



Program Information Documents (PID)

Appraisal Stage | Date Prepared/Updated: 19-Mar-2020 | Report No: PIDA208636

**BASIC INFORMATION****A. Basic Program Data**

Country Senegal	Project ID P164967	Program Name AGRICULTURE AND LIVESTOCK COMPETITIVENESS PROGRAM FOR RESULTS	Parent Project ID (if any)
Region AFRICA	Estimated Appraisal Date 18-Mar-2020	Estimated Board Date 12-May-2020	Practice Area (Lead) Agriculture and Food
Financing Instrument Program-for-Results Financing	Borrower(s) Ministry of Finance and Budget	Implementing Agency Ministry of Agriculture and Rural Equipment	

Proposed Program Development Objective(s)

The Project Development Objective is to enhance productivity and market access of priority commodity value chains and livestock, in the extended groundnut basin and agro-pastoral areas.

COST & FINANCING**SUMMARY (USD Millions)**

Government program Cost	700.00
Total Operation Cost	210.00
Total Program Cost	210.00
Total Financing	210.00
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	150.00
World Bank Lending	150.00
Total Government Contribution	60.00



Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

- 1. Senegal is entering the third decade of the 21st century with tremendous promise and opportunities, while facing important pressures to navigate growing risks and overcome deeply rooted challenges.** Structural reforms and favorable exogenous conditions have led to GDP growth of above 6percent for the last five years. Offshore oil and gas discoveries will reach production in 2022–23, easing some of the country’s fiscal and development challenges and laying a foundation for broad-based economic growth. A vibrant democracy has provided the current government with a second mandate, and an ambitious national development plan provides a roadmap to middle-income status. Yet Senegal faces important challenges in maintaining its trajectory toward emergence, including reducing challenges in the different forms of inequality, strengthening governance and human capital, efficiently mobilizing tax revenue, transitioning to more private sector-led growth, and managing the increasing risks from climate change. Public policies will also need to promote remunerative employment for the ever-expanding youth population.
- 2. Faster economic growth has reduced the incidence of poverty, but rural areas still lag behind their urban counterparts.** The share of people living in poverty (income per capita below US\$1.9 per day) fell from 47 percent in 2011 to 38percent in 2018. Agriculture was one of the main drivers of this reduction. Its performance has improved significantly, with two exceptionally good years (2017 and 2018) registering year-on-year growth of 13percent and 7 percent, respectively. Improvements in value added per agricultural worker, although moderate, reversed a negative trend lasting more than a decade, pointing to signs of nascent structural transformation. Another sign is the emerging trend of job reallocation out of the primary sector as rural households tap into the growing rural non-farm economy for their livelihoods. At the same time, growth in labor-intensive sectors such as construction has boosted income among the urban poor.
- 3. The Government of Senegal (GoS) aims to achieve middle-income status by 2035.** “Plan Senegal Emergent” (PSE) is the blueprint for achieving that goal. Its strategic objectives are to: (i) stimulate structural transformation of the economy to support sustainable and dynamic growth, (ii) facilitate broad access to social services while preserving conditions for sustainable development, and (iii) meet requirements for good governance by strengthening the country’s institutions and promoting peace, security, and regional integration. The proposed Program for Results (PforR) helps implement the PSE



through its focus on promoting more competitive agricultural and livestock value chains for more resilient and inclusive growth.

Sectoral and Institutional Context

1. **Agriculture has grown at a robust rate of 3.2% in the past two decades.** Under the PRACAS and PNDE¹ national programs, crop and livestock production have grown at robust rates in recent years (Box 1). The development of sedentary mixed crop-livestock production systems has diversified revenues and provided a critical asset and safety net for farmers. This progress occurred through a combination of financial and pricing incentives (subsidized fertilizer, seed, and interest rates, as well as crop price setting) and production enhancement measures (technology development and transfer). Rural people, who constitute 62% of the population, have benefited significantly from this progress, given that agriculture is a source of employment for 69% of the rural population and 36% of the national labor force.² Many agricultural jobs are not very remunerative, however, and the incidence of poverty among farmers and herders is the highest among any group in the country. In rural areas, nearly 80% of workers in paid employment are in the bottom income quintile, and even the more prosperous individuals engage largely in providing poorly paid informal services. Among the poorest are the farmers growing rainfed crops and herders having only livestock as their main livelihood source.

2. **Despite the recent progress, the productivity gap between agriculture and the rest of the economy remains large and closing the gap will require government support policies to change.** The average farmer and herder are more than six times less productive on average than their counterparts in other sectors. Low agricultural productivity has many causes: only 3% of cultivated land is irrigated; the production system is still archaic; harvest losses span between 10% and 30%; and sustainable access to productive assets is problematic. In this context, increased agricultural output over the last few years has stemmed more from the expansion of cultivated area and increases in input use, rather than from overall improvements in Total Factor Productivity (TFP) through such factors as innovation and skills. To drive the economic transformation agenda described in the PSE and achieve substantial, sustained poverty reduction, Senegal must significantly improve TFP and labor productivity. A three-pronged approach is proposed to reduce the productivity gap and increase incomes of farmers and herders: (i) improving the incentive framework, focusing on subsidies, pricing, and marketing policies; (ii) reorienting government spending to emphasize the production of public goods and services such as research and extension, seed production, and rural infrastructure; and (iii) promoting increased roles for non-public actors and supporting partnerships between them and state institutions.

¹ Programme d'Accélération de la Cadence de l'Agriculture Sénégalaise (PRACAS) concluded its first phase (2014–17) and a second is underway (2018–23); the Plan National de Développement de l'Élevage-(PNDE) 2014–17) will also extend to 2023.

² ILO Labor Force Survey (2015) and <https://gfc.ucdavis.edu/profiles/rst/sen.html>.



3. **Senegalese agriculture is vulnerable to climate shocks, with drought being the most important risk in terms of frequency and impact.** The strong correlation between changes in agriculture's contribution to GDP and meteorological conditions demonstrates agriculture's sensitivity to weather-related events. The food crisis resulting from the 2011 drought affected a sizable share of the population. While longer-term climate change projections remain uncertain, short- and medium-term rainfall deficits are very likely to continue to plague agriculture in Senegal, as the frequency and severity of drought will probably either remain the same or increase. Senegal's Intended Nationally Determined Contribution (INDC, 2015) considers adaptation options to be a top priority, including options that reinforce the rural population's resilience to increasingly unpredictable weather patterns. The nation's climate change strategy is based on a vision of climate-smart agriculture (CSA) and access to modern energy-saving technology for everyone. In particular, Senegal seeks good adaptation practices and techniques that combine improved productivity and increased reserve stocks in communities to reduce food insecurity, and permit carbon sequestration and a reduction in greenhouse gas (GHG) emissions. The proposed Program emphasizes support for CSA and other sustainable agricultural practices.

4. **The government's subsidy policy has distorted competition and had a less than proportional impact on agricultural value added.** Farm subsidies cost a significant fraction of GDP (0.5% in 2018) but have not given results commensurate with their cost. These subsidies must be allocated more cost-efficiently, including through more effective targeting mechanisms that ensure access by poor farmers and herders. The groundnut sector is a case in point. Government regulations and policy interventions have much reduced the space for fair and open competition, promoted rent-seeking behavior, and brought about inefficient and inappropriate allocations of public resources. Free primary marketing is impeded by the current provisions and related regulations for transport, quality control, and competition between operators involved in the financing, crop insurance, collection and processing of groundnuts. The subsidy for companies that process groundnut oil prevents production from being allocated efficiently, to the detriment of the much more remunerative market for whole nuts. The system for setting the producer price for groundnuts currently uses the world market price for groundnut oil as the reference price. To better guide production trends, this system must be reevaluated with a view to basing the reference price predominantly on the price for whole nuts. The National Groundnut Interprofessional Committee (CNIA), which was intended to play a key role in promoting and managing the groundnut value chain, has remained very ineffective, undermined by institutional and organizational weaknesses. Given the new dynamics in the value chain and the development prospects emerging from expanding market opportunities, the CNIA must be restructured to become a much stronger institution, both in terms of its legitimacy and managerial capacity.

5. **The productivity gap can be narrowed by addressing constraints that prevent efficient input use and access to advisory services.** First, certified seed production and distribution systems can be improved, including through partnerships between public institutions such as the Senegalese Institute for Agriculture Research (ISRA), farmer cooperatives, and other seed industry actors. Second, fertilizer use must increase, based on updated fertilizer formulations and recommendations tailored to local agroecological



conditions. Third, producers must have access to advisory services of good quality. Finally, any effort to reduce the productivity gap must be accompanied by efforts to resolve environmental problems such as the loss of soil fertility. Given these considerations, the national program should reorient its efforts to focus on productivity-enhancing activities, including wide dissemination of crop diversification and agro-forestry techniques; water collection and storage strategies such as dams, retention basins, structures to prevent soil salinity, and windbreaks; expansion of community woodlots; prevention of bush fires; dissemination of organic soil fertility techniques; early warning systems in rural areas; and the prevention and treatment of pest infestations. The proposed Program will include policy reforms to rationalize agricultural subsidies and prices as well as productivity-enhancing measures that require government support, such as improved seed production, crop marketing and food safety regulations, and livestock disease control interventions.

6. **To increase agricultural productivity, the public sector must overcome its weak performance of important tasks in agriculture, which is compromised by its poorly defined roles and responsibilities and failure to tap into private sector capacity.** For example, the public sector has not been effective in seed production, quality control, and certification, or in research and development (R&D) to improve husbandry practices and generate productivity-enhancing cultivars. This ineffectiveness stems partly from the overlapping and/or ambiguous roles played by public and non-public actors, both across and within main agricultural value chains, in activities ranging from producer price setting to foundation seed production and primary marketing. In the groundnut value chain, for instance, processing plants purchase the crop through Officially Licensed Traders (OPs) at the subsidized producer price, while exporters of whole nuts must purchase the crop at the market-determined price. To improve the performance of important tasks in agriculture such as foundation seed production, the government can tap into private sector capacity through public-private partnerships (PPPs), such as those already initiated in the groundnut value chain. For such partnerships to be effective, the government will need to develop appropriate regulations and related investments, in addition to supporting contractual arrangements between producer organizations (POs) and private actors such as processing firms, traders, and exporters. The Program will address both the ambiguity in roles and responsibilities and stronger partnerships with the private sector through the World Bank Group (WBG) Mobilizing Finance for Development (MFD) approach.

7. **Despite government support, the productivity of many Senegalese producers is still limited by two major constraints: they cannot obtain credit to invest in more productive operations or purchase crop insurance to manage risk and protect their investments.** While 46 percent of rural adults borrowed money in 2017, only 5.7 percent borrowed from a formal financial institution.³ The key constraints to the development agricultural lending are well known: it is costly and risky to lend to farmers involved in rainfed agriculture, financial institutions lack knowledge of agriculture finance, microfinance institutions have exhibited weak performance and governance issues, and public interventions have been inefficient (involving crowding out effects). The GoS subsidizes loans issued to smallholders (with little evidence on

³ *Global Findex Database (2017).*



efficient targeting) by covering the difference between market interest rates (about 13 percent) and the capped interest rate for farmers (7.5 percent). The subsidy is administered by State-owned Banque Agricole (BA). Recurring decisions by the Government to cancel farmers' debts has jeopardized the soundness of BA, which does not always receive committed funds and prompt regular capital increases. The Government also supports access to agricultural insurance through the *Compagnie Nationale d'Assurance Agricole du Senegal* (CNAAS) under a 50 percent subsidy on premiums. But wide access to suitable agricultural insurance products remains constrained for several reasons: reliable, granular data on weather and yields are limited, the current insurance products are expensive, producers have limited financial awareness and understanding of insurance (including the basis risk arising when farmers experience a shock but receive no payout). Also, there is a need to promote value-chain type of financing in the form of warehouse receipts, which requires the operationalization of the new law on Warehouse Receipt Systems. The proposed Program will address these constraints through close collaboration between the World Bank and International Finance Corporation (IFC) and other partners.

8. **Productivity also suffers as women are marginalized in agricultural activities.** Overall while women make important contributions to the agriculture sector, they still earn less. As presented in the CPF (and several World Bank Gender studies⁴) despite the fact that women are estimated to represent more than half of those economically active, the potential of the agriculture sector to help rural women out of poverty is hampered by their poor access to productive resources (inputs, land, credit), that results in men dominating the more profitable activities. Other factors also undermine women's participation in agriculture in Senegal, including low human capital (inadequate technical education) and limited access to markets. Access to credit tends to be more limited among women. The access rates to Decentralized Financial Services (DFSs) in the banking system is estimated at 8 percent for men and 2 percent for women, and 9.9 percent for men and 6.6 percent for women in the non-banking system (informal sector).

9. Similarly, many rural youths have had little formal education, and most lack professional qualifications. On top of their lack of education and experience, their low social status limits their participation in decision-making at the family and community level and makes it harder to take advantage of economic opportunities. The proposed Program will address these constraints by promoting diversification into higher-value agriculture (through horticultural crops, for instance) and the use of digital or mechanized approaches for agricultural enterprises, among other activities.

10. **Achieving a sustained rise in agricultural production and productivity will also require a spectrum of new, integrative technologies and knowledge that facilitate better connections between agriculture and other sectors of the economy and that seamlessly link technology to increase agricultural productivity with technology to manage risk.** Agriculture should be better integrated with other sectors of the economy, starting with the local food transformation industry, which frequently uses imported rather than locally produced inputs and lacks modern processing technologies to meet market

⁴ 2015 Poverty and Gender Assessment (which covers gender in terms of employment, education, poverty, access to finance, health, and agriculture); 2017 West Africa Poverty Monitoring ASA (including two reports on constraints to women's economic participation in Senegal); the 2018 study on Women, business, and the law



demand. Senegal can shield producers from the effects of volatile climatic conditions by developing technologies that improve risk management, such as irrigation systems to improve water control and enable producers to move gradually away from rainfed agriculture; developing climate-smart technologies such as high-yielding, drought-tolerant, and early maturing varieties, to be used with on-farm digital technology that adapts growing methods based on improved weather forecasting; and developing infrastructure for the livestock sector and enhancing animal husbandry practices. Because knowledge is essential for reinforcing the technical capacity of small-scale producers, including their knowledge of digital solutions that boost productivity, research centers and agricultural advisory services must collaborate much more closely to facilitate knowledge transfer. The reliability of agricultural statistics can be improved by relying more on new information and communication technologies (ICTs) such as global positioning systems (GPS) and drones, adequate estimation methodologies, and improved weather forecasts. Finally, it is critical to encourage the private sector to play a bigger role in the development of agriculture.

11. **The proposed Program for Results will support transformative elements from PRACAS II and the National Livestock Development Plan (PNDE).** First, it will support improvements in the productivity and economic performance of the groundnut value chain, which is of major economic, social and political importance in Senegal. Groundnut production remains a primary source of income for the vast majority of farm families, accounting for about half of the cropped area in Senegal and employing two-thirds of the rural population, mostly living below the official poverty line. Second, the proposed Program will promote crop diversification and build producers' resilience to climate change by increasing the productivity of other priority crops (such as maize, potatoes, sesame, fonio, and horticultural crops). Third, the Program will support development of the livestock value-chain.

PforR Program Scope

12. **The proposed PforR is anchored in the vision for agricultural development articulated in the PSE and in the objectives of the corresponding sector programs (PRACAS II and PNDE): achieving longer-term impacts on agricultural and livestock productivity while addressing the needs of farmers and herders for resilient production and revenue outcomes.** The proposed Program will support two subprograms (for crop and livestock development, respectively) that incorporate several critical interlinked investments and policy reforms, as well as capacity building, with expected high development impacts. The geographic scope of the Program includes extended groundnut-producing areas for the crop subprogram and the entire national territory for the livestock subprogram.

13. **The PforR will pursue integrated efforts to address the vulnerability of the Senegalese agricultural sector to climate variability and change.** It will integrate the implementation of climate-smart practices for sustainable productivity growth with adaptation strategies for resilient production and livelihood systems and climate change mitigation strategies dedicated to achieving climate co-benefits. These strategies will enable production systems to adapt both to climate variability (more extreme weather in the short term) and change (more erratic weather in the short term, rising temperatures in the medium term, and decreasing rainfall in the long term) and strengthen the resilience of farmers and herders to climate-related shocks. Adaptation will be increased in several ways: through better management of land and water resources in integrated rainfed agricultural and livestock production systems at the basin and farm levels; the adoption of climate-smart crop varieties; enhanced use of good practices for climate-smart agriculture and livestock production; integrated soil and



water management; and energy-saving systems for adding value to agricultural products. The Program should also achieve climate co-benefits by mitigating GHG emissions—for example, through integrated soil management practices that allow greater carbon absorption/storage and by reducing food and feed losses and waste.

14. **A central aim of the PforR is the development of the private sector.**⁵ The Program will support the government's efforts to establish a favorable environment for private sector development in several ways: it will focus on a set of reforms in the groundnut sector, livestock sector, and other key crop sectors; on institutional strengthening in sectoral organizations; and on targeted public investments to improve factors that promote competitiveness, such as productive infrastructure, market infrastructure, R&D and agricultural extension services, quality management, and the sustainable use of agricultural resources, among others.

C. Proposed Program Development Objective(s)

Program Development Objective(s)

15. The Project Development Objective is to enhance productivity and market access of priority commodity value chains and livestock, in the extended groundnut basin and agro-pastoral areas.

16. The PDO results indicators measure: (i) yield increase of groundnuts; (ii) increase of production of selected livestock products; (iii) increase in exports of high-value crops (shelled groundnuts and horticultural products); and (iv) number of farmers/herders reached with agricultural assets and services.

D. Environmental and Social Effects

17. It is assumed that the proposed Program given its nature will yield substantial positive environmental and social benefits, while its implementation will have no significant adverse impact. PforR interventions exclude activities which normally would be considered as Category A under Investment Financing Projects. In particular, the proposed Program is not considering heavy infrastructure on irrigation or any facilities necessary to establishing a full Agro park, such as power plant or connection to high voltage power grid and connecting roads. Furthermore, interventions on irrigation will not imply transfer of significant flow of groundwater, but rather small-scale irrigation facilities or water infrastructure such as catchment weirs and boreholes, infrastructure and strengthening veterinary services' capacities, slaughter houses, cattle markets, etc. Environmental and social impacts of such infrastructure will be limited in scope and manageable. Implementation of some investments may require acquisition of land and/or displacement of people, even though affected people during construction may also be ultimate beneficiaries of such investment. The proposed Program's approach consists of developing targeted value chains around family farming and enhance pastoral and agro-pastoral communities' sustainable management of and secure access to natural resources. In this respect, regarding land acquisition, it is worth noting that the structure of farming systems in the Program areas, is overwhelmingly dominated by small scale family farming holdings. This land tenure situation, combined with the high population density in many of these areas, prevent distribution or acquisition of massive tracts of land for agribusiness operations, which the Program cannot support.

⁵ In the context of the Program, "private sector" includes a wide array of entrepreneurial activities, from smallholder farms, to cooperatives, small and medium agribusiness enterprises, and agri-food industries.



18. The Program will strive to promote climate friendly agro-pastoral intensification, to the extent possible involving unnecessarily large increase in the use of chemicals for soil fertilization, plant diseases, weed and pest control and livestock related diseases. This said, the control of such negative predators as fruit flies on tree crops will involve increased use of pesticides at a significant scale or acquisition of advance technology to produce sterile males of *ceratitis*. The Program will incorporate measures to mitigate the possible negative environmental impact of these practices.

19. MAER and MEPA have long-standing experience in managing Bank operations. These operations have dedicated Project Implementation Units (PIUs) with competitively selected staff who are qualified in the environmental and social fields and familiar with Bank guidelines and procedures on environmental and social risks management. As part of the Program's preparation, the program task team has been preparing a draft Environmental and Social Systems Assessment (ESSA). The ESSA will review existing regulations and policies, their legal and practical applicability at the Program level, and the supporting institutional capacity, as well as its implementation effectiveness using empirical information and data to be provided by GoS and other stakeholders. Furthermore, in order to remedy the limited capacity regarding environmental and social safeguard measures, the Program will provide technical assistance support designed to strengthen the performance of environmental and social management systems, especially to strengthen the risk management capacity. This support will be designed through an Environmental and Social Management Action Plan (ESMAP) integrating a set of specific and concrete measures which will be integral part of the PforR. With diligent implementation of the proposed action plan, the PIU will be equipped to effectively mitigate the environmental and social risks during program implementation.

20. This draft ESSA includes the national consultations done with the key Ministries (Agriculture and Livestock). The draft version of the ESSA will be published at national and World Bank level. Communities and individuals who believe that they are adversely affected as a result of the PforR operation, will have the opportunity to submit complaints to the program Grievance Redress Service (GRS), as defined by Bank applicable policy and procedures. The GRS will ensure that complaints received are promptly reviewed in order to address pertinent concerns. In this fashion, affected communities and individuals will be able to submit their complaints to the Bank's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of non-compliance with Bank policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the Bank's attention, and Bank Management has been given an opportunity to respond. Information on how to submit complaints is available on the following internet sites: (i) for the World Bank's corporate Grievance Redress Service (GRS), at <http://www.worldbank.org/GRS>, and (ii) for the World Bank Inspection Panel, at <http://www.inspectionpanel.org>.

E. Financing

Program Financing (Template)

Sources	Amount (USD Million)	% of Total
Counterpart Funding	70.00	31.82



Borrower/Recipient	50.00	22.73
Local Beneficiaries	10.00	4.76
International Development Association (IDA)	150.00	68.18
IDA Credit	150.00	68.18
Total Program Financing	210.00	

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