

Republic of Senegal

*One People – One Goal – One Faith*



**Global Agriculture and Food Security Program (GAFSP)**

**FOOD SECURITY SUPPORT PROJECT IN THE  
LOUGA, MATAM AND KAFFRINE REGIONS**

**REQUEST FROM THE GOVERNMENT OF SENEGAL**

**Dakar - March 2012**

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### ATTACHMENTS

1. Agro-Sylvo-Pastoral Orientation Law
2. Senegal's ECOWAP/CAADP national Pact
3. CAADP NAIP 2011-2015 Post-Compact
4. CAADP Post-Compact Technical Review Report of the Investment Plan
5. Documented evidence that CAADP Business Meetings has taken place following the Technical Review.

## ABREVIATIONS AND ACRONYMS

<b>AGS</b>	Accelerated Growth Strategy
<b>ANCAR</b>	National Agency for Rural Counsel
<b>ANREVA</b>	National Agency for Return Plan to Agriculture
<b>BAD</b>	African Development Bank
<b>CES/DRS</b>	Waters and Soil Conservation / Soil Defense
<b>CRES</b>	Consortium for Economic and Social Research
<b>DAPS</b>	Directorate of Analysis, Forecasting and Statistics
<b>DCEF</b>	Directorate of Technical and Financial Cooperation
<b>ECOWAP</b>	Agricultural Policy of the Economic Community of West African States
<b>ECOWAS</b>	Economic Community of West African States
<b>FONSTAB</b>	Stabilization Fund
<b>GDP</b>	Gross Domestic Product
<b>GOANA</b>	Big Agricultural Offensive for Food and Abundance
<b>IFPRI</b>	International Food Policy Research Institute
<b>IP</b>	Investment Plan
<b>LOASP</b>	Agro-Sylvo-Pastoral Orientation Law
<b>MDG</b>	Millennium Development Goals
<b>NAIP</b>	National Agricultural Investment Program
<b>NEPAD</b>	New Partnership for Africa Development
<b>NGO</b>	Non Governmental Organization
<b>NRM</b>	Natural Resources Management
<b>PADAER</b>	Support Program to Agricultural Development and Rural Entrepreneurship
<b>PAFA</b>	Agricultural Sub-sectors Support Project
<b>PAPEL II</b>	Livestock Support Project - Phase II
<b>PAPIL</b>	Local Small Irrigation Support Project
<b>PDDAA</b>	Comprehensive Program for the Development of African Agriculture
<b>POs</b>	Producers' Organization
<b>PMIA</b>	Agricultural Modernization and Intensification Project
<b>PRODAM II</b>	Matam Agricultural Development - Phase II
<b>PU</b>	Pastoral Unit
<b>SAKSS</b>	Strategic Analysis and Knowledge Support Systems
<b>SME</b>	Small and Medium Enterprise
<b>TFP</b>	Technical and Financial Partners
<b>USAID</b>	United States Agency for International Development
<b>VCF</b>	Food Supplies against Training
<b>VCT</b>	Food Supplies against Work
<b>WB</b>	World Bank
<b>WFP</b>	World Food Program

# **Part 1: Summary of Overall Agriculture and Food Security Strategy and Associated Investment Plan**

## **1.1 Objectives and indicators**

**1.1.1 General overview of the rural sector:** Senegal recorded a decrease in the poverty rate in 2005 at the national level (50.8%) as well as in rural areas (61.9%) and urban areas (35.1%) with however a less significant decline in rural areas. According to recent estimates, the proportion of individuals living below the poverty line would remain at approximately 50.7% in 2009, with increasing poverty in rural areas and a slight decrease in urban areas. Senegal remains one of the poorest countries in the world and is ranked in 2011, 155<sup>th</sup> out of 187 countries in terms of human development index (HDI). Although contributing only about 17.2% of GDP (2010), the agricultural sector continues to employ more than three out of five Senegalese and four poor persons out of five in rural areas. The average growth rate of the agricultural sector (2.5% between 1960 and 2003) remains generally lower than that of GDP. Agriculture constitutes the cornerstone of the Senegalese economy and is characterized by the dominance of peasant/subsistence farming. Agricultural enterprises (horticulture, arboriculture) and industrial agriculture (peanuts, cotton) which occupy less than 5% of the cultivated areas have thrived only in areas that have irrigation facilities and easy access to the main urban market of Dakar and to export markets. Subsistence rain-fed agriculture in a semi arid zone is highly vulnerable to drought, soil degradation, and to the effects of climate change. Less than 2% of the cultivated areas are irrigated, despite huge potential in surface water and run-off water. The livestock sub sector constitutes an important component of the Senegalese economy. It consists of approximately 3,000,000 people originating mainly from the most vulnerable segments of the rural areas, and accounts for about 35% of agricultural GDP.

**1.1.2** Senegal is facing a relatively difficult food situation and the gap between national production and the needs of an increasing population has not ceased to widen over the years. The problem is even more acute in the cereals sub-sector which constitutes the staple food for the rural and urban populations. Cereal production (millet, sorghum, maize and rice) averaged about 930,000 tons per annum during the past ten agricultural seasons, with marked fluctuations depending on yearly rainfall patterns. Local cereal production only meets about half of the basic food needs and the deficit is essentially covered by massive imports of white rice. To meet the national demand by 2015, without any increase in imports, it is estimated that it would be necessary to increase cereal production by 1 million tons, meat production by more than 40,000 tons, dairy production by about 80 million liters of milk, and fish production by about 80,000 tons. Agricultural production deficits, reliance on external trade, fragility of the Sahelian ecosystem aggravated by climate change, anthropic pressure and excess fishing, constitute the main determinants of the country's food insecurity. Annex 1 map represents the country's regions according to their level of food insecurity measured during the last survey of the Early Warning System conducted in August 2011 and funded by WFP, FAO and UNICEF.

**1.1.3 Strategic framework for designing the NAIP:** The measures and orientations taken by the Senegalese Government in the area of economic and social development and in the rural sector are enunciated in the country's various intervention frameworks, including in particular : (i) the Social and Economic Policy Paper highlights poverty reduction as one of the government's main priorities ; (ii) the Accelerated Growth Strategy (AGS) which seeks to

consolidate the macroeconomic gains of the previous decade and to sustainably increase the growth rate (around 7 to 8 %) ; and (iii) the Agro-Sylvo-Pastoral Orientation Law (LOASP). The LOASP adopted in 2004, defines for the next twenty (20) years, the general provisions and plans for the development of the agricultural sector in order to reduce poverty. Six specific objectives were identified (see table below).

<b>Specific objectives of the LOASP</b>
→ The reduction of the impact of climatic, economic, environmental and health risks, through better water resource management, product diversification the training of rural communities; all this being aimed at improving food security, and in the long run, achieving national food self-sufficiency
→ The improvement of the incomes and living standards of the rural population, and the establishment of social safety nets.
→ The improvement of the quality of life in rural areas, particularly through access to public infrastructure and services, and through appropriate land use and planning
→ Environmental protection and sustainable management of natural resources through soil fertility improvement know-how
→ The establishment of an incentive system for private sector investment in agriculture and in rural areas
→ Improvement of the environment and quality of production to enable agriculture become the engine of industrial and artisanal development, and to better meet the needs of the domestic and foreign markets (sub-regional, regional and international)

1.1.4 The attainment of all these growth objectives in the rural areas is contingent on the implementation of the sector programs developed by the Government, particularly the Agricultural Sector Decennial Strategic Framework, the National Livestock Plan (PNDE), and the Action Plan for the development of Fishing and Aquaculture and the Forest Action Plan of Senegal (PAFS). To strengthen the central role of agriculture in all these programs, the Government also launched in 2008, the “la Grande Offensive Agricole pour la Nourriture et l’Abondance (GOANA) – the Big Agricultural Offensive for Food and Abundance”, which sets ambitious output targets for the main crops cultivated in Senegal. These different planning and orientation instruments put in place by the Government of Senegal constituted the basis for the design process of the National Agricultural Investment Program (NAIP).

1.1.5 **Specific objectives of the (NAIP):** Senegal developed its National Agriculture Investment Plan (NAIP/PNIA) in order to translate into action the options it subscribed to under the Common Agriculture Policy of the ECOWAS (ECOWAP) and under the Comprehensive Africa Agriculture Development Program (CAADP), but also the options identified in its policy and strategy documents, both for current and future agriculture development. The Investment Plan (IP) of the NAIP relating to the period 2011-2015 complements the efforts undertaken by the Government of Senegal over the years to enable agricultural play a major role in economic development, food security and poverty reduction by the year 2015, and also ensure a more balanced distribution of agricultural activities between the agro-ecological zones, the regions and the local communities. The NAIP is fully aligned with the ECOWAP and CAADP objectives, and is articulated around the following eight strategic objectives.

<b>Strategic Objectives of NAIP</b>
<ul style="list-style-type: none"> <li>- Reduce climatic risks through better water resource management</li> <li>- Preserve and sustainably manage the other natural resources</li> <li>- Increase the production and the productivity of inputs in general</li> <li>- Enhance the value of agricultural products through further processing</li> <li>- Improve market access for agricultural products</li> <li>- Strengthen research for the generation and transfer of new technologies in production, processing and marketing</li> <li>- Significantly reinforce the capacity of various stakeholders</li> <li>- Ensure efficient direction and coordination of the IP implementation</li> </ul>

**1.1.6 The NAIP main indicators:** The main indicators associated with the implementation of NAIP relate to the contributions expected from the program in terms of Senegal's economic and social development. The NAIP thus relies on an average annual increase of 7.2% in agricultural GDP (or 1.2 point of percentage more than the initial objective set by the CAADP), a reduction in the national incidence of poverty which would decrease from 50.8% in 2005 to 25.9% in 2015, and notable increases in the yield and production of cereals with a view to meeting the domestic needs by year 2015. Specific indicators of the NAIP are also organized around themes and sector activities, such as the total land area under irrigation (hectares), the incremental yield and additional production (tons), the area of land reforested, recovered or protected (hectares), the number of modernized farms and modern farms put in place (units), the professionalization of the producer organizations (effectiveness), the improvements to the policy environment conducive to more private sector involvement (incentives), etc.

## **1.2 Key elements of the public environment**

**1.2.1** With a coastline spreading over an area of more than 700 km, surface water resources characterized by the presence of permanent rivers and water streams (Senegal, the Gambia, Casamance, etc.), potentially cultivable land estimated at four million hectares, undoubtedly Senegal is endowed with assets. Its geographic location at the extreme west of the African continent offers an exceptional advantage for preferential access to the European and American markets. This is reinforced by its quality airport infrastructure, and the leader role it plays in the telecommunication sector in West Africa. Because of its political stability, Senegal also presents real advantages and enabling conditions for successful implementation of the NAIP. Despite these assets, Senegal continues to face major structural rigidities. Overall, the economy remains relatively undiversified and exports are essentially composed of sea products, petroleum products, and phosphate and, to a lesser extent, peanut products. Agriculture which employs more than half of the active population still has low productivity and weak linkages with agribusiness. The SMEs/SMIs which represent more than 90% of the Senegalese enterprises are confronted with limited financial resources for various reasons including particularly the insufficiency of alternative financial products. Senegal's strong dependency on oil imports for energy production also makes its productive system vulnerable. At the economic level, the country has over the years faced both exogenous and endogenous shocks, including financial and food crises, have been a source of concern. In fact, the growth rate remained on average around 3.8%, compared to the government's ambition of 7% indicated in the AGS. To tackle these diverse challenges including those associated with the budget deficit, Senegal adopted a series of reform measures in public finance, procurement, business environment, particularly in the telecommunication and energy sectors.

1.2.2 The rural sector policies indicated in 1.1 above were in the past decade translated into measures of support and subsidies, strengthening of the producers' organizations through unionization. At the institutional level, several entities (Government's central and decentralized institutions, national agencies, NGOs, socio professional organizations, financial and insurance institutions) are involved in rural development with differentiated functions. On the fiscal front, Senegal embarked on certain improvements by establishing an investment code which better responds to the objectives of improving country's competitiveness in terms of incentives offered to investors, consistency in fiscal reforms, decentralization of production activities, and localization of the existing industrial network. Similarly, the agricultural sub-sector enterprises in the general sense were afforded the benefits of export processing zones (EPZ) as a tool for export promotion. As regards public finance management reforms, in order to improve visibility and coherence in interventions and public finance management practices, Senegal adopted results-oriented budget planning using the Framework for Medium Term Sectoral Expenditure as a tool.

1.2.3 Concerning more specifically the implementation of LOASP, a number of advances were recorded, demonstrated in particular by the promulgation in 2007 of : (i) the decree establishing the National Fund for agro-sylvo-pastoral development, (ii) the decree establishing the stabilization fund (FondStab), and (iii) the decree on the establishment, composition and functioning of the Supreme Council and Regional Committees for Agro-sylvo-pastoral Orientation, and by the promulgation in 2008 of: (i) a decree establishing a social agro-sylvo-pastoral protection system, (ii) a decree on recognition, organization and functioning of inter-professional organizations, and (iii) a decree concerning organization and functioning of the agro-sylvo-pastoral national research system, and (iv) a decree establishing GOANA funds. In addition, 11 orders concerning creation of regional committees for agro-sylvo-pastoral orientation have been signed. All these measures and reforms will be pursued in implementing LOASP. It is also expected that progress will be made in removing the rigidities and deficiencies in the normative framework of the land tenure system, particularly the law on the national domain, which constitutes a hindrance to securing investments and promoting sustainable resource management. The difficulties of access to credit in rural areas remain a concern and inhibit the development of agricultural entrepreneurship. At the institutional level, there are deficiencies in agricultural governance which lead to a dispersal of the decision-making centers resulting in a lack of coordination among the numerous concerned ministries on the one hand, and between those ministries and the other institutions involved in the agricultural sector on the other (PTF, NGOs, POs, etc.). Reforms should rely on a revised operational framework, proportionate to the agricultural sector stakes and priorities, through a stronger involvement of professional organizations. The improvements in institutional framework arising from these reforms should limit dispersals in the interventions, build the professional organizations' capacities and, through the implementation of NAIP, contribute to the promotion of a more effective monitoring, planning and evaluation mechanism.

### **1.3 Plan components to achieve the objectives**

The NAIP covers broadly all the agricultural subsectors i.e. crops, livestock, maritime and continental fishing, and the environment, and has eight main components associated with the eight priority objectives designed to remove the main constraints in the rural sector. These components of the NAIP group a series of activities which are detailed below:

<b>The NAIP components and activities</b>
<p><b>1 « Reduction of the climatic risks through water resources management »</b></p> <ul style="list-style-type: none"> <li>- hydro agricultural developments</li> <li>- promotion of drip irrigation for efficient water use</li> <li>- redistribution of surplus water particularly towards the central regions</li> <li>- establishment, implantation of agro pastoral farms around drilled wells</li> <li>- construction and development of water retention basins particularly through the sector's involvement</li> </ul>
<p><b>2 « Sustainable preservation and management of other natural resources »</b></p> <ul style="list-style-type: none"> <li>- restoration of the agricultural base in the Peanut Basin, protection and development of saline zones</li> <li>- development and management of the fisheries and the continental ecosystems as well as the fishing areas</li> <li>- control of bush fires and invading aquatic plants, sustainable management of forests, reforestation of irrigated perimeters and construction of "The Great Green Wall"</li> </ul>
<p><b>3 « Production increase and productivity improvement »</b></p> <ul style="list-style-type: none"> <li>- crop protection</li> <li>- control of major animal diseases</li> <li>- production of seeds for agricultural and forestry sub-sectors</li> <li>- mechanization and modernization of agricultural and livestock farms</li> <li>- development of the traditional agricultural systems and support to emerging systems</li> <li>- development of the dairy, poultry and equine sub-sectors</li> </ul>
<p><b>4 « Development of processed agricultural products »</b></p> <ul style="list-style-type: none"> <li>- value addition to inland fisheries products</li> <li>- modernization of the traditional processing sub-sector</li> <li>- development of agricultural and animal products</li> <li>- development of non-timber forest products</li> </ul>
<p><b>Objective 5 « Access to markets for agricultural products »</b></p> <ul style="list-style-type: none"> <li>- rehabilitation and construction of feeder roads</li> <li>- construction of cereal storage infrastructure</li> <li>- support to the quality management of agricultural products and animal husbandry</li> <li>- construction and rehabilitation of storage facilities</li> </ul>
<p><b>6 « Strengthening research for the development and transfer of new technologies »</b></p> <ul style="list-style-type: none"> <li>- restoration of the fruit crop potential through the establishment of a national fruit collection system and pens of mother single stands</li> <li>- support to research programs induced by the IP</li> </ul>
<p><b>7 « Stakeholder capacity building »</b></p> <ul style="list-style-type: none"> <li>- restoration and sustainable management of the agricultural education system</li> <li>- strengthening of the provision of rural agricultural advisory services</li> <li>- capacity building of both public and private actors</li> </ul>
<p><b>8 « Sector coordination and direction »</b></p> <ul style="list-style-type: none"> <li>- creation of an agricultural information system and support for agricultural data collection</li> <li>- identification and national census of livestock</li> <li>- establishment and operation of a monitoring and evaluation system</li> <li>- strengthening of the early warning systems and management mechanism of food crises</li> <li>- undertaking of studies necessary for the execution of the IP components</li> </ul>

## **1.4 Planned composition and level of spending to implement the components**

1.4.1 The implementation of the Investment Plan will qualitatively improve the state of the agricultural sector through a new generation of programs. It will place agriculture on a trajectory consistent with the objectives defined in the CAADP for the achievement of MDG



1 by 2015. The NAIP estimated the required public financing at 2,016 billion CFAF (about 4,032 million \$US) of which 81 % or 1,632 billion CFAF (3,264 million \$US) are investments. The current programs already initiated and financed by the Government and the donor community amount to approximately 670 billion CFAF (1,340 million \$US) which was devoted mainly to the NAIP and the National Forestry Action Plan.

1.4.2 Considering the external funds already mobilized and committed to NAIP, the additional financing required to fund the priority areas identified by the Senegalese authorities for the 2011-2015 investment period is 1,346 billion CFAF (2,692 million \$US), which will be allocated to various activities associated with the objectives as follows:

Components of the NAIP's Investment Plan	Amounts		
	(billion CFA Francs)	(million \$US)	%
O1 Reduction of climatic risks through water resource management	267.9	535.8	19.9%
O2 Preservation and sustainable management of other natural resources	148.9	297.8	11.1%
O3 Production increase and productivity improvement	799.4	1,598.8	59.4%
O4 Development and processing of agricultural products	8.2	16.4	0.6%
O5 Improvement of market access for agricultural products	68.1	136.2	5.1%
O6 Strengthening of research for generation and transfer of new technologies	7.5	15.0	0.6%
O7 Capacity building of stakeholders	14.7	29.4	1.1%
O8 Strengthening of sector coordination and steering	31.3	62.6	2.3%
<b>TOTAL</b>	<b>1,346</b>	<b>2,692</b>	<b>100%</b>

1.4.3 Nearly 70% of the budget is allocated to the crop subsector not only because of its preponderance in the primary sector activities (on average 53% of the value added) but also because of the numerous uncertainties associated with the subsector. The environment subsector, which on average constitutes 5% of economic activity in the agriculture sector accounts for a relatively significant part of the budget (11%); this reflects the Senegalese authorities' will to create a the right conditions for sustainable agriculture through the preservation of the ecosystem and the mitigation of the effects of climate change. Livestock, which plays a relatively important role in the primary economic sector (on average 31.0% of the value added), and whose leverage role has been demonstrated, benefits from about 11% of the total expenditure.

1.4.4 It should be noted that 56.1% of the expenditure provided for in the IP is earmarked for investments, a large part of which is dedicated to the subprogram« production increase and productivity improvement » and to the crop sub sector. Such a trend results from the deliberate choice of the national authorities to increase agricultural production in the short run mainly through yield improvement that would result from improved availability and supply of inputs (seeds, fertilizers, pesticides, etc.). In the medium to long term, emphasis will be put more on farm equipment in order to vigorously increase crop production. In the other sub-sectors, the ratio of capital expenditure to total expenditure is maintained at a high level.

1.4.5 It should also be noted that the IP introduces changes in the spatial allocation of the public investments, with a more balanced distribution of the resources between the agro-ecological zones and administrative regions. The Peanut Basin, where about 60 % of the rural population lives, used to receive barely 3 % of agricultural investments, but will going forward benefit from this resource reallocation and its relative share will increase to about 20 %. Eastern Senegal, which possesses a significant proportion of cultivable land, the sylvo-

pastoral zone and the Niayes, will also gain from the new allocation of public resources induced by the IP. The correction of past distortions achieved by the IP is also reflected in the distribution of public investments between the administrative regions. Except for the regions of Saint-Louis and Tambacounda, resource allocation for agricultural investment among the other regions will be leveled out.

## 1.5 Financing sources and gaps

1.5.1 As previously indicated, the total of the NAIP cost for the period 2011-2015 was estimated at 2,015 billion CFA francs (4,030 million \$US), whereas the investment plan was evaluated at 1,346 billion CFA francs (2,692 million \$US). For the financing of the IP alone, the amount of funding required is **672.3 billion CFA Francs (1,344.6 million \$US)**. The balance (673.4 billion CFA francs or 1,347.4 million \$US) will be borne by the Government (433.3 billion CFA francs, 866 million \$US), local communities and farmer organizations (103.2 billion CFA francs, 206.4 million \$US) and the private sector (132.8 billion CFA francs, 265.6 million \$US) respectively. The breakdown of financing sought by sub sector is indicated in the table below.

*Distribution of the Investment Plan (IP) by sub-sectors and financing sought*

Sub sector	IP total amount		Funding obtained		Financing sought	
	(billion CFA Francs)	(million of \$US)	(billion CFA Francs)	(million of \$US)	(billion of CFA Francs)	(million of \$US)
Agriculture	931.2	1,862.4	603.3	1,206.6	327.9	655.8
Development of agricultural products	8.0	16.0	2.0	4.0	6.0	12.0
Livestock	147.3	294.6	6.6	13.2	140.7	281.4
Environment	144.8	289.6	41.7	83.4	103.1	206.2
Fisheries	63.1	126.2	20.0	40.0	43.1	86.2
Rural infrastructure	34.7	69.4	0.1	0.2	34.6	69.2
Coordination, monitoring and evaluation	16.9	33.8	0.1	0.2	16.8	33.6
<b>TOTAL</b>	<b>1,346.0</b>	<b>2,692.0</b>	<b>673.7</b>	<b>1,347.4</b>	<b>672.3</b>	<b>1,344.6</b>

1.5.2 The required resources to complete the NAIP funding (672.3 billion CFA Francs, 1,344.6 million \$US) represent nearly 50 % of the total amount of the IP funding needs less commitments. It should be noted that the contribution expected from the Government amounts to 32% of the IP total funding, which represents an annual amount of approximately 87 billion CFA Francs (174 million \$US).

## 1.6 Process by which the strategy and investment plan were developed

1.6.1 The NAIP formulation process was officially launched in Senegal on February 14, 2008, with the involvement of basically all the stakeholders in the agricultural sector. These include government institutions, sector ministries, research institutes, farmer organizations, youth, women, the civil society, the private sector, technical and financial partners, etc. Within this framework, thematic working groups were set up using a participatory approach. In addition, a modeling team was charged with the responsibility of estimating the required growth rate, the rate and levels of associated investments, the budget expenditures and the required external funding. This analytic work was performed with the technical assistance of the Consortium for Economic and Social Research (CRES) and the National Research Institute of Food Policies (IFPRI) and with the financial and technical support of ECOWAS.

The validation workshop which marked the end of the technical work was held on August 13 and 14, 2009. It was concluded by the delivery of several documents (brochures, briefs and draft pact, etc.), including the review and detailed analysis of the current efforts devoted to the development of the rural area, as well as an inventory of the policies and strategies for promoting the rural sector. These documents also highlighted the investment options and the need for policy and institutional reforms to improve the various decision-making frameworks.

1.6.2 The formulation process took place from February 9-10, 2010, and led to the National Round Table on the NAIP funding, resulting in the adoption of the various proposals contained in the NAIP documents. On that occasion, Senegal's compact was signed. Following this important milestone and in order to address the concerns relating to the operationalization of the NAIP, on May 17, 2010, Senegal officially launched the post-pact process with the establishment of the Technical Committee coordinated by the Directorate of Analysis, Forecasting and Statistics (DAPS) of the Ministry of Agriculture, who are also in charge of developing the IP. This committee received financial support from USAID which enabled it to present on June 10, 2010 a first draft of the NAIP 2011-2015. This document was also discussed at the post-compact technical review meeting jointly organized by the African Union, NEPAD's planning and coordination agency and various institutions including TFP, during the ECOWAS business meeting held in Dakar from June 14 to 17, 2010. On the basis of the observations gathered during this meeting, the IP was reviewed with the support of CRES, and finalized in October 2010.

## **1.7 Implementation arrangements and capacity to implement**

1.7.1 **The NAIP implementation** : The government of Senegal is presently actively working on the operationalization of the NAIP, and developed at the beginning of 2012, the organizational chart which defines the organization of the NAIP implementation. A Technical Committee, coordinated by the DAPS, will be the body in charge of implementing the NAIP. It will be supported by the focal points of Ministries and relevant institutions, the SAKSS mechanism (Strategic Analysis and Knowledge Support Systems) and if needs arises, on ad hoc thematic groups. Its function will be to (i) ensure the panning of eligible programs ; (ii) monitor the implementation of projects and programs eligible to the NAIP ; (iii) conduct the annual review of activity reports and that of programs and recommendations on the underlying priorities in relation to the accomplishment of the CAADP national objectives; (iv) regularly evaluate the impact of the implemented programs' results ; (v) identify opportunities and constraints to improving programs' impacts ; and (vi) monitor environmental impacts of eligible programs. The decree creating this committee is being signed.

1.7.2 A Steering Committee of the NAIP was put in place (decree N°0549 of the Ministry of Agriculture, dated January 25, 2012), and charged with approving the technical committee's proposals, ensuring policy dialogue, facilitating and promoting exchanges with other countries, regional and international institutions, and providing support to the technical committee in searching funding. This committee is presided over by the Prime Minister's Office and is composed of representatives from the ministry of economy and finance, ministries in charge of ECOWAS matters, agriculture, environment, water resources, catchment basins, infrastructures, local collectivities, research, processing of agricultural products and marketing. It also includes representatives from producers' organizations, civil society, private sector and TFPs.

1.7.3 Ad hoc thematic groups will be contracted out if needed by the technical committee and will be tasked with (i) conducting the NAIP review and identifying areas for improvement, whether they are operational or associated with the generation and use of knowledge, and (ii) developing research and analysis agendas to take in charge the shortcomings identified either during implementation, or by anticipation. These thematic groups could gather, according to the cases, the staff of services and agencies of the ministry of agriculture and other concerned ministries, research institutions (INRA, universities, NGOs. etc.), data providers (national institute of statistics, etc.), producers and civil society representatives, and the other actors concerned by the NAIP implementation.

1.7.4 **The NAIP monitoring** : The NAIP monitoring is ensured through the SAKSS mechanism (program monitoring and evaluation mechanism) and will be built on planning units of the ministries in charge of rural development, and will measure progress accomplished towards to the ECOWAP and CAADP objectives through a performing monitoring and evaluation system. This system will be fed by regularly collected data and will relate to all the NAIP's sectoral sets of themes, but also to the IP's economic, social, and environmental effects at the macro, and micro levels. It will be completed by a watch mechanism which will support the decision-making process. Evaluation of the IP's efficiency and impact are periodically conducted. The focal points of institutions in charge of rural development are the technical committee's guarantors. They will be responsible for scrupulously monitoring the NAIP implementation and working closely with representatives from the SAKSS mechanism. They will work at the planning units' level in order to improve the quality of data collection, analysis, and storage, and make them accessible for the sake of coherence at the sectoral level.

1.7.5 The NAIP monitoring implementation plans for the constitution of a Policy Dialogue Group of the ECOWAP/CAADP, facilitated by the civil society, and which will be straddling between the steering committee and the technical committee. This group will provide basic feedback to public authorities on the NAIP implementation. It will periodically review the NAIP implementation, identify areas for improvements in order to ensure a successful program, and express its views in the prioritization of agricultural investments' priorities under the NAIP. This group will be composed of representatives from producers, civil society, private sector, and development partners.

<p><b>Part 2      Specific proposal for GAFSP financing :</b>  <b>Food Security Support Project</b>  <b>in Louga, Matam and Kaffrine regions</b></p>
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## 2.1 Specific objectives and results targeted

**2.1.1 Program presentation and justification:** The program proposed for GAFSP financing, that is, the Food Security Support Project in Louga, Matam and Kaffrine regions (PASA-Lou/Ma/Kaf), is an activity of food security improvement under the IP and NAIP components. This project was selected in priority by the Government because it falls within the NAIP strategic objectives and also addresses development options highlighted in the accelerated growth strategy (AGS). It covers a vulnerable area, located in the country's central-north, benefitting little from development partners' assistance, and which is frequently subject to climate uncertainties and food insecurity, and subjected to desertification effects. Annex 1 maps illustrate production deficits and prevalence of food insecurity recorded in 2011 at the local level and for the three concerned regions in particular. This program concerns levers (meat, milk, livestock, cereals and vegetables) which were identified after the modeling on agricultural growth. It will in the short run contribute to improving food security and reducing poverty, by targeting women and small holders as a priority, and by using simple practices which proved themselves in other areas of the countries. The identified interventions target an increase of production in agriculture and livestock, particularly through an increased development of surface and underground waters, the creation of development hubs initiated and supported at the local level, a better organization and sensitization of producers and livestock breeders, and an attention brought to a facilitated access to market.

**2.1.2 Specific objectives :** The PASA-Lou/Ma/Kaf's objective is to contribute to food security and rural poverty reduction in the regions of Louga, Matam and Kaffrine. More specifically, the project targets the sustainable increase of crop and animal productions, the improvement of small producers' incomes (farmers and livestock breeders) and women in particular. To reach these different objectives, the project will improve access of small producers, women, and their organizations to diversified production infrastructures, particularly in the area of water control and opening up, as well as to services, support and adapted and efficient technologies. The project implementation will specifically focus on issues associated with gender promotion (emphasis put on interventions directed towards women and youth) and ecological viability (taking in account mitigation measures at the level of environment and actions of adaption to climate change).

**2.1.3 Results and aimed targets:** Among other expected results, the program will enable to induce an increase of annual crop and animal productions, an increase of incomes for the producers, by particularly targeting vulnerable groups (small producers, women and youth). The table below gives an overview of the project's key indicators which will be integrated into the monitoring-evaluation system.

Indicators	Targets
<b>FOOD SECURITY</b>	
Additional cereal production	9,500 tons/year
Additional truck farming production	13,000 tons/year
Additional meat production	5,300 tons in 5 years
Production of collected milk	16.8 million liters of milk in 5 years

Quantities of food supplies distributed in VCT and VCF	1,675 tons
<b>INCREASE OF INCOMES</b>	
Lowland producers	50,000 to 250,000 CFA Francs/year
Vegetable gardens' women	30,000 to 120,000 CFA Francs/year
Women and youth of the small irrigated perimeters	800,000 to 1,200,000 CFA Francs/year
Value added by the meat productions	9.5 billion CFA Francs
Value added by milk development	3.4 billion CFA Francs
<b>VULNERABLE GROUPS REACHED</b>	
Number of farmers directly benefiting from the project	10,500 farmers of whom 5,600 are women and 1,900 are youth
Number of livestock breeders directly benefiting from the project	19,700 livestock breeders of whom 7,500 women and 3,400 are youth
Total population directly benefiting from the project	211,000 persons of whom 51% are women
Total population benefiting from the project's spillovers	490,000 person of whom 51% are women
Number of persons receiving food supplies (VCT and VCF)	87,792 persons of whom 44,774 are women
Minimal rate of access to land for women	50% lowlands, 100% gardens, 25% perimeters

2.1.4 The project's priority targets will be the small producers (men and women) residing in the three regions where the project is intervening. A total of 30,000 farmers and livestock breeders will directly benefit from the project, of whom 13,000 are women and 5,000 are youth. The project will make sure to privilege rural activities usually prized by women, and for which they possess a recognized know-how (truck farming, small livestock, traditional poultry farming, processing activities, marketing, etc.) and from which they can derive incomes. The project will also apply a positive discrimination in favor of women and vulnerable groups, wherever local traditions tend to exclude them from decision-making bodies, or from certain benefits. The program will make sure that women are integrated in the access to developed lands, the organization and management of new infrastructure, as well as in the access to trainings and new production tools. The establishment of new perimeters downstream the drilled wells forages will enable the creation of jobs for youth. More globally, the project will also improve populations living conditions also through opening up activities (rural dirt roads), in the area of potable water supply (drilled wells) and environment protection (NRM activities).

2.1.5 **Monitoring-evaluation framework** : A monitoring-evaluation system integrated in the SAKSS/NAIP mechanism will be put in place to monitor the program implementation and to be sure that progress is accomplished towards the set objectives. The details of this monitoring framework will be designed taking into account common target indicators selected for the five components of the GAFSP program at the global level, in order to have homogeneous and regular information (semester basis) on the progress of interventions funded through the GAFSP. The monitoring-evaluation system will be put in place at the project's start-up and a specialist will be charged with ensuring implementation. A baseline survey will also be conducted in order to determine in a more precise manner, the initial level of key indicators which will be monitored. The monitoring-evaluation framework will systematically integrate disaggregated data by gender in order to make results on women and most vulnerable groups, more visible. Period reports will be produced, of which two will be transmitted to the GAFSP every year. The WFP will provide particular assistance for data related to the monitoring of food security and nutrition, through yearly evaluation. External

monitoring-evaluation missions, involving all the concerned sectoral ministries, will also be regularly organized by the Government, in addition to the supervision missions that will be organized by the African Development Bank. Several participatory workshops will also be organized to enable local actors to evaluate themselves the implemented interventions. A mid-term review and a final evaluation will also be conducted to enable subsequent adjustments and a capitalization of the assets.

**2.1.6 Linkages with the investment plan :** All the activities planned under this program are directly associated with the NAIP components. Therefore the collection and development of run-off-waters and the recourse to underground waters result from Objective 1 « Reduction of the climate risks through water resources management » of the NAIP. Likewise, activities which translate into an increase of crop (rice, maize, sorghum, fruits and vegetables) and animal (meat, milk) productions directly relate to Objective 3 « Production increase and productivity improvement » of the NAIP. Objective 7 of the NAIP which concerns « the stakeholder capacity building » is also taken into account in the proposed program (component 2: Support to the development and organization of producers and livestock breeders) through support provided in terms of restructuring and training of producers, and sub-sectors organizations. The creation of access roads, the activities initiated for storage, the sale and products development, and the processing and marketing also cover Objectives 4 and 5 related to « the development of processed agricultural products » and « the access to markets for agricultural products ».

## **2.2 Activities to be financed**

**2.2.1 Program description and main components :** The PASA-Lou/Ma/Kaf project will be implemented over a five-year period and equally benefit the agriculture and livestock sectors, while taking into account in a cross-cutting manner issues associated with gender, environment, and climate change. Activities associated with livestock will more specifically target sylvo-pastoral regions of Louga and Matam, while agricultural activities will target more the region of Kaffrine and South of the Louga region, since activities integrating agriculture and livestock will be promoted everywhere. Certain activities will be supported by food supplies' strategies for assets creation (or food supplies against work : VCT) and food supplies against training (VCF) for the involved communities. These approaches aim at stimulating mobilization of beneficiary communities to implement targeted activities by proving them support in the form of food. For efficiency and impact reasons, the Project will concentrate its interventions and activities in sites and rural community with potential and which can become local development hubs. Therefore, the project will target areas for which the following are found : (i) a productive potential which can be developed in a sustainable manner, (ii) a local dynamics expressed by community initiatives and a strong commitment of collectivities, (iii) opening up possibilities of production zones, (iv) the nearness of a local or regional market, as well as prospects and market opportunities for the different products, and (v) farmers' organizations and groups fit in a structuring and sustainability dynamics.

**2.2.2** The project will be articulated around three main components which will aim at (i) developing in a participatory and sustainable manner, agricultural and livestock infrastructures destined to promote securing, increase, storage, consumption and marketing of crop and animal production ; targeted interventions will particularly be conducted in the hydraulic and pastoral area, in linkage with the adaptation to climate change, by integrating the land tenure issue and by taking into account the lessons and best practices learned from similar programs ; (ii) strengthening the mechanisms of extension, support-advisory services,

producers' organization, products processing and marketing; the producers' capacities will be built to ensure an efficient management of infrastructures and concerned production sub-sectors ; and (iii) ensuring an efficient coordination of the Project, centered on the monitoring-evaluation of results and impacts. In the agricultural area, the project, according to the zones and often in a complementary manner, will target truck farming, arboriculture and food crops (especially destined to self-consumption). Livestock activities will especially be oriented towards the pastoral system securing, small ruminants, poultry farming and milk. All the planned activities are detailed below.

**2.2.3 Component 1 – Development of agricultural and livestock infrastructures :** In the livestock sector, the project will especially intervene in the Ferlo sylvo pastoral zone (Louga and Matam regions), marked by low rainfall and environment degradation. The project will intervene in the pastoral hydraulics by building 10 new drilled wells equipped with water towers and drinking troughs, by rehabilitating 10 old drilled wells and by extending networks (about 5 km) for existing drilled wells. In addition to these infrastructures and in liaison with the concerned pastoral units, 12 storage and sale points of animal feed will be put in place, as well as 25 vaccination parks. The project will also develop, in liaison with the waters and forests services and the local collectivities, natural resources protection activities for the establishment of local conventions (local development plans/land use planning) and the creation/maintenance of fire-breaks (500 km targeted). Ten (10) existing pastoral ponds will also be developed (over digging and development of access roads), in order to increase their capacity and life duration. Targeted interventions will be conducted towards the small ruminants, through supporting the modernization of settlements with night parks. A total of 80 sheep sheds and 60 pilot goat sheds will be built, and half of them will be reserved to women. Traditional poultry farming will be taken into account through the development of 60 pilot poultry houses at the villages' level and exclusively destined to women.

2.2.4 Regarding the agricultural sector, the project will establish small diversified hydro-agricultural infrastructures. In Kaffrine region and certain areas of Louga region, it will promote the development of 1,200 ha of lowlands and floods spreading plains for rain-fed rice farming and truck farming. For that, small catchment works (micro-dams, spreading thresholds, etc.) will be built in the outlet area, following the example of the developments realized by the PAPIL/BAD project in the regions of Tambacounda and Kolda. For the low land activities, near 60% of the plots will be cultivated by women (rice farming, truck farming, etc.). In order to preserve the developed sites against sand-bank and at the same time fight against erosion of the slopes' lands on which rain-fed crops are grown, soil conservation and restoration activities are planned (CES/DRS techniques) over an area of about 300 ha. The project will also facilitate the establishment of 30 cereals' banks, near the developed sites. About 20 vegetable and arboricultural gardens over an area of 80 ha will also be specifically developed for the women's groups. They will include the construction of 60 new wells, pumping equipments (solar or electrical), small water towers and mixed distribution systems (basins, drip systems, etc.) according to the concerned groups' level.

2.2.5 The project will also promote the development areas for small scale irrigation scheme for horticultural crops by using excess water from drilled wells or by building new drilled wells. 40 sites will be concerned for a total area of 500 ha (100 ha from waters of existing drilled wells and 400 ha from new drilled wells). For these perimeters, at least 25% of the areas will be exclusively reserved to women, the remaining 75% will target youth in priority. The project will finance the fences and promote the installation of sustainable quickset hedges around the perimeters. To promote the securing of land tenure vis-à-vis women (lowlands,



truck farming gardens, small perimeters), the project will support them in the procedures required from the rural councils. To facilitate access and marketing, the project plans to rehabilitate a total of 270 km of roads and rural dirt roads which will promote access to the developed sites, as well as the construction of 40 storage warehouses in the irrigated perimeters leant back against the drilled wells. These infrastructures will be localized according to the zones subject to land developments and connectable to existing communication means. Some of these activities (lowlands development, truck farming gardens, rehabilitation of access roads to the agricultural sites, cereals' banks) will be supported by the food supplies strategy for creation of assets (VCT) and food supplies against training (VCF) for the involved communities, with the WFP support.

**2.2.6 Component 2 – Support to the development and organization of producers and livestock breeders :** In the livestock area, the project will support the restructuring of about 25 Pastoral Units, following the example of prevailing practices in the area (PAPEL II/BAD and PRODAM II/FIDA projects). In collaboration with the hydraulics' services, the project will particularly support the creation or redynamization of the Association of drilled wells' users (ASUFOR), to establish a sustainable management of the water points, in conformity with the current national policy. The project will provide targeted support to improve animal health practices. It will support the livestock vaccination for groups and livestock breeders benefiting from the infrastructures put in place, the animal feed supplement (3,000 tons of processed animal feed and cotton grains, 1.500 blocks of mineral complements with added vitamins) and the constitution of forage reserves (acquisition of 25 motor mowers). For the women, the Project will train 1,500 female vaccinators for traditional poultry and will support intermediation to promote cattle fattening activities (at least 500 women targeted). The project will also provide support for the installation and strengthening of about ten mini dairy farms, integrating milk collection, in order to promote the development of milk basins. The decentralized services of the Ministry of Livestock will provide advisory services to livestock breeders in the pastoral units (Pus) supported by the Project. For the different procurements of inputs and equipments, the project will put in place an incentive system involving the private sector and in relationship with the decentralized financial system and some certain credit mechanisms in place (FONSTAB, PMIA resources, etc.). In this process, the beneficiaries will provide a minimal contribution to the funding and will benefit from trainings and a close follow up support.

2.2.7 The support-advisory services in agriculture will include the technical (extension, new agricultural technologies, maintenance and management of land developments) and socio-economic (economy and management of individual farms, organization and operation of holders' groups) aspects. According to a cost-sharing system, the project will provide small basic equipments and initial inputs to groups. The project will provide institutional support for the management of hydro-agricultural infrastructures put in place, by creating and forming committees in charge of the works' maintenance, upkeep and management. The project will develop activities of support-advisory services and extension, by relying on the existing agricultural counsel, particularly the National Agency of Rural and Agricultural Counsel (ANCAR). The project interventions will also aims at providing support to agricultural products processing, and professionalization of actors. To promote local processing of agricultural products, the Project will particularly support the development of 64 small processing /packaging units (mills, hulling machines, gin, etc.) of food products from the selected sub-sectors. Like the livestock activities, these procurements will be made by involving the private sector and micro finance institutions, and will require beneficiaries' contribution. The professionalization of actors will include capacity building through

information and sensitization activities, technical, trade-union and management trainings, and support to the restructuring of POs, etc. The producers' organizations (POs) will receive differentiated support, according to the organization level, and progressively tend towards autonomy and professionalization, including a strengthening of federative organizations. About 125 POs will be concerned by these activities and will also benefit from the support of the VCF strategy supported by the WFP.

**2.2.8 Component 3 – Project management:** The project will be implemented by respecting efficiency principles of the coordination, management efficiency, and subsidiarity. The project coordination will be ensured by the NAIP technical committee. The committee will particularly be charged with monitoring the project implementation through the SAKSS mechanism. Coordination of field activities will be performed by two light teams placed under the technical supervision of the Ministry of Agriculture and the Ministry of Livestock. These teams will have the administrative and financial management autonomy for activities falling within their intervention area. They have qualified personnel, recruited on a competitive basis and well versed into the management, procurement and monitoring-evaluation procedures. The operational details will precisely be provided later during the project preparation.

**2.2.9 Summary of the main activities to be funded:** The table below summarizes for each component the main planned activities.

<b>Main activities of the PASA-Lou/Ma/Kaf</b>
<b>Component 1 : Development of agricultural and livestock infrastructures</b>
<p><i>Agricultural infrastructures</i></p> <ul style="list-style-type: none"> <li>- Development of 1,500 ha of lowlands for rice farming and truck farming, supported by the VCT strategy</li> <li>- Preparation of 300 ha of lands by techniques of soil defense and restoration (CES/DRS)</li> <li>- Establishment of 30 cereals' banks supported by the VCT strategy</li> <li>- Establishment of 80 ha of truck farming gardens for women, fenced and equipped with pumping systems, VCT strategy</li> <li>- Installation of 100 ha of small irrigated perimeters from existing drilled wells</li> <li>- Installation of 400 ha of small irrigated perimeters from new drilled wells</li> <li>- Construction of 40 buildings of exploitation including storage warehouses</li> <li>- Rehabilitation of 150 km of dirt roads and access roads, supported by the VCT strategy</li> </ul> <p><i>Livestock Infrastructures</i></p> <ul style="list-style-type: none"> <li>- Construction of 10 new pastoral drilled wells and rehabilitation of 10 existing drilled wells</li> <li>- Equipment of new drilled wells with 10 water towers and 20 drinking troughs</li> <li>- Extension of existing networks over 5 km (about 5 concerned drilled wells)</li> <li>- Construction of 25 vaccination parks and 12 storage and sale points of animal feed</li> <li>- Construction of 25 forage storage sheds</li> <li>- Development of 500 km of dirt roads and fire-breaks in the sylvo-pastoral zone</li> <li>- Development of 120 km of rural dirt roads</li> <li>- Support to the modernization of 60 goat sheds and 80 sheep sheds equipped with night parks</li> <li>- Support to the installation of 60 small modern poultry houses in villages and dissemination of bred roosters</li> </ul>
<b>Component 2 : Support to the development and organization of producers and livestock breeders</b>
<p><i>Agriculture Sector</i></p> <ul style="list-style-type: none"> <li>- Establishment and training of 125 management committees of hydro-agricultural infrastructures, VCF strategy</li> <li>- Structuring and organization of 20 truck farming gardens and 40 developed perimeters</li> <li>- Activities of extension and support-advisory services to 10,500 farmers (of whom 5,600 are women)</li> <li>- Cost-sharing provision of inputs for land development (2,000 ha) and small equipments</li> <li>- Support to the establishment of 64 small processing units</li> </ul>

*Livestock sector*

- Support to the establishment or dynamization of 25 management entities for managing drilled wells (ASUFOR)
- Structuring, guidance and facilitation of 25 PUs in the sylvo-pastoral zone
- Training of 1,500 female vaccinators of traditional poultry and intermediation for 500 cattle fattening operations
- Support-advisory services to 19,700 livestock breeders (cattle, small ruminants, poultry farmers)
- Support activities to the sanitary cover and animal feed supplementing
- Support the installation and strengthening of 10 mini-dairy farms

**Component 3 : Project Management**

- Program coordination
- Financial management
- Procurement of goods, works and services
- Monitoring-evaluation activities
- Project environmental monitoring
- Communication activities

**2.2.10 Ecological viability :** Overall, the PASA-Lou/Ma/Kaf project will have positive impacts on the environment and natural resources preservation. The negative effects will not be substantial and mitigation will be implemented in conformity with the environment and social management plan (PGES) which will be developed during the application submission by the ADB. The environmental issue will be integrated in all steps of the project cycle, but particularly in the specifications projected works. The management committees of land developments and infrastructures will be involved in implementing the measures. The agricultural production increase will be based on yields' improvement following the use of best cultivation practices, the limitation of post-harvest losses, a better management of water resources, as well as the use of crop protection products. The program also plans to conduct trainings on the rational use of fertilizers and crop protection products and the respect of environmental management norms. In terms of mitigation and adaptation capacities' measures facing climate change, the project particularly plans for : (i) a more controlled use of run-off and underground waters, and the promotion of drip irrigation techniques, (ii) the judicious use of natural resources management through development of agricultural residues' techniques, manure and animals' excrements; (iii) the wedging of different cropping cycles of different annual crops, the gradual redefinition of a developed cropping calendar; and (iv) the introduction and promotion of short cycle varieties, needing little water and regarding different stress inherent to early climate disturbances.

**2.2.11 Linkages with the CAADP activities:** The different targeted operations and activities are directly linked with the NAIP objectives and the CAADP different pillars. These linkages are shown in the table below.

*Linkages between the PASA-Lou/Ma/Kaf activities and the CAADP pillars*

<i>The CAADP pillars</i>	<i>The PASA-Lou/Ma/Kaf activities</i>
1. Water Management improvement	The organization of pastoral water points' management, the hydro-agricultural infrastructures destined to establish performing irrigation systems, enable not only the securing of animal and crop production, but also involve an improvement of water management. Various trainings are planned to organize the hydraulic infrastructures users.
2. Sustainable development of the agricultural farms	Environmental safeguard measures, professionalization of the actors, development hubs generated by the hydraulic developments as well as the infrastructures and improved settlements for livestock, -- will serve as references and contribute to inducing a sustainable development of the agricultural and pastoral farms.

3. Improved Natural resources management	Environmental issues will be systematically taken in charge under the program implementation, by applying methods planned at the environmental and social management plan level. Protection measures at the development lowlands level will contribute to limiting erosion and promote the vegetative cover upkeep. This pillar is also directly concerned by the NRM activities (sensitization, fight against bush-fires, etc.) conducted at the PUs level. Support provided to livestock development will promote in the long run animals' settling process, particularly through the development of pastoral water points and the preservation of forage resources.
4. Agricultural sub-sectors development and markets promotion	Implementation activities under crop (rice farming, truck farming, etc.) and animal (cattle, sheep, goats, traditional poultry, etc.) sub-sectors cover different segments of the concerned sub-sectors (production, products processing and marketing). The producers' organizations are supported at the level of infrastructures and equipments, and in the organization, management and intermediation.
5. Food insecurity reduction	The project objective is to contribute to food security reduction through an increase of crop (+22.000 tons) and animal (+5.300 tons) productions.

2.2.12 At the macroeconomic level, all these activities contribute to consolidating the country's food self-reliance, one of the LOASP's fundamental objectives and targeted by the NAIP, because they enable to reduce imports of crop and animal products, which will alleviate the deficit of the country's trade balance. Direct effects will be perceived at the concerned communities' level due to an increase of their income resulting from the exploitation system modernization. The proposed activities' viability will constitute a primary concern of the program. In this sense, the project will privilege experienced infrastructures and technologies which have proven themselves and adapted to different environments. Through operators and specialized NGOs, in liaison with the decentralized technical services, the project will provide accompaniment and guidance to target groups, in order to build their capacities, and better organize and professionalize them.

## 2.3 Implementation arrangements

2.3.1 The project will be implemented with the support of two types of operators : (i) strategic and institutional partners, and (ii) contractual service providers. Partners are those who perform direct public service functions (veterinarian posts at the level of districts, technical departmental and regional services), or those which mandates are subject to law (ANCAR, ANREVA, etc.). According to the cases, on the basis of protocols or conventions, they will be responsible for support-advisory services to the extent that they have enough staff it, or support to POs in the area of structuring, activities' implementation monitoring and evaluation of the service providers' work, information dissemination, and dialogue facilitation at the local level. The private service providers (enterprises, consulting firms, NGOs, individual consultants, etc.) will be in charge of providing all the others works, goods and services. They will be recruited on a competitive basis, according to ABD's procedures, and associated with the project through contracts. Investment works are done by specialized enterprises on the basis of calls for bids. Supervision and control of these works are performed by experienced firms recruited on a short list basis. Certain works and activities calling on the communities' mobilization will be supported by the WFP (VCT and VCF strategies). The operators in charge of restructuring, facilitation and support-advisory services will contribute to collecting implementation indicators to regularly feed the project monitoring database. During the project preparation, particular attention will be paid to the

promotion of efficient operational processes, using already existing studies, having recourse to adapted and efficient methods of procurement and review, promoting field synergies and complementarities, privileging the best practices, and calling on more performing services and organizations.

2.3.2 At the operational level, the Ministry of Livestock, through a light team, will conduct pastoral and support activities for the animal sub-sectors’ modernization, like what was done under the PAPEL II. The Ministry of Agriculture will be responsible for implementing the activities associated with agricultural development. It will put in place a light team which will work in liaison with the concerned organizations and operators. These teams will work in synergy and in close relationship with the involved local collectivities (regional councils and rural communities), as well as with the technical services in charge of land use and planning, hydraulics, agriculture and livestock, etc. It is important to note that the implementation of the program activities will be largely decentralized and conducted in a participatory manner. Participatory workshops will be regularly organized to inform all the stakeholders and also evaluate the obtained results.

**2.4 Amount of financing requested**

2.4.1 The activities to be funded are indicated in the table below, broken down by funding sources. A certain number of feasibility studies and capitalization documents are available and were used in the activity budgeting. A total funding of 40 million US\$ (20 billion CFA Francs) is requested from the GAFSP, which represents 94,6% of the project activity’s global amount, and about 3% of additional resources to be sought for financing the IP (1,344.6 million US\$). The detailed table of costs is presented in Annex 2.

*Distribution of the PASA-Low/Ma/Kaf costs by funding source (in millions of USD)*

Component	TOTAL	GAFSP	GVT	BEN	WFP	%
1. Development of agricultural and livestock infrastructures	29.53	<b>28.76</b>	-	0.77	-	69.9
2. Support to the development & organization of producers & livestock breeders	7.23	<b>6.94</b>	-	0.29	-	17.1
3. Project Management	5.47	<b>4.30</b>	0.81	-	0.36	13.0
<b>TOTAL (millions of USD)</b>	42.24	<b>40.00</b>	0.81	1.07	0.36	100%

2.4.2 The GAFSP will be essentially used to finance structuring investments : lowlands’ development, equipments of gardens, development of perimeters, pumping equipment, construction of drilled wells and water towers, construction of buildings, development of ponds, rehabilitation of rural dirt roads, establishment of processing units, etc. They will also be used to improve services provision to producers and livestock breeders. The funding will take in charge the missions of works’ supervision and control, as well as targeted support for the accompaniment, and capacity building and professionalization of the sub-sectors’ actors. The operating expenses will partly (15%) be borne by the Government. The GAFSP will finance expertise services (study and control of works, part of the operating expenses, the monitoring-evaluation system, the environmental monitoring, and the missions of audit, mid-term review and final evaluation. The beneficiaries will contribute to certain non qualified works, whereas the WFP will contribute to the VCT and VCF activities’ coordination and monitoring.

2.4.3 If the fiduciary funds reveal to be insufficient, it is proposed to reduce the mileage of access roads (50 km instead of 150 km) and rural dust roads (40 km instead of 120 km projected), which will lead to a total cost of 16.7 billion CFA Francs or 33.4 million USD, for the GASFP request.

**2.5 Preferred supervising entity**

2.5.1 The African Development Bank (ADB) is the supervising entity chosen by the Government of Senegal to assist in the implementation of this intervention. This institution has a long history of collaboration with Senegal in the rural sector in general and in the livestock subsector in particular, as well as in the intensification of agricultural production through irrigation. In particular, from 1992 to 2009, the ADB financed two successive livestock support projects (PAPEL I and PAPEL II) which, among other results, initiated the modernization of the sector and development of pastoral infrastructure. These interventions also helped to reflect and establish strategic focus on the livestock sub-sector, which to date had not benefited from significant funding.

2.5.2 In the agricultural production sector, through appropriate water resource management and irrigation, the ADB intervenes in the half of the country’s south through two activities : the Local Small Irrigation Support Project (PAPIL) and the Casamance Rural Development Support Project (PADERCA) which both develop activities targeting a better water control, from small hydro-agricultural developments, and the productive capital preservation in order to increase food security and promote the emergence of production hubs. The ADB’s experience in designing and implementing projects and programs in the rural sector, and the presence of the ADB regional Office in Dakar will contribute to ensuring, in close consultation with the TFPs, partners and concerned actors, a diligent set-up, privileging quality first, then adequate monitoring of the program. During the project implementation, ADB will also rely on the TFPs’ group « Rural Development and Food Security » to promote synergies and complementarities with the on-going programs and initiatives, including those implemented by the WFP (VCT and VCF) and the IFAD project (PADAER and PAFA projects covering larger areas).

**2.6 Time Frame for proposed support**

The projected implementation time frame is provided on an indicative basis in the chronogram below. The Project evaluation by ADB is expected to start as soon as it is approved by the GAFSP. In total, the projected project is expected to be fully implemented before the end of 2017 which is the completion date of the IP and NAIP first phase.

Activities		2012	2013	2014	2015	2016	2017
1	Approval of request by the GAFSP	■					
2	Preparation/Appraisal of the program		■				
3	Launching of the program			■			
4	Procurement process			■	■		
5	Development of infrastructure				■	■	
6	Capacity building				■	■	■
7	Supervision, Audit				■	■	■

## **2.7 Risks and risk management**

2.7.1 Apart from the risks generally inherent in agricultural sector interventions, such as those related to land tenure status (law on the national domain), the climatic uncertainties and conflicts between farmers and livestock breeders, the implementation of this program presents limited specific risks, insofar as broadly similar interventions were already conducted, and that lessons learned from these experiences will be taken into account.

2.7.2 The risks of drought and poor harvests will be alleviated by the development of lowlands, the establishment of gardens and installation of small irrigated perimeters, which will ensure regular water supply for the crops. The creation of modern pastoral water points will contribute to a regular supply of water for the cattle in periods of inadequate rainfall. Similarly, with the sensitization of the farmers' and livestock breeders, and the delineation of livestock paths, the conflicts between the nomadic livestock herders and the farmers would be minimized. The land tenure issue will closely involve all the concerned local collectivities and will be systematically addressed and clarified before the realization of any activity.

2.7.3 Concerning the program implementation itself, care will be taken to ensure that different implementing agencies are conversant with the procedures and processes for introducing requests funded under the GAFSP, because a major source of delay and /or blockages to program implementation emanate from inadequate knowledge or misinterpretation of laid down procedures, particularly in the procurement of goods and services, disbursements etc. It will be easier for the supervising agency which happens to be the ADB to overcome these bottlenecks through the dissemination of operational notices that detail out the processes, applicable rules and procedures; and subsequently through the training sessions that will be conducted. At the level of program technical and financial management, the eventual risks of project slippages could be mitigated through regular supervision missions conducted by the supervising agency. The presence of the ADB regional office in Dakar will facilitate the implementation and monitoring of the various activities. There will also be regular annual audit of accounts and financial operations. At the start of the program, a launching workshop will be organized, bringing together the supervising entity, the implementing agencies and the concerned government departments, as well as beneficiary and local community representatives.

2.7.4 The additional output attributable to the program will be relatively significant but will remain below the national requirement. Consequently, this would not lead to a decrease in producer prices and reduction in the producers' incomes. The modernization and development of livestock farming according to the value chain approach could constitute significant challenge for the most vulnerable and unskilled rural population. The project will ensure that the most underserved segments of the community are dynamically integrated whereby the development of private entrepreneurship will foster the dynamization of the activity sectors. The capacity building activities will also enable the different actors to better take charge of the innovations and to assume the responsibilities inherent in the development of the sector.

## **2.8 Consultation with local stakeholders and development partners**

2.8.1 The formulation of the NAIP enabled the actors involved in the country's economic development in general to undertake a review and a detailed analysis of the past and present efforts in the area of agricultural and rural development, as well as take stock of the policies and strategies for the promotion of the sector. This review enabled us to validate the

programs' relevance and to identify the necessary adjustments or to propose alternatives in the area of investment. The results of the consultations and analyses led to the NAIP design and to the signature of the pact in February 2010, followed by the formulation of a first draft of the NAIP in June 2010 that gave rise to a number of recommendations during the technical review. The finalization of the IP took place during the months of July to September 2010, under the guidance of DASP and with the support of CRES. The final IP document will be shared with the stakeholders soon.

2.8.2 This request was formulated by the Government of Senegal under the coordination of the DAPS, who are charged with the implementation of the NAIP, and in consultation with the Directorate for Economic and Financial Cooperation (DCEF). Support was also received from the concerned sector agencies and ministries (Agriculture and Livestock) in line with the propositions highlighted in the IP. This request also takes into account the results of the various simulations performed. All of these ensured the identification of sub-sectors with most potential and where future investment should be prioritized. Thus, it came out that crop production, particularly cereals, and livestock should be priority niches. The targeting of this request takes this orientation into account. The request formulation also gave preference to activities sufficiently advanced in terms of design, reflection, consultation and preparation so as to be ready for implementation relatively quickly. Most of the selected activities concern zones and communities already identified, and with whom several discussions were held to define in a participatory manner the priority interventions. During the detailed formulation of this program, discussions will again be held with all stakeholders to incorporate any subsequent operational adjustments.

2.8.3 The formulation of this current request was transmitted to the thematic working group of the PTFs in charge of agriculture and food security (co-chaired by World Bank and USAID). The observations formulated were taken into account in the finalization of this document. Although the final review of the finalized IP has not been organized yet, it was admitted that the activities selected under this request were in perfect conformity with the priorities defined by the NAIP and the CAADP, and that their funding would contribute to supporting urgent interventions already initiated, and offer the possibility to catalyze other funding sources through the demonstrative character of certain activities.

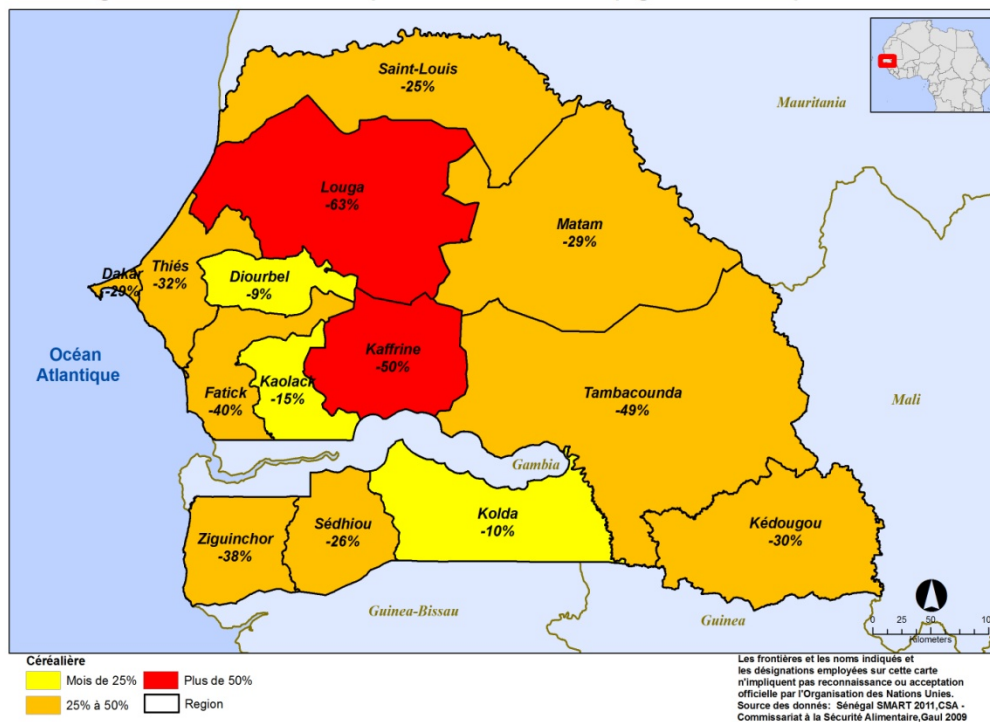
## **2.9 Conclusion**

This request for funding amounting to 40 million USD is hereby submitted to the Global Agriculture and Food Security Program. The objective of the proposed project is to improve food security and rural incomes by targeting three vulnerable regions of Senegal in which there are currently no appreciable agriculture development support programs by Government and development partners. The intervention will target smallholder farmers and women. The project is derived from the NAIP. The project will improve access of small producers, women, and their organizations to diversified agricultural infrastructures, particularly in the area of water control, storage and opening up, as well as technologies, services and adapted trainings. The food security support project in Louga, Matam and Kaffrine regions will be implemented in a very participatory manner, and will have a monitoring-evaluation system leant back against that of the NAIP. The PASA-Lou/Ma/Kaf will directly benefit about 210,000, persons and generate an additional crop and animal production estimated at more than 22,000 and 5,000 tons, respectively.



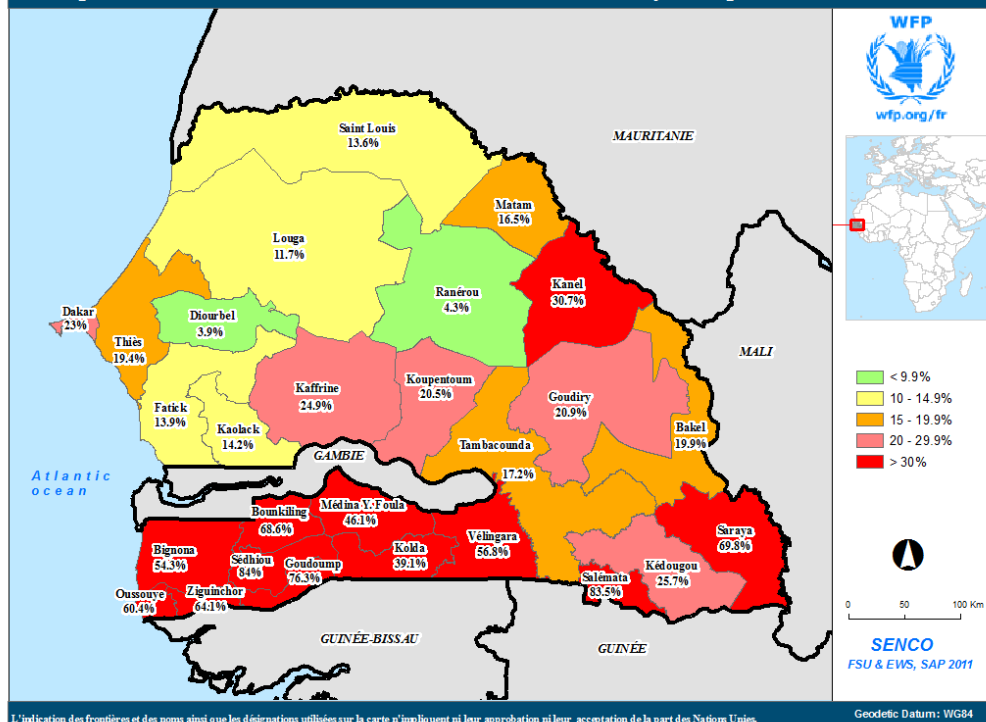
**Maps illustrating problems of production deficits and food insecurity in Senegal (2011)**

Sénégal: Profondeur du déficit de production céréalière campagne 2011/12 comparée à 2010/11



Source WFP

Sénégal: Prévalence de l'insécurité alimentaire, 3ème passage du SAP, aout 2011



Source WFP

**Table of the PASA-Lou/Ma/Kaf costs**

**ANNEX 2**

**Details of the funding requested from the GAFSP (in thousands of CFA Francs and millions of USD)**

Components / Activities	Units	Q	Pu (thousands CFA fr)	Pt (thousands CFA francs)	Pt (millions USD)
<b>Development of agricultural and agricultural infrastructures</b>					
Development of lowlands, micro-dams (1,500 ha)	site	20	112 500	2 250 000	4.50
Development of CES/DRS	ha	300	800	240 000	0.48
Vegetable gardens	u	20	18 000	360 000	0.72
Horticultural perimeters downstream drilled wells (excess flow)	u	20	18 000	360 000	0.72
Horticultural perimeters downstream the new drilled wells	u	20	100 000	2 000 000	4.00
Access dirt roads to agricultural sites	km	150	15 000	2 250 000	4.50
Expertise (study and agricultural component control)	7%	1	0	562 800	1.13
Construction of new drilled wells	u	10	180 000	1 800 000	3.60
Rehabilitation of old drilled wells	u	10	20 000	200 000	0.40
Extension of existing networks (5 concerned drilled wells)	km	5	12 000	60 000	0.12
Development of pastoral ponds	u	10	60 000	600 000	1.20
Points of storage and sale of animal feed	u	12	15 000	180 000	0.36
Installation of vaccination parks	u	25	7 000	175 000	0.35
Construction of pilot sheep sheds	u	80	2 000	160 000	0.32
Construction of pilot goat sheds	u	60	2 000	120 000	0.24
Development of modern poultry houses	u	60	1 000	60 000	0.12
Creation/maintenance of fire-breaks	km	500	400	200 000	0.40
Rural dirt roads in sylvo-pastoral zone	km	120	20 000	2 400 000	4.80
Expertise (study and livestock component control)	7%	1	0	402 850	0.81
<b>Sub-total 1</b>				<b>14 380 650</b>	<b>28.75</b>
<b>Support to development and organization</b>					0.00
Storage warehouses	u	40	15 000	640 000	1.28
Cereals' banks	u	30	6 000	180 000	0.36
Support to agricultural products processing (mill, hulling machine, etc.)	u	1	204 000	204 000	0.41
Support to capacity building	u	1	150 000	150 000	0.30
Contribution in inputs and small equipments	u	1	693 000	693 000	1.39
Vaccination of poultry against the MN	ff/year	5	1 500	7 500	0.01
Animal health activities	ff/year	5	50 000	250 000	0.50
Contribution to purchase of bred roosters	u	1000	5	5 000	0.01
Contribution to purchase of processed animal feed & cotton grains	tons	3000	162	487 500	0.97
Contribution to purchase of blocks of mineral complements	u	1500	5	7 500	0.01
Contribution to purchase of motor mowers	u	25	2 000	50 000	0.10
Forage storage sheds	u	25	5 000	125 000	0.25
Support and strengthening of mini-dairy farms	u	10	40 000	400 000	0.80
Training of poultry female vaccinators	u	1500	4 000	6 000	0.01
Support-advisory services to groups and pilot livestock breeders	ff/year	5	25 000	125 000	0.25
Support to the dynamization of 25 ASUFOR	u	25	500	12 500	0.02
Support to the organization of 25 PUs (sensitization, NRM, etc.)	u	25	5 000	125 000	0.25
<b>Sub-total 2</b>				<b>3 468 000</b>	<b>6.93</b>
<b>Project management</b>					
Coordination, management, monitoring-evaluation, audit, etc.	12%	1		2 151 350	4.30
<b>Sub-total 3</b>				<b>2 151 350</b>	<b>4.30</b>
<b>TOTAL</b>				<b>20 000 000</b>	<b>39.99</b>