



Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 10-Jan-2023 | Report No: PIDC35150



BASIC INFORMATION

A. Basic Project Data

Country Western and Central Africa	Project ID P180244	Parent Project ID (if any)	Project Name WEST AFRICA FOOD SYSTEM RESILIENCE PROGRAM (FSRP) PHASE 3 (P180244)
Region WESTERN AND CENTRAL AFRICA	Estimated Appraisal Date Jul 03, 2023	Estimated Board Date Sep 29, 2023	Practice Area (Lead) Agriculture and Food
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance and Budget	Implementing Agency Ministry of Livestock and Animal Production, Ministry of Agriculture, Rural Equipment and Food Sovereignty	

Proposed Development Objective(s)

To increase preparedness against food insecurity and improve the resilience of food systems in Senegal

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

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

DETAILS

World Bank Group Financing

International Development Association (IDA)	300.00
IDA Credit	150.00
IDA Grant	150.00



Environmental and Social Risk Classification

Substantial

Concept Review Decision

Track II-The review did authorize the preparation to continue

B. Introduction and Context

Regional and Country Context

1. **After a decade of progress, West African economies are slowing amid global headwinds, strongly affecting poverty reduction.** Economic growth in West Africa is expected to slow to 4.0 percent in 2022, from 5.0 percent in 2021¹ following multiple global crisis affecting economies, which include the tightening of global financial conditions, elevated inflation driven by rising food and fuel prices exacerbated by the war in Ukraine, adverse weather conditions, and the rising risk of debt distress. The estimated per capita income growth of 1.08 percent for the region in 2022 is insufficient to meet the goals of poverty reduction and boosting shared prosperity in the medium to long term. The COVID-19 pandemic has impacted long-term growth, particularly affecting the poorest people and increasing extreme poverty. The slow recovery of the per capita income growth rate, at 1.26 percent in 2023 and 1.3 percent in 2024, still falls short of putting the region back on the pre-pandemic path of poverty reduction. Acute food insecurity has more than doubled from 16.7 million people in October-December 2020 to an estimated 38.3 million people in June-August 2022 and 45.21 million people in June-December 2023. The war in Ukraine is estimated to have driven seven to ten million additional people into food insecurity. West Africa remains among the most fragile regions and very vulnerable to shocks. There is an urgent and clear need for additional investments in food systems development and resilience in the region.

2. **Senegal is one of the fastest-growing economies in West Africa.** With a per capita gross national income (GNI) of US\$1,540 in 2021, Senegal is currently a lower middle-income country². Real growth was about 6 percent annually in 2014-2019 but contracted to 0.87 percent in 2020 due to the pandemic. After reaching 6.1 percent in 2021, growth is projected to decelerate to 4.8 percent in 2022 as domestic and external shocks dampen industrial and agricultural production. The fiscal deficit is expected to remain high, at 6.2 percent of GDP. However, the start of offshore oil and gas exports in 2023 will underpin broad-based future economic growth expected to accelerate to an average of 6.8 percent during 2023-2027.³

3. **Senegal's strong economic performance over the last decade did not translate in significant poverty reduction or reduced inequality.** The poverty rate remains high and stable around 37 percent (see Table 1), as growth is driven mainly by urban services, while most of the poor derive their incomes from agriculture. Poverty in urban areas dropped from 22.5 percent in 2011 to 19.8 percent in 2018 while in rural areas it only declined from 59 percent to 54 percent.

Table 1: Senegal Macro Poverty Outlook 2021

Population, million	17
GDP, current US\$ billion	27
GDP per capita, current US\$	160
International poverty rate (\$2.15) ^a	37
Lower middle-income poverty rate (\$3.65) ^a	37
Upper middle-income poverty rate (\$6.85) ^a	7
Gini index ^a	38
School enrollment, primary (% gross) ^b	83
Life expectancy at birth, years ^b	64
Total GHG emissions (mtCO2e)	3

Source: WDI, Macro Poverty Outlook, and official data.
a/ Most recent value (2018), 2017 PPPs.
b/ Most recent WDI value (2020).

¹ Source: IMF report on the economic situation of West Africa (October 2022). <https://www.imf.org/en/Publications/REO/SSA/Issues/2022/10/14/regional-economic-outlook-for-sub-saharan-africa-october-2022>

² Lower middle-income economies defined as those with a GNI per capita between US\$1,086 and US\$4,255.

³ World Bank Country Profile. September 2022



4. **Senegal’s economy is weathering the impact of several adverse shocks.** The ongoing Ukraine conflict poses immediate challenges with higher energy, fertilizer, and food prices. High food price inflation, which accounts for about half of final household consumption, has also hindered poverty reduction. Inflationary pressures continue to negatively impact livelihoods and household welfare. Inflation accelerated to 13 percent in October 2022, driven mostly by a sharp increase in food prices over 19.3 percent. Rising food prices are already causing the poorest households to replace higher quality foods with poorer substitutes, likely worsening malnutrition. Senegal is also affected by sub-regional insecurity and rising social and geopolitical tensions. Finally, Senegal is exposed to climate shocks including floods, droughts, and associated health hazards, which reduce agricultural productivity, already under pressure with the recent increase in the price of fertilizer imports. As a result, food insecurity is a persisting challenge. According to the last estimates from the report of the *Cadre Harmonisé*, despite a favorable rainy season, about 8 percent (1,410,416 people) could be in situation of moderate food insecurity (1,323,517 people) and of food crisis (86,900 people) in June-August 2023 in Senegal.

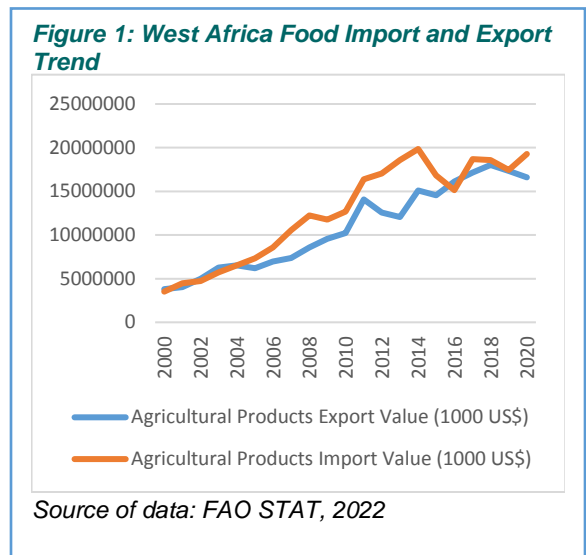
Sectoral and Institutional Context

Importance and performance of the Agriculture sector in the region

5. **West Africa economy is heavily dependent on Agriculture.** Even though its share of total GDP has decreased over the last decades from 31 percent in 1990 to 23 percent on average in 2000-2021, the Agriculture sector retains a crucial role in economic growth in West Africa. The sector generates 33 percent of all foreign exchange earnings. Agriculture is the main source of livelihood for 80 percent of the rural population and employs nearly half—46 percent on average in 2010-2020—of the region’s labor force.⁴

6. **Although technology and efficiency gains have been the main drivers of agricultural growth in all developing regions, their contribution to growth in West Africa is still limited.** While crop yields have increased in Africa, they still significantly trail those of the rest of the world. The average cereal yield across the continent in 2020 was half that of India (3.28 t/ha), about one-fourth that of China (6.30 t/ha), and one-fifth of the yield in the United States (8.18 t/ha). Scant evidence points out at a much larger productivity gap for livestock production. For instance, African milk yield (0.19 t/head) is estimated at about 15 percent of the world’s average (1.23 t/head). In sum, there is still a huge potential to boost agricultural productivity in Africa. Production of crops and livestock must increase sustainably if the region is to meet the growing demand for food.

7. **Many countries in West Africa region depend on food imports given their current consumption and production patterns and Senegal is no exception.** As a result of the rising divergence between supply and demand, West Africa’s food import bill has doubled over the past two decades increasing from US\$8.01 billion on average during 2000-2010 to US\$17.78 billion during 2011–2020 (Figure 1). The worse is expected in 2022 following food price inflation induced by Ukraine – Russia crisis. This increase is primarily driven by growing imports of cereals and vegetable oil and fats making nearly 34 and 14 percent of the higher import bill, respectively. Rising



⁴ Data from database: World Development Indicators. Last update 16/09/2022



food imports do not pose a threat to a country's foreign exchange if they can be financed by exports. Still, despite important progress showed by the upward trend of the region food exports (Figure 1), the food trade balance is negative with a food export-to-import ratio of 0.86; thus, putting pressure on external macroeconomic imbalances and diverting much-needed foreign exchange reserves from importing capital goods and technology. West Africa's growing food import bill means an important missed opportunity. Food import bill consists of 23 percent of the region merchandise imports on average over the last decade 2010-2021.⁵

8. Senegal is essentially an agriculture-based economy and despite some progress achieved, the country remains a net importer of food.

The Agriculture sector⁶ accounted for 19 percent of the GDP in 1990 and this share kept decreasing over the year and reached 15.3 percent in 2021. Despite some progress, the sector growth is highly fluctuating over the last two decades 2000-2021, with a rate varying from -22 to 21 percent and an average rate of 4 percent, equal to the overall GDP growth rate average but much below the Comprehensive African Agricultural Development Program (CAADP) target of 6 percent. In Senegal, the sector supports 62 percent of the rural population and employs more than 38 percent of total labor force on average in 2000-2021.⁷ In addition, it is skewed towards employment for the poorest quintile of the population with 45 percent of households in poorest quintile working in Agriculture.⁸ With a herd size of 3.7 million cattle, 7.7 million sheep, 6.0 million goat and 85 million poultry,⁹ the livestock subsector itself contributes to 3.4 percent to the GDP and 23.4 percent to the added value of the primary sector. And about 30 percent of rural households¹⁰ derive their livelihoods, resilience, and food security from livestock which also plays a critical role in women and children's nutritional security. Furthermore, production for domestic consumption has not followed the demand driven by the population growth. From 2010 to 2020, the value of agricultural imports increased by 62 percent from US\$1,175 million to US\$1,907 million (see also Box 1), while the value of agricultural exports increased by 120 percent from US\$344 million to US\$756 million. The national reliance on food imports has increased in volume terms and has made the country more vulnerable to external shocks such as global price volatility, trade bans or restrictions, energy prices, etc. Many of the food imports could be competitively produced domestically, confirming the potential for a more robust supply response. Although some progress is being made, the development of the Agriculture sector has lagged other sectors and accelerating the pace and scale of investments is necessary to reduce rural poverty and import dependency.

Box 1: Potential for substitution of food imports.

The main imported items include wheat, sugar, and vegetable oil (palm and soya bean) and account for 47 percent of the total value of imported foods. Agricultural imports also include products with a clear potential for local production, such as maize, fruit and vegetables (onions, potatoes, paste of tomatoes, fruit juice, etc.), live animals (cattle, sheep, goats, poultry), meat products, as well as dairy products and eggs. In 2020, the value of these imports was estimated at US\$420 million. Due to strong market demand in urban areas, imports keep increasing; for example, import of onions increased from 105,459 MT in 2010 to 176,542 MT in 2020 despite significant increase in the production moving from 160,000 MT to 412,305 MT over the same period, an increase by 157 percent (FAOSTAT).

Opportunities and potential yet to be explored

⁵ Ibid

⁶ comprising agriculture, livestock, and fisheries

⁷ Data from database: World Development Indicators. Last update 16/09/2022

⁸ 2021 Senegal Poverty Assessment

⁹ MEPA, 2021

¹⁰ MEPA, 2016. PNDE



9. **West Africa has many natural resources endowments yet to be tapped to boost agricultural growth and improve food security.** The region has the potential to feed its 418 million people and even could contribute significantly to feeding the nine billion people across the globe by 2050. It has tremendous amount of underutilized land and water resources. In Senegal, 3.27 million hectares of land is cropped out of a potential of 8.87 million hectares and only 67,000 hectares are irrigated out of a potential of irrigable land of 350,000 hectares. The improvement of water resource use is recognized as a pivotal measure around which more resilient and productive territorial development projects can be designed. Senegal is a member of the Sahel Irrigation Initiative and signed the Dakar Declaration in 2013 through which the country committed to scale up investments in water resources management. Implementation experience has shown that investment in water management is the most critical and efficient element in pursuing climate change adaptation efforts. The potential for the development of surface water resources remains considerable and is still largely unexplored.

10. **Furthermore, food demand will continue to grow at a fast pace as the trends in population growth and urbanization persist.** With a rapid population growth of 2.68 percent, domestic demand for food will rise by an estimated 4–5 percent per year, and an increasingly urban and prosperous population will consume not only more staple foods (millet, maize, rice) but more high-value foods, such as fresh fruits, vegetables, and livestock products. This offers a unique opportunity for farmers and agribusiness in the region to step up efforts to meet this growing demand. In turn, meeting such demand requires policies and investments that transform agriculture and food systems along the value chains in a sustainable manner and strengthen urban-rural linkages. Spike of world food prices induced by the COVID-19 pandemic and the Ukraine-Russia crisis (about 70 percent higher than before the 2008 world food crisis), can also be seen as an incentive for producers to supply more. And Senegal has the potential to gain more market share, given growing domestic, regional, and international demand for its agricultural products, including dry cereals (millet, sorghum, maize), rice, groundnuts, vegetables, fruits, milk, and meat.

11. **As evidence, Senegal is making some important progress in supplying domestic and international market, taking opportunity of the increasing food demand.** As illustration, poultry value chain has taken off with production doubling over the last decade, increasing from 56,000 tons to 133,000 tons between 2011 and 2020 and with positive impact on youth entrepreneurship. Poultry provides 40 percent of the total national meat consumption, making it the primary meat consumed in the country. However red meat production (ruminants) only increased by 16 percent from 125,000 tons in 2011 to 145,000 tons in 2020, below its potential. Horticulture (vegetables and fruits) is an emerging sub-sector that has expanded rapidly with a jump in exports from 34,295 metric tons in 2010 to more than 123,000 metric tons of produce in 2020, or in value terms from US\$37.5 million to US\$373 million in the same period, signaling a nascent structural transformation with a shift to higher added value per unit of produce. Horticulture is also a rapid adopter of innovations, both with respect to production and handling technologies as in value chain development. Growth in the horticulture subsector also has the potential to reduce rural poverty by boosting off-farm wage employment along these value chains, for women and young people, and increase nutritional outcome.

12. **Furthermore, West Africa trade integration offers a unique opportunity to enhance the resilience of food systems to international shocks.** Economic Community of West African States (ECOWAS) and the African Continental Free Trade Area (AfCFTA) can be leveraged to coordinate investments in regional infrastructure and innovation dissemination to foster participation in regional value chains. Removing trade and technical barriers to food trade, investing in regional trade facilitation, and enabling the free flow of capital across borders (foreign direct investment) will be essential for building resilient regional food systems with digital technologies playing a critical role. Senegal should take advantage of and further contribute to the transformation of regional agri-food value chains.

Major structural constraints to be addressed



13. **Many intertwined constraints are challenging the development of the Senegal Agriculture sector.** These barriers are (i) severely limiting the capacity of rural households to lift themselves out of poverty, (ii) worsening per capita calorie availability and deepening food insecurity, and (iii) preventing agribusiness to take off and grow adequately. To unlock the potential of the Agriculture sector and promote private investment along crop and livestock value chains, Senegal will need to address the following structural binding constraints:

- a. **Vulnerability to climate change and its adverse effects.** Climate change and variability are reducing agricultural productivity both for crops and livestock. The impacts of more frequent extreme weather events such as droughts and floods are felt across the region. In the medium term, regional climate models consistently predict fewer days of rainfall and shorter wet spells over 70 percent of the region, coupled with a higher intensity of rainfall on wet days.¹¹ In particular, Senegal is among the top-tier African countries most at risk of drought-related impacts of climate changes. Besides droughts, floods and fires are the most prevalent climate-related shocks affecting Senegal according to the 2018–19 Harmonized Survey of Household Living Conditions. The National Determined Contribution (NDC) report (2020)¹² states that climate impacts will create a downward trend in rainfall (expected to range from 16 mm in the Northern region to 89 mm in the South by 2035), an increase in average temperatures (expected to reach between +1.17 and +1.41 by 2035), and disruptions to the availability of arable land. In addition, crop yields can vary 30-40 percent from year to year due to the amount of rainfall, pointing to the efforts needed to protect agriculture against climatic variability.¹³ These factors reflect the great vulnerability of Senegal to climate change, requiring specific mitigation and adaptation actions to future climate prospects. Adequate information system to provide regular and updated meteorologic information, accurate weather forecast, early warning and practical advice to smallholders and agribusiness SMEs is necessary.
- b. **Degradation of natural resource base.** The productive resource base including water, land, and vegetation needed for food production is deteriorating rapidly as crops and livestock expand across landscapes¹⁴ with little attention to sustainability. Land cover has changed significantly over the last 50 years. Villages and cities cover 140 percent of the area they occupied in 1975. While the area covered by crops doubled between 1975 and 2013, vast areas of forest, savanna, and woodland were lost or fragmented. More than one-third of the region's dense forest cover has been cleared since 1975 for farms and settlements. In savanna and steppe landscapes, bare sandy areas increased by 47 percent as drought and unsustainable land-use practices degraded vegetative cover. Soil erosion is widespread in the region, mainly caused by recurring droughts, deforestation, and unsustainable agricultural practices such as intensive tillage, over-grazing etc. Without widespread adoption of good agriculture practices under integrated landscapes management, erosion and soil infertility are expected to further accelerate.
- c. **Low productivity due to limited access to inputs, technology, and extension services.** Agricultural productivity is still low as smallholder producers have little access to technology and quality inputs (improved varieties and breeds, fertilizers, machinery, modern irrigation...), and appropriate advice. Regarding livestock, gaps in animal nutrition, genetics, health, and husbandry practices constrain its modernization and the sustainable growth of sedentary systems, which are necessary to complement pastoral (mobile) systems. In the dairy sector, major constraints to productivity include the presence of contagious diseases, insufficient access to quality forage and

¹¹ Dosio et al., 2019.

¹² Available at <https://unfccc.int/sites/default/files/NDC/2022-06/CDNSenegal%20approuv%C3%A9e-pdf-.pdf>

¹³ FAOSTAT, November 2022

¹⁴ Landscapes are social-ecological systems that consist of a mosaic of natural and/or human-modified ecosystems, often with a characteristic configuration of topography, vegetation, land use, and settlements that is influenced by the ecological, historical, economic, and cultural processes and activities of the area.



feed, and a lack of knowledge and capacity from stakeholders on intensive production systems. Building on the West Africa Agriculture Productivity Program (WAAPP, P094084)¹⁵ achievement, further support for the generation, transfer and adoption of productivity-enhancing and climate-smart technologies and innovations will be needed to reduce efficiency gaps while adapting to climate change.

- d. **Limited access to finance.** Bank credit for agriculture is very low, at 5.12 percent of the total credit of the Senegalese economy, according to the Central Bank of West African States (BCEAO),¹⁶ with only 1.47 percent for long term and investment credit. Financial institutions are reluctant to extend credit to SMEs and smallholders are presented with collateral and guarantee requirements above their capacity.¹⁷ GoS is currently implementing the National Strategy for Financial Inclusion (SNIF 2022-2026) to boost financial inclusion and financial literacy among informal sector actors specially smallholders' agriculture producers, but financial inclusion remains low.
- e. **A poor business environment with few incentives for private investment and weak value chain organization.** Senegal likewise the rest of West Africa region must dramatically improve its business environment to foster private investment, especially to unlock the potential of commercial agriculture, develop agricultural value chains, generate efficiency and economies of scale, drive innovation, and boost export markets. In addition, Senegal has many producer associations, cooperatives, and inter-professions but agricultural value chains are not organized enough to connect buyers and sellers and improve competitiveness.
- f. **Inadequate marketing infrastructure.** The lack of infrastructure for pooling, handling, storing, cooling, and shipping agricultural products creates significant marketing inefficiencies. It discourages the emergence of commercial operators that can act as aggregators and generate economies of scale. Without proper storage and cooling facilities, significant waste occurs. For rice and other cereals, post-harvest losses are estimated at 10 percent, and they increase to 30–50 percent for fresh fruits and vegetables (onion in particular). The development of dairy and meat value chains also heavily depends upon processing and cold chain infrastructure. Exports of fresh farm products are also compounded by high transport costs. The time required to ship produce by sea makes it difficult for firms to guarantee supplies of fresh products of good quality to e.g. European Union (EU) markets. High cost of electricity impedes the development of functioning and cost-efficient cold chains, which further reduces the competitiveness of Senegalese fresh exports. Although some progress was made recently with Diamniadio national interest market platform and planned agropoles, far more investment is needed. Inefficient market information systems have also hampered the development of commercial agriculture, but now digital technology has opened opportunities to provide market information and productivity-enhancing services more widely and efficiently.
- g. **Weak integrated regional market.** The region's poorly integrated food markets cannot accommodate large yearly fluctuations in crop and animal production by directing surplus food to areas with shortages. Commodities imported from outside the region account for about 80–90 percent of all food traded by volume in West Africa, with intraregional trade stagnating for several decades at 10–20 percent.¹⁸ Most intraregional food trade is informal and unrecorded, constraining regional value chain integration. Intraregional trade is hindered by limits on the free movement of goods posed by high transaction costs as well as physical, infrastructural, and political barriers. As a result, food markets are fragmented. They cannot accommodate the large variations in local food

¹⁵ WAAPP also included other phases: P117148; P122065; P129565; P145160; P158265; P158983. /

¹⁶ BCEAO 2021 annual report

¹⁷ Financial information required by banks is now partially covered by the newly established credit bureau and lack of guarantees and collaterals are to be covered by public institutions such as the Priority Investment Guarantee Fund (FONGIP) to mitigate risks and Sovereign Strategic Investment Fund (FONSIS) to extend long term investments to priority sectors including agriculture and livestock.

¹⁸ UNCTAD 2020.



production that occur from one year to the next by distributing food from surplus to deficit areas across the region. Localized food shortages and price volatility are common, while farmgate prices remain low. Imported food is becoming not more competitive than domestic production while food imports are placing severe strain on the region's balance of payments and foreign exchange reserves. Import dependencies also expose West African countries to the volatility of international cereal markets, as being experimented under COVID-19 pandemic and Ukraine – Russia crisis.¹⁹

- h. **High gender inequality.** With a United Nations (UN) Gender Inequality Index (GII) of 0.530, Senegal is ranking 131 out of 170 countries in 2021. Women are the backbone of agricultural productivity in Senegal yet enormous gender gaps persist specifically in access to productive resources such as land, financing services, extension services, labor, and other inputs. Despite policies from the Government of Senegal (GoS) on gender equality, persistence of gender disparities in rural areas are shaped namely by: (i) a lack of technical expertise on identifying and addressing gender differences; (ii) agricultural sector policies and programs neglecting to adequately consider the gender dimensions of agriculture in the design and implementation of their programs; and (iii) social pressures preventing them from developing their income activities. As a result, women in rural areas have much lower incomes compared to men and have more limited access to decision-making roles in the food system. Critically, women also bear the brunt of climatic shocks in agriculture.

A Supportive Institutional Context

14. **National policy and strategy documents have consistently advocated the emergence of a vibrant Agriculture sector.** Thus, the GoS, through the “Senegalese Emergent Plan” (PSE) aiming at achieving middle-income status by 2035, has adopted solid strategies to guide the transformation of the agriculture sector by enhancing productivity growth and regional competitiveness, developing value chains to improve national food security or food sovereignty and increase resilience to external shocks. These strategic documents include: (i) The National Livestock Development Plan (PNDE)²⁰ being implementing by the Ministry of Livestock and Animal Production (MEPA); and the new “Country Food Sovereignty Program” being prepared by the Ministry of Agriculture, Rural Equipment and Food Sovereignty (MAERSA) in response to Ukraine-Russia crisis with its implications on food spike. As part of the 2022 World Food Summit, Senegal, in its commitment to the development of sustainable food systems, expressed the vision of a “high-performing, inclusive and resilient nation in the sustainable production, processing, distribution and consumption of safe and nutritious food for a society emancipated from hunger and malnutrition” by 2030. Senegal adheres to the Great Green Wall initiative (GGWI) for which an agency with ambitious means and mandate has been set up, and existing institutional and planning frameworks in this context can be leveraged for new implementation. The proposed project is fully aligned with these strategic documents, vision and initiative and intends to address several of the key identified structural constraints to build a resilient food system.

15. **The project will adopt a holistic or integrated approach, complementing other programs and projects supporting the agriculture sector in Senegal.** It will work in synergy with the ECOWAS which will coordinate the overall program, jointly with the West African Council for Agricultural Research and Development (CORAF) and the Regional Center for Agro- and Hydrometeorology of the Permanent Interstate Committee for Drought Control in the Sahel (CILSS/Agrhymet), as specified in FSRP Phase I project appraisal document (PAD - P172769). It will also place a strong emphasis in reducing

¹⁹ The spike in international rice prices in the first half of 2020, when Asian countries restricted exports out of fear that the pandemic would lead to a supply shortfall, illustrates the international market risk to which West African countries remain exposed.

²⁰ *Plan National de Développement de l'Élevage* (PNDE, 2014–17) was extended (2017–2031)



women's vulnerability to shocks and increase their active contributions and benefits from the food system. Specifically, the project will build on the achievements of or complement the following projects:

- a. WAAPP by strengthening the established Regional Research Centre of Excellence (RCE) for dry cereals and associated crops in Senegal and other CREs and National Centers of Specialization (NCoS), and extension services, accelerating the adoption of climate smart practices and the use of digital technologies to support the development of the project targeted cereals (maize, sorghum, millet), horticulture (potato, onion and banana), and livestock (meat and dairy) value chains;
- b. Agriculture and Livestock Competitiveness Program for Results (P164967), to further improve productivity and competitiveness;
- c. Sahel Irrigation Initiative Support Project (P154482) to further expand and improve water use for irrigation purposes, essential to increase agriculture production and productivity, while ensuring the adoption of broader landscape management/agro-ecological practices;
- d. Regional Sahel Pastoralism Support Project - phase II (PRAPS-2, P178791), to support sedentary, more intensive, integrated crop-livestock production systems focusing on dairy and meat (ruminants, poultry and pig) value chains. Broad adoption of sanitary, environmental, and public health standards along the livestock value chain will also be critical and supported by the project under a One Health approach;
- e. Senegal Jobs, Economic Transformation and Recovery Program (PRES, P174757), supporting access to finance to boost investments from the private sector (small to medium size ventures), selecting the most adapted instruments and approaches to enhance financial inclusion of agriculture crop and livestock value chain actors.

Relationship to CPF

16. **The proposed project is aligned with the Country Partnership Framework (CPF) 2020–24 (Report No. 143333-SN) aiming to make growth more inclusive, competitive and sustainable.** By addressing underlying factors constraining sustainable production, productivity, and competitiveness, and embedding climate adaptation and mitigation in all its interventions, the project will directly support CPF Focus Area 2 (boost competitiveness and job creation through private sector-led growth), particularly Objective 2.4 (boost the competitiveness of agriculture²¹ and related value chains), as well as CPF Focus Area 3 (increase resilience & sustainability in the context of growing risks), particularly Objective 3.1 (promote and protect resilient livelihoods, ecosystems, and infrastructure in the face of climate change). It will support gender specific objectives²² that will be specifically tackled through partnerships on “Climate-Smart-Gender-Smart” agriculture technologies, and by promoting women's access to markets and productive inputs. Furthermore, the project will look to meet the IDA 20 Policy Commitments on Gender (GEN2 on Productive Economic Inclusion and GEN5 on increasing digital access).

17. **It will also directly contribute to the PSE²³ and NDC's objectives.** PSE states that the development of agriculture, livestock, fishing, aquaculture and agro-industry responds to a triple aspiration: (i) strengthen Senegal's food security and

²¹ The CPF clarifies that “unless otherwise specified, the term ‘agriculture’ includes the livestock sub-sector”.

²² The CPF specifically highlights gender objectives: Objective 2.3 aims to increase the percentage of women with transaction accounts and also promotes female-headed small and medium enterprises (SMEs) (including through a dedicated initiative to connect national procurement needs with women-owned SMEs); Objective 2.4 ensures that women are well represented among farmers benefiting from climate-smart agriculture assets and services.

²³ PSE, the national level development plan, is now in its second phase of implementation (2019-2023), and constitutes the overall strategic framework for the country's long-term economic and social development. Its goal is to achieve middle-income status for Senegal by 2035. The PSE, adopted in 2014, has three strategic axes: a) transforming the structure of the economy to support strong and sustainable growth; b) expanding access to social services



address a trade balance that has worsened; (ii) develop competitive integrated value chains with high added value; and (iii) preserve socio-economic balances and boost the rural economy. The second priority action plan 2019-2023 (PAP-2) indicates that initiatives will be supported to promote and develop horticulture and agribusiness, and boost sectors such as groundnut, rice, corn, cashew nuts, mango, onion, tomato, potato, poultry, milk and meat. The proposed project is fully aligned with PSE's axis 1 (economic structural transformation and growth) and PAP-2 strategic objectives 1.1 (promote sectors that drive growth, exports and social inclusion), 1.5 (strengthen the foundations of high productivity), and 2.10 (reduce the degradation of the environment, natural resources and the adverse effects of climate change). The project is also aligned with the country NDCs that target agriculture (which contributed 43.8 percent of Greenhouse Gas -GHG- emissions in 2010) as one of the key sectors to address for climate mitigation -through increased carbon sequestration- and adaptation.

C. Proposed Development Objective(s) (PDO)

18. The proposed PDO is to increase preparedness against food insecurity and improve the resilience of food systems in Senegal.

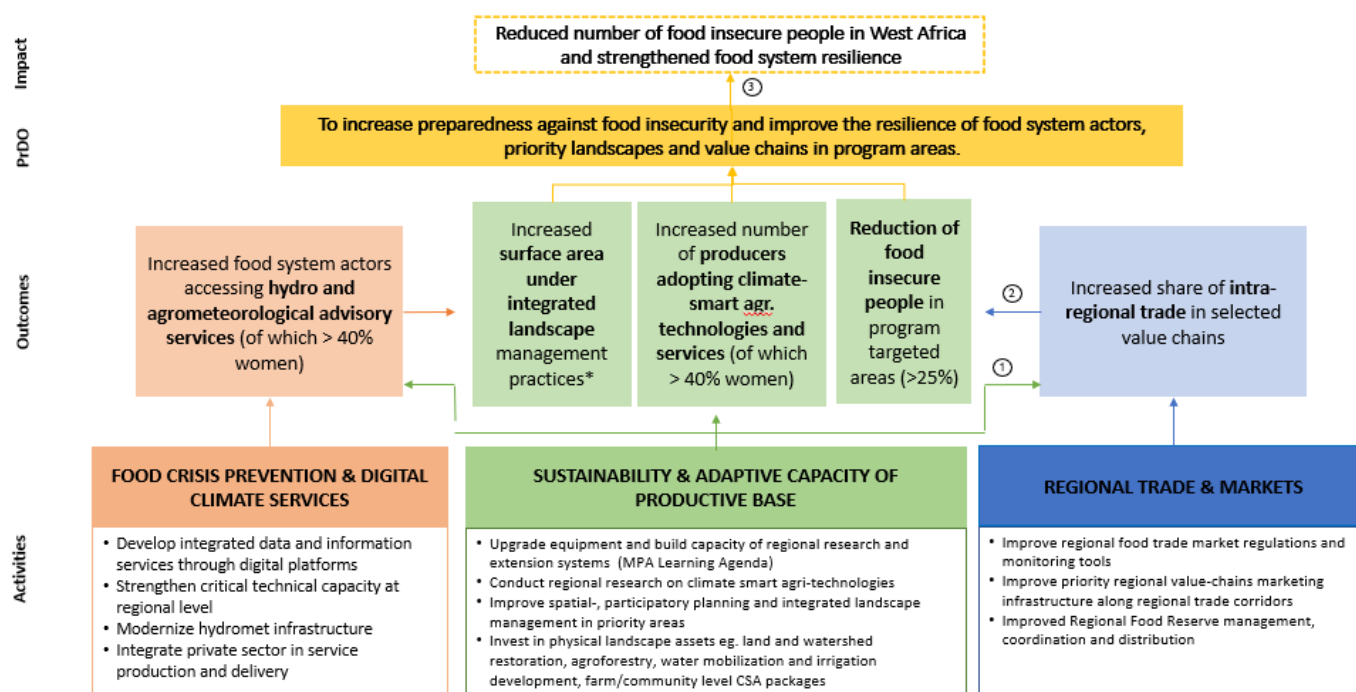
Key Results (From PCN)

19. The Program's Results Chain is described below. Senegal, as all other beneficiary countries, will abide to the common results framework (Project Development Objective indicators and intermediate levels indicators -IRI). In addition, specific IRI may be added to better monitor progress of selected interventions envisaged in the country.

20. The key results will remain unchanged and include:

- (i) Intra-regionally traded production in selected value chains (percentage)
- (ii) Reduction of food insecure people in program targeted areas (percentage)
- (iii) Project beneficiaries (number and percentage of female beneficiaries)
- (iv) Food system actors accessing hydro and agrometeorological advisory services (number and percentage of female beneficiaries)
- (v) Land area under integrated landscape management practices (CRI, Hectare (ha))
- (vi) Producers adopting climate smart agriculture technologies and services (number and percentage of female beneficiaries)

and social protection and preserving the conditions for sustainable development; and c) meeting the requirements of good governance, strengthening institutions and promoting peace, security and African integration. The implementation of each phase of the PSE is guided by a Priority Action Plan (PAP).



* Corporate Result Indicator (CRI)

- Assumptions**
- 1 Landscape & CSA interventions can keep the risk/return profile attractive for private investments
 - 2 COVID-19 recovery progresses and stable macro-economic environment persist, allowing value chain interventions to encourage farmer commercialization
 - 3 Political stability improves or remains constant at regional and national levels

D. Concept Description

21. The components and subcomponents for FSRP Phase III, also referred to as FSRP-SN, will remain the same as the Board approved Phases I and II. These are: (i) Digital Advisory Services for Regional Agriculture and Food Crisis Prevention and Management; (ii) Sustainability and Adaptive Capacity of the Food System’s Productive Base; (iii) Regional Food Market Integration and Trade; (iv) Contingency Emergency Response Component (CERC); and (v) Program Management.

COMPONENT 1: DIGITAL ADVISORY SERVICES FOR REGIONAL AGRICULTURE AND FOOD CRISIS PREVENTION AND MANAGEMENT (INDICATIVE BUDGET: IDA US\$7 MILLION)

22. The objectives of this component are to: (i) enhance decision support systems with demand-driven information services to increase the effectiveness of agriculture and food crises prevention and management; and (ii) strengthen regional capacity and institutional sustainability, as well as the capacity to adapt to climate change. At the regional level, CILSS/AGHRYMET will be supported to fulfil its mandate of collecting, processing, and disseminating climate and other information necessary for improving food security, building on, and strengthening mechanisms such as the *Cadre Harmonisé* and the ECOWAS Agriculture Information System (ECOAGRIS) database,²⁴ and will ensure the overall

²⁴ The Regional Integrated Agriculture Information System. See also : <http://www.platforme-ecoagris.net/>



coordination of this component among all beneficiary countries. This component will build on and complement investments initiated through the ongoing Accelerating Impacts of CGIAR Climate Research for Africa –AICCRA – project (P173398).

Subcomponent 1.1: Upgrading Regional Food Crisis Prevention and Monitoring Systems

23. This subcomponent seeks to: (i) improve national capacities for delivery of reliable information services on vulnerability, nutrition and food security through ECOWAS' *Cadre Harmonisé* and agriculture regional information systems; (ii) reorganize and improve national pest and disease monitoring and management mechanisms; and (iii) strengthen regional collaboration for food crisis prevention.

24. FSRP-SN intends to support :

(i) **The improvement of information collection and delivery:** the project will finance (i) the collection and delivery of agro-meteorological data from the National Agency of Civil Aviation and Meteorology (ANACIM), the main purveyor of meteorological data in Senegal, as well as the Ecological Monitoring Center (CSE), a specialized center in environmental monitoring and sustainable management of natural resources using satellite imagery ; and (ii) the realization of more advanced studies to fill information gaps on nutrition and food security to identify causes of chronic food insecurity in certain areas and help develop tailored corrective actions.

(ii) **The improvement of plant pest and disease monitoring and management:** the project will support institutional capacity building on plant pest and disease surveillance and control. The project will finance (i) capacity building of staff from the Plant Protection Directorate (DPV), the National Agency for Agricultural and Rural Advisory Services (ANCAR), and the Senegalese Institute of Agricultural Research (ISRA) ; (ii) the integration of plant pest and disease surveillance information integrating agrometeorological information into ANCAR digital tools (through the SAIDA platform);²⁵ and (iii) the development of biological control options to control selected pest and disease.

(iii) **Regional collaboration:** FSRP-SN will contribute to enhanced collaboration, knowledge sharing and cross-fertilization of best practices between the relevant national institutions in Senegal and other countries in the region, facilitated by CILSS/Agrymet.

Subcomponent 1.2: Strengthening Digital Hydromet and Agro-Advisory Services

25. This subcomponent seeks to (i) improve the production of climate, hydromet, agromet and impact-based information for use by decision-makers, farmers, livestock producers and other actors in the food system; (ii) support timely delivery and use of essential agro-hydrometeorological information to key user; and (iii) strengthen the financial and institutional sustainability of national and regional institutions providing climate, hydromet and agromet information.

26. Under this subcomponent, FSRP-SN foresees to support :

(i) **The production of agro-climatic information:** the project will finance (i) the capacity building of staff from MAERSA, MEPA, and ANCAR to use agro-climatic data; (ii) the establishment of effective mechanisms for information sharing between government agencies, e.g. through the establishment of partnership agreement(s)

²⁵ SAIDA (Agricultural services and digital inclusion in Africa) is an FAO designed program, implemented by ANCAR, aimed at providing real-time information to producers and to improve the process of data collection in the field using modern technological tools.



between ANACIM/ANCAR/ISRA/DPV; (ii) the strengthening of ISRA's meteorological stations and digitization of ISRA's agro-climatological information.

(ii) **The delivery of agro-climatic information:** the project will support (i) ANCAR's e-advisory services incorporating information developed under (a) ; and (ii) the expansion of the "Digital village initiative" pilot using precision agro-meteorological data to support agriculture production.

(iii) **The development of public/private partnerships to disseminate information:** the project will support the establishment of public (ANCAR)/private partnerships for the broad dissemination of agro-climatic information with an adapted business model.²⁶

COMPONENT 2: SUSTAINABILITY AND ADAPTIVE CAPACITY OF THE FOOD SYSTEM'S PRODUCTIVE BASE (INDICATIVE BUDGET: IDA US\$100 MILLION)

27. This Component's objectives are to (i) strengthen national and regional agricultural research systems; (ii) strengthen the policy environment for landscape governance (multisectoral inclusive policies and regulations to avoid, reduce, and reverse land degradation); and (iii) support landscape units under integrated management that are able to achieve multiple objectives sustainably (food production, provision of ecosystem services, protection of biodiversity, and improvement of local livelihoods). At the regional level, CORAF will ensure the overall coordination of this component across all FSRP beneficiary countries and consolidate the regional research system established under the WAAPP.

Subcomponent 2.1: Consolidate Regional Agricultural Innovation Systems

28. This subcomponent seeks to strengthen the national and regional research and extension systems to deliver and widely disseminate improved technologies and innovations including climate-smart, nutrition-sensitive, gender and youth friendly technologies, bio-digital applications as well as technologies supporting agri-processing and marketing for value addition.

29. Specifically, the project will focus on:

- (a) **Strengthening national and regional research centers.** The project will strengthen (i) the Regional Research Center of Excellence (RCE) in dry cereals (millet, maize, sorghum) and associated crops (groundnuts, cowpeas) led by the Regional Study Center for Drought Adaptation Improvement of the Senegalese Agricultural Research Institute (CERAAS) of ISRA,²⁷ as the regional leader in the generation of new drought resilient varieties and other climate-smart agri-food technologies; and (ii) the National Laboratory for Livestock and Veterinary Research (LNERV) of ISRA and the Dakar Inter-States School of Sciences and Veterinary Medicine (EISMV) to develop zotechnical research programs on genetics, animal health and nutrition for improved livestock management technologies. Specifically, the FRSP-SN will finance (i) research infrastructure and equipment; (ii) ISO certification/accreditation and quality assurance development; (iii) research programs with a particular focus on climate-smart plant breeding, seed systems, agri-food processing, phytopathology, animal breeding and feeding adapted to local conditions, and bio-digital applications; (iv) scientific exchange visits; and (v) MSc and PhD scholarships for young scientists.

²⁶ Such as with start-ups like Jokalante, to support the rapid transmission of information to member producers.

²⁷ The CRE includes in addition to CERAAS: the Agro-Food Processing Technologies Institute (*Institut de Technologies Agro-Alimentaires*, ITA), the Macro-Economic Analysis Office (Bureau d'Analyse Macro-Economique, BAME/ISRA), and National Superior School of Agriculture (*Ecole Nationale Supérieure d'Agriculture*, ENSA)



- (b) **Escalating innovative R&D and technologies transfer.** The project will deepen and extend R&D networks and technologies transfer through the financing of: (i) the National Funds for Agricultural and Agri-Food Research (FNRAA) to finance applied research sub-projects in a competitive way based on priority research themes identified; (ii) the National Fund for Agro-Sylvo-Pastoral Development (FNDASP) for the competitive financing of sub-projects to support large-scale dissemination of research products generated at national (by RCE and other research institutes) and regional level (other RCE and NCoS throughout the region), and the multiplication of new improved seed varieties by seed producing cooperatives and other private companies to ensure their availability at the local or community level and their wide use to increase yields and agricultural production. The regional digital platform of the Market for Agricultural Innovations and Technologies ([MITA - coraf.org](http://mita-coraf.org)) will be regularly updated and used. Also, the project will finance studies and workshops for joint planning of R&D programs, participatory monitoring and evaluation system, and operational framework with R&D units.
- (c) **Modernizing national agricultural extension and advisory services.** The project will support the modernizing of approaches to agricultural advisory and extension services, including on digital agriculture tools for a wide service delivery. The project will finance : (i) the construction and equipment of a modern dedicated agricultural e-advisory center (infrastructure, equipment, staff, call center, hardware and software, application development) at the headquarters of ANCAR; (ii) a reference training center on the agricultural and rural advisory (ARA) profession; (iii) technology demonstration, application and transfer centers; (iv) the development of private agricultural advisory services that meet the demand of agribusinesses; (v) the acquisition and use of drones and development of other artificial intelligence capacity; and (iv) the renovation of regional centers and the capacity-building of staff in advanced technologies. It will also finance the development of a national strategy for the digitalization of ARA services and the creation of a related coordination and consultation framework, and the approach to quality control (ISO management certification of ANCAR).
- (d) **Promoting access to and exchange of technology:** The project will finance (i) the creation of participatory field schools and technology parks for demonstration and adoption incentives; (ii) production and dissemination of new seed varieties to upgrade the national seed system, seedlings, improved breeds and animal husbandry practices adapted to mixed-crop/livestock and more intensive production systems, equipment for agricultural mechanization and agro-food processing, and other innovative technologies; (iii) the digital directory of technologies and innovations interconnected with the update of the MITA digital platform; (iv) the promotion of modern technology platforms services, including on mechanization and soil fertility management (v) the creation of innovation platforms bringing together actors of specific value chains (following example of WAAP Benin IRA Juice platform for the development of value chains²⁸); and (vi) study tours enabling regional technology transfer.

Subcomponent 2.2: Strengthen Regional Food Security through Integrated Landscape Management

30. Subcomponent 2.2 seeks to (i) establish participatory Integrated Landscape Management (ILM) in priority landscapes among the main agro-ecological regions, (ii) enhance the resilience of ecosystems and food systems in those priority landscapes, and (iii) strengthen national capacities to extend and generalize ILM.

31. Under this subcomponent, the project will support interventions to:

- (a) **Establish participatory ILM in priority landscapes among the main agro-ecological regions.** FSRP-SN will support the implementation of a multi-stakeholder territorial planning process including the definition of territorial

²⁸ See also: <http://www.waapp-ppaao.org/en/success-stories/juice-ira-platform-development-pineapple-sector-benin>



projects that develop local resources and specificities more responsive to the needs of producers and markets. Within each of the territories, landscape units will be defined and will constitute the basic planning unit.²⁹ The sub-component will finance the mobilization of scientific and technical partners to prepare and facilitate such planning and implementation processes, as well as soft investments (including engineering studies) needed to rehabilitate degraded lands, support the agro-ecological transition of food systems, and improve landscapes productivity and management system.

- (b) **Enhance the resilience of ecosystems and food systems in those priority landscapes.** Using plans and studies developed under (a), FSRP-SN will finance sub-projects for works and equipment to restore natural assets that support production as well as rehabilitate irrigation infrastructure and develop floodplains/inland valleys, water harvesting infrastructure, light anti-erosive infrastructure, afforestation, scaling up of degraded land recovery techniques, restoration, and maintenance and improvement of soil fertility. Building on innovative irrigation solutions developed under PARIIS, the project expects to finance the rehabilitation of 10,000 ha of irrigation schemes in the Senegal River Valley, Casamance, and their equipment with modern water and labor-saving irrigation technologies for small-scale perimeters led by women and youth.
- (c) **Strengthen national capacities to extend and generalize ILM.** Relevant partners and stakeholder will play a role in sharing the Senegalese experience in ILM in the sub-region. This task will involve the preparation of territorial planning guides on improved landscape resilience as well as on agro-ecological transitions of food systems. These guides will be translated into training modules for public sector officials involved in territorial planning (ministries in charge of agriculture, livestock, environment, as well as decentralization and land use planning - SRADLs) and local collectivities (ARDs, departments and communes). Additionally, this component will include the formulation of public policy proposals and a stock-taking exercise with participants of the ILM processes.

COMPONENT 3: REGIONAL FOOD MARKET INTEGRATION AND TRADE (INDICATIVE BUDGET: IDA US\$175 MILLION)

32. The objective of Component 3 is to facilitate the trade of agricultural goods and inputs within and across national borders in West Africa. Component 3 is organized around two subcomponents, with the following expected outcomes: (i) increased intra-regional food trade between surplus and deficit areas; and (ii) increased value creation in regional priority value chains. ECOWAS will ensure the overall coordination of this component across Phase I, Phase II and Phase III countries, utilizing the resources it received under Phase I.

Subcomponent 3.1: Facilitate Trade across Key Corridors and Consolidate Food Reserve System

33. Sub-component 3.1 seeks to (i) implement an ECOWAS Agriculture Trade and Market Scorecard Mechanism, (ii) stimulate agricultural regional trade through policy harmonization on food system resilience issues, (iii) improve regional food security reserves, and (iv) provide analysis and foresight to inform strategy, trade and fiscal policy positions on selected priority regional products. ECOWAS will implement the regional-level activities of Subcomponent 3.1 as outlined in the PAD of FSRP Phase I.

34. In Senegal, investments will focus on:

- (a) **National implementation of an ECOWAS Agriculture Trade and Market Scorecard (EATM-S) Mechanism.** Senegal will adopt a scorecard developed by FSRP Phase I to increase transparency and accountability by tracking national implementation of regional policies and regulations increasing transparency and accountability, as well as

²⁹ The project will build on experiences from PRAPS-2 on the development of pastoral units (PUs) as well as Irrigation Charters (implemented by the company for the development and exploitation of the Senegal river delta lands –SAED-, and the Agricultural and Industrial Development Company of Senegal - SODAGRI).



implement the ECOWAS trade liberalization scheme Economic Community of West Africa Agricultural Policy. ECOWAS will provide technical support for data collection to all FSRP countries and more importantly serve as the peer learning and knowledge sharing platform, helping all countries to identify trade policy bottlenecks, and catalyzing policy reforms. This scorecard will include indicators on intra-regional agri-food trade in West Africa as well as important climate metrics.

- (b) **Harmonizing agricultural regional trade policy on food system resilience issues.** The project will support implementing ECOWAS regulations towards strengthening relevant national institutions. The project will support participating in cooperation frameworks with other ECOWAS States to facilitate trade in agricultural products by reducing non-tariff barriers through harmonization and mutual recognition of conformity assessment regulations, standards and procedures. The project will also support national institutions' capacity to promote awareness on those aspects.
- (c) **Improving the Regional Food Security Reserve.** Support for the Regional Food Security Reserve will focus on strengthening national capacities to respond to food crises, designing sustainable mechanisms for financing food storage and crisis management systems, and providing direct support to the first (local and community storage), second (national security stocks), and third (regional physical and financial reserves) lines of food security defense. This will be done by: (i) strengthening the capacity of producers and their organizations to store and manage first-level stocks; (ii) properly articulating these local stores with the policy of the Warehouse Reception System Regulatory Body (ORSRE); and (iii) strengthening the capacity of the Food Security Commission to store and manage national security stocks.
- (d) **Providing analysis and foresight to inform strategy, trade and fiscal policy positions on selected priority regional products.** Senegal will participate in the West Africa Rice Observatory and support national observatories for other key relevant products for regional or international trade and for those targeted by subcomponent 3.2 (milk, meat, maize, onions, potatoes, and bananas). The observatories will monitor trade flows, analyze the competitiveness of the products and provide advice to adapt strategies as well as trade and fiscal policy related to these products.

35. To achieve this, FSRP-SN will finance technical assistance (TA) and training workshops, participation in regional workshops, studies and analytical work, organization of national events, as well as supporting operational costs of specialized services involved.

Subcomponent 3.2: Support the Development of Strategic and Regional Value Chains

36. This subcomponent will support selected priority value chains (VCs), that have a clear potential to impact regional market integration and trade, competitiveness, food and nutrition security, and climate change adaptation and resilience. The selected priority VCs in Senegal are dry grains (maize, sorghum/millet), horticulture (onion, potato, and banana), and dairy and meat (beef, small ruminants, pork, and poultry). FSRP-SN will also ensure that linkages are established with the Agropoles under development in the country, which also have prioritized certain VCs. FSRP-SN will contribute to the structuring of the Agropoles' supply chains and will strengthen the organization of producers in the Agropoles' catchment areas.

37. Under this subcomponent, FSRP-SN will:

- (a) **Strengthen value chain organization and financing.** This subcomponent will support matching grants to VC actors for investments in facilities and services such as aggregation and processing centers, cold chain for horticulture and livestock products, storage facilities to reduce post-harvest losses, warehouse receipt systems, input supply mechanisms (feed, fertilizer, horticulture seeds for off-season agriculture, artificial insemination –AI– services, etc.) and food trade services. FSRP-SN will prioritize climate-smart, low-carbon technologies and practices. The



project expects to recruit service providers here to assist beneficiaries in developing bankable business plans, linking them to financing institutions, and providing technical support to implement their business plans.

- (b) **Support agricultural competitiveness and access to infrastructure.** This subcomponent will finance capacity building within national institutions to develop and implement standards and regulations for improved product quality, such as Sanitary and Phytosanitary (SPS) measures,³⁰ certifications, traceability, and quality control. This support could include financing the establishment and/or strengthening of certified laboratories; technical assistance in SPS policy and regulatory issues; animal health services; and technical assistance for the establishment of product standards. FSRP-SN could finance needs assessments and critical investments in public infrastructure and services to leverage private financing along the targeted value chains.
- (c) **Strengthen multi-stakeholder coordination and promoting a private sector enabling environment.** FSRP-SN will invest in strengthening multi-stakeholder mechanisms for the governance of the selected VCs and innovation platforms, in particular for market-oriented³¹ urban and peri-urban horticulture, dairy, and poultry. The project may finance the diagnostics and structuring studies of POs involved in the targeted VCs, and their capacity building. Those studies and capacity support will have an important angle for women and youth, as targeted support to them will likely work through PO's, and other groups in selected VC's. It will facilitate the establishment of linkages between various segments of the VCs (POs and market operators), as well as the promotion of contracting models (for example, using the Senlouma³² tool in partnership with ANCAR). It will also finance public-private dialogues to catalyze policy reforms in agri-food and input trade (e.g., to identify and overcome policy barriers of selected and emergent value chains).

COMPONENT 4: CONTINGENCY EMERGENCY RESPONSE COMPONENT (CERC) (US\$ 0 MILLION IDA)

38. The CERC is a mechanism for Borrowers to access funds rapidly to respond to an eligible crisis or emergency (disasters and health emergencies). Standard conditions will apply to allow the activation of the CERC and ensure its adequate implementation, completion and evaluation. An operation manual will detail implementation arrangements including activities that may be included, eligible expenditures, financial management and procurement procedures and methods arrangements, and environmental and social standards management framework for the implementation of CERC related activities.

COMPONENT 5: PROJECT MANAGEMENT (INDICATIVE BUDGET: IDA US\$18 MILLION)

39. This component will finance all aspects of project management at national level including project coordination unit (PCU) staffing, equipment, and operational cost. Key activities under this component include planning, preparation of annual work plan and budget (AWPB), monitoring and evaluation (M&E), carrying out an Impact Evaluation, procurement management (PM), financial management (FM) including annual external audits, environmental and social (E&S) safeguard implementation, communication as well as reporting. All these aspects will be detailed in a project implementation manual (PIM) to be approved before project effectiveness. This component will also support the

30 Investments in food safety are increasingly relevant from a trade but also health perspective. Climate change, through long-term changes in temperature, humidity, rainfall patterns and the frequency of extreme weather events, favors toxin-producing microorganisms and other pests affecting the occurrence and intensity of some foodborne diseases and promoting the establishment of invasive alien species harmful to plant and animal health.

³¹ Using the Smallholder Horticulture Empowerment and Promotion (SHEP) Approach developed in Kenya. See also: https://www.jica.go.jp/english/our_work/thematic_issues/agricultural/shep/index.html

³² www.Senlouma.org. E-marketing of crop, horticulture, livestock and fishery products.



operational costs of the national steering and technical committees. As for all other FSRP beneficiary countries, the regional oversight of FSRP-SN implementation will remain under ECOWAS leadership and its financing included under Phase 1.

40. **Maximizing Finance for Development (MFD).** The project design will provide avenues to systematically leverage all sources of finance, expertise, and solutions, from the private sector, with a view to support sustainable investment in sector growth. Subcomponent 3.2 in particular will use financing mechanisms to leverage the private sector together with local public sector contributions in value chain investments. The strengthening of multi-stakeholder coordination and value chain governance will catalyze policy reforms in agri-food and input trade with a view to promoting an enabling environment for the private sector. Opportunities to develop synergies with ongoing or possible future investments from the International Finance Corporation (IFC) will also be sought.

41. **Gender.** The project, as in all phases of the FSRP, will specifically tackle women's access to productive resources, to income and their ability to make choices over production, and decision-making over natural resources. The project will ensure in project preparation that specific gender gaps and constraints are identified across components, specifically in the livestock and horticulture value chains. This will enable project activities to be especially tailored towards meeting gendered constraints. The projects' gender planning will closely collaborate with existing initiatives in other World Bank financed projects and within the CMU, including the AICCRA projects' incubators on women's climate smart agriculture businesses and the Women's Land Trust Fund (TF) which can finance baseline studies on empowerment in agriculture measures. The intersecting issues of agriculture and land tenure security will continue to be explored and supported throughout the project life cycle (and that of the TF). CORAF and ECOWAS coordinate a gender working group for the entire FSRP, and Senegal will become a key part of this group. The project preparation will include a fine-tuned analysis section, clear actions and activities reducing gender gaps, and a specific indicator in the Results Framework to measure progress.

42. **Citizen engagement.** The project commits to consult throughout project preparation and up to completion with relevant stakeholders to ensure that concerns and reflections from professional organizations, civil society and communities are adequately included in design. During project preparation, further consultations will be held at many levels, in ways to ensure men, women and different ethnic groups are well represented in the design of the project. Conflict risks, disparities, preferences and other issues around land and natural resources will be captured and mitigated through implementing set-ups. The project will naturally set up all necessary mechanisms to address grievances during implementation and will build strong citizen engagement measures into the results framework and implementation manual.

43. **Climate adaptation and mitigation.** The project will support the continuing development and adoption of climate-smart agriculture technologies, assets and services that include improved, high-yielding, early-maturing and drought- and pest-resistant plant varieties as well as improved livestock breeds and animal husbandry practices (through SC2.1), improved land management approaches (through SC2.2), improved irrigation technologies (through 2.2), best cropping and livestock management practices, as well as climate smart infrastructure that would help to mitigate or adapt to climate change (through SC 2.1, 2.2 and 3.2).



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

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Approved By

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