Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 08-Dec-2021 | Report No: PIDC32659

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Angola	P177305		Angola Agricultural Transformation Project (MOSAP3) (P177305)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA EAST	Jan 24, 2022	May 26, 2022	Agriculture and Food
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of Finance	Ministry of Agriculture and Fisheries	

Proposed Development Objective(s)

To increase productivity and climate resilience of and to promote commercialization for smallholder farmers in the selected project areas.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	415.00
Total Financing	415.00
of which IBRD/IDA	300.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	300.00

Non-World Bank Group Financing

Other Sources	115.00
FRANCE: French Agency for Development	115.00

Environmental and Social Risk Classification	Concept Review Decision
Substantial	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Angola is a resource-rich, fast-urbanizing country with considerably young population and high poverty rates.** The country is the third largest economy in Sub-Saharan Africa (SSA) and the second largest oil producer in SSA. During the period of high oil prices (2005-14), it has achieved rapid economic growth. However, growing oil wealth resulted in an overvalued currency, which fostered import dependency and hindered investment in the non-oil tradable sectors. Currently, its population of 32 million, of which 45 percent is under 15 years of age and 52% women, is growing at an annual rate of 3.3 percent. Following the end of the civil war in 2002, the rural population migrated to the cities in search of greater economic opportunities – this rural-urban migration was also impacted by the internal displacement caused by the war. As a result, the urban population now represents about 65 percent of the total population, and still grows at 4.5 percent per year, one of the fastest urbanization rates of the continent. About a quarter of Angola's population lives in the capital Luanda. Poverty remains high at 56.4 percent and concentrated in rural areas at 56.7 percent of total poor. Poor rural infrastructure and lack of access to services – schooling, improved water, and sanitation – exacerbate the non-monetary dimensions of poverty. Low access to paved roads, for example, acts as a major constraint for the reduction in rural poverty and is highly correlated to low market access, increased food insecurity, school dropouts, and low medical consultations. Inequality is high and grew from 43 to 51 on the Gini index during the 2008-2018 period.

2. **Angola endured a fifth year of recession in 2020. The country fell into a recession when oil prices declined in 2015 and the sharp drop in oil prices in early 2020 further exacerbated the economic situation.** Gross Domestic Product (GDP) declined by 5.2 percent in 2020, following a cumulative decline of 5.6 percent over 2015-19. Both the oil sector (-8 percent) and non-oil sector (-4 percent) contracted in 2020. Angola's per capita Gross National Income (GNI) in nominal US$ in 2020 has fallen to less than half its 2015 peak. Poverty, defined as the proportion of the population living below the poverty line (less than US$1.90 a day), is likely to continue increasing further in the near-term due to a combination of loss of employment opportunities and higher food inflation. Estimates suggest that nearly 2.6 million additional people fell into poverty between 2018 and 2020 alone. The size of the public debt, much of it in foreign currency, was further boosted by currency depreciation, reaching 135 percent of GDP in 2020.

3. **The country ranks low on the Human Capital Index (HCI), largely due to persistent under-investment in social sectors.** HCI performs below income comparators and the SSA's average at all levels. There is also ongoing work

needed to reduce the gender gap in Angola in a variety of sectors. For example, 27 percent of women are less likely to be salaried workers compared to 40 percent of men. Moreover, of those employed, 81 percent of women hold vulnerable employment compared to 54 percent of men. Investment in human capital, effective institutions and a favorable business environment are critical for economic diversification and job creation.

4. **The COVID-19 pandemic has made acutely apparent the importance of ensuring access to safely managed water supply and sanitation (WSS), which are particularly important given Angola's limited-service coverage.** In March 2020, Angola joined the ranks of countries with confirmed increasing cases of COVID-19 infection. This viral outbreak is posing an even greater threat to the health and welfare of the Angolan population, due to the lack of WASH services and ongoing difficulties in addressing recurrent infectious diseases (e.g., malaria, cholera, typhoid). Epidemics of vector-borne diseases and water-borne diseases in Angola are likely to become worse under climate change, due to both increases in frequency and severity of droughts and flooding, expanding the geographic range and the seasonality of events and associated vectors (mosquitoes) and conditions (flood waters, unsanitary conditions). As of 2015, access to improved drinking water sources had grown to 54 percent (63 percent in urban areas), a very low rate for an upper-middle income country. Access to piped water service only averaged 29 percent nationally (55 percent urban, 9 percent rural) and access to sanitation averaged 35 percent (57 percent urban and 17 percent rural).

Sectoral and Institutional Context

5. **Agriculture was the motor of the colonial economy, but protracted conflict eroded the sector's technical capacity, destroyed infrastructure, and isolated production areas from markets; and these issues remain largely unaddressed.** In the colonial period, agriculture had a dual structure, with a commercial sector of about 6,400 farms (800,000 ha) managed by Portuguese settlers using modern technologies and a traditional sector composed of smallholder family farms cultivating about 3.4 million ha. After independence, most Portuguese settlers left the country and many former commercial farms and plantations were converted into state farms, which have since been privatized. The civil war resulted in a virtual collapse of commercial production as large numbers of rural inhabitants either fled or reverted to subsistence agricultural production. In fact, Angola's once thriving export of coffee, cotton, tobacco, and sugarcane all but ceased by the 1990s. Although the situation has improved with the rehabilitation of main roads and bridges and clearance of mines, the agriculture sector has not yet fully recovered from the destruction and decapitalization of the conflict period.

6. **In recent years, however, agriculture's share of Angola's economy has grown rapidly, and the sector provides opportunity for economic diversification and food and nutrition security.** In contrast to the rest of the economy, the sector growth averaged 4.9 percent in the 2015–19 period. Ranking in the 86th percentile globally, this rapid growth rate led to agriculture's share of GDP increasing from 5.8 to 10 percent of Angola's GDP during the 2011–2017 period. The cultivation of main food crops has expanded rapidly, with cereals (maize), beans and oilseeds (peanuts), and tubers (cassava) production growing by 47, 42, and 14 percent respectively between 2012 and 2016. Fruits and vegetables grew at 12 and 4 percent respectively, with banana and sweet potatoes growing the fastest. Livestock products grew at the slowest rate, except chicken meat, which started from a low base (CPSD 2019). The broad-based sector growth can be linked to the 2018-2020 currency devaluation (natural incentive for

domestic producers), cultivated area expansion by returning land to agriculture after the civil war, and the Government's investments in public infrastructure, cooperatives, and fisheries.[1]

7. **However, agricultural productivity remains low due to low access to improved technologies and access to services by smallholder farmers who account for 80 percent of production and 90 percent of agricultural land.** National agricultural output is well below demand, and Angola imports more than half of its food. The average yields for cereals (0.9 MT/ Ha) and vegetables (3.6 MT / Ha) have been low and stagnant, currently at 1/4th and 1/5th of global averages respectively. Maize yields are 1/4th of regional leader South Africa and wheat yields are 1/6th of its neighbor Namibia. Yields for beans and soybeans are low relative to SSA comparators like Kenya, Ghana, and Zambia. Small-scale and subsistence-oriented family farms – averaging 2.3 ha in size –account for 80 percent of production and 92 percent of land under cultivation, with community holdings and commercial farms making up 5.8 percent of land. Almost one-third of agricultural households are headed by women, who are responsible for 70 percent of traditional subsistence agriculture and for 24 percent of commercial agriculture. Productivity growth is constrained by the use of poor agronomic practices and low access to improved technologies like climate-smart seeds, agro-chemicals, and mechanization. The domestic markets for seeds, fertilizers, tools, machinery, and other agricultural inputs are poorly developed and they are largely imported and unaffordable. Farmers have poor access to extension services, which has led to limited information related to production and marketing. Furthermore, only 2 percent of farmers report access to credit and consequently, investments with high upfront costs are limited. Producer organizations could aggregate demand and enhance access to inputs and services, but they remain weak and collective decision-making is uncommon. Despite their large number, a small fraction is registered, active, and commercially oriented, thus contributing to a low access to input and output markets.

8. **Angola has an abundance of arable land, freshwater, and diversity of climatic conditions suitable to producing a variety of agricultural products, but its agriculture potential remains untapped.** The main crops include cassava, maize, beans, potatoes, sweet potatoes, soy, and bananas, with other agricultural products being livestock, coffee, manioc, rice, vegetables, and fruits. Agricultural land accounts for 57 million ha – 45.6 percent of total land – and the arable area is estimated to be 35 million ha. Both crop and livestock production have significant potential given that only 16 percent of arable area is cultivated and about nearly half of it is unused. There is also large untapped irrigation potential as only 3.5 percent of irrigable land has been developed.

9. **Agriculture is the largest source of jobs and livelihoods, but agricultural incomes remain low.** The agriculture and fisheries sector provides the main source of income to 90 percent of the 10.7 million Angolans living in rural areas and employs 45 percent of the workforce. Further, more than half of Angola's poor are in rural areas and depend almost exclusively on agriculture for their livelihood. However, agricultural labor productivity, measured in terms of value added per worker, is just US$1,216 (compared to a global average of US$20,916)[2], which drives the low returns to labor in farming. Among economic sectors, agriculture offers the lowest median income at around 8,000 kz[3] per month and is even lower for women (~6,000 kz per month). Additionally, the concentration of low-skilled labor contributes to low incomes, with approximately 77 percent of the labor in the agriculture

[1] The agriculture sector policy review 2021 finds that the macroeconomic policies led to increased prices for domestic agricultural produce leading to significant food inflation. It also notes the low effectiveness of subsidies, prioritization of few staple crops, and policies discouraging private sector investment in agriculture.
[2] World Bank, Food System Dashboard.
[3] 1USD = 600KZ (October 06, 2021).

sector having less than primary education. Under its strategic objective of "Increasing the contribution of the agrarian sector to economic growth and social development" in the medium-term sector development plan, MINAGRIP has targeted raising the per capita income of agricultural households from US$1.2 per day to more than US$2.2 per day. Given the rural population's heavy reliance on the sector, increasing both agricultural production and productivity is critical for improving livelihoods for the rural poor. Further, when accompanied with complementary investments improving market connectivity, productivity gains will contribute to food and nutrition security, poverty reduction, and ultimately help to diversify the economy.

10. **Agriculture in Angola has long been affected by extreme climate events with considerable adverse impact on key development indicators.** Floods have made up 57.5% of average annual hazards occurring in Angola, and droughts have made up 12%. However, droughts tend to have far reaching impacts. The country is currently facing the most severe drought of the last 40 years with 6million not having enough food and 15 million people are using crisis or emergency livelihood-base coping strategies, such as spending savings or reducing non-food expenses.4 In 2019, a severe drought in the southern part of Angola resulted in food and nutrition insecurity for 2.3 million people, including close to half a million children under the age of five, due to impacts of crop yields and livestock loss. The climate shocks led to the increase in the cost of basic commodities – such as maize and maize flour, beans, and sugar – by 25 percent. More than 877,199 livestock (35 percent of the total) died, a severe shock with both immediate and long-term impacts on rural households' livelihoods. Furthermore, the movement of people in search of water for human and animal consumption as well as greener pasture for their cattle contributed to an increased number of school dropouts. More specifically, 614 out of 887 primary schools in the Cunene province are affected by drought, leaving approximately 150,000 children without access to education — almost 70 percent of the total students in the province (Provincial Education Directorate). Previous droughts had similar devastating impacts.

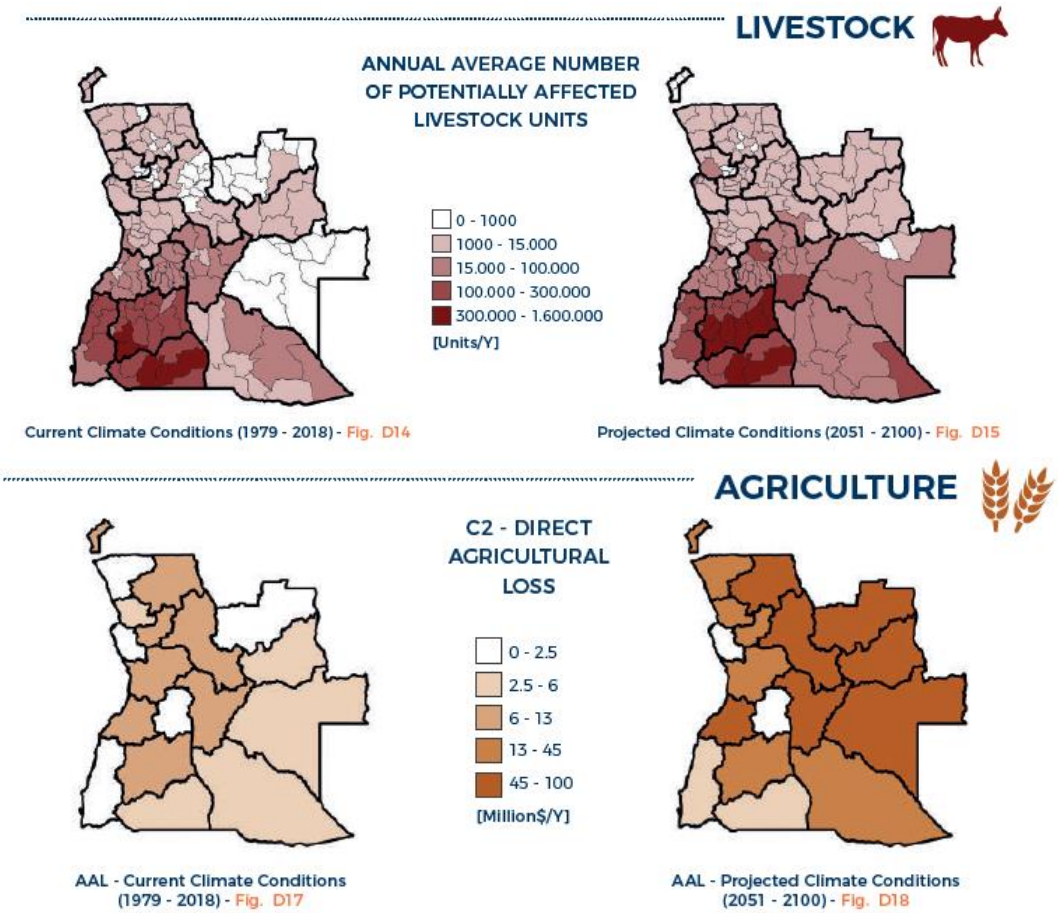
11. **The area affected by drought is characterized by pastoral and agropastoral systems which are vulnerable to climate shocks.** Initial information indicates that households and communities in the three southern provinces have suffered substantial losses of their livestock assets. It is estimated that over 2 million people are also in a situation of food and nutrition insecurity (FAO_YEAR). With regards to agriculture-based farm households (livestock included), the response will need to involve both short-term measures (improved animal nutrition; provision of water; provision of seeds and fertilizers, ensuring animal feed supply; restocking; veterinary services) and a transition to medium-term structural interventions to increase the resilience of affected communities (sensitization and establishment of agropastoral associations, small-scale and climate responsive irrigation, pastoral landscape restoration including water points and storages, sustainable feed supplies, veterinary services, restocking, and preparedness for future shocks).

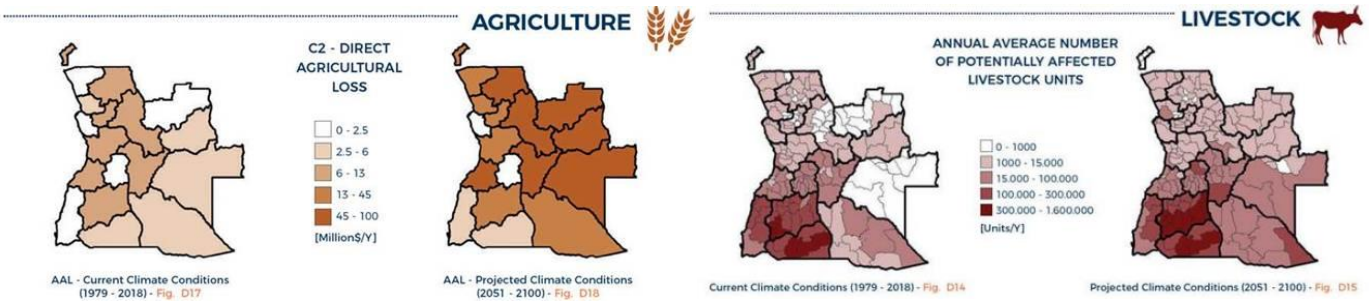
12. **Climate change will exacerbate the vulnerabilities of agro-pastoral systems through increased exposure to extreme event like droughts.** Angola is 160th on the ND-GAIN country index rank, denoting a high vulnerability and low readiness to deal with the impacts of climate change. Yet, climate change is projected to impose severe stresses on the country, especially the agriculture sector. Projections show that average temperatures in Angola could increase by up to 3.2°C by 2060. While precipitation projections are more uncertain, rainfall will likely decrease, with the southern regions experiencing the steepest decline. Climate change is projected to lead to a

[4] Amnesty International – Press Release June 2021. Available at: https://www.amnesty.org/en/latest/press-release/2021/07/angola-millions-facing-hunger-as-thousands-flee-their-homes-as-drought-ravages-the-south-of-angola/

decrease in productivity. For instance, bean yields could decrease by up to 60%, Under a changing climate, there is a greater probability of extreme events, with a particular increase in heat waves, droughts and intense rainfall events. Frequency and intensity of flooding in Angola is projected to increase, especially along the coastal zone. Drought incidence, which is mainly concentrated in the southern regions, will likely expand to the central and eastern regions, increasing the number people living in drought prone areas from 30.8 percent of the population presently to more than half of the country's population. Those directly impacted by drought conditions annually will increase to 13 percent of the population, up from 7.5 percent by the 2050s. Average crop production loss due to drought is estimated to range from 3.7% to 30% across common crops (cassava, maize, groundnut, millet, sorghum, potato, banana, etc.) between 2051 and 2100. The dynamics between drought, increased population pressure and increased agricultural development of lands will combine lead to a decline in quality and quantity of soils, especially along major rivers catchments. The number of affected livestock will reach up to 68% of total livestock populations, with major losses mostly in the southern regions. The livelihoods and incomes of smallholder crop and livestock farmers in the marginal areas will be the ultimate victim of climatic changes. The direct economic impacts to agriculture could rise seven-fold, considerably affecting the agriculture sector's potential contribution to the country's economic growth and poverty reduction.

Figure 1. *Estimated drought impacts in terms of annual Direct Agricultural Loss (left), and annual average number of potentially affected livestock units (right), now and in the future.*





Source: International Centre on Environmental Monitoring, CIMA, and United Nations for Disaster Risk Reduction, UNDRR, 2019[5].

13. **Agriculture and land-use change are important contributors to environmental damage, including towards growing GHG emissions in the country.** Although Angola is a low emitter of greenhouse gases, at a global scale (less than 1 percent), the country has experienced exponential increase in GHG emissions over the past few decades. Emission increase has been largely driven by the energy sector. However, emissions from land-use change and forestry, and agriculture are estimated at 37 percent and 12 percent respectively, a meaningful contribution. Direct GHG emissions from agriculture largely emanate from livestock systems and crop residue burning. Furthermore, burning to clear land for farming has been a key driver of deforestation, and GHG emissions. Unabated, the trend of increasing GHG emissions in the terrestrial systems is projected to continue. Yet, if well managed, the agriculture sector could also act as an important sequester of carbon in soils.

14. **The sector is also vulnerable from non-climate shocks, such as the COVID-19 pandemic, which have further exacerbated the economic and social situation.** Since the beginning of the outbreak, several restrictive measures were put in place, including social distancing and closure of borders, which has further exacerbated the economic and social situation, and has worsened the food security crisis in the country. While the number of people infected has been low compared to other countries in the region, several negative impacts are reported country-wide, including business closures, shortages of supply of food items, price increases of agricultural inputs, and loss of income for many households, among others. The pandemic has thrown into stark contrast the inequalities inherent in the country's food systems. The several months of stringent restrictive measures in Angola, with massive disruptions in labor markets and loss of incomes, has aggravated the food security situation, especially for the poor and vulnerable, such as in the southern provinces already affected by the drought. It is estimated that 5.1 million could become food insecure – in addition to the 2.3 million prior to the pandemic – if appropriate measures are not put in place.

15. **Angola's agriculture sector will need to transform to meet the needs of its people (especially vulnerable farmers), the economy and the environment.** To achieve this, efforts are needed to re-orient the agriculture sector in such a way that boosts production and productivity, addresses the threat posed by climate change, and opens opportunities for farmers to boost their incomes. All these will need to be done sustainably, minimizing

[5] CIMA, UNDRR (2019) *Angola Disaster Risk Profile*, International Centre on Environmental Monitoring (CIMA) Research Foundation and United Nations for Disaster Risk Reduction (UNDRR), Nairobi.

harm to the land, environment, and biodiversity, and taking advantage of opportunities to increase efficiencies in the sector that can bring important environmental benefits and mitigation opportunities.

Relationship to CPF

16. **The proposed project is expected to contribute to the Government's economic diversification agenda and inclusive growth model by promoting a sustainable transformation of agriculture from subsistence farming to commercial farming**. It will support the transition from subsistence to more market oriented competitive agriculture, while also improving food security, reducing the dependency on food imports, fighting the impact of, and building resilience of agricultural systems to climate change, reducing agriculture's environmental footprint, improving the well-being of the rural families, and promoting Angola's national agro-industry. This approach is outlined in the Government's National Development Plan (NDP)[6], which sets out the medium-term development objectives for Angola between 2018 and 2025. More specific to climate risk, the NDP and the Nationally Determined Contributions (NDCs) explicitly mention the need to prioritize addressing the impact of climate change through adaptation and mitigation efforts under the area of environmental sustainability. They recognize that the country has been significantly impacted by extreme climate events, particularly droughts and flooding.[7]

17. **The project is also closely aligned with national and regional priorities for agricultural development.** By supporting the development of commercial agriculture, the project aligns with Angola's updated Medium-Term Agriculture Sector Development Plan (PDMPSA) (2018–2022) which seeks to improve food security, reduce the trade deficit in agro-livestock products, and contribute to economic and social development. Accordingly, the project provides technical support and access to capital, investments in critical infrastructure, and a better enabling environment. The project will also help strengthen MINAGRIP's capacity to boost private investment in food systems, contributing to the PDMPSA's pillar to make MINAGRIP a more relevant and competent institution.

18. **The project is aligned with the World Bank's Country Partnership Strategy (CPS) for Angola for the period of 2014-2016, extended to 2020.** The revitalization of the rural economy and development of the agriculture sector through productivity increases and market links are important sources of growth, employment creation, and poverty reduction. Greater dynamism in the rural economy is expected to have far-reaching effects on achieving shared prosperity. The Performance and Learning Review (PLR) extended the CPS and reformulated its objectives to respond to macroeconomic challenges emerging from the decline in oil prices, with economic diversification remaining a key objective.

19. **This project will build synergies with and draw on the experiences of other World Bank Group projects**. These include the Smallholder Agriculture Development & Commercialization Project (SADCP/P154447, also known as MOSAP2), the Commercial Agriculture Development Project (CADP/P159052, also known as PDAC), and the Climate Resilience and Water Security in Angola (P177004). Other World Bank operations can also provide

[6] The six government priorities of the NDP are: (i) human development and welfare; (ii) sustainable, diversified, and inclusive economic development, (iii) infrastructure development, including water supply and sanitation; (iv) peace consolidation, strengthening democracy, good governance, decentralization and state reform; (v) harmonious territorial development; and (vi) ensuring Angola's stability and territorial integrity and strengthening Angola's role regionally and internationally.
[7] The GoA has developed a National Strategy for Climate Change (ENAC 2018-2030) to fight the impact of climate change and they remain committed to the Paris Accords, SDGs, and the African Agenda 2063.

important guidance on viable approaches to key activities considered under this project, as does the experience of the World Bank's productive alliance investments in Latin America. Further, close coordination between other development partners, the International Finance Corporation (IFC), the and the World Bank can play an important role in mobilizing investment and sector financing.

C. Proposed Development Objective(s)

20. The proposed Project Development Objective (PDO) is to increase productivity and climate resilience of and to promote commercialization for smallholder farmers in the selected project areas.

Key Results

21. The proposed outcome indicators to measure achievement of the PDO are as follows:
    (i) Farmers adopting improved and climate smart agriculture and livestock technologies (number).
    (ii) Farmers benefitting from improved market information systems (number).
    (iii) Increase in yield per hectare, selected indicative crops (disaggregated by gender).
    (iv) Increase in productivity of livestock species, indicative targeted production systems (weight in kilogram, liters of milk per animal per day, number of eggs per chicken per day).
    (v) Increase in sales volume of agriculture and livestock products by targeted smallholders (average % increase in sales).
    (vi) Direct project beneficiaries (gender-disaggregated number).

    A detailed monitoring and results framework with indicators will be developed during project preparation.

Project Beneficiaries

22. The primary project beneficiaries are expected to be about 600,000 smallholder farmers in the project areas of which at least 50 percent will be women. Smallholder farmers are defined as those who are engaged in single or mixed farming systems involving crop, livestock, pastoral, and aquaculture production. In addition, the project will strengthen capacity of staff in the national and provincial institutions working on agriculture and livestock, as well as of the private sector and NGOs in the sector.

Geographic Coverage

23. The project area is expected to cover all 18 provinces of Angola. The project, however, will adopt a spatial approach by component. While Component 1 (FFSs) will reach the country's 18 provinces, component 2 will reach nine Provinces, including those of Bié, Huambo, Malanje, Cuanza Norte, Cuanza Sul, Huíla, Cunene, Namibe and Cuando Cubango. The population census of 2014 estimates that the 18 provinces have a total population of 32.9 million, and the 9 provinces identified for component 2 have a total population of 11.3 million, representing about 42 percent of the total population of Angola. The main criteria for selection of the nine provinces are: (i) areas severely affected by the drought and food insecurity, and under threat from climate change; (ii) achievements under MOSAP 1 and MOSAP 2; (iii) complementarities with PDAC and CRWS – as well as with other agricultural projects support by the GoA and development partners; (iv) agricultural and livestock potential of provinces; and, (v) availability of government extension officers (minimum of three extension officers per municipality).

D. Concept Description

24. **The Angola Agricultural Transformation Project (MOSAP3) will build-up on ongoing Bank-financed projects, namely the Smallholder Agriculture Development and Commercialization Project[8] (MOSAP 2).** MOSAP 2 was designed to increase agricultural production through the provision of improved agricultural services and investment support to smallholder farmers. Activities implemented included: (i) training of over 150,000 smallholder farmers in the use of improved agricultural technologies to increase crop production through Farmers' Field Schools (FFSs); (ii) the training of more than 100 agricultural MINAGRIP technicians; (iii) providing investment support to over 50,000 smallholders through sub-projects; and (iv) building the capacity of MINAGRIP staff in targeted provinces and municipalities. In addition to capacity building, MOSAP 2 also contributed to: (a) an increase in agricultural production; and (b) the adoption of improved technologies for maize, beans, cassava, and Irish potatoes in the project areas.

25. **MOSAP 2 implementation is progressing well and is likely to achieve the project development objectives.** To date, the project has reached 165,328 smallholder farmers corresponding to 94 percent of its target, of which about 48 percent of beneficiaries are female. Major achievements to date include: (i) average crop yield increase by at least 60 percent of beans, cabbage, cassava, Irish potatoes, and maize compared to the baseline; (ii) considerable increased in the volume of production of maize and cassava by 122,412 tons and 752,822 tons respectively, compared to the baseline; and (iii) increased proportion of production sold by the smallholder farmers from 17 percent to 51 percent. The project has also been successful in introducing new technologies, i.e. new maize and cassava varieties, new planting technologies, construction of small sheds (*galpões*) for processing and storage to reduce post-harvesting losses. The project also, contributed to pilot small-scale irrigation in 700 hectares expected to reach 1,700 hectares by the closing date.

26. **MOSAP 3 will also scale up the geographic scope of MOSAP 2 from three provinces to a national coverage.** Building on the lessons learned from MOSAP 2, the project strongly emphasizes capacity building, institutional development, investment support to smallholder farmers and sustainability by strengthening MINAGRIP's capacity for extension services, and market information. Also building on lessons learned, MOSAP 3 will mainstream nutrition and food security considerations as well as climate-smart agriculture (CSA) practices into the project design through investments in nutrition activities and the more efficient use of water resources, promotion of soil conservation techniques, and integrated natural resource management.

27. **The overall cost of the proposed Project is estimated at US$ 415 million, of which US$ 300 million IBRD and US$ 115 million non-WBG financing (French Development Agency).** The Government of Angola has requested the Bank support for the development of smallholder agriculture and its climate-related risks by scaling-up the successes of MOSAP 1 and 2 and complimenting it with PDAC. The proposed key interventions include technical assistance and investments that aim at enhancing agricultural productivity and commercialization, and at strengthening climate resilience in the south and central regions of Angola, thus contributing to food and nutrition security in the medium term.

28. **The proposed MOSAP 3 will build on the successes of MOSAP 1 and MOSAP 2 and will aim at expanding technical and institutional agricultural capacity to improve climate resilience and food and nutrition security in**

[8] Approved in June 2016 and scheduled to close in December 2022.

Angola. The propose The project will also complement interventions implemented under PDAC that aims at increasing productivity and market access for small and medium farm and agribusiness enterprises, as well as the Climate Resilience and Water Security (CRWS) in Angola, which is under preparation with the objective of improving WASH services and water resources development and strengthening the institutional capacity for climate resilience in the water sector.

Table 1: *Synergies with World Bank Projects*

	MOSAP3	MOSAP2	PDAC	CRWS
Project Beneficiaries	600,000 smallholder farmers (50% Women), Government staff, and NGOs.	175,000 smallholder farmers, 600 government officials.	11,500 farmers and agribusiness SMEs.	500,000 people benefiting from measures aimed at alleviating drought impact on water availability.
Geographic Coverage	National	Bié, Huambo, Malanje.	**Corridor (A):** Luanda – Bengo – Malanje – Cuanza Norte. **Corridor (B):** Luanda – Bengo – Huambo – Bié – Cuanza Sul – North of Huila.	Benguela, Cuanza Sul, Huila, Namibe Cunene, Cuando Cubango and Zaire. (Talk of expansion to Huambo, Bié).
Technical Areas of Operation		Strengthening technical, institutional, managerial, and marketing skills of i) farmers and farmers' organizations; ii) different units of the Ministry of Agriculture; and agriculture research systems.	Supporting farmers through productive alliances to reach new markets and establish commercial relationships; Strengthening business practices and VC development through public-private dialogue to benefit agribusiness SMEs, including Partial Credit Guarantees.	Support WSS services through a combination of TA, designs, investments for: i) Rehabilitation and Expansion of WSS in medium-size cities; ii) strengthening rural water supply systems to build drought resilience in the South of Angola
		Improving agricultural productivity, production, and market access through demand-base matching grants. Providing of technical assistance for irrigation, production, and value chains investments.	Investing in public goods such as agricultural service roads, irrigation infrastructure.	Strengthening selected institutions with technical assistance and key studies (i.e. groundwater, storage, drought contingency plans, and basin plans) and will support an extensive community-level infrastructure program to increase
			Addressing regulatory constraints in public support to enable agribusiness, including	

		public research and development.	reliable access to water resources to improve climate resilience and water security in the region.
Complementarities of MOSAP3	175,000 beneficiaries from MOSAP2 will become beneficiaries of MOSAP3's component 2 (designed for investment support to smallholder farmers).	Build on the knowledge and experience with the productive alliance approach, which can lead to increases in productivity, market integration, and income of smallholder farmers.	Finance WASH investments for communities, agro-entrepreneurs, food processing facilities, food markets in Provinces not reached by CWRS.
	Build on successes delivered by Farmers Field Schools to adopt improved agricultural practices and technology.	MOSAP3 beneficiaries can be linked and benefit from PDAC's Matching-Grants which will finance approved business plans.	
	Address new geographical areas affected by climate change (flood in the North and drought in the South).	New geographical areas to support public irrigation projects.	

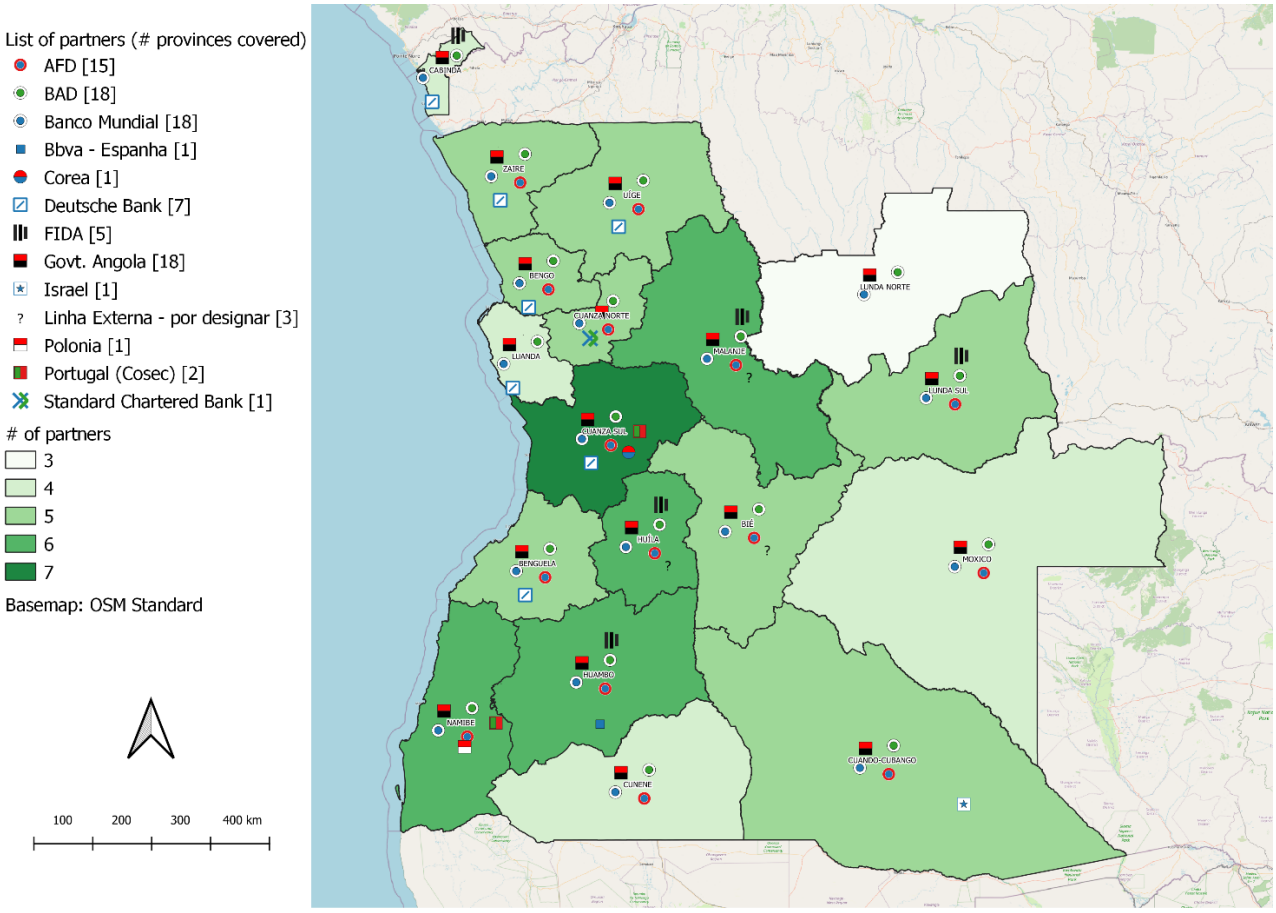
29. **MOSAP 3 is designed to address three critical constraints to agricultural development in Angola.** First, it is designed to increase agricultural institutional capacity through training programs, both nationally and in the project areas. Second, it is designed to sustainably increase production and productivity, including through, access to improved production technologies, extension services, irrigation, and productivity enhancing inputs (improved seeds, fertilizers, etc.), and management practices. Third, it will address critical bottlenecks along the agri-food value chain particularly for post-harvest value addition, and market linkages. Agriculture is essential to promote national development and economic diversification and its potential will remain untapped if productivity does not increase significantly, if climate resilience is not strengthened, and if market incentives aren't aligned. Although agriculture output has increased in the past few years, crop yields remain very low compared to other countries in the region. Substantial scope exists for increasing crop yields and production through sustainable intensification via the use of improved climate smart agriculture (CSA) technologies and practices, and management. This will require supporting farmers in the adoption of such CSA practices and technologies, modern agricultural inputs, undertaking participatory development, and very critically, increasing the area under irrigation among other interventions.

30. **Key lessons and recommendations.** The key lessons from MOSAP 1 and 2 and PDAC include: (i) The Farmers' Field School approach to agricultural extension was very effective in enhancing smallholder farmers' capacity to generate and use new knowledge and adopt improved agricultural practices and technology; (ii) Provision of

investment support to farmers through demand-driven subprojects – MOSAP3 investments, however, will also be driven by market demands, thus financing sub-projects that have identified a buyer (following the productive alliance model utilized under the PDAC project); (iii) Availability of extension officers in the new areas is key for successful implementation of capacity building activities; and (iv) Key project staff need to be involved in the project design from the outset to ensure successful implementation after project approval.

31. **The role of other development partners.** The Project will coordinate with the GoA and other development partners to improve the overall effectiveness of the investments, reduce costs, and avoid unnecessary duplication of work. The figure below illustrates ongoing agriculture projects in Angola.

Figure 2. List of Agriculture Projects in Angola



Source: GEPE / MINAGRIP, 2021 (WB project team's mapping).

Proposed Project Components

32. To achieve its PDO and in line with the sectoral needs, the proposed project will be structured as follows (components):

33. Component 1: Capacity Building and Institutional Development (US$ 115 million, of which US$ 100 million IBRD and US$ 15 million AFD): The objective of this component is to strengthen institutions involved in the development of smallholder agriculture, including smallholder farmers' organizations (including women's organizations), cooperatives, non-governmental organizations (NGOs), government agencies, service providers (such as extension services), and private sector. It is expected that a total of 425,000 smallholder farmers will benefit from this component.

a. Strengthening Capacity of Smallholder Farmers (US$XX million): The objective of this subcomponent is to strengthen the technical, institutional, managerial, and marketing skills of direct beneficiaries through the Farmer Field School (FFS) approach – which builds on the successful experience of MOSAP 1 and 2[9] [with MOSAP2 having benefitted a total of 150,126 beneficiaries, of which 72,774 women]. Through the FFS approach, this subcomponent will finance: (a) organization of farmers into producer groups, cooperatives, and associations to facilitate participatory development of and improved farmers access to knowledge, and technologies, improve access to markets and improve their bargaining positions in input and output markets through aggregations; (b) strengthening farmers' knowledge and skills in areas of productivity, climate and nutrition responsive farming practices and technologies, marketing strategies and skills, agricultural finance and risk management products, post-harvest management and value addition, value chains, nutrition awareness and practices, and gender responsiveness in farming systems; (c) strengthening farmers' functional literacy and numeracy skills ,as well as the capacity of vulnerable households to adopt nutritious food production through kitchen-gardens (no-land production technologies, small community water storages for irrigation, water harvesting, irrigation technologies, wells, etc.) and small-scale household processing infrastructure (food preservation, processing, drying, storing – solar/wind based); (d) develop and strengthen existing communication, information, and support channels to help vulnerable people to access food or food markets in case of emergencies and outbreaks; and (e) promote measures to counter misinformation and promote dissemination of correct information on covid related measures.

b. Institutional Capacity Strengthening of Local, Provincial and National Units of MINAGRIP and Capacity Building of Non-Governmental Organizations (US$XX million): The objective of this subcomponent is to strengthen the institutional capacity of MINAGRIP at the national and decentralized levels to provide the complementary services needed for the investments implemented under the project. This subcomponent will finance technical assistance in the areas of (a) collection and dissemination of data on crop and livestock production, prices, and market information – also adapted to agropastoral communities; (b) promote coordination and partnerships between MINAGRIP and other relevant agencies/institutions (e.g. climate and hydrological agencies, and civil protection), and strengthen MINAGRIP skills to support/develop targeted agro-climate information services, pest/disease monitoring and response systems, improved crop and pasture managements practices, and soil health monitoring; (c) technical assistance to MINAGRIP to develop smart subsidy programs (i.e. input voucher system, climate smart market-friendly smallholder support programs (for instance to support diversification from maize and beans to other marketable nutritious and climate resilient crops, adoption of climate smart technologies and practices, public goods that promote development of effective early warning and agro-

[9] With MOSAP2 having established 4,417 FFSs in the Provinces of Huambo, Bié, and Malanje, benefitting a total of 150,126 beneficiaries, of which 72,774 women.

climatic information services); and, (d) technical assistance and capacity building activities on agriculture practices to non-governmental organizations (NGOs) involved in relevant activities supporting the development of smallholder agriculture – i.e. activities under subcomponent 1.a.

34. **Component 2: Agricultural Resilience, Intensification and Market Linkages (US$ 270 million, of which US$ 185 million IBRD and US$ 85 million AFD):** The objective of this component is to provide investment support to eligible beneficiaries in driving their rehabilitation and/or development of new micro and/or small-scale irrigation systems, sustainable and climate resilient crop and livestock production through improved access to climate smart technologies and irrigation technologies, services, and infrastructure. This component is expected to benefit 400,000 smallholder farmers (50% women), including 225,000 beneficiaries supported under component 1 (exact number of beneficiaries to be discussed during project preparation and following the selection criteria specified in paragraph 23) as well as 175,000 direct beneficiaries who graduated from MOSAP2.

    a. **Irrigation Infrastructure, WASH Investments, and Technical Assistance (US$ XX million):** The objective of this subcomponent is to improve access to agricultural water for irrigation and livestock needs through investments in irrigation and water harvesting infrastructure and technologies that are climate responsive, affordable (including operation and maintenance (MOM)) to smallholder farmers or cooperatives and also in alignment with other core elements of building back greener and better concept as well as strengthening institutional capacities for improved and sustainable water management. This subcomponent will finance (Matching-Grants): (i) eligible investments in modernization of existing and in development of new irrigation and storage infrastructure for producer groups. Estimates of new and rehabilitates areas will be defined during preparation; (ii) technical assistance to support formation and strengthening of Water Users Associations (WUAs) for adoption of improved and climate responsive water management practices such as soil and water conservation techniques and O&M; (iii) WASH investments for agro-entrepreneurs, food processing facilities, and food markets by supporting access to reliable sources of quality water; and, (iv) community/household multi-purpose self-supply which includes climate responsive technologies (solar/wind power technologies to support water supply for irrigation (e.g. kitchen gardens), domestic and livestock purposes (e.g. irrigated fodder) and water efficient irrigation), sanitation, and hygiene infrastructure, as well as behavior change messaging around open defecation, hand washing, etc. – only in those areas which are not covered under the new CRWS project.

    b. **Agriculture Production and Market Development (US$ XX million):** The objective of this subcomponent is to increase farm productivity, resilience to climate change and extreme climate events, and competitiveness to facilitate transition to commercial farming. Following the MOSAP2 model, this subcomponent will finance technical assistance and investment support, including the identification of market-driven sub-projects at the level of farmer groups for increasing agricultural production and improving access to storage capacity, post-harvest, value addition, processing, and marketing infrastructures. The subcomponent will also support the development of commercial partnerships between off-takers and project beneficiaries (those that have achieved certain level of organization). Other activities to be supported under this subcomponent includes agriculture vouchers (pilot voucher system) and Matching-Grants [define a very clear criteria on what MGs will support, i.e. climate-smart technologies, marketing, post-harvest practices, skills for business plans' preparation, etc.] for eligible

farmers to allow access to improved productivity enabling and climate smart technologies, farm machinery and tools. These would include investments in but not be limited to access to improved and climate adapted seeds (drought and water-stress tolerant, short season, etc.) and climate resilient crops, nutrition smart agriculture practices (especially hardy crops like sorghum and millet, legumes, root tubers and vegetables), other farm inputs, sustainable soil management and soil health enhancing technologies (such as crop-rotation/intercropping, integrated soil fertility management, and crop residue management), small scale farm machinery (power tillers, seeders, tractors, threshers, micro-irrigation technologies). This model will enable market access to agricultural inputs and services and improve the capacity of suppliers to plan and deliver quality inputs and services based on voucher system, increased productivity, enhanced resilience of cropping systems and increased potential for cropland to build mitigation Co-Benefits.

c. Livestock Production and Market Development (US$ XX million): The objective of this subcomponent is to increase livestock productivity, strengthen synergies and integration with crop farming to support diversification, build resilience to climate change and extreme climate events and increase the share of production that is marketable by the beneficiaries, especially the agropastoralists, thereby supporting the transition from subsistence to commercial livestock. Following the same MOSAP2 model, this subcomponent will finance technical assistance and investment support, including the identification of market-driven sub-projects for increasing livestock production, integration, and synergy with crop farming (e.g. through manure management), storage capacity, value addition, processing/marketing infrastructure, the rehabilitation of selected critical public facilities – i.e. zootechnical stations[10] and breeding centers at local levels. The subcomponent will also support the development of commercial partnerships between off-takers and project beneficiaries (those that have achieved certain level of organization). Other activities to be supported under this subcomponent includes small grants and Matching-Grants for eligible farmers to allow access to improved livestock breeds, improved rangeland management technologies, water and animal feed supply, provision of veterinary services and products, restocking, managed grazing, and other responses to increase the resilience of beneficiaries to climate-related shocks and reduce livestock sector contribution to environmental damage and GHG emissions, such as improved manure management.

35. Component 3: Project Management and Monitoring and Evaluation (M&E) (US$ 30 million, of which US$ 15 million IBRD and US$ 15 million AFD): The objectives of this component are to (i) ensure an efficient project management, which will include efficient and targeted use of project resources in accordance with the project's objectives, procedures, and fiduciary guidelines and efficient contract management among others; and (ii) building the project M&E system capable to inform about the project progress and achievements, support management decision making and course correction with timely and quality data and reporting.

36. Component 4: Contingent Emergency Response Component (CERC) (US$ 0 million): This component will provide immediate response to eligible emergencies. As such, in the event of such an eligible emergency, as defined in

[10] Zootechnical stations will be financed to provide seeds of forage and animal feed in crisis periods and to disseminate technologies of pasture improvement and management. A selection criterion for eligible facilities needs to be defined and agreed with the World Bank. These would include government commitments to allocate specific resources for operations and maintenance. The potential beneficiary institutions include: Institute of Veterinary Services (IVS), Veterinary Research Services (VRS), and Agriculture Research Institute (IIA).

the Contingency Emergency Response (CER) operational manual prepared and adopted by the GoA, this component would finance emergency activities and expenditures through the reallocation of funds from the Project.

37. Gender. The project will support women's employment and decision-making throughout the activities contemplated under Component 1 and 2. The objective is to guarantee the gender mainstreaming and that fifty percent of the beneficiaries will be women, in a context in which women are 52% of the population of Angola and the main workforce in the agriculture. More than half (55.6%) of the population is employed in the agriculture, animal production, hunting, forestry, and fishing sectors, followed by the trade sector (19.4%). Women are more represented in the Agriculture, Forestry and Fisheries sector (47%). Women in Angola also play a key role in keeping the food system functional. Another relevant aspect is women's access to land, which, for cultural reasons, sometimes encounter barriers. The project will prepare a Gender Gap Analysis and a proposed Action Plan to close these gaps, in relation to each of the project components: capacity development; access to technologies and infrastructure, transition to commercial farming and others to ensure that the project will be gender-tagged.

38. Gender-based violence (GBV). The Project will be screened for GBV risks. Awareness raising and sensitization efforts will be included in the design of investments as part of the social outreach program and technical assistance.

39. Citizen Engagement. Stakeholder engagement will be carried out throughout implementation to mitigate the risk of misperceptions about project impacts and benefits. Expected meetings to be take place during preparation will inform the development of a Stakeholder Engagement Plan, identifying affected and other interested parties and vulnerable groups. The plan will include a schedule of engagement actions, including sharing of project information and stakeholder participation, and description of a Project-level GRM. The latter will be used to keep communication lines with residents open throughout implementation, resolve issues and complaints, and answer citizens' questions and concerns.

40. Citizen engagement through the project will also go beyond grievance mechanisms. The project will put in place mechanisms for stakeholder's involvement at all stages of project design and implementation to make sure that it is informed by beneficiaries. Moreover, periodic beneficiary assessment surveys to promote overall accountability and responsiveness to beneficiaries. Especial attention will be paid to women and people with disabilities which have less access to basic services.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	TBD
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

41. **The environmental risk is classified as Substantial at this stage considering the activities described below.** This is based on the project's anticipated civil Works under Component 2, such as, modernization of existing and in development of new irrigation and storage infrastructure; as well as activities under Component 1 that include capacity building, technical assistance and small-scale household processing infrastructure. The number of construction activities in nine provinces under Component 2, in different locations that are not yet known; and the Borrower's lack of experience on the implementation of projects under the new ESF requirements is also considered as being a potential risk. Key environmental concerns are related to potential risks and impacts of the modernization of existing and in development of new irrigation and storage infrastructure. The proposed civil works may generate some adverse impacts related to: (i) disposal and management of waste during the construction phase, (ii) occupational health and safety of workers, (iii) nuisances related to air and noise emissions, and (iv) community health and safety. Project activities such as improving access to fertilizers; modernization/rehabilitation of existing irrigation infrastructures and development/construction of new irrigation infrastructures, have the potential to adversely impact the physical and natural environment. Likely risks and impacts could include soil erosion and contamination, water use efficiency, increased use of pesticides and other agrochemicals. These potential risks and impacts shall be managed through the implementation of cost-effective mitigation measures. Technical assistance activities will be financed by the project under Component 1 and 2 and will support MINAGRIP to develop smart subsidy programs; capacity building activities on agriculture practices; formation and strengthening of Water Users Associations (WUAs) for adoption of improved and climate responsive water management practices such as soil and water conservation techniques and O&M; investment for increasing agricultural production and improving access to storage capacity, for increasing livestock production; and the rehabilitation of selected critical public facilities. The proposed TA activities are classified as type 2 (formulation of programs) and type 3 (borrower capacity building) per OESRC Advisory Note for TA under ESF. Anticipated environmental risks of the TA activities are expected to be moderate and easily manageable through the implementation of cost-effective mitigation measures. Hence, environmental and social objectives shall be included into the TA process.

42. **The project's social risk rating is Substantial at this stage.** This is based on the project's proposed interventions envisaged under Component 2 (such as, modernization of existing and in development of new irrigation and storage infrastructure; as well as activities under Component 1 that include capacity building, technical assistance and small-scale household processing infrastructure), which have the potential to result in significant social impacts in part due to the social context that characterizes some of the areas where project interventions will take place (e.g., remote rural communities affected by drought and with high incidence of poverty). Although the social and economic impacts of the envisaged project interventions are expected to be positive overall, it is anticipated that there will be substantial social risks relating to the impacts of civil works on communities, including issues relating to labor and working conditions (e.g., risk of child labor), labor influx, and sexual exploitation and abuse and sexual harassment (SEA/SH); potential temporary or permanent physical or economic displacement impacts; potential issues relating to the distribution of project benefits and social inclusion (including limited participation of women); and interventions in pastoralist and/or Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local (IP/SSAHUTL) communities in southern Angola, where culturally-appropriate engagement and consultation activities and measures to ensure appropriate inclusion of such communities as project beneficiaries will be needed. (e.g. prevalence of child labor in agriculture and construction, enforcement of labor laws, workplace exclusion/discrimination, water availability, local land use patterns, tenure arrangements and access/competition for arable land). In rural communities affected by drought in southern Angola, there is limited access to social services such as health clinics and high incidence of poverty and food insecurity. Ensuring the inclusion of vulnerable groups in the distribution of project benefits may be one of the project's main challenges, in part due to the remoteness of

many rural communities affected by drought (often characterized by poor road access) and to the limited reach of the state (and hence of public services) in many of such locations. Furthermore, the IP/SSAHUTL communities which are present in southern Angola are characterized by additional vulnerability and marginalization in part due to linguistic and cultural differences and – in some cases – reliance on government services across the border in Namibia due to the Angolan state's limited reach.

43. A preliminary sexual exploitation and abuse/sexual harassment (SEA/SH) risk assessment has been conducted, using the World Bank's SEA/SH Risk Assessment Screening Tool, and the risk rating is substantial. This is largely due to the fact that it is envisaged that there will be project interventions involving civil works in rural and remote areas, where supervision of the project's labor force is typically more challenging, and as it is anticipated there will be interventions in areas severely affected by drought and thus characterized by high a degree of vulnerability. Measures designed to manage potential SEA/SH risks in line with the risk level will be outlined in the E&S documents that are to be developed for this project (e.g., ESMF, LMP, SEP, and IPPF), and a SEA/SH Action Plan will be developed during project preparation and implemented by Effectiveness.

CONTACT POINT

World Bank

Izabela Leao, Marco Antonio Aguero
Senior Rural Development Specialist

Borrower/Client/Recipient

Ministry of Finance

Implementing Agencies

Ministry of Agriculture and Fisheries
Anderson Jeronimo
Project Director
andjeronimo@gmail.com

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Izabela Leao, Marco Antonio Aguero

Approved By

Practice Manager/Manager:		
Country Director:	Jean-Christophe Carret	09-Dec-2021