



USAID | SENEGAL

FROM THE AMERICAN PEOPLE

September 7, 2018

Reference: Notice of Funding Opportunity (NOFO) Number: 72068518RFA00017
USAID/Senegal Feed the Future Fisheries, Biodiversity & Livelihoods (FBL)
Activity

Subject: Amendment #1

The purpose of this Amendment 1 is to:

- 1) Request resubmission of questions;
- 2) Update the dates on the NOFO Cover Page; and
- 3) Provide an additional document to prospective applicants.

- 1) Due to technical glitches, we were not able to receive any questions that might have been submitted against this NOFO.

Prospective Applicants are requested to re-submit their questions to dakaregosolicitations@usaid.gov and copy the following email addresses: nawilane@usaid.gov and alndiaye@usaid.gov.

- 2) Therefore, the dates on the Cover Page of the NOFO have been revised as follows:

Issue Date:	Friday, August 17, 2018
Deadline for Questions:	Friday, September 14, 2018
Closing Time:	10:00hrs Dakar Local Time

Closing Date:	Monday, October 1st, 2018
Closing Time:	17:00hrs Dakar Local Time

- 3) The following document is provided to the prospective applicants:

- ✓ Economic Growth for All-Vision (page 4 of NOFO)

Sincerely,

// Signed (Original Signature on File)//

Alula Abera
Regional Agreement Officer

[END OF AMENDMENT 1]

Route des Almadies B.P. 49 Dakar, Sénégal Téléphone: 33-879-4000

Fax: 33-879-4100 Internet: <https://pages.usaid.gov/senegal>



USAID | **SENEGAL**
FROM THE AMERICAN PEOPLE

USAID Senegal – Economic Growth For All (FY2018-2023)

Project Vision

27 March 2017

LIST OF ACRONYMS

AAD	Activity Approval Memos	CRODT	Oceanographic Research Center
ACF	Action Contre la Faim	DAP	Dept of Analysis Forecasting and Statistics
AETR	Agriculture Education Training Research	DCA	Development Credit Authority
AGCLIR	Agricultural Commercial, Legal, and Institutional Reform	DO	Development Objective
AMEP	Activity Monitoring and Evaluation Plans	DPM	Directorate of Marine Fisheries
ANCAR	Agence Nationale de Conseil Agricole et Rural	DPSP	Directorate for Surveillance and the Protection of Surveillance
ANIDA	Agence Nationale d'Insertion et de Développement Agricole	ECOWAS	Economic Community Of West African States
ANPEJ	Agence Nationale pour la Promotion de l'Emploi des Jeunes	EG4ALL	Economic Growth for All
ANSO	Agence nationale de la statistique et de la démographie	EGO	Economic Growth Office
AOR	Assistance Office Representative	ENSA	Ecole Nationale Supérieure d'Agriculture
ASPRODEB	Association Sénégalaise pour la Promotion du Développement à la Base	ERA	Education, Research, Agriculture
BDS	Business Development Services	ESPS	L'Enquete de Suivi de la Pauvreté au Sénégal
CBSP	Community Based Service Provider	Feed the Future	Feed the Future
CCIR	Cross-cutting Intermediate Result	FY	Financial Year
CDCS	Country Development Cooperation Strategy	GDP	Gross Domestic Product
CFA	West African Francs	GFSS	Global Food Security Strategy
CGER	Centres de Gestion et d'Economie Rurale	GIS	Geographic Information System
CIFA	Centre Interprofessionnel de Formation des Agriculteurs	GLAAS	Global Acquisition & Assistance System
CINSERE	Climate Information Services for Increased Resilience and Productivity	GOLD	Govt for Local Development
CIS	Climate Information Services	GOS	Govt of Senegal
CLM	Cellule de Lutte contre la Malnutrition	GTDRSA	Donors Group on Rural Development and Food Security
CLPA	Comité Locale de Peche Artisanal	HR	Human Resources
CNCAS	Credit Agricole du Sénégal	ICT	Information Communication Technology
CNCR	Conseil National des Concertations et de Coopération Rurales	IFPRI	International Food Policy Research Institute
COMFISH	Collaborative Management for a Sustainable Fisheries Future in Senegal	IP	Implementing Partner
CONGAD	Conseil des organisations non-gouvernementales d'appui au Développement	ISDP	Integrated Service Delivery Project
COR	Contract Office Representative	ISFAR	L'Institut de Formation Agricole et Rurale
		ISRA	Institut Sénégalaise de Recherche Agricole
		ITA	Institut de Technologie Alimentaire
		IUUF	Illegal, Unregulated and Unreported Fishing
		JICA	Japanese International Cooperation Agency
		LEO	Leveraging Economic Opportunities

LOASP	Agro-Sylvo Pastoral Orientation Law	ReSAKSS	Regional Strategic Analysis and Knowledge Support System
LTAEB	Lycée Technique Agricole Émile Badiane	SAED	Société d'aménagement et d'exploitation des terres du delta
M&E	Monitoring and Evaluation	SAGIC	Accelerated Growth and Increased Competitiveness Economic Growth Project
MAER	Ministry of Agriculture and Rural Equipment	SBCC	Social & Behavior Change Communications
MCC	Millenium Challenge Corporation	SEM	Sustainable Ecosystems Management
MEL	Monitoring Evaluation and Learning	SENWASH	Senegal Water, Sanitation and Hygiene
MPA	Marine Protected Areas	SFZ	Southern Forest Zone
MSME	Micro, Small, Medium Enterprise	SGO	Sabadola Gold Organization
NERICA	New Rice (variety) for Africa	SISMAR	Société Industrielle Sahélienne de Mécaniques, Matériels Agricoles et de Représentations
NFSS	Nutritious Food System Services	SME	Small medium Enterprise
NGO	Non Govt Organization	SMS	Short Message Service
NOAA	National Oceanic and Atmospheric Administration	SODEFITEX	Société de Développement des Fibres Textiles
OSC	Office of Security Cooperation	SOW	Scope of Work
PAD	Project Appraisal Document	SPRING	Strengthening Partnerships, Results, in Nutrition Globally
PAPA	Projet d'Appui aux Politiques Agricoles	SRV	Senegal River Valley
PBS	Population Based Survey	TBD	To Be Decided
PCE	Projet de Croissance Économique	UCAD	Université Cheikh Anta Diop de Dakar
PD	Project Description	UNICEF	United Nations International Children's Emergency Fund
PDIDAS	Projet de Développement Inclusif et Durable de l'Agribusiness au Sénégal	USAID	US Agency for International Development
PDP	Project Design Plan	USD	US dollar
PERA	Public Expenditure Review in Agriculture	USG	US Govt
PMP	Project Management Plan	VC	Value Chain
POPAS	La Plateforme des organisations professionnelles de l'agroalimentaire du Sénégal	WASH	Water Sanitation and Hygiene
PPP	Public Private Partnership	WHO	World Health Organization
PPR	Performance Plan and Report	WTO	World Trade Organization
PRACAS	Programme de relance et d'accélération de la cadence de l'agriculture au Sénégal	ZOI	Zone of Influence
PRN	Nutrition Strengthening Project		
PRODAC	Programme des Domaines Agricoles Communautaires		
PSE	Plan Senegal Emergent		
PYD	Positive Youth Development		

LIST OF FIGURES

Figure 1. Youth Unemployment rates (GlobalEconomy.com, WorldBank).....	4
Figure 2. Cost of Starting a Business (Global Economy.com, World Bank).....	5
Figure 3. Project Results Framework.....	11
Figure 4. Feed the Future Zone of Influence, including coastal COMFISH zones.....	15
Figure 5. USAID Senegal EG4ALL PAD Activities.....	17
Figure 6. Critical interlinking of components to effect MSME development.....	24
Figure 7. Precipitation variability over the period 2000-2015 (Badiane, 2016).....	51
Figure 8. Youth Unemployment rates (GlobalEconomy.com, WorldBank).....	59
Figure 9. Cost of Starting a Business (Global Economy.com, World Bank).....	61
Figure 10. Strategic Framework for MSME Growth and Development.....	65

LIST OF TABLES

Table 1. Aspects of Plan Senegal Emergent addressed by EG4ALL.....	35
Table 2. Activity Transitions and Proposed Procurement Mechanisms Error! Bookmark not defined.	
Table 3. Non-competitive mechanisms to be procured under this PAD Error! Bookmark not defined.	
Table 4. Current and future activity costs (Low Budget Scenario).....	Error! Bookmark not defined.
Table 5. Current and future activity costs (High Budget Scenario).....	Error! Bookmark not defined.
Table 6. Traditionnal Filiere system approach versus Naatal Mbay contracting agriculture approach (source: LEO report 49, Case studies on facilitating systemic change).....	52

Contents

1	Purpose	1
2	Context	2
2.1	Political, Social, Commercial	2
2.2	USAID/EGO Engagement	5
3	Problem Statement.....	7
4	Project Approach	11
4.1	Theory of Change	11
4.2	Project Principles	12
4.3	Assumptions/Risks	14
4.4	Geographic Approach	14
5	Project Description.....	16
5.1	Value Chain Services.....	17
5.2	Nutritious Food System Services.....	20
5.3	Entrepreneurship and Vocational Development Services	22
5.4	Policy Systems Services.....	26
5.5	Sustainable Ecosystem and Fisheries Management Services	30
6	Alignment with United States Government and GOS Priorities/Other Leveraged Resources.....	33
6.1	Relationship to GFSS and CDCS.....	33
6.2	Linkages with USAID Activities	33
6.3	Linkage with GOS Priorities.....	34
8	Project Monitoring Evaluation and Learning Plan (PMELP)	36
9	References.....	41
10	Annexes.....	43
10.1	Climate Risk Analysis.....	43
10.2	Project Logic Model.....	46
10.3	Summary of Analyses	48
10.3.1	Senegal - Country Overview.....	48
10.3.2	Agriculture Sector Analysis	50
10.3.3	Feed the Future Value Chain Activities, Achievements and Remaining Challenges	51
10.3.4	Water Management Schemes in Senegal	56

10.3.5	MSME Study	58
10.3.6	Environment.....	69
10.3.7	Agriculture Sector Climate Vulnerability Assessment and Options Analysis.....	75
10.3.8	Gender Analysis Study.....	76
10.3.9	Expanding and Enhancing Nutrition-Sensitive Agriculture.....	79
10.3.10	Youth in Agriculture Assessment	83
10.4	Business Enabling Environment and Competitiveness Program (PREAC).....	87

1 Purpose

The following describes USAID/Senegal’s vision for **Economic Growth For All (EG4ALL) 2018-2023**, an integrated investment that will aid Senegal, as a focus country under the United States Government’s (USG) Feed the Future Initiative (Feed the Future), to make further advancements along its food security and agricultural development trajectory.

The purpose of the USAID/Senegal **Economic Growth For All (EG4ALL) 2018-2023** Project is to sustainably reduce poverty and undernourishment among beneficiaries (See Annex 10.2).

EG4ALL is consistent with the current Government of Senegal (GOS) medium and long-term economic and social policy framework, called the Plan Senegal Emergent (PSE). In particular, it responds to the PSE’s first thrust – structural transformation of the economy and growth.

EG4ALL will contribute to USAID/Senegal Country Development Cooperation Strategy (CDCS) Development Goal 1: Increased Inclusive Economic Growth in the Zone of Influence (ZOI). In designing activities to achieve the purpose, the agricultural economy is recognized as the most immediate means of generating income and employment for large numbers of young people. Thus, in alignment with the U.S. Government Global Food Security Strategy (GFSS), the project builds resilience through linking efforts to accelerate agricultural growth and improve nutrition, and more deliberately to create jobs for young people and opportunities for women.

Sustainable ecosystem services are also recognized as a foundation for economic growth.

EG4ALL is an essential next step in expanding a group of current activities that will improve household incomes, consumption of nutritious diets, and environmental outcomes. EG4ALL is built upon the premise that in order to sustainably reduce poverty and malnutrition, these activities must be advanced concurrently in order to ensure that each develop in a complementary or synergistic fashion. Undertaken separately, lack of one stream could undercut potential for success in others.

The approach both builds on and better integrates the current portfolio of Economic Growth Office activities, based on the following principles:

Project Purpose:

Sustainably reduce poverty and undernourishment among beneficiaries.

Coverage:

Senegal River Valley, Southern Forest Zone, Coastal Artisanal Fisheries – 9 Administrative Regions

Priority Crops:

Cereals, Horticulture, Fishers, Livestock

Priority Populations:

Children under 5
Women of reproductive age (15-49)
Youth (15 upwards)
Farmers (male and female)

Methods:

Agricultural productivity improvement, MSME/Employment creation, Technical/Vocational/organizational development training, Food system development, Nutrition Behavior change, Policy strengthening/implementation, Sustainable management of threatened ecosystems

- a. Market-based solutions that target youth and women for income-generating opportunities on-farm, and off-farm along the value chain (VC), while reliably supplying nutritious foods.
- b. Public/private institutions, local management groups, and commercial entities, strengthened and empowered to manage proactively, based increasingly on strong data, and better linked with end-users' market requirements.
- c. Sustainable and inclusive land and water management that conserves ecosystem services and functions, while promoting viable livelihoods.
- d. Policies that improve the business climate for targeted sectors, to be more inclusive of local stakeholders, and attract greater private sector investment.

The presence of a large (and increasing) population of un- and underemployed youth can be seen as both an opportunity and a threat. Therefore, youth engagement as a priority in the commercial functions of the value chains is a key focus of the project. Women's engagement is also a priority, given women's propensity to spill over to their families and households any social and economic gains that accrue to them (better education, enhanced nutrition, etc.).

Wherever possible the project will take a 'service development' view to value chain functions as a key to sustainability. There will be a strong focus on commercially viable products and services derived from scalable local solutions that add value and enhance competitiveness. These will build on existing systems and opportunities resulting in effective local actors, institutions, and systems. Environmental sustainability will be addressed in all activities, from resilient agricultural practices to better fish stock management.

At the end of EG4ALL there will be in place a more strongly integrated innovation system that is better able to exploit its potential to contribute to economic growth, employment, and food security in an environmentally sustainable way. This system will link public and private sectors and be founded on a growing, dynamic, network of Micro, Small, Medium Enterprise (MSMEs) offering essential business services in response to market needs. Small farm productivity, profitability, and sustainability will grow based on improved availability of inputs, markets, and services.

2 Context

2.1 Political, Social, Commercial

Senegal is one of the most stable countries in Africa, and has considerably strengthened its democratic institutions since its independence from France in 1960. All three presidential transitions since independence have been peaceful, and President Macky Sall is overseeing further legislative strengthening, including the policy of decentralization of government functions which will enable greater responsibility for decision-making in local areas.

Senegal's macroeconomic performance is continuing strongly with a 2015 growth rate of 6.5%, a rate that hasn't been achieved since 2003, making Senegal the second fastest growing economy in West Africa, behind Côte d'Ivoire (World Bank, 2016).

The primary sector is the fastest growing sector boosted by extractives and agriculture (terrestrial crops, livestock, and wild fisheries). In agriculture, good rainfall and strong outcomes from sectors

targeted by government programs (including groundnuts, rice, and horticulture) explain this outcome. Over the past ten years the Agricultural Production Index has increased by 25%, mainly supported by improvements in rice yield (doubled to 4 metric tons per hectare (MT/ha)), and a large increase in horticultural production (mainly beans, tomatoes, and mangoes) (Badiane *et al*, 2016). Millet, sorghum, and maize have all remained constant. From an export value perspective, the horticultural crops have seen a marked growth in importance, now moving into second place behind groundnuts. This period has also seen Senegal move from net importer to exporter of fish and animal products (despite the country's fishers losing an estimated 300,000 MT of fish each year to illegal fishing). Economic modelling by Badiane *et al* (2016) has also identified horticulture as a significant future opportunity.

Senegal's 2015 Environmental Threats and Opportunities Assessment (ETOA) detailed a variety of threats affecting biodiversity and related ecosystems. Senegal has a significant amount (1.6 million hectares) of protected areas featuring national parks, forest reserves, bird reserves, and Ramsar wetlands sites. Many of these are under challenge from overexploitation, and around 40,000 ha of forest are lost every year to over and/or alternative use. Significant water resources are available, estimated at 4,700 m³/capita/year, split between surface and groundwater sources. The groundwater portion is supplied by deep aquifers that cover four fifths of the land mass. The main threats to water quantity and quality are climate change and related increased rainfall variability that is also exacerbating soil salinization in areas close to estuaries, and pollution from agriculture, industrial and domestic waste.

Poverty remains high in Senegal, affecting 46.7% of the population. Gross Domestic Product (GDP) growth is well below the rates necessary for significant poverty reduction, and a growing reliance on capital-intensive exports, rather than labor-intensive sectors, limits the creation of new jobs. Repeated shocks in recent years have further hampered progress, with poverty decreasing only by 1.8 % between 2006 and 2011, and the number of poor increasing, reaching 6.3 million in 2011.

Inequality in Senegal is moderate, and slightly lower than the Sub-Saharan African average. However, geographic disparities are very pronounced, with almost two out of three poor residents in rural areas, especially in the south, versus one in four in Dakar. Likewise, there is still marked inequality in gender roles. Women have far lower access to productive resources (land, labor, finance, water, and other infrastructure) and opportunities to enhance their skills (time resource, access to training, extension services, and technologies).

A significant percentage of youth (52.2 %) live in rural areas (ANSD, 2014), and according to the most recent national poverty survey, rural youth experience higher levels of extreme poverty, illiteracy and inactivity than urban youth (ANSD, 2006). The percentage of youth in rural areas with at least a primary school education is low, less than 25 % (ANSD, 2014).

Each year, 300,000 new young job seekers enter the labor market, and 50 % are in rural areas. The rural economy offers 60 % of national employment opportunities to youth (ANSD, 2014). The national youth employment promotion agencies *Agence Nationale d'Insertion et de Développement Agricole* (ANIDA) and *Programme des Domaines Agricoles Communautaires* (PRODAC) still struggle to attract youth and provide them with permanent jobs. Over 60% of MSMEs are youth owned, and employment in quality control and quality assurance is in line with world-class commodity value

chains. However, young Senegalese looking for agriculture sector employment or entrepreneurial opportunity face very limited access to land, finance, and continued training to compete for the few jobs that are available (USAID Senegal, 2016b). Senegal also leads its peers in the region in youth unemployment as evidenced in Figure 1 below.

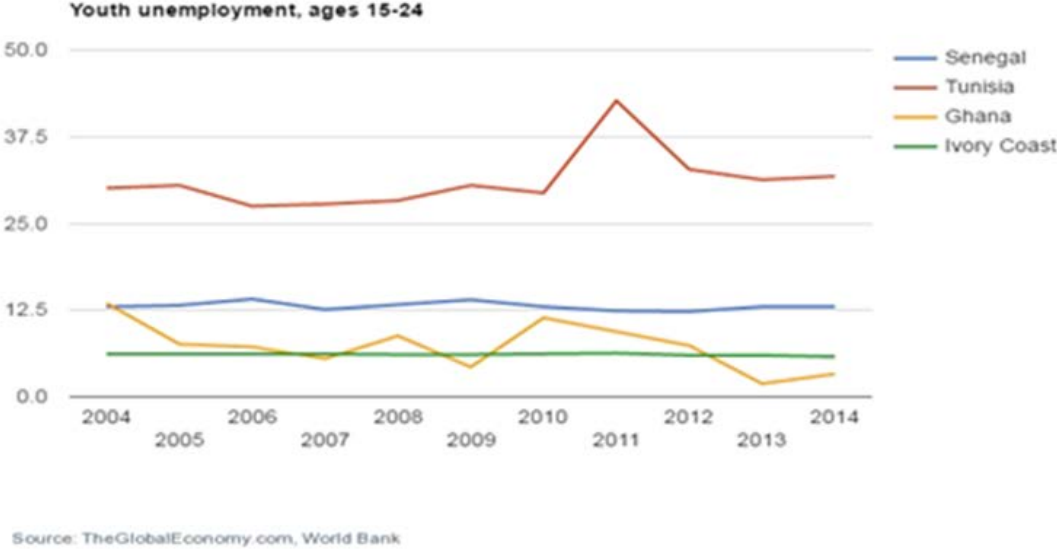
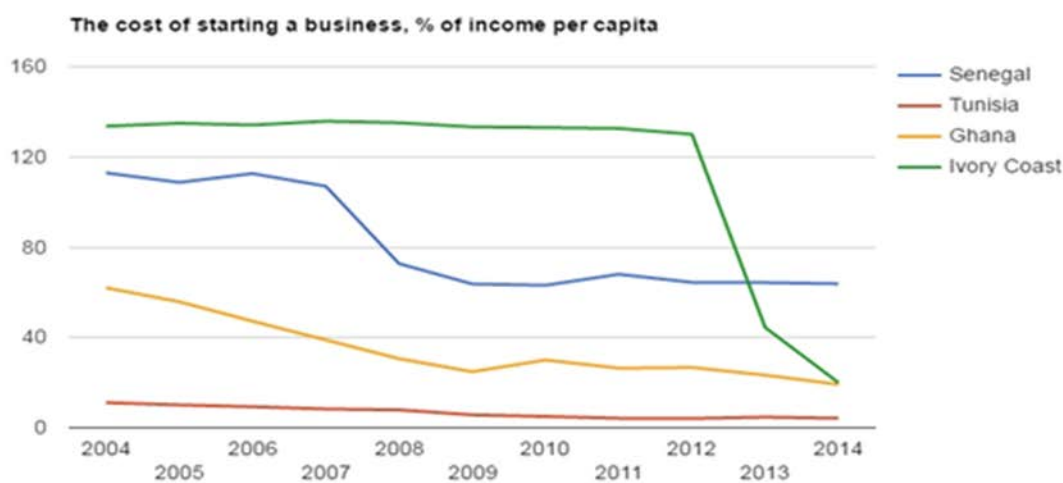


Figure 1. Youth Unemployment rates (GlobalEconomy.com, World Bank)

In nutrition, Senegal is off course toward achieving the World Health Assembly 2025 goals. During the period, 2005-14, the children-under-5 stunting rate remained constant at around 19%. However, this masks regional disparities, with Dakar and central regions improving, while the south has worsened. Over the same period, the prevalence of exclusive breastfeeding worsened from 37.5% to 32.4%. Senegal has the highest prevalence of women anemia and the fifth highest prevalence of women underweight in sub-Saharan Africa. Over-nutrition and its related non-communicable diseases are on the rise, with 21.3% of women over age 40 overweight or obese.

Senegal is behind its peers in the region in business climate improvement. According to the World Bank’s Doing Business 2016 report, Senegal has taken important steps to improve its business enabling environment with the creation of the Presidential Council on Investment, the establishment of a one stop-shop for business registration and the reduction of corporate tax rates. However, sustained efforts are still needed to improve the regulatory climate: contract enforcement, the time and cost involved in registering property aspect of business, and other constraints increase the costs and risks to businesses and hinder access to world-class services, investment, and competitive business performance (Figure 2). A weak business enabling environment has discouraged entrepreneurship and new business formation and resulted in large numbers of informal firms, which have labor productivity levels that are only 7% to 10% that of formal ones.



Source: TheGlobalEconomy.com, World Bank

Figure 2. Cost of Starting a Business (Global Economy.com, World Bank).

2.2 USAID/EGO Engagement

In the cereal crops sub-sector of agriculture, the flagship Feed the Future Senegal Value Chain Activity, known as Naatal Mbay, was built upon successes and learning from earlier investments, notably Wula Nafaa and Senegal Accelerated Growth and Increased Competitiveness Activity (SAGIC), followed by the Economic Growth Project (PCE). Naatal Mbay has catalyzed productivity and market linkages in the rice, maize, and millet value chains. Over the period 2013/15, adoption of the improved technical packages developed by the project increased irrigated rice yields from 5-6 MT/ha, leading to more than \$15M in incremental sales. Irrigated rice yields are poised to increase even further. Regarding maize, supply of certified seed trebled from 3,000 MT to 10,000 MT in the 2014 to 2016 period - an outcome facilitated by partnerships among USAID, Senegalese companies, and farmers' groups. For financial risk-reduction to support greater agricultural investment by smallholders, innovative insurance instruments were tested in the maize and millet zones with good results (USAID Senegal, 2015b). In 2015, 1,470 maize and millet growers purchased rain-index insurance packages, and 450 were paid out due to drought. In the subsequent season, 14,350 farmers bought insurance that covered 4,000 ha. For the more advanced producers, access to finance is being addressed through equipment leasing schemes and warehouse receipts - both modern methods for addressing the liquidity needs of a growing industry (USAID Senegal, 2013).

In the fisheries sector, through the Collaborative Management for a Sustainable Fisheries Future in Senegal (COMFISH), reforms are contributing to building the strength of fisheries governance and management institutions, CLPAs, the backbone of successful shift to collaborative management, sustaining productivity through support to the rollout of large fish stock management plans, connecting artisanal fishers more fully in fisheries value chains, and gaining control over

uncertainty with innovative products such as fisheries insurance.. The activity has made striking gains in improved governance through local councils for artisanal fishing. In conjunction with the Climate Information Services for Increased Resilience and Productivity (CINSERE) activity, which emphasizes strategic use of climatic information, resilience and productivity of targeted communities of fishers, herders, and farmers are being promoted as a means of confronting climate variability and change.

Concerning nutrition, a nutrition-led agriculture approach was employed through the Yaajeende activity to reduce malnutrition in Matam, Kedougou, Kolda, and Bakel Department (Tambacounda). Tools deployed in this approach include promoting the emergence of community-based agribusinesses that facilitate availability and accessibility of agriculture goods and services to isolated and vulnerable communities. These businesses support improved production, trade, and local consumption of quality, nutritious foods, such as orange fleshed sweet potato, bio-fortified grains, meat, and dairy. Results under Yaajeende include a 30% drop in stunting rates, from 23% in 2011 to 16% in 2015; a decrease in poverty by 2.9 percentage points, and an increase in the proportion of women practicing exclusive breast feeding from 1% in 2011 to 24% in 2015. A hallmark of this activity is its work with local government bodies to maximize the numbers of people who are exposed to the benefits.

The Education and Research in Agriculture (ERA) Activity is the primary vehicle for helping to develop the human and institutional capacity among the Senegalese public and private sectors to spur value chain productivity, and undergird sustainable production systems. Under ERA, a “4-H Senegal” Positive Youth Development Program focuses on agriculture and entrepreneurship for sustainable community development. It now has over 30 clubs in three regions of Senegal, reaching hundreds of youth. ERA is supporting academic programs ranging from 20 Masters Degrees at U.S. universities to degrees and certificates for 104 scholars at Senegalese universities and technical training institutes.

In the policy realm, through the Feed the Future Senegal Agricultural Policy Project/*Projet d'Appui aux Politiques Agricoles* (PAPA) and the Feed the Future Senegal Policy for Agriculture Investments Activity (P4I) strides are being made to address policies that impede progress in the agriculture, fisheries, and business enabling environment. Fisheries laws have been strengthened and fisheries codes introduced to improve enforcement measures.

3 Problem Statement

Exhaustive analyses have been either performed or commissioned by the USAID/Senegal Economic Growth Office (EGO) in the areas of gender, youth employment in agriculture, MSME situation, policy, energy and water for agriculture, climate change, biodiversity, fisheries political economy, and nutrition. In addition, multiple engagements were undertaken with a range of government departments, institutions, other donors, and formal and informal producer and advocacy groups to deepen EGO's understanding of remaining constraints, specifically:

Agricultural productivity: On the whole, food production in Senegal is not efficient due to availability and access issues related to secure land, water, credit, fertilizers, pesticides, seeds, equipment, and proven techniques for increased agricultural production. The very structure of the input sectors and various distortions in the market limit private sector investment in the cereal seeds sector. Pressure on land and water resources in a country where population growth and urbanization outpace gains in food system functionality, make gains in productivity all the more urgent. Access to technologies and innovation diffusion is limited by the weakness of the government research and extension services system and the lack of linkages with the private sector.

Water and energy infrastructure: Although public investments in water management technologies and irrigation systems have contributed to increased rice production in the Senegal River Valley (SRV) and lowland areas in Southern Forest Zone (SFZ), Senegalese agriculture is still mostly dependent on rainfall. The recurring incidence of extreme weather with irregular rainfall, flooding, and drought, bears increased risks both to farming businesses and to food security. Expansion of processing facilities is hampered by the low access to energy and the higher cost of electricity and fuel in rural areas. Increasing the availability of water and energy, like improved seeds and fertilizers, are critical to improved agricultural productivity.

Land Tenure: Secure land tenure creates a more favorable environment for agricultural growth through smallholders (men, women, and young people) and other responsible investment. Access to and control of land is more limited for women and young people. There is recognition of the need to reform the laws governing land tenure and to improve implementation of existing laws in ways that support greater inclusion of women and young people. Transparent land rights information, including maps, secure tenure and land transactions in areas targeted for investment areas critical. Given that existing projects to map and record land rights (Millennium Challenge Corporation [MCC] and World Bank *Projet de Développement Inclusif et Durable de l'Agribusiness au Sénégal* [PDIDAS]) only cover part of the SRV, where most investment is concentrated, there is considerable need to adapt and apply tools for improved land documentation and management more broadly.

Private sector investments in agriculture: Financial resources dedicated to the agriculture sector have been limited. Based on the Senegal Public Expenditure Review in Agriculture (PERA), agriculture investments account for 10 percent of the national investment portfolio. Recurrent interventions of the government in the financial and inputs sectors distort markets and increase the risks for the private sector. Low private sector investment in agriculture is a major contributing

factor to the weak competitiveness of the sector, negatively impacting poverty reduction, food security, and overall economic growth.

Formation and growth of MSMEs: A range of social and economic factors prevent robust development of MSMEs in Senegal. Constraints preventing them from contributing effectively to economic development include: poor access to credit, inadequate managerial and technical skills, insufficient access to information, limited competitiveness, high regulatory burdens, and limited formalization. Due to these challenges, MSME sustainability is low (60% fail within two years). As employment creation and income expansion remain critical for poverty reduction, addressing challenges for the MSME sector provides opportunities to pursue these goals.

Resilience to climate and economic shocks: Senegal's population is increasing faster than agricultural output and agriculture is highly vulnerable to climate-related risks. These risks include: variable and increasingly extreme rainfall levels, and extreme temperatures; delayed onset and dry spells during rainy season; floods from heavy rainfall events; sea-level rise and coastal erosion, that are having an impact on crop, livestock and fisheries sectors, threatening the country's development goals. When erratic rains, frequent dry spells, and variations in the timing and length of the rainy season occur, lives are put at risk, assets are damaged, productivity falls and incomes fail. This traps people in a cycle of food insecurity and poverty. Rainfall variability is likely to continue, with an increase in severe weather events. Proactive and integrated risk management strategies are needed to build farmers' and fishers' resilience to climate-related shocks and improve livelihoods. Despite progress in developing economic potential and introducing innovations for climate adaptability, resilience at community levels remains weak due to lack of effective mechanisms to generate group responses to unexpected shocks. Thus, greater organizational capacity to produce unified community responses to major shocks is needed. Senegal needs to identify and apply a full set of policies and actions for achieving national food system resilience.

Youth integration in modern agriculture: A number of issues constrain youth integration in modern agriculture, on and off farm in Senegal. For youth interested in farming, the two main problems are access to land ownership and access to credit. A number of government and donor-financed programs are attempting to address the credit issue with mixed results. There is a vast array of institutions aiming to support directly or indirectly business development opportunities in agriculture and provide training for youth (*Domaines Agricoles Communautaires*, ANIDA, *Agence Nationale pour la Promotion de l'Emploi des Jeunes* [ANPE]), various donors), but efforts lack coherence and are often stand alone or one-off endeavors. Stimulating jobs for young people in the agriculture sector, in areas such as processing, machinery/equipment rental, operation and repair, and logistics, can be integrated and linked more deliberately with MSME development and other efforts to accelerate agricultural growth and improve food security. Information and Communication Technologies (ICT) with digital tools' hold great potential to enhance agricultural productivity through innovative value-added services along the value chains and provide job opportunities to youth.

Agricultural policy reforms: Closely tied to Senegal's low agricultural productivity and limited private sector investment, a constrained agricultural policy environment, at the national and local levels is detrimental to the competitiveness of the agriculture sector. Implementation of policy

reforms was highlighted in multiple strategies (Agro-Sylvo Pastoral Orientation Law - LOASP, New Alliance for Food Security and Nutrition Cooperation Framework, and Plan Senegal Emergent) as essential for modernizing and increasing sector performance. The LOASP was enacted as an expression of Senegal's aspiration to make agriculture an engine of economic growth, yet implementation has slowed. Both at the national and local levels, considerable work remains to advance reforms in areas such as land tenure, women's empowerment, youth inclusion, water rights, the enabling environment for increased private sector investment and a reduction in the government intrusions that distort agricultural input and equipment markets. At the same time, there are important institutional and human resource capacity gaps within the cognizant Ministries that constrain them from effectively formulating, implementing and monitoring the needed reforms. Hence, more focused attention on strengthening the underlying policy architecture is required.

Ocean fisheries: Wild fisheries are critical to the socio-economic development of Senegal, yet the sector on the whole is characterized by overexploitation, inadequate regulation and monitoring, weak stakeholder consultation mechanisms, and overall poor management. Overfishing of key species and declining fish size and abundance push Senegalese fishers to fish further offshore. Illegal, unreported and unregulated fishing (IUU) and the re-emergence of large fishing vessels illegally harvesting fish within the Economic Exclusive Zone of Senegal deplete the resource base and lower natural productivity, negatively affecting fishers' livelihoods and national wealth. The situation is compounded by the consequences of a warming climate on the marine and coastal resources and environment, namely changing fish stock migration habits and spatial and temporal abundance. Despite these threats to sustainable ocean fisheries, the policy response does not yet provide sufficient incentive for change.

Multi-sectoral integration for nutrition and understanding of the causes driving malnutrition in Senegal's various agro-ecological zones: Bringing about improved nutrition calls for interventions in the agriculture, health, and education sectors, along with improvements in people's economic status. While rising GDP per capita and increasing proximity to markets are associated with declines in underweight, they are also linked with worsening rates of over nutrition and its related non-communicable diseases. Senegal is in the midst of a nutrition transition marked by the coexistence of over and undernutrition at the population, household and individual levels. To get out front of this looming double burden, deliberate coordination to drive development of a multi-sectoral nutrition policy and strategy are needed. The specific drivers of malnutrition by agro-climatic zones are not yet clearly defined. Gaining a nuanced understanding of the causal factors at work in the different geographical zones where malnutrition persists is critical to optimally targeting USAID, GOS and others' resources to achieve the greatest impact.

Gender in agriculture and food security: There has been steady progress in socio-economic conditions for Senegalese women. Interventions under Yaajeende and COMFISH have helped women diversify their incomes, improve their nutrition status and take on leadership roles in important community activities. Still, less than half of those surveyed for the Feed the Future Senegal 2015-16 ZOI Interim Assessment, reported having ownership, access to, and decision-making power over the purchase, sale or transfer of productive resources such as land, livestock, agricultural equipment, consumer durables and credit. While there is tremendous potential for

entrepreneurship and employment in the value-added segments of value chains, creative approaches will need to be deployed to successfully address persistent cultural and institutional biases. A final area of concern is the need for men's engagement and active participation in household nutrition, supporting women in reducing their labor burden and increasing time/resources available for key practices, such as exclusive breastfeeding, continued breastfeeding beyond six months, proper complementary feeding, and seeking healthcare.

Knowledge management systems for evidence-based decision-making: Relevant, timely and accurate agricultural data and statistics are needed to support analysis of producer decision-making and the impact of government policies on all aspects of agriculture – trends in trade, progress towards food security, impact of farmer outreach programs, status of fisheries stocks, etc. Timely, accurate and relevant information is also needed for efficient functioning of agricultural markets, and monitoring progress towards or hindrances to food security and economic growth.

The current suite of EGO projects is addressing aspects of each of the above gaps.

EG4ALL represents a new generation of activities to further address these gaps, building on evidence and lessons learned from earlier accomplishments.

4 Project Approach

4.1 Theory of Change

The Project is based upon the following theory of change:

If productivity and resilience of food production systems are enhanced;

If access to markets and trade is increased;

If employment and enterprise development are increased;

If nutrition behaviors are improved; and

If sustainable ecosystem management is improved;

Then incomes will increase; consumption of nutritious diets will increase; and natural capital will be enhanced. Achievement of all three of these intermediate results will contribute ultimately to the sustainable reduction of poverty and undernourishment among EG4ALL beneficiaries.

This logic is represented graphically in Figure 3.

The achievement of the Sub-IRs will also be supported by seven cross-cutting intermediate results (CCIR).

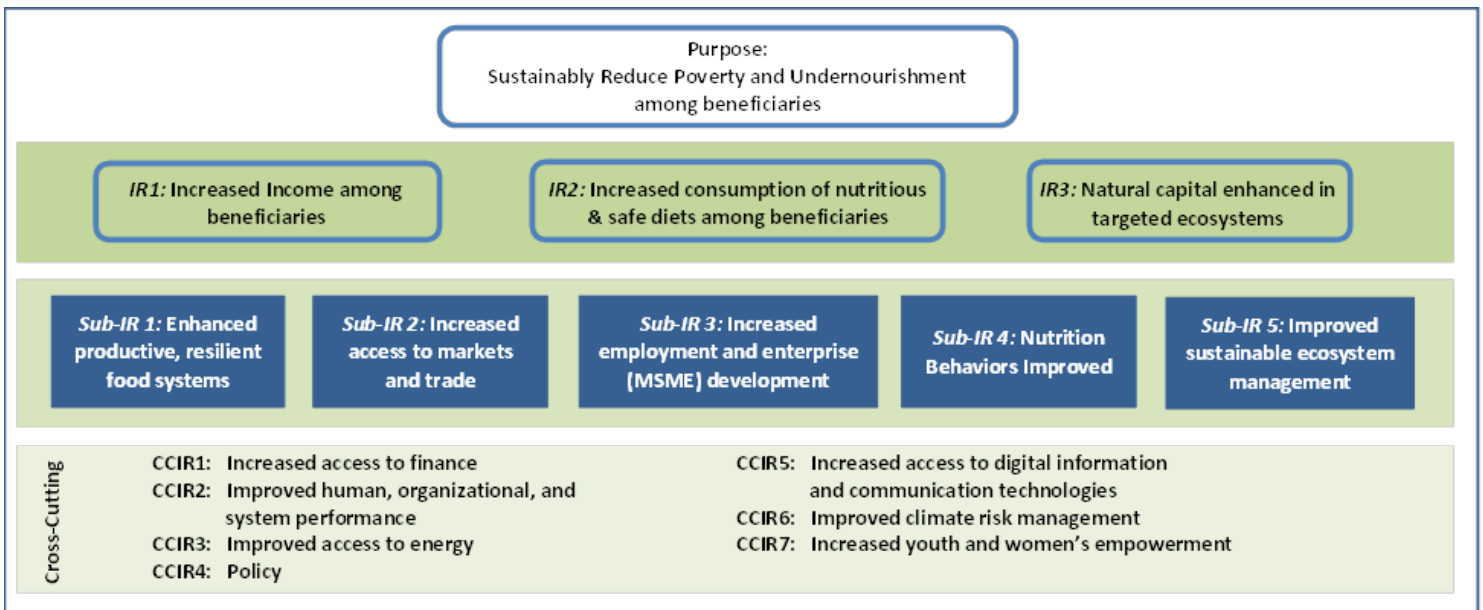


Figure 3. Project Results Framework

By 2023, USAID will aim to reach 150,000 households in order to impact the lives of 1,500,000 people and increase the 2015 average household income in the Feed the Future ZOI by 20%. This investment will also allow project activities to reach 70% of all children under five, and increase consumption of a minimum acceptable diet for children 6-23 months from 7% to 35%, in each focus

community. Further, there will be increases in three key domains of the Women's Empowerment in Agriculture 2015 score: asset ownership, access to credit, and workload by 17%, 47% and 14%, respectively. In the Feed the Future ZOI, this will ultimately contribute to reducing poverty and stunting by 15% in synergy with the health and WASH projects.

4.2 Project Principles

EG4ALL builds on a strong sequence of previous and current activities. As such, the proposed activities are designed according to principles that will continue to push results deeper and wider. The principles are grouped around the themes of key focus areas such as integrated value chain approaches, entrepreneurship and market drive, women and youth empowerment leading to scaled technologies and good practices, systemic change, and sustainability.

Youth engagement should underpin all project activities in line with USAID's 2012 Youth in Development Policy using the Positive Youth Development (PYD) approach that seeks to build the four domains of youth assets, youth agency, youth leadership and participation and a strong youth enabling environment at the family, community and national levels. The goal is to make agriculture fun and lucrative for many young people, to cement their long term contribution to Senegalese agriculture by extending every opportunity to improve **employment** options for youth and women, as owners and/or employees of the service providers to the expanding rural market.

Empowerment underpins the EG4ALL approach, as access to information alone is insufficient to ensure adoption of best practices. Ultimately, successful behavior change is contingent upon agency, an individual's power or ability and willingness, both economic and social, to transform their knowledge of best practices into action. The Project will promote gender equality and women's empowerment by actively engaging men and women of all ages to increase their capacity to be good environmental stewards, better business people, engaged citizens, and proponents of good nutrition and childcare. It is recognized that when power dynamics shift, for example when women generate more income, there is an impact on men as well. Therefore, the project must actively engage both men and women to ensure that gains are maintained and advanced at a societal level, rather than undermined or taken over by individuals who may not feel included.

Do no harm. All proposed activities will be screened and assessed to avoid undermining existing functioning systems. Examples are those commercial systems organized through the current projects, ongoing government efforts, and other donor programs working under similar principles. To be avoided are subsidies, donor-dependent practices, or other approaches that undermine the development of local solutions and engender a culture of dependence or disempowerment.

Working with partners should involve a true sense of engagement, rather than unduly imposing activities that the project deem beneficial.

Closely related is the issue of **sustainability**. Implementation will require continuous focus on **markets** and agricultural value chains as the basis for **demand-driven** activities. Local actors, including farmers, private sector, producer organizations, business organizations, local government, and community groups, should be the principal actors, with services developed to be

more responsive to their needs and to facilitate their ability to meet market demands. Support in the area of financial services, input supply and market development will generally be transactional, responding to needs and interests of individual firms or producer groups. Support to training, information, and technology providers will facilitate better and more responsive service to their clients or constituents. The Project aims to facilitate the functioning of **local systems** rather than become an actor in the system itself. It will seek to the extent possible to **facilitate** linkages among **service** providers, businesses and other institutions, to help them achieve their objectives. Here the term 'service' refers to all the functions that enable actors with vested interests to operate efficiently. These functions include technical and business training, extension and behavior change communication, research and development support, fisheries and natural resources management, business/marketing information and support and quality assurance systems. To the maximum extent possible, the Project will embrace **local solutions** to foster and enhance local ownership and sustainability.

Building the rural population's access to a wide range of income generating activities, with the confidence to rapidly change between them depending on prevailing climatic/economic situations, plus increased health status and strong local governance, all combine to improve **resilience** to potential shocks.

Targeting of investments will occur in geographic areas that have the greatest potential to sustainably improve food security and nutrition, using those approaches and interventions that evidence shows will reduce extreme poverty, hunger, and malnutrition at scale.

The major lesson from the preceding *Projet de Croissance Économique* (PCE) activity was that sufficient proof-of-concept had been demonstrated to shift the implementation focus of the ensuing *Naatal Mbay* activity to **scale-up**. Again, every effort and innovation will be employed, every entity energized, and every constraint analyzed, to maximize the scaling-up potential of the project.

Science and innovation is an important area of investment that can help to scale up and accelerate impact of targeted technologies on food security. When considering scaling up a successful pilot, rigorous analyses and research on the pathways of uptake of technology and innovative practices, as well as how to trigger behavior change, will be undertaken. Furthermore, identifying, characterizing, and isolating those factors that influence uptake and seeking to identify those solutions that show promise for scaling should become mainstream so that they are harnessed during and beyond the life of the project.

EG4ALL will encourage implementing entities to be **scientific**, rigorous and yet, **pragmatic** and **actionable** in their recommendations. Making **data-and-evidence-based** decisions should be the norm and part of any capacity development program. There is a wealth of international and local **partners** developing new **technologies** to suit project clients at all levels of development.

ICT has a suite of technology offerings to increase the efficiency of implementation, while upgrading the management systems of the entities involved in the program. Specifically, ICT offers ways to multiply the use of scarce, high-level technical expertise, to larger and more dispersed client groups – for example, through the use of social media for group problem solving, video instruction, and expert decision support systems. Similarly, ICT is enabling high resolution management, based on real-time data collection.

Partnering with **local private sector and local institutions** to unlock opportunities, mitigate risks, and secure investment is also key. Naatal Mbay, Yaajeende, COMFISH, ERA, and CINSERE are all supporting organizational capacity development of targeted local organizations that will be partnered to scale up and sustain the activities.

4.3 Assumptions/Risks

The theory of change logic assumes that certain contextual and macroeconomic trends will remain stable. The specific assumptions are listed below. Dramatic shifts in any of these could potentially derail achievement of the intermediate results and overall goal of EG4ALL.

- Input prices remain on current trends or improve;
- Weather and climate patterns remain on current trends;
- Global food prices remain relatively stable;
- Commitment to market liberalization continues (Senegal continues to fulfill World Trade Organization [WTO] & regional agreements);
- Demand for target sector products remains stable or improves;
- Ease of doing business remains the same or improves;
- Political receptivity to pro-business labor law (labor market....) remains the same or improves;
- Population and leadership remain generally receptive (to change, new information);
- Effectiveness of local populations' engagement in decision making remains the same or improves;
- Revenues from oil and gas do not influence investments and purchasing power until after the completion period of this project (2023). They are said not to accrue to Senegal until around 2021; and
- Budgets from USG do not drastically decrease.

4.4 Geographic Approach

The Project will continue operations in the same Feed-the-Future (Feed the Future) Zone of Influence (ZOI) as the current EGO activities (Figure 4).

There are significant reasons for not changing. First, many of these activities are still in 'forming' mode, gaining traction and confidence with local stakeholders. New systems have been tested and are still being adapted. There is also a sense that there is much potential for 'filling-in' the areas, as more people experience the benefits. The Project will leverage and capitalize on EGO's successful value chains and nutrition-led agriculture results and approaches to address gaps in targeted value chains. The ZOI is expansive, with a population of 2.7 million in the Feed the Future focus areas alone; effecting transformative change that profoundly impacts such a large population takes time.

Senegal offers an opportunity to target communities with very different levels of development and resources. This means there is a 'development continuum' within the project whereby the more developed areas are able to push further into newer innovations, providing a proven path for the less developed areas to follow.

Also, as more entities are developing more confidence with the new set of tools and clients, the potential for systemic change increases. Systemic change is an ultimate success measure, not seen enough in the development world. However, after only a short operational time, Naatal Mbay has already rated well in the Feed the Future systemic change analysis (USAID LEO 49, 2016). As Naatal Mbay built on former PCE successes, this Project will scale up and anchor ongoing changes brought about by USAID interventions in the ZOI food systems.

While the ZOI sub-regions have markedly different poverty levels, there is a more complex connection with nutrition status (Figure 4). First, there is wide variation within sub-regions, and second, nutritional food availability may be more uniform in the southern forested areas, than the more Sahelian north.

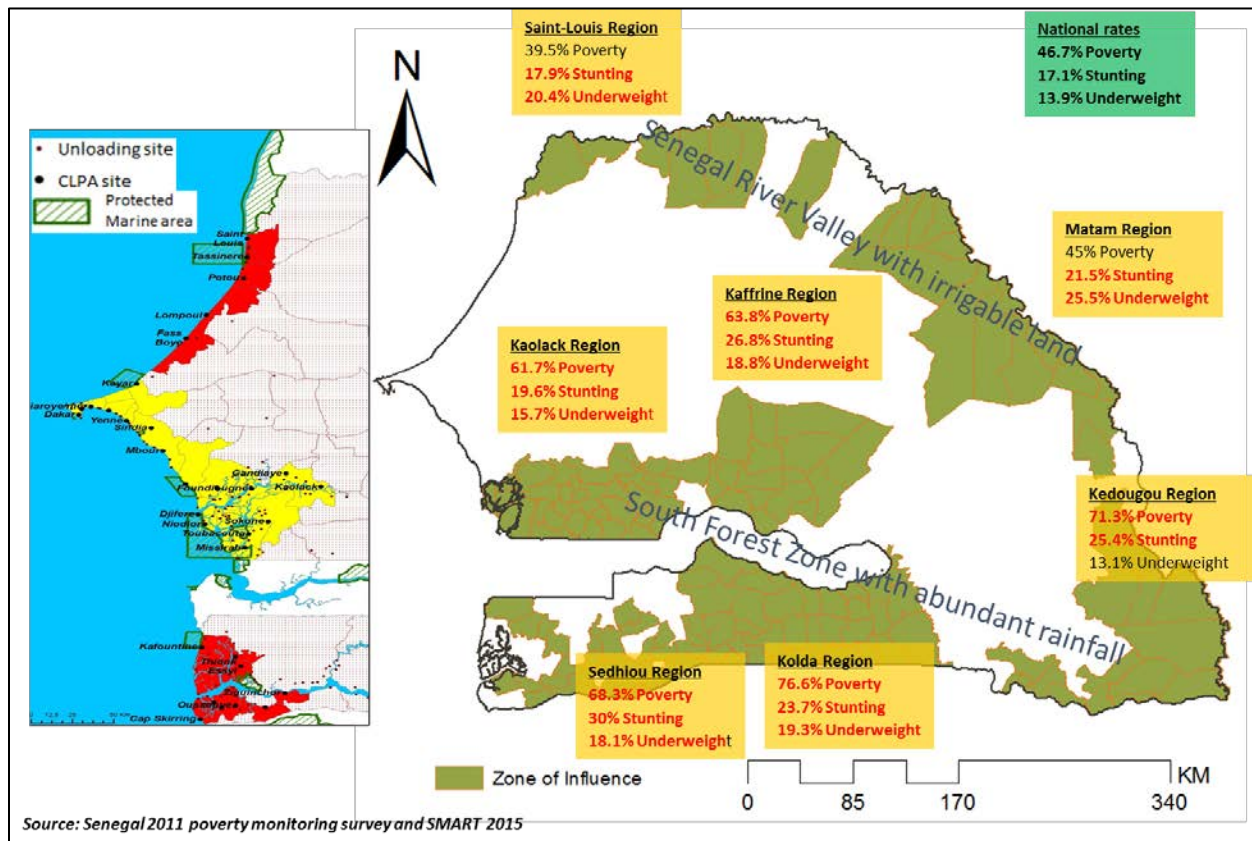


Figure 4. Feed the Future Zone of Influence, including coastal COMFISH zones.

The rural population of the Feed the Future zone is approximately 2.7M, and EG4ALL plans to reach 45% of this population. The COMFISH zone brings an additional 23,000 people active in the fishing industry.

5 Project Description

EG4ALL has five areas of intervention as depicted in Figure 5 :

1. Value Chain Services
2. Nutritious Food System Services
3. Entrepreneurship and Vocational Development Services
4. Policy Systems Services
5. Sustainable Ecosystem and Fisheries Management Services

The use of the term ‘Service’ in the interventions is a deliberate reference to sustainability being a cornerstone of the project. The proposition here is that sustainability takes hold when actors with vested interests in the process, on an on-going basis, are able to define, clarify, and institutionalize efficient transactions with each other. The project will focus on facilitating and strengthening connections between market actors, local entities, businesses etc., rather than inserting itself into the market and providing services.

Value Chain Services, Nutritious Food System Services, and Sustainable Ecosystem and Fisheries Management Services will share an objective of identifying and fostering the services (and associated employment opportunities) that will most effectively facilitate their respective value chains. *Entrepreneurship and Vocational Development Services* will then assist these nascent commercial entities with entrepreneurial and business management skills and also facilitate the development of relevant service providers that will provide the training and the information. Good connections between the private sector and training institutes will be paramount.

All interventions will be supported by Policy Systems Services, which will continue earlier efforts to facilitate change in the enabling environment. Interventions will revolve around two foci - working at national level on more strategic policy development and at regional/local level, e.g. via Regional Development Hubs, to monitor and understand policy constraints and influences on economic activities (including those related to EG4ALL Activities) and ensure effectiveness of policy implementation.

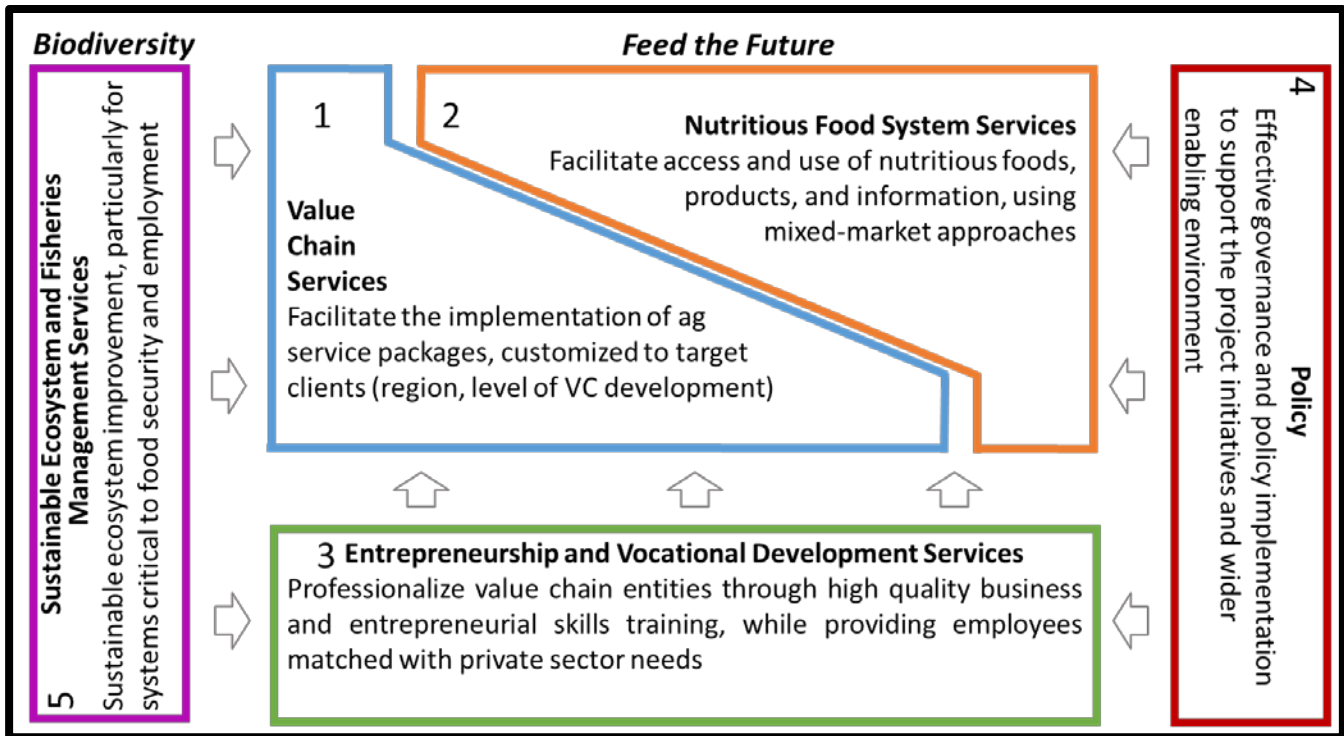


Figure 5. USAID Senegal EG4ALL Intervention Areas.

All EG4ALL interventions share the same design principles. As such, the common principles are youth development, women’s empowerment, productive and healthy livelihoods based on up-to-date information, supportive policies and local governance, and sound environment stewardship. The interventions are designed to be implemented in a highly linked fashion, operating in similar locations. Efficient operation of this layered approach will result in a strong resilience program.

5.1 Value Chain Services

The Value Chain Services interventions aim to increase incomes among the rural poor, particularly women and youth. Agriculture value chains with the greatest potential to meet this aim will be targeted, such as cereals, livestock, and horticulture.

Improved access to agricultural, business development, finance, risk management and market services packages for a range of target clients along the value chain will increase producers’ productivity and commercialized surplus. It will also facilitate more young entrepreneurs and viable MSMEs to enter the value chains. Increased service provision will expand demand for improved technologies as well as good practices and information for producers, input suppliers, processors, marketers, financial institutions, and policy makers. This will unlock the potential of the agriculture sector for resilient, diversified income sources, employment, and MSME development. Focus on agricultural and food-related enterprises will meet critical national needs and exploit the recognized multiplier effects of growth in the agricultural sector. Ultimately, incremental sales from food products and delivered services along with paid salaries, will increase income and contribute to food security, economic growth and poverty reduction.

Despite recent progress, Senegalese agriculture is not yet seen by many, particularly youth, as an attractive, reliable livelihood endeavor. Thus, EG4ALL will seek to support local business development service providers to meet the needs of a modernizing, productive agriculture sector. These service providers in the public, private, and civil society sectors could then address the needs of producers, producer and community organizations, MSMEs, and local government entities with information and knowledge services addressing entrepreneurship, business management, and technical gaps. Service provision should be largely based on market mechanisms linking service supply and demand to foment local agricultural innovations and system development.

The Value Chain Services interventions will build on lessons learned from prior and current USAID investments. For example, the introduction of a new model for contract farming in irrigated rice, maize, and millet value chains is USAID's most prominent value chain intervention in Senegal to date. This market-based approach significantly reduced the risks, difficulties, conflicts, and uncertainty of procuring rice, maize or millet on the open market and consequently resulting in transformative changes and increasing the sustainability of USAID investments. In the Anambe Valley in upper Casamance, Naatal Mbay helped generate the first-ever Integrated Model of Financing. Based on lessons learned from the Delta, this model is helping hundreds of small farmers to expand their production by giving them the means to access higher quality seeds and other inputs through private sector channels. These key successes among others were made possible mainly by the soft facilitation and collaborative approach that guides all Naatal Mbay interventions.

USAID used a combination of interventions that featured a strong facilitation approach, but also provided direct subsidies through cost-sharing to unlock the potential of the targeted value chains. An example of this is the work with the seed sector, in which seed processing centers were renovated or built through Public Private Partnerships (PPP). Further, cost-sharing was also used for extension and database management staff, to support contract farming. This support gave local systems actors' capacity to deliver extension services, inputs, and financing that includes insurance. The use of organized and inclusive local producers' networks as main field partners and delivery channels of activity support services facilitated effective community appropriation of productivity-enhancing technologies and best management practices. The model has been successful even in the traditional rice farming system of Casamance, where women are fully engaged in the technology adoption process.

Strong farmers' associations and geo-referencing allowed for accurate estimates of members' production potential and input requirements. With this information lenders have accurate information on farmers' production potential, and buyers know exactly where farmers are located. Thus, the contract farming and its integrated financing resulted in increased yields, quality and profitability for participating rice farmers.

Led by the Association Sénégalaise pour la Promotion du Développement à la Base (ASPRODEB), a key West African business in the seed and cereal sectors, 13 local organizations involved in seed production were supported to develop and adopt three-year seed plans for rain-fed rice varieties to meet fast growing demand. ASPRODEB, and Naatal Mbay partner, IPAR, (l'Initiative Prospective Agricole et Rurale), are examples of private sector entities that will continue the value chain work beyond Naatal Mbay. As a result of Naatal Mbay intervention, ASPRODEB is currently providing capacity building services to farmer organizations in commercial grain production, improving

access to small agricultural equipment, consolidating producer networks, developing farmer friendly equipment financing formats and playing a direct role in regional Monitoring and Evaluation (M&E) data collection, and its analysis.

Building redundancy into the system was an important characteristic supporting systemic change. So in addition to training the rice millers on quality standards they also built the capacity of farmers and bankers. This helped to equalize the power relationships at selling time, compared to enabling only one actor to be the arbiter of quality. The same lesson applied to information management on production levels. The millers, bank, and farmer associations all needed access to information on production estimates, volumes harvested, and reimbursement levels. Better information built the capacity of all actors to negotiate effectively. The “Scaling Up of Sahel Rice in Senegal” report outlined the following key aspects that underlay the success of USAID value chain interventions.

- Using a push-pull approach by helping producers increase yields, production, and quality and by increasing market demand by facilitating linkages to processors and distributors, and strengthening those downstream institutions.
- Kick-starting private upstream and downstream investment through subsidies, risk mitigation, and market facilitation. Examples include PCE’s support for agricultural machinery leasing through Locafrique and innovating crop insurance with the GOS.
- Translating this push/pull and kick-starting into a virtuous spiral which, by 2014-15, had become increasingly self-generating.
- Aligning the incentives for farmers, bankers, processors, machinery service providers and wholesalers so that everyone makes money. In some cases, this has been complicated by distortions of prices and margins at various stages of the value chain.
- Addressing risk for key actors. This was particularly true for banks and the CNCAS and was addressed through the innovations of contracting farmer production, crop insurance, and the use of a warehouse receipts system

The report also noted some challenges, including the following.

- Reaching the last mile in farm productivity: As current interventions are helping to close the yield gap in production in the Delta, future interventions in this area must focus on bottlenecks to double cropping and MSME development. However, in SRV and the SFZ, despite huge progress on yields that lead to emerging cereal surplus for markets, investments in scaling up successful models applied in the Delta will be still needed.
- Lack of a clear strategic policy orientation and effective coordination of donor-supported initiatives, particularly in the seed and agricultural equipment sectors, hinders the dynamism and motivation of emerging private entrepreneurs who are engaged or who could potentially invest in those domains
- Lack of mid-scale storage infrastructure that is crucial for sustainable growth of commercial farming and particularly for integrated financing of cereal value chains. There is a need to promote a policy environment conducive to private investments in warehousing services.
- Grain markets are not solely driven by large-scale formal buyers. An important intermediate level made up of small scale MSMEs and wholesalers represents a powerful segment that needs to be integrated in the value chain development strategy, especially in the more remote zones.

- Unlocking the potential of cereal value chains for more job creation, robust youth inclusion and women’s economic empowerment, and as a means to increase small holders’ resilience through diversified cash revenue sources.

EG4ALL Value Chain Services interventions will apply these lessons for different value chains, agro-ecosystems, and market situations.

In collaboration with Entrepreneurship and Vocational Development Services, Value Chain Services will support entrepreneurship skill development and development of MSMEs as service providers to expand access to improved technologies, good practices, and information for farmer and producer groups focusing on youth and women’s employment.

Local government bodies and institutions will be an important client/scaling agent for the Value Chain Services Activity. Here EG4ALL is very consistent with the goals of the Regional Development Hubs, part of the GOS decentralization policy.

At one level, the goal here is to raise the awareness of local government bodies and institutions of the Value Chain Services that are available to turn their economic development vision into realities. The next level is for local government bodies and institutions to use those services to help them develop their own portfolios of local service providers – which again is helping them further their economic plans. Such a plan fits comfortably with the GOS Regional Development Hubs.

The more comfortable local government bodies become in facilitating these Value Chain Service connections, the more benefits will be seen in local MSME development, employment, and profitable families.

Value Chain Services complements the USAID GOLD activity, which is working to bolster the governance capacity of the local government bodies.

5.2 Nutritious Food System Services

Nutritious Food System Services (NFSS) will expand Yaajeende and SPRING’s work around *awareness, access, and use* of nutritious foods and products essential for good health and addressing nutritional deficiencies. Increasing consumption of healthy, nutritious, and safe diets (as measured by indicators such as minimum acceptable diet for children under age two and minimum dietary diversity among women) requires continued strengthening of the food system, behavior change communications, and local governance of food security. All three of these efforts rely on strong engagement, investment, and partnership of both the private and public sectors.

The NFSS will support dietary improvements for the general population, with a special focus on women of reproductive age and children under age five. In order to achieve sustainable positive impacts for these groups, the whole community must be engaged, particularly youth and influential actors, such as husbands, grandmothers, and village religious leaders.

Households across the ZOI will need to employ a variety of strategies to successfully access all the foods needed for a healthy diet throughout the year. Improved homestead production alone, while an important piece of the solution, is insufficient to address the gamut of nutritional deficiencies, particularly given that most Senegalese purchase a majority of their food. Likewise, increased incomes and access to markets alone are also inadequate. Evidence shows that these two factors, while helpful for reducing under-nutrition, are also associated with increased overweight, obesity, and nutrition-related non-communicable diseases (diabetes, cardiovascular disease, etc.). The market must do a better job of providing the right foods, in sufficient quantities, at an affordable price, all year long.

Taking a holistic view of the food system and nutritional deficiencies, EG4ALL will prioritize agriculture development activities that increase the availability and affordability of critical nutritious foods while also increasing incomes and economic stability (resilience). EG4ALL will also increase awareness among market actors and consumers about the risks associated with consuming low quality foods (high sugar, low fiber, poor nutrient density, etc.).

Approaches that effectively integrate gender considerations and promote women's empowerment will also be prioritized. As the principal providers of family meals and childcare, women in the ZOI play a central role in child nutrition. Women's capacity to generate income, access the needed foods, ensure proper child feeding and care, and maintain their own health and nutrition is critical, as is men's understanding of nutrition and the important role they can play to improve child nutrition and food security. Lessons from Yaajeende illustrate that women with a strong support network tend to derive more benefit from activity interventions.

Ensuring that markets and economic growth benefit the poor requires effective public-private partnership and collaboration. This is particularly relevant for nutritional outcomes, given that there is a very short, yet critical window in child development that occurs between conception and age five. In particular, poor nutrition during the first 1,000 days (from conception to age two) can permanently impair a child's health and cognitive ability for life. Therefore, effective public and civic engagement at the local level is very important to ensure that markets serve the broadest swathe of the population as possible and that effective, sustainable safety nets or programs are in place to help the vulnerable meet their immediate nutritional needs as they work to climb out of poverty. For example, Yaajeende currently supports local governments to partner with civil society and private sector to promote nutrition-related best practices, nutritional gardens, children's granaries, and pass-on-the-gift livestock programs, among others.

NFSS will collaborate significantly with the other activities. While Value Chain Services will work at the market (or local economy) level to advance income, employment, and food availability and affordability within a limited set of strategic value chains, NFSS will focus on strengthening the market's ability to supply the target population with the full range of foods needed for a healthy diet. This implies promoting a broader set of foods, including linking with Sustainable Ecosystem and Fisheries Management Services to increase access to fish products across the ZOI. It also implies significant work at the community level to ensure that all the pieces come together, translating into improved diets.

NFSS will also advise Value Chain Services and Sustainable Ecosystem and Fisheries Management Services to ensure that activities are nutrition-sensitive and do not inadvertently detract from nutrition goals (for example, taking into account mothers' time and energy requirements; favoring varieties and processing techniques that enhance nutrition; etc.).

Further, NFSS will collaborate with the Value Chain Services and Employment & Organizational Services Activities to support the profitability, growth, and sustainability of emerging enterprises (nutrition, livestock, and other agriculture-related enterprises). Finally, NFSS Activity will collaborate with Policy System Services to ensure coherence between national and local level governance efforts, as well as with other USAID efforts in governance, health, education, and WASH.

5.3 Entrepreneurship and Vocational Development Services

Entrepreneurship and vocational development services aims to increase youth engagement in Senegal's economic development/growth. Interventions will focus on agriculture, entrepreneurship and leadership and have the potential to provide both technical and social solutions to youth un- and under-employment. Through existing and new relationships with public institutions, including Senegalese Agriculture Education Training Research (AETR) centers, universities, government run programs, as well private sector organizations, interventions will connect youth to technical expertise while also helping these institutions engage in providing services to the community. The focus on positive youth development (PYD) affirms Throughout the Activity, the focus on positive youth development (PYD) affirms that youth are resources to be developed not problems to be solved; that youth voice, leadership, and participation are vital; and that a strong enabling environment creates conditions for youth to flourish.

There are considerable opportunities and great need for employment, job creation and organizational service capacity building across EG4ALL's Activities and targeted value chains. The different EG4ALL intervention areas combine to facilitate this local capacity development and build cross-activity synergies for youth and local institutional development essential to supporting achievement of EG4ALL objectives (Figure 6). This directly supports EG4ALL's core MSME strategy. Direct links to the Value Chains Services, Nutrition, and Fisheries activities will identify and foster relevant services and associated employment opportunities within these targeted value chains. Focus on agricultural and food-related enterprises will meet critical national needs and exploit the recognized multiplier effects of growth in the agricultural sector.

As markets develop, increasing demand for higher quality and more reliable goods and services provides a "pull" for development of entrepreneurial, organizational and technical skills. This "pull" along with the "push" provided by Entrepreneurship and Vocational Development Services will drive development of a local system for innovation and entrepreneurial development that will foster sustainability and efficiency in EG4ALL activities. The structure of the activities and facilitation approach to local system development avoids the unsustainability inherent in a 'project-

centric' activity and the inefficiency found in reliance on individual public or private organizations. The Activity recognizes that training alone is often inadequate to lead to employment or enterprise development, but that broader mentoring and facilitation support is often more effective.

The Activity will support services for both human and institutional capacity development. The human capacity skills in technical areas, entrepreneurship and business skill are essential to more productive employment opportunities. Organizational capacity builds on the human talent and provides institutional vehicles for development. The Activity will respond to and build on the opportunities from technical and market development provided by innovation in agriculture and fishery value chains and nutritional innovations. The Policy Activity will support improvements in the operating environment for these developments. (See Figure 6). The local capacity development services will be important to multiple institutions.

Engagement with local governance networks will be critical, as all concerned favor local solutions involving local people. This will be especially important to the nutrition-related capacity development that will target development of local entities. GOS resources may also be accessed for extension input and other support. Community and producer groups will be key participants in agricultural value chain development and require substantial support in transitioning to more sound business practices and approaches.

During multiple field visits, the USAID EGO team found that a burgeoning formal agri-business sector already exists. It is comprised mostly of MSMEs which are hampered by a lack of adequate technical support, specialized training, long term vision, and access to credit, among other things. MSME operators see opportunities but often lack the wherewithal to engage and the capacity to attract banks and investors to the sector and need Business Development Services (BDS) and technical skills to transform good ideas into viable businesses.

At the same time, the dynamic informal sector is the major source of jobs in Senegal and is likely to remain so for quite some time. The sector creates jobs, generates income and adds value but it remains highly unstructured with weak entrepreneurial skills and other factors limiting access to formal markets. According to the USAID/Senegal EGO Youth Assessment (2016), some 52.2% of youth live in rural areas (ANSD, 2014), and nearly 32% are underemployed (ANPEJ, 2016). Youth are affected disproportionately by poverty, conflict, unemployment, and exclusion. Yet youth are key drivers of future prosperity, security, and democracy and are a vital resource essential to national development. Evidence shows that if effective investments are made in their integrated development and if youth are engaged as partners, they can become a demographic dividend. A recent Mercy Corps study found that feelings of injustice and marginalization, more than unemployment or poverty, push young people towards violent extremism.

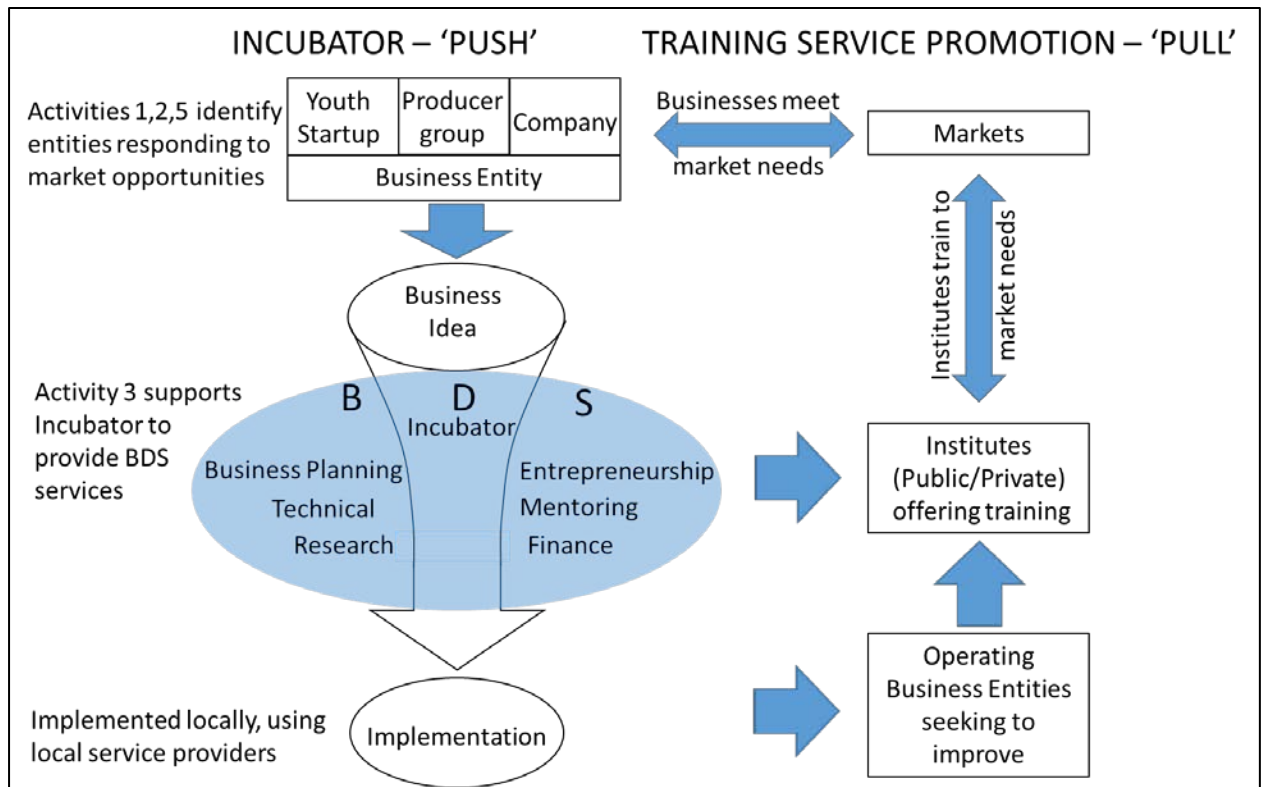


Figure 6. Critical interlinking of components to effect MSME development

A range of Senegalese institutions supporting development of agricultural enterprises, including community-engaged academic institutions (such as universities, lycées techniques, and private colleges), private sector goods and service providers, non-governmental incubation centers and financial institutions must be considered across the interventions. These institutions service local governance networks, producer and community organizations, MSMEs, and emerging informal sector businesses. Vocational training and business development needs include et al, single skill, short duration training for market-driven positions, such as tractor driving /maintenance; soft skill needs including human resources, marketing, leadership, and finance management; and longer-term certificate training programs.

Interventions will build on GOS models (PRODAC, ANIDA, CGER, ANPEJ) and on previous USAID investments, such as ERA. The models have helped meet technical training needs but have had difficulty facilitating successful transitions from learner to entrepreneur. Therefore, interventions must help facilitate improvements in vocational training as well as business development services among a variety of potential institutes. Individuals and/or MSMEs need a full package of business and technical skills as well as follow-up mentoring to enable them to move from “farmer” or “entrepreneur” or “trader” to “sustainable business owner.” In order to be successful and meet the needs of its local communities, all institutions need to rely on strong community engagement and labor market information to develop appropriate training programs that motivate and prepare individuals to start and succeed in their businesses.

These institutions can be catalysts for economic development, providing a range of services, including job creation, fostering a community's entrepreneurial climate, technology

commercialization, diversifying local economies, business creation and retention, or encouraging women or youth entrepreneurship (Knopp, 2007). Since most MSMEs in Senegal have minimal resources, experience and networks, these institutions can provide services that can help them overcome initial obstacles of starting a business. These obstacles may include funding, accounting services, business plan development, and other prerequisites. Additionally, the institutions may provide services to dispersed agricultural production or processing clients. Institutions can also design training programs in partnership with private sector enterprises or producer groups to help train their new employees for their chosen professions.

Institutions should empower youth and women by enabling them to participate more robustly in agriculture as a business opportunity. As institutions' activities align more closely with community needs, they will become more aware of entrepreneurial opportunities and more effective in translating these into viable, sustainable, and profitable businesses. Institutions will need to market their services and can expand their geographic reach. Focus on fisheries and nutritional food product development and marketing can present important opportunities. This might include livestock, which presents opportunity for women and youth engagement, as well as animal-source protein foods, and aquaculture, which may help offset declines in wild caught fish.

A National Youth Program will complement the entrepreneurial and vocational training services by capitalizing on the improvements made to these services. They will work in support of each other.

The Youth Program will not be a formal school or exclusively training-based program, but one that is club -or group-based and a network for experiential learning. It will be non-political. The Youth Program will also prepare youth for future employment.

The National Youth Program will have an appropriate institutional base and financial sustainability strategy that can continue and grow beyond the life of EG4ALL. Interventions may continue and expand on the program base established by ERA or may develop an alternative or additional institutional support base, such as private enterprises, secondary schools, government, foundations, or religious or community groups, as appropriate. US youth programs such as 4-H, FFA, or Junior Achievement should provide models and inspiration for such program development, but the program developed should be in keeping with Senegalese cultural, social, and institutional norms and conditions.

The focus on positive youth development will orient towards developing life skills and employment skills for young people. The Youth Program will focus on rural youth and on agricultural enterprises throughout agricultural value chains. The Youth Program will promote entrepreneurship and development of micro, small, and medium enterprises (MSMEs) as well as commercial on-farm production, profitable informal sector employment opportunities, and/or formal employment in large businesses and government. The Youth Program must be flexible in its target group and approaches, but should stress gender equity, possibly providing for women's groups or clubs, if so desired by youth.

5.4 Policy Systems Services

The Policy Systems Services interventions aim to strengthen the policy system that is foundational to a business enabling environment that generates public and private sector investment towards reducing poverty and undernourishment.

Since 2012 when Senegal's President launched the Plan Senegal Emergent (PSE), USAID/Senegal aligned its Economic Growth activities to support PSE goals. PSE is an ambitious private sector investment strategy to grow the economy with flagship road; rail; real-estate; and agriculture, health, and education infrastructure projects. The goal of the PSE is to create sufficient economic growth (13%) to move to middle-income country status by 2035. The GOS has taken on board high-level African commitments to food security embodied in CAADP (Comprehensive Africa Agriculture Development Program) processes, especially the principle of mutual accountability that is operationalized through Joint Sector Reviews. To help Senegal advance its PSE aspirations, USAID intensified policy engagement to support the GOS vision of a vibrant and modern Senegalese agricultural sector with a strong commercial and smallholder private sector; creating opportunities for employment, growth, and income generation; and bringing about a disciplined public sector capably providing public sector services, oversight, and enforcement of policies and regulations.

USAID/Senegal's Economic Growth Office designed and launched the Feed the Future Senegal Agricultural Policy Support Activity (PAPA in French) and the Feed the Future Senegal Policy for Agriculture Investments (P4I) under the Global Africa Lead agreement, specifically to respond to the first three policy challenges. These activities together are aimed at increasing private sector investments and improving the business enabling environment by strengthening the capacity of Government Ministries and their agencies in charge of promoting private sector investments and conducting agricultural policy analysis and reform. Work towards making an impact on the third and fourth challenges began under the Naatal Mbay value chain activity. In particular, Naatal Mbay supported the Ministry's efforts to build PPPs to encourage critical investments in the seed processing sector and consultations to inform land reform and reorganization of the Ministry of Agriculture.

The GOS priorities articulated in the PSE and Ministry of Agriculture strategic documents reflect a logical continuum from earlier policy accomplishments under Senegal's Private Sector Development and Accelerated Growth Strategies that USAID supported. For example, the first Agricultural Commercial, Legal, and Institutional Reform (AgCLIR) assessment of the agriculture enabling environment for private sector investment highlighted key constraints such as contract enforcement, access to credit, and land property rights that are being addressed in part through Naatal Mbay. USAID support to these early strategies focused first on the implementing of commercial law and labor code regulations aimed at improving Senegal's performance against Doing Business indicators. As such, nine regulations and a Ministerial order issued in 2009 to apply the 1997 labor law helped to remove legal uncertainties for employees and employers. For example, the Ministerial Order 11100 defines the term of part time employment and the rights and obligations of both employees and employers that engage in part time work – important clarifications, in light of the seasonal nature of some agriculture and food industry employment.

Accomplishments under the New Alliance for Food Security and Nutrition Cooperation framework are also foundational to current and planned policy work. The New Alliance focused on incentives-based business environment, improvement of supply chain productivity and competitiveness, and reducing the prevalence of stunting and wasting. Support USAID/Senegal provided under the New Alliance fostered increased competitiveness and reduced barriers to stimulate private investment in agriculture. As an example, suspension of a Value Added Tax (VAT) on agriculture and hydro equipment paved the way for reduction in production factor costs, an important variable for investors.

More recently, the core of USAID's policy support to undergird economic growth has revolved around growing private sector investments in the agricultural sector to advance the GOS vision of rice self-sufficiency. Thus, interventions focused on: 1) facilitating financial contracting mechanisms between networks of smallholders, financial and agricultural insurance institutions, and buyers using a value chain approach; 2) strengthening key GOS institutions' capacity and leadership skills, including the Bureau in charge of monitoring the activities of the PSE (BOS, in French), APIX (the organization in charge of private sector promotion, an agency of the Ministry of Investments), DAPS (in charge private sector within the Ministry of Economy and Finance); 3) assisting the Land Reform Commission to undertake regional consultations; 4) assisting the Ministry of Agriculture to reorganize and modernize, to build a small policy unit in the Minister's Office to initiate and monitor policy reform activities, to carry-out a transparent and inclusive joint agricultural sector review, to build greater capacity at the regional and local levels to monitor GOS agricultural program achievements, and to build a knowledge and information management system open to all stakeholders; and 5) to build regional platforms for investments.

The basic tenets of the current policy activities, which will be continued under EG4ALL, include the following.

- *Capacity for policy analysis and advocacy* needs to be enhanced. The institutional architecture or policy system in place and the coordination and sharing of information and knowledge among those institutions and other stakeholders needs to be strengthened.
- *Data, information, and knowledge* related to agriculture must be made equally accessible to all stakeholders including civil society, private, and public sectors to ensure mutual accountability.
- *Mutual Accountability* in establishing priority actions and reviewing progress in the sector must be increased through the Joint Sector Review exercise which needs to become more rigorous, with a reinforced contribution by all stakeholders.
- *GOS M&E capacity*, especially at the decentralized level, to systematically monitor and evaluate the results and impact of agricultural programs and to manage data and analysis of this data must be reinforced.
- *GOS Change Management*. GOS must have an increased but streamlined ability to manage the policy making and implementation process.
- *Addressing policy issues at the regional and local levels* can unleash agricultural and micro, small and medium enterprise (MSME) growth in the rural areas of Senegal.
- *Retain Agile Mechanisms* that allow the flexibility to quickly respond to new priorities, seize emerging opportunities, or address time sensitive policy considerations.

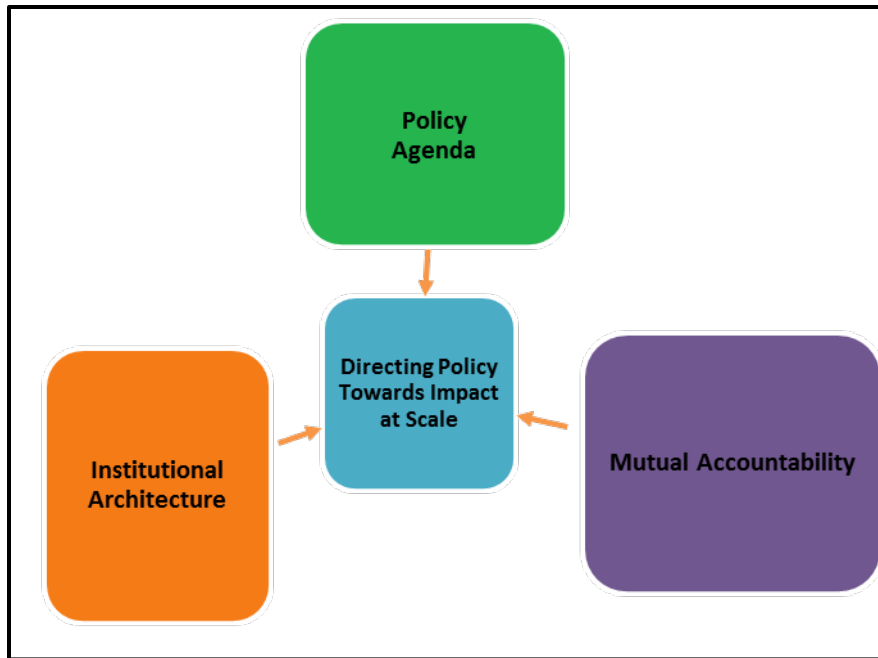
To date, the USAID/EGO approach to policy reform has focused on institutional architecture improvement in parallel with the policy agenda dialogue and reform. GOS capacity for policy analysis, implementation, and monitoring is improved by building a network of policy expertise that includes public sector researchers, universities and think tanks to deliver evidence-based services for decision making to better orient public and private investment in strategic areas such as agriculture inputs, mechanization, incentives, and regulations to improve value chains competitiveness. Policy dialogue is institutionalized by GOS through the organization and the funding of an inclusive annual agriculture joint sectorial review to monitor the technical performance and the implementation of policy reforms. The Feed the Future policy systems approach takes on board three key lessons. First is the need to secure strong government engagement and recognition for a given reform because without such engagement, policy initiatives will fail. Second, while policy agenda setting is important, at this juncture in Senegal's policy reform process, it is not as critical as the establishment of policy architecture. Third, a participatory and inclusive approach increases stakeholder buy-in and involvement, which is important for facilitating policy implementation, enforcement, and evaluation.

The new Policy Systems Services interventions will capitalize on results achieved and lessons learned to date with a focus on effective policy formulation, implementation, and evaluation constructed on the three basic building blocks identified in the GFSS 2017-2021, to achieve impact at scale.

The first involves a *prioritized agenda* of critical policy actions built through consultation with country and interagency representatives to ensure that priority policy areas align with and add value to the investment plans of partner countries, as well as with GFSS.

The second pertains to the *institutional architecture* needed to identify barriers, design policy options, and coordinate actions to implement policies. The term "institutional architecture" applies to public and private sector institutions and activities, including collecting and analyzing data and proposing, implementing, and enforcing policy. It also includes the process of consultation between partner Governments and stakeholders from the private sector, civil society organizations, think tanks, and development partners.

The third concerns the *mutual accountability* needed to ensure that policy changes are effective and have significant impact. It is also important to ensure that partner governments, development partners, the private sector, and civil society follow through on commitments to significantly accelerate reduction in hunger and poverty.



The Policy Systems Services interventions will take a step-by-step approach to fostering institutional change. As institutional reform is a dynamic and iterative process involving continuous assessment, adjustment of policies, and refinement of implementation approaches, the approach must also be adaptive.

The Policy System Services will embody an integrated but diverse range of services and approaches, across a number of “policy customers” and policy institutions. It will influence faster, better policymaking, leading to significant policy changes with a measurable impact on economic growth and food security, while also building a more capable and sustainable Senegalese policy system for the formulation, consultation, implementation, and monitoring of policies.

Strategic partnerships and alliances will be built with a wide range of key actors in government, the private sector, civil society, donors groups, and research and advocacy institutions to keep momentum on policy reforms.

The priority policy outcomes that EG4ALL will facilitate and influence are outlined in several documents including the PSE key reforms, the 2016 Joint Sector Review Report for Senegal; and the New Alliance for Food Security and Nutrition cooperation framework. GOS priority policy reforms are being implemented through the Business Enabling Environment and Competitiveness Program (PREAC). For agriculture, the PREAC (Annex 10.4) action plan includes sectoral and structural reforms, incentive-based business environment, administrative procedures streamlining and promotion of competitive economic zones.

5.5 Sustainable Ecosystem and Fisheries Management Services

The Sustainable Ecosystem and Fisheries Management Services (SEFMS) interventions aim to reduce threats to natural capital and rebuild the resource base to sustainable levels to ensure ecosystems continue to provide goods and services for agriculture, fisheries, and economic growth.

The SEFMS interventions will build on previous USAID/Senegal activities. Since 2003 USAID/Senegal has invested significant resources in environmental and ecosystem management applying the Nature, Wealth, and Power (NWP) paradigm. NPW explicitly recognizes the importance of integrating environmental, economic and governance factors for successful and lasting outcomes. From 2003 to 2013, the 2 phases of the flagship activity Wula Nafaa contributed to poverty reduction and to sustainable local development, increasing rural communities and producer revenues by encouraging decentralized, integrated, and participatory resource management. Other accomplishments under Wula Nafaa include the promulgation of 20 Local Conventions (a model that will be later duplicated in the fisheries sector) that were approved by the local authorities, the initiation of several pilot land use planning exercises in the rural communities, and the setting up of Low-Land Management Committees (COGIRBAF) for sustained management of water resources and anti-salinization infrastructure in low-land areas. Over its ten year life, Wula Nafaa developed and tested tools that facilitated rational and decentralized natural resource management and helped to reduce the incidences of conflict arising from incompatible or competing uses of resources. Another highlight was the development of a methodology for formulating participatory forest management plans (FMP) in three community forests totaling 77,000 hectares. An important feature of this approach was the integration of an administrative and financial management system (the GAF) that defines procedures for collecting and spending revenues generated from forest taxes. Beneficiaries of the activity generated substantial revenues from management of natural resources: more than 5,000 local partners increased their revenues by nearly 80 percent. In sum, Wula Nafaa advanced efforts to address key barriers to natural resource management. The activity used dialogue, a processes of consensus-building, frameworks and round tables to bring stakeholders together and discuss in-depth the problems, solutions related to sustainable management of natural resources.

Concerning fisheries, since 2011 USAID Senegal has supported the Collaborative Management for a Sustainable Fisheries Future (COMFISH) Activity and more recently, COMFISH PLUS. Interventions under these activities are helping to reform the fisheries sector, sustain productivity, and enhance artisanal fishers' participation in management and decision making in fisheries value chains. As an example, the activity supports the GOS in implementing the Fisheries and Aquaculture Sector Policy Letter (*Lettre de Politique sectorielle et de Développement de la Pêche et de l'Aquaculture-LPSD-PA*), which serves as a national framework for sustainable management of fisheries resources.

In light of the vital importance of fisheries to the Senegalese economy and to the nutritional status and livelihoods of Senegalese, over the years, the impact of climate change on Senegal's coastal resources, and more broadly on the fishing sector, garnered increased visibility and resources targeted at climate change adaptation and resilience. Accordingly, COMFISH began to focus more on climate change by increasing awareness among stakeholders, developing and implementing climate change adaptation plans for coastal communities, enhancing the scientific database of climate trend

information, and supporting the integration of climate change adaptation into the national fisheries policy. The activity has seen some encouraging results that auger well for reversing the trend from over fishing and overexploitation of fish stocks.

COMFISH also helped improve women's incomes related to fish processing, as a function of improvements to local infrastructure (facilities) and protocols for fish processing. Environmental compliance was also stressed, with key stakeholders agreeing to support the Marine Protected Area Strategy. Governance structures are improving through the strengthening of co-management organizations (CLPAs), their steering committees, and the adoption of Local Agreements that put in place regulations agreed upon by the communities. This decentralized management system entitles CLPAs to a rebate on fishing permits, boat registrations licenses, wholesalers' identification cards, and fines paid by violators of the Fishing Code, all of which are levied by Treasury. These were meant to be permanent revenues for the operational costs of the CLPAs towards sustainable financing. The CLPAs also conduct joint surveillance with government enforcement agencies and help to promote more sustainable fishing practices.

Faced with strong demand from Feed the Future stakeholders for climate information services, USAID launched Climate Information Services for Increased Resilience (CINSERE) in 2016. The activity supports key institutions (the Research Program on Climate Change, Agriculture and Food Security of the Consortium of International Agricultural Research Centers (CCAFS), the National Agency Civil Aviation and Meteorology (ANACIM) and the Institute of Agricultural Research (ISRA)) that together are addressing the negative impacts of climate change on farming, livestock, and fisheries. CINSERE works with local entities to facilitate the development of systems to disseminate climate information services. Consistent with the EGO core principle of being market-led, interventions under CINSERE will be guided by multi-disciplinary working groups in eight regions covered by the Naatal Mbay and Yaajeende activities. The working groups will design dissemination models to fit the specific needs of the stakeholders and regions. Examples of the type of climate information services of interest are: downscaled seasonal forecasts, daily weather forecast, ten-day weather forecast, onset and end of rainy season, and early warnings about climate and weather extremes using SMS platforms. Existing indigenous knowledge will also be mainstreamed into the models. Layered with other Feed the Future interventions, CINSERE will ultimately contribute to increased resilience and productivity.

The primary focus of SEFMS interventions will be on reducing the drivers of threats to fisheries biodiversity. These interventions will aim to support sustainable fisheries management for inclusive economic development, food security, nutrition, and climate resilience. Efforts will focus on conserving critical fish habitats and ecosystems; species that play an essential role in fisheries productivity and food security; and aspects of human wellbeing, namely food security and climate adaptation. If funds allow, additional interventions will support sustainable management for other ecosystems that are foundational for EG4ALL.

Over the past ten to fifteen years, USAID funded multiple studies to address ecosystems management for sustained production in the agriculture, fisheries, and livestock sectors. More recent studies include the climate change vulnerability assessment (CCVA), the Environmental Threats and Opportunities Assessment (ETOA), the Initial Environmental Examination (IEE), and other fisheries related studies conducted by the COMFISH activity.

A 2013 study on the effects of illegal fishing conducted by COMFISH highlighted the significant fish loss in Senegal (350,000 metric ton/year) each year and the resulting financial loss (estimated at \$312 million/year). The report also discussed IUU fishing, thus informing the GOS fisheries management planning process.

Preliminary findings of a political economy analysis of the artisanal fisheries sector suggest a need for improved regulation and management according to sustainable yield indicators. The following factors characterize the sector:

- Fast cash and cultural norms reinforce open access;
- The dire state of fisheries does not receive adequate attention;
- Fishers and women processors/harvesters lack organization;
- Stakeholders tend to prioritize their own interests over sustainable fisheries management;
- Information and power asymmetry skew the marketplace;
- Women have less power in the CLPAs and in the marketplace;
- Government structure and limited resources make policy implementation challenging;
- Other GOS priorities compete with sustainable fisheries management;
- Law enforcement efforts are undermined;
- Transparency and accountability should be strengthened; and
- Marine protected areas need more investment.

6 Alignment with United States Government and GOS Priorities/Other Leveraged Resources

6.1 Relationship to GFSS and CDCS

The US Government GFSS (2017-2021), USAID/Senegal CDCS (2012-2017), and EG4ALL (2018-2023) are all linked. The goal of the GFSS is to sustainably reduce global hunger, malnutrition, and poverty. The current CDCS ends in 2017, and aims to improve the well-being of Senegal's citizens, resulting from the development hypothesis that a politically-active and healthy citizenry, endowed with the skills to participate in the private sector and government, will lead to an improvement in the well-being of Senegalese citizens. Achieving this goal depends on the three complementary Development Objectives (DO), including DO1, "Increased Inclusive Economic Growth." Due to the design of EG4ALL advancing prior to development of the Mission's new CDCS and its new Feed the Future Strategy, EG4ALL articulates a project purpose – "Sustainably Reduce Poverty and Undernourishment among beneficiaries" that is expected to inform a new DO1 in the CDCS, and priorities in the new Feed the Future Strategy. Interventions under EG4ALL will at once contribute to achievement of GFSS, Senegal's Feed the Future Strategy, and its CDCS goals. Implementation of EG4ALL will align with the life of the new CDCS (2018-2022).

6.2 Linkages with USAID Activities

The objectives of this PAD and its supporting activities are intentionally linked with the broader USG and USAID Senegal program towards improving the well-being of Senegalese. As examples:

Health Behavior Change Communications: Malnutrition can be driven by poor diets as well as by poor health (disease). To reduce stunting, three major things must improve: (1) consumption of nutritious diets, (2) healthcare, and (3) water and sanitation. EG4ALL will focus on the first, while the Health Project under DO2 leads USAID efforts on the second, and the Senegal Water, Sanitation, & Hygiene Project (SENWASH) on the third. The combined success of all three of these projects will ultimately improve nutritional status. EG4ALL will collaborate with and complement the Health and SENWASH projects' efforts to increase adoption of nutrition-promoting health and hygiene behaviors. This will largely be achieved through harmonized social and behavior change communications in synergy with rising incomes which permit families to invest more in health. The local governance and private sector networks supported under EG4ALL will expand the reach of nutrition-related messages and practices that are initiated by the public health sector. However, it will not seek to replace or duplicate public health activities.

This represents a minor shift compared to the current Feed the Future portfolio, which plays a more prominent role in water, sanitation, and hygiene and overlaps somewhat into the public health domain through its work with healthcare professionals and community nutrition volunteers. While EG4ALL is expected to directly increase consumption of nutritious diets and incomes, it is recognized that these intermediate results are only part of the equation towards improving

nutritional outcomes, such as stunting and wasting. Health and SENWASH also will contribute significantly.

EGO staff managing EG4ALL will continue collaborations with the WASH and Health Teams to build synergies, to leverage resources to achieve greater results, and ensure effective field coordination among implementing partners.

Water, Sanitation and Hygiene (WASH): As referenced above, USAID/Senegal established the SENWASH Project to achieve improvements in nutrition through investments in water, sanitation, and hygiene in the most malnourished regions of Senegal. In addition to the link between access to safe drinking water, the prevalence of diarrheal diseases, and malnutrition (stunting and wasting), access to water for food production for a diverse, nutritious diet is also critical. EG4ALL will collaborate with SENWASH to ensure that investments in productive water infrastructure are well integrated into local water management plans.

Democracy & Governance: The CDCS calls for deliberate consideration of governance integration across Development Objectives as good governance is foundational to achieving all development objectives. The design of EG4ALL anticipates considering small-scale irrigation and water management schemes and engaging existing community water users' associations where feasible, in partnership with SENWASH. As part of Senegal's decentralization policy, local governments are to have a role in coordinating the planning and management of water systems. However, the capacity of local governments in planning, budgeting, and oversight of project implementation is low. Linkages with SENWASH and USAID/Senegal's Governance for Local Development (GOLD) Project will be strengthened to address this. In addition, because sustainability and civic engagement in agriculture and food security are integral to EG4ALL, linkages with GOLD in areas such as building and strengthening Citizen Working Groups established under Yaajeende will continue and will be reinforced.

Education: As EG4ALL seeks to increase economic opportunities for youth and women, including those with low levels of formal education and literacy, the EG Office will collaborate with the Education team in the General Development Office to explore opportunities for synergy with their out-of-school youth and early grade reading activities. In particular, EG4ALL will collaborate with Education activities on increasing functional literacy skills to ensure a harmonized approach that capitalizes on best practices.

Consistent with the Whole of US Government approach of Feed the Future, through EG4ALL, key **Peace Corps** programs in agriculture and agroforestry, health and nutrition and community economic development will continue to be aligned with USAID Senegal's economic growth activities, further expanding their reach and scale by assisting families and communities to promote their own food security and increase their resilience.

6.3 Linkage with GOS Priorities

All EG4ALL investments are closely aligned with GOS priorities as elaborated in the country's highest-level strategic plans, including the PSE, the New Alliance for Food Security and Nutrition, and the Program for Accelerated Agricultural Development (PRACAS). The PSE recognizes

agriculture as an important engine for growth and addresses opportunities for investments to increase food security, increase competitiveness and reduce barriers to stimulate private investment in agriculture, thereby increasing incomes for smallholders/firms and generating employment. The PSE also calls for reforms to modernize the public administration for enhanced effectiveness, a more sustained struggle against social inequality, attention to preserving the natural resource base, and supporting the emergence of viable regions. The specific aspects of the PSE being addressed by EG4ALL are shown in Table 1.

Table 1. Aspects of Plan Senegal Emergent addressed by EG4ALL.

PLAN SENEGAL EMERGENT	
<i>Axe 1 – Structural Transformation of the Economy and Economic Growth</i>	
3.1.1.	Agriculture, Livestock, Fisheries , Aquaculture, and Food
<i>Axe 2 – Human Capital, Social Protection, & Sustainable Development</i>	
3.2.2.	Education and Training (vocational training)
3.2.3.	Health and Nutrition (mother and child nutrition)
3.2.7.	Prevention & Management of Catastrophic Risks (resilience, climate change)
3.2.8.	Environment and Sustainable Development (NRM, green economy)
<i>Axe 3 – Governance, Institutions, Peace and Security</i>	
3.3.3.	Promotion of Equity and Gender Equality (women, young girls)
3.3.4.	State Reform and Strengthening of the public administration (capacity building in planning, monitoring and evaluation in targeted ministries)
3.3.5.	Land Use Planning, Local Development and Decentralization (local bodies)
<i>Chapter IV – Foundations for Emergence</i>	
4.5.	Strengthening of the Financial Sector (access to finance)
4.6.	Improvement of the Business Enabling Environment (MSME development)
<i>Chapter VI- Implementation, Monitoring and Evaluation of PSE</i>	
6.1.1.	Oversight and Governance (policy reform)

Activities proposed under EG4ALL’s five thrusts; Value Chain Services, Nutritious Food System Services, Entrepreneurship and Vocational Development Services, Policy Systems Services, and Sustainable Ecosystems and Fisheries Management Services, all respond directly to PSE goals. More specifically, EG4ALL is deliberately designed to link efforts to accelerate growth, improve nutrition and improve stewardship of natural resources while creating jobs for young people and opportunities for women. Interventions will contribute to GOS priorities by facilitating, among other things: MSME development and access to markets; innovative financing; enhanced local governance and private sector capacity for improving food security and nutrition; strengthened capacity in local institutions to develop risk mitigating governance structures, to provide business, entrepreneurial and technical skills, and strengthened inclusive value chain development that supports ecologically sustainable, climate-resilient fisheries.

8 Project Monitoring Evaluation and Learning Plan (PMELP)

This project will put in place a monitoring and evaluation plan that uses a range of instruments and approaches. Over the five-year life of the EG4ALL project, planned activities include a variety of mechanisms to monitor and evaluate overall performance at every level, from implementation of specific interventions to measuring progress toward achievement of our higher level results. Implementing partners are primarily responsible for collecting activity-related data and submitting them to USAID/Senegal through periodic activity reports. Other monitoring and evaluation will be conducted outside of the implementing mechanisms with a goal of analyzing data and evidence to promote learning and evaluation impact.

Overall, the approaches to data collection will emphasize:

1. Local capacity building and institutionalization to support and promote sustainability;
2. Dialogue, consultation, coordination, and alignment with host country institutions and organizations to ensure ownership; and
3. Joint funding of data collection efforts. Partnerships with multiple stakeholders, including other USG agencies, donors, implementers, targeted GOS offices, and local non-governmental organizations is crucial to ensure more vigorous and sustained efforts to data collection. This participatory approach lays the foundation for increased efficiency and ownership by successfully engaging all parties and sharing responsibilities for monitoring and information gathering activities.

M&E activities for this project will concentrate on the EG4ALL purpose of sustainably reducing poverty and undernourishment. The attainment of the purpose, objectives, and outputs will be measured against indicators, including the illustrative ones specified in Annex 10.3. Data will be collected from sources, including implementing partners' reports, national account reports, International Food Policy Research Institute (IFPRI) studies, Household Living Conditions Surveys, World Bank reports, etc. USAID/Senegal will work to ensure that M&E activities are:

Coordinated: It is in the interest of USAID/Senegal to partner, coordinate, and align with the various stakeholders because most of the data for goal-level indicators originate from secondary sources and cannot be collected on an annual basis due to complexity and cost considerations. In this respect, USAID/Senegal will work closely with the relevant government offices at all levels to institutionalize data collection, processing, analysis and reporting to ensure timely availability of data to track performance and inform decision making processes. For instance, USAID/Senegal will support the Directorate of Analysis, Forecasting and Statistics (DAPS) to coordinate the use of the Economic Community of West African States (ECOWAS)-required M&E system, and the Regional Strategic Analysis and Knowledge Support System (ReSAKSS). USAID will also place a staff member who is an M&E specialist in DAPS to support the use of this new system.

Meaningful and timely: USAID/Senegal is fully committed to meaningful and timely evaluation and research that will inform decision making. USAID/Senegal takes advantage of the annual Performance Plan and Report (PPR) to list completed and planned evaluations. The annual update of the Activity Monitoring and Evaluation Plans (AMEPs) further helps to maintain the list of

planned evaluations/studies as current as possible. The mission has reinvigorated the office level PMPs. Following approval of this Project, the EGO Project Management Plan (PMP) will be finalized. For all studies, the processes include (a) consultations with a wide range of stakeholders to agree on the terms of reference, research questions, and data collection tools; (b) organization of in/out-briefings by the study teams for USAID, implementers, and the GOS; (c) sharing of draft reports for comments; and (d) wide dissemination of the final reports. A wide dissemination of the final reports will be done through submission to the USAID Development Experience Clearinghouse, stakeholder workshops, etc. USAID/Senegal will also utilize existing central mechanisms and resources in order to issue quality terms of reference and conduct cost-effective evaluations.

Consistent with USAID’s Evaluation Policy: To ensure that staff is well-equipped to manage monitoring and evaluation plans and to analyze data, USAID/Senegal will continuously review the Agency’s Evaluation Policy and plan to remain up-to-date on the most recent thinking in evaluative science.

High priority evaluation questions include, but are not limited to, the following:

- What factors are likely to influence the sustainability of MSMEs that USAID helped develop in comparison to others at the national level?
- To what extent have USAID activities been effective in supporting local government systems to facilitate value chain service connections? How are benefits quantified in terms of local MSME development, employment, and family incomes?
- To what extent have USAID politically-informed interventions in fisheries helped trigger a sense of urgency and demand for increased sustainability?

USAID/Senegal EGO and the Feed the Future Learning Agenda

The first years of Feed the Future activities in Senegal prove the positive influence of a staple cereal value chain approach as a method to strengthen the food security of tens of thousands of small-scale producers and their hired labor. In 2016 alone, USAID/Senegal interventions benefited 116,625 households, and 142,372 individuals were trained in methods to enhance agriculture productivity and food security. USAID/Senegal assisted farmer groups sold nearly 105,769 MT of cereals, fruits, and vegetables, worth \$28.6 million (M). USAID also facilitated access to \$25.3 M in loans via contract farming and integrated finance agreements between farmers, wholesalers, millers, and finance institutions. Food systems in the ZOI improved through communication and trainings, raising demand for nutritious foods, while support for production and sale of nutritious foods is increasing supply and access.

This project will ask questions to determine how effectively their value chain models serve the growing population of rural poor. Questions will help determine interventions that will have the greatest impact on resilience of households. The analysis may be able to determine which activities continue after projects end, and which activities are continuing to help individuals recover from or withstand common and extreme shocks.

Information gained from these questions and others will help guide the formulation of interventions for years 3-5 of the project.

Guidelines for EG4ALL M&E:

- Testing innovative activities.
- In determining the success and scalability of certain interventions and identifying which of the arrays of treatments are most successful, the project will need to be evaluated/reviewed/assessed constantly throughout the project cycle.
- To ensure adaptive management and gain information on which interventions are having the most impact early on in the project, monitoring and evaluation activities will be embedded throughout the life of the project. This could entail the implementing partners work in partnership with a proposed independent evaluation organization.
- Implementation of monitoring and evaluation will occur simultaneously with implementation of the various PAD Activities. As these Activities may not start at the same time, USAID will engage with an independent organization to collect baselines and data for the various activities to ensure consistency and allow for information to flow across activities. The bulk of the M&E, however, will be with the implementing partners.
- Implementing partners will collaborate closely to identify standard and custom indicators and design the monitoring and evaluation tools necessary to assess the interventions and inform decision-making.
- Geographic Information System (GIS) will be an integral tool for M&E. All Implementing Partners (IPs) will receive a standardized format for collecting GIS data.
- Adopt a mixed methodology for evaluation of activities and the project as a whole. Use of Randomized Control Trials and complexity aware monitoring are some examples.
- The project will also do an external mid-term performance evaluation of the portfolio to meet the Evaluation Policy and ADS 203.3.1.3 for large and/or and innovative projects.
- Gender differential effects are expected in response to many of the interventions given women's roles as caretakers for children, food preparers, and fetchers of water. The monitoring and evaluation components of the project will have a strong gender perspective. Monitoring data will be disaggregated by sex.

Monitoring and Analytical Support: In collaboration with the Program Office, the Economic Growth Office will examine project M&E data for conclusions about the portfolio's contribution to program outputs and regularly review progress, key challenges and lessons learned for integration into the activity cycle. The portfolio will therefore support multi-stakeholder monitoring and evaluation and learning through mechanisms such as these:

- USAID/Senegal Mission-Wide Monitoring and Evaluation Project (MSI)
- Bilateral Implementing mechanisms (M&E components of each activity)
- Evaluative studies and assessments (UGB)
- Internal mission quarterly M&E monitoring with Program Office

Evaluation: The Spring 2018 Population Based Survey (PBS) will serve as the baseline and will help EGO, in the long term, determine the relative impact of the EG4ALL PAD on sustainable poverty reduction and malnutrition. EGO will also conduct mid-term performance evaluations on all of the Activities through a Small Business set-aside.

Along with these above mentioned methodologies, EGO will also design an impact evaluation tool using PPL approved approaches and methodologies. We will employ methodologies such as Complexity Aware Monitoring (CAM) and other newly designed methodologies, as appropriate. While its name assumes monitoring, CAM tools will be used to help determine the impact or outcomes of EGO activities.

Projects and their environments can have some simple aspects, some complicated aspects and some complex aspects; it is more useful to identify these individually than to attempt to classify a whole situation as either one or the other. The application of the three key principles of CAM listed below can be invaluable for monitoring the emergent and dynamic aspects of strategies and projects.

1. Synchronize monitoring with the pace of change.
2. Attend to performance monitoring's three blind spots.
3. Consider relationships, perspectives, and boundaries.

These general principles have much in common with the collaborating, learning, and adapting (CLA) approach being promoted as part of the Program Cycle within USAID. CLA embraces a broad range of efforts to engage with other development actors in the pursuit of development results. The complexity-aware monitoring principles often wed CLA tenets with the rigor of tested monitoring methods.

There are five main recommended approaches to complexity-aware monitoring for USAID projects and strategies. The list is not comprehensive, but is intended as a starting point.

1. Sentinel Indicators
2. Stakeholder Feedback
3. Process Monitoring of Impacts
4. Most Significant Change
5. Outcome Harvesting

Two approaches USAID/Senegal is considering are Most Significant Change (MSC) and Outcome Harvesting.

MSC is a participatory monitoring and evaluation technique that involves the collection and analysis of stories describing the most important project outcomes. The method works well when adaptive management practices in different or dynamic contexts lead to diversity of implementation and outcomes. The method captures differences in development outcomes across sites and time, as well as different perspectives on the same outcomes. MSC is particularly useful when different interpretations of significant change are considered valuable.

Outcome Harvesting, like MSC, is a participatory monitoring and evaluation method that enables users to identify, verify, and make sense of outcomes with or without reference to predetermined objectives. Outcome Harvesting, however, puts more emphasis than MSC on verification and on identifying and describing contribution.

Using the CAM approach and tools, EGO will design a rolling evaluation, beginning in the first year of implementation 2018. This will serve as a monitoring, evaluation, and learning tool given its link

to the CLA approach.

Learning: Each implementing partner will be required to make contributions to the overall EGO learning agenda, as done previously under the 4A PAD. Learning at the implementation level will help inform the development hypothesis by examining specific investments in more depth to determine which of these were most effective in strengthening food security objectives in Senegal. This will complement the work of the CAM.

Possible topics for the learning agenda, aside from the IP selected topics, include:

- Are the women empowerment interventions in targeted value chains driving malnutrition reduction among vulnerable households?
- Is the policy dialogue (reform) leading to improving governance and increasing investments in agriculture sector?
- Is there a correlation between the strengthened role of the local private sector and sustained economic development in the agricultural sector in Senegal?
- What are the key factors that drive sustainable management of fisheries?
- Is the layering of EGO activities driving a more sustainable economic growth than otherwise would be seen if implemented as completely stand-alone activities?
- What are the definitive factors that result in youth staying involved in the agricultural sector?
- What explains high malnutrition rates in areas of high agricultural productivity?

9 References

- ANPEJ (2016) Presentation: Youth Employment Status. ANPEJ, Senegal
- ANSD (2006) L'Enquête de Suivi de la Pauvreté au Sénégal (ESPS, 2005-2006). Agence Nationale de Statistique et de la Démographie, Dakar, Senegal
- ANSD (2014) Sénégal : Enquête Démographique et de Santé Continue. Agence Nationale de Statistique et de la Démographie, Dakar, Senegal
- Badiane, O., Camara, A., Collins, J., Elvilaly, A., Fofana, I., Odjo, S., Sidine, M., Traore, F. (2016) Senegal Agricultural Sector Status. International Food Policy Research Institute, Senegal
- Fisher, M.G., Warner, R.L., and Masters, W.A. (2000) Gender and agricultural change: Crop livestock integration in Senegal. *Society and Natural Resources* 13(3):203-222.
- Global Panel on Agriculture and Food Systems for Nutrition (2016). Food systems and diets: Facing the challenges of the 21st century. London, UK. <http://www.glopan.org/foresight>
- iDEV (2016) Evaluation des expériences et du potentiel hydroagricole pour la petite irrigation dans les zones Nord (Saint Louis, Matam), Centre (Fatick, Kaffrine, Kaolack) et Sud (Kolda, Sédhiou, Ziguinchor et Tambacounda) du Sénégal. Report to Naatal Mbay Project, Senegal.
- International Development Group (2016). Feed the Future Senegal 2015-2016 Zone of Influence Interim Assessment Report.
- International Development Group (2016). USAID Yaaajeende Program Mid-Term Evaluation. Available on the USAID Development Experience Clearinghouse, http://pdf.usaid.gov/pdf_docs/pa00mfpw.pdf.
- Knopp, L (2007). 2006 State of Business Incubation Industry. Athens, Ohio: National Business Incubation Association.
- Miller, Victoria et al. Availability, affordability, and consumption of fruits and vegetables in 18 countries across income levels: findings from the Prospective Urban Rural Epidemiology (PURE) study. *Lancet Glob Health* 2016; 4: e695–703. [http://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)30186-3/fulltext?elsca1=etoc](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)30186-3/fulltext?elsca1=etoc).
- Nene, Marc. (2016) Nutritional Outcomes in Senegal: Reducing Geographic and Socioeconomic Inequalities to Accelerate progress towards the 2025 Goals (draft). World Bank.
- USAID (2014) Climate Change Vulnerability Assessment and Options Analysis (CCVA&OA). USAID Washington.
- USAID/W DRG and USAID/Senegal EGO (2017) Political Economy Analysis of the Fisheries Sector. USAID Democracy, Rights, and Governance, Washington.

USAID LEO (2016) Youth Engagement in Agricultural Value Chains Across Feed The Future: A Synthesis Report. Leveraging Economic Opportunities (LEO) Report 46.

USAID LEO (2016) Case Studies on Facilitating Systemic Change – Ghana, Senegal, Zambia, Rwanda. Feed the Future LEO Report 49.

USAID LEO (2016) Cultivating Women’s Empowerment. Feed the Future LEO Report

USAID/Senegal EGO (2013) Structured agriculture financing for smallholder market integration : approaches and results from Senegal. Economic Growth Project, Dakar, Senegal.

USAID/Senegal EGO (2015) USAID/Senegal Environmental Threats and Opportunities Assessment (ETOA). USAID Senegal.

USAID/Senegal (2015a) Country Development Cooperation Strategy. Dakar, Senegal

USAID/Senegal EGO(2015b) Agricultural Insurance for Cereal Value Chain – Integrating conventional and index-based insurance models into value chain strengthening activities in Senegal. Dakar, Senegal.

USAID/Senegal EGO (2016a) Rapport Final De l’Assessment Du Genre Dans Le Secteur De l’Agriculture.

USAID/Senegal EGO (2016b) Youth Assessment in the Agricultural Sector. USAID M&E, Senegal

USAID Senegal (2016c) Cost Benefit Analysis of USAID/Senegal’s Rice value Chains – Final Summary Report. Dakar, Senegal.

World Bank Doing Business 2016, 13th edition:

<http://www.doingbusiness.org/data/exploreeconomies/senegal>

10 Annexes

10.1 Climate Risk Analysis

Summary of Climate Risk Management Screening of the USAID/Senegal EG4ALL PAD

General Background:

The USAID/Senegal Economic Growth Office (EGO) targets sectors, specifically agriculture and fisheries, which are sensitive to climate variability and change. EGO has already done an excellent job of considering and addressing climate change risks when planning, designing, and implementing projects. As part of the new EG4ALL (2018-2023) a Climate Risk Management (CRM) Screening was conducted. The purpose of this screening was to identify climate related risks to projects and activities in the PAD, and make these projects and activities more resilient to both current and future climate variability and change. This screening is part of implementing the Executive Order on Climate Resilient International Development and the Mandatory Reference for ADS Chapter 201, 'Climate Risks Management for USAID Projects and Activities.'

Executive Order on Climate Resilient International Development:

<https://obamawhitehouse.archives.gov/the-press-office/2014/09/23/executive-order-climate-resilient-international-development>

Mandatory Reference to ADS Chapter 201:

<https://www.usaid.gov/ads/policy/200/201mal>

Summary of Key Findings and Recommendations:

The risks of climate change to the ecosystems services that the natural environment provides to support the economy threaten many of the activities envisioned in EG4ALL project.

Much of EG4ALL focuses on agriculture related activities, which are particularly vulnerable to the impacts of climate change. Agriculture employs more than 70% of the Senegalese workforce and is the backbone of the country's economy. The combination of raising temperatures, which are expected to increase by 1.1-3.1 C by the 2060s, increase in heavy rainfall events, and potential increase in droughts, will likely have negative impacts on the agriculture industry throughout the Zone of Influence (ZOI). Smallholder farms, which are already stressed in Senegal due to degraded lands and lack of extension services, will suffer the brunt of the impacts of climate change on agriculture. Overall, climate change impacts are likely to lead to 5-25% decrease in yields nationwide. Climate change will also likely impact the quality and quantity of water availability, further stressing the agriculture industry.

EG4ALL, particularly activity 5, Sustainable Ecosystem and Fisheries Management Services, focuses on fisheries and coastal resources. Oceans are expected to rise by 1m by the 2090s in Senegal, affecting coastal ecosystems and fisheries habitat. Fisheries, which are already stressed due to overfishing, will likely be impacted by rising ocean temperatures, ocean acidification, and changes in biological cycles of marine organisms and changing fish and human migration patterns.

Highlighted below are some of the key risks, and recommendations to address those risks, for each activity.

- 1) Value Chain Services: The impacts of drought, flooding, and sea level rise, for example potential crop failure, reduced yields, and reduced water availability for livestock, were identified as high risk to the project's success. The impacts of increasing temperature, for example, crop heat stress and difficulty to store crops and seeds, was identified as a moderate risk to the project's success. EGO plans to leverage the work of previous projects', the GOS commitment to agriculture as an economic driver, and existing producer organizations to help address some of these risks. Many activities, such as integrated soil and water management services, access to seed varieties for various climates, and improved climate and weather services, are already built into the PAD and will be included in project design to help limit the impacts of climate change. There is a need for more data about how climate change is and will impact small holder farmers and where to place small scale infrastructure (such as irrigation) with consideration of climate data.

Recommendations:

- Expand previous completed climate change vulnerability assessments to cover the full ZOI.
 - Evaluate where to place infrastructure based on climate information. This could be completed by the Implementing Partner (IP) post award.
 - EGO should decide if they want to conduct an analysis of how drought/climate will reduce dam function based on the potential impacts to the project.
 - EGO should decide if they want to assess the role climate change can play on land use change, and potential impacts to agriculture systems in the ZOI.
- 2) Nutritious Food System Services: Many of the risks that are relevant for the Value Chain Services activity also apply to the Nutritious Food System Services activity. For example, the changes in water quality and quantity as a result of flooding and drought and decreased crop yields due to climate change impacts could all negatively affect nutrition. Communities and individuals that already suffer from lack of nutrition, such as smallholder farmers and women in remote areas, are likely to be most impacted. The climate risks to this activity range from high to moderate risk. Similarly to the Value Chain Services activity, many of these risks are already recognized in the PAD and will be addressed during project design. For example, EGO plans to link WASH programs with this activity to promote local solutions for water availability, build local governance capacity, and promote technologies and household decision making to support pregnant and lactating women.

Recommendation:

- Further assess how climate change and variability can contribute to malnutrition in the ZOI and integrate climate change into the nutrition causal analysis.
- 3) Employment and Organizational Services: The focus of this activity is to increase employment opportunities and enterprise development through technical training, particularly for youth and women. EGO determined that the climate risk for this activity is low. There is some climate risk to this activity because climate change could result in less employment opportunities in sectors that are vulnerable to climate change, such as agriculture and fisheries. This provides an

opportunity to integrate relevant climate change information and training to the targeted beneficiaries, especially when working in the agriculture and fisheries industry.

Recommendations:

- Accept risk that there may be reduced employment opportunities due to climate change.
- Integrate relevant climate information into training for employment opportunities. This could be done through working with other activities in the PAD.

- 4) Policy: This activity focuses on supporting GOS policies and strategies to create an economic environment that encourages entrepreneurship, competition, and investment. EGO determined that the climate risk for this activity is low. While the GOS is beginning to integrate climate change into relevant policies and strategies, and the country completed a National Determined Contribution, a Fisheries National Adaptation Plan, and a National Adaptation Plan of Action, there is still a need to strategically integrate climate change into relevant national strategies and policies.

Recommendation:

- EGO encourages the Implementing Partner to work with other projects that focus on climate change to effectively integrate climate change into relevant policies and strategies.

- 5) Sustainable Ecosystem Management Services. This activity focuses on collaborating with GOS and local fisher partners to promote sustainable fishing and enhance the participation of artisanal fishers in decision making. The impacts of sea level rise, storm surge, and changing frequency and intensity of rainfall events, and the resulting social and economic impacts on the fisheries industry in Senegal were determined to be high risk for this activity. The impacts of ocean acidification and warming due to climate change were identified as a moderate risk to this activity. Degradation of coastal and marine habitats, increased coastal erosion, and fish biological cycles due to climate change and variability could lead to decreased income for those in the fishery industry, change in migration patterns of humans, loss of jobs, and reduced availability of protein. EG4ALL proposes using some already established capacity, especially through COMFISH and CINSERE, to address many of the impacts of climate change on the proposed activity. For example, the activity will use climate information to help determine where to place coastal infrastructure, promote sustainable coastal ecosystem management, and empower and educate local fisher organizations about the impacts of climate change on the fisheries sector.

Recommendations:

- Identify results from COMFISH that are applicable to this activity.
- Conduct an assessment to determine how ocean acidification and warming can impact fisheries in Senegal.
- Work with local and national stakeholders to integrate climate change into relevant fisheries policies and strategies.

10.2 Project Logic Model

Result		Indicator	2023 Targets			Data Source	Notes
			From	To	% Change		
Goal	Sustainably reduce poverty and malnutrition in the ZOI	Prevalence of poverty (EG-a)	41.3%	TBD	PBS	Data from the 2015 Feed the Future ZOI PBS. Targets pending new CDCS & Feed the Future Senegal Strategy. Former targets were based on the \$1.25/day poverty line. New targets will likely use \$1.90/day.	
		Prevalence of stunted children under 5 (HL.9-a)	25%				
		Depth of poverty (EG-b)	13.9%				
		Average consumption shortfall of the poor	67.0%				
		Prevalence of underweight women (HL.9-d)	21.7%				
		Prevalence of underweight children under 5 (HL.9-c)	16.2%				
		Prevalence of wasted children under 5 (HL.9-b)	7.7%				
EG4ALL Purpose	Sustainably reduce poverty and undernourishment among beneficiaries	Prevalence of poverty (EG-a)	41.3%	35%	-15%	IPs	Collected by IPs. Listed targets are estimates based on current Feed the Future ZOI PBS data. They will be adjusted following the Baseline of targeted beneficiaries and the recalibration to the \$1.90/day poverty line.
		Depth of poverty (EG-b)	13.9%	10%	-28%		
		Average consumption shortfall of the poor	67%	75%	12%		
		Prevalence of children 6-23 months receiving a minimum acceptable diet (HL.9.1-a)	7%	35%	400%		
		Minimum Dietary Diversity-Women (HL.9.1-d/EG 3.3-10)	58%	67%	16%		
		Prevalence of households with moderate or severe hunger (HL.9-e)	20.9%	15%	-28%	PBS	
EG4ALL Intermediate Results	IR1: Increased income among beneficiaries	Daily per capita expenditures in USG-assisted areas (EG.3-a)	\$2.60	\$3.00	15%	IPs	Target estimates based on PBS data; to be adjusted following Baseline of targeted beneficiaries.
		Household assets index (New GFSS Wealth Assets Index)	TBD				New Indicators
		Household savings level					
		Household debt level					
		Cost of a nutritious diet					

	WEAI: % Women with adequate Asset Ownership	55.6%	65%	17%	PBS	
	WEAI: % Women with adequate Access to/Control over Credit	51%	75%	47%		
IR2: Increased consumption of nutritious & safe diets among beneficiaries	Dietary diversity of children 6-23 months (criterion of HL.9.1-a)	6%	48%	700%	IPs	Target estimates based on PBS data of women and breastfed children; to be adjusted following Baseline of targeted beneficiaries, including bottle-fed children.
	Meal frequency of children 6-23 months (criterion of HL.9.1-a)	30%	60%	100%		
	Women's Dietary Diversity (Mean # of food groups) (custom and link to HL.9.1-d)	4.7	5.5	17%		
	WEAI: % Women with adequate Workload	44%	50%	14%	PBS	
IR3: Natural capital enhanced in targeted ecosystems	Size of adult fish of critical species	TBD			IPs	New Indicators
	Number of fish in the stock for critical species					
	Number of hectares of biologically significant areas showing improved biophysical conditions as a result of USG assistance (EG.10.2-1)	N/A	500,000	N/A		Targets based on COMFISH/COMFISH+ targets; to be revised following review of monitoring protocol and Baseline.
	Number of people with improved economic benefits derived from sustainable natural resource management or biodiversity conservation as a result of USG assistance (EG.10.2-3)	N/A	200,000	N/A		

10.3 Summary of Analyses

10.3.1 Senegal - Country Overview

(World Bank, OCT 2016)

Senegal is located in the western most part of Africa's Sahel region and has a national territory that spans 196,722 km². Senegal's population is estimated at 15.3 million as of 2016. According to the latest population census conducted in 2013, 23% of the population lives in the greater Dakar region (0.3% of the territory), and 40% lives in other urban zones.

Political Context

Senegal is one of the most stable countries in Africa, and has considerably strengthened its democratic institutions since its independence from France in 1960. Senegal has had three peaceful political transitions with four presidents: Leopold Sedar Senghor (1960-1980), Abdou Diouf (1981-2000), Abdoulaye Wade (2000-2012), and since March 2012, Macky Sall.

On March 20th, 2016, Senegal held a referendum to strengthen its political system by reducing the length of the presidential term from seven to five years, creating a new consultative assembly, allowing an independent candidate status for all elections, establishing an official status for the opposition leader, and establishing the intangibility of some articles of the constitution (republican form of the State, mode of elections, term of the presidential mandate, consecutive number of mandates). The next presidential election is expected in 2019 while legislative elections are planned for 2017.

Economic Overview

Over the course of 2015, Senegal's macroeconomic performance has been strong with a growth rate of 6.5%, a rate that hasn't been achieved since 2003, making Senegal the second fastest growing economy in West Africa, behind Côte d'Ivoire.

Growth remained strong in 2016, with a rate of 6.4% during the first quarter. The primary sector is the fastest growing sector boosted by extractives, fishing, and agriculture. In agriculture, good rainfall and strong outcomes from sectors targeted by government programs (including groundnuts, rice, and horticulture) explain this outcome. Industry decelerated somewhat despite strong performances in construction, chemistry and energy, while services – which represent more than half of the total GDP – is still growing rapidly, thanks to advances in the transport and communications sectors. From the demand side, all sectors are performing robustly with exports growing rapidly, mainly due to stronger output and exports from primary sectors.

On the external front, rapidly growing exports helped reduce the current account deficit from nearly 9% in 2014 to 7.6% in 2015, despite higher imports linked to stronger growth. Similarly, higher revenues supported government efforts to progressively close the fiscal gap, which passed from a deficit of 8.5% of GDP in 2014 to 7.7% in 2015. Debt increased to close to 57% of GDP, but remains sustainable.

Medium-Term Outlook

The economic outlook remains favorable with growth projected to reach 6.6% in 2016 and progressively higher rates in the years to come. Agriculture should continue to have strong growth rates, under the condition that both the secondary (manufacturing) and tertiary (services) sectors perform robustly. In addition to low oil prices – despite some recent recovery – the economy could benefit from the continued implementation of the Plan for an Emerging Senegal (PSE), which aims to ease structural bottlenecks to growth and facilitate private initiative. Both the external and the fiscal deficit will continue decreasing as production, exports and fiscal revenues increase. This is true despite higher imports and stronger public investment. Public debt, as a share of GDP, should stabilize before gradually reducing in the medium-term.

Development Challenges

Important challenges are linked to the implementation of the PSE. Accelerating public investment may challenge the fiscal discipline, despite the manageable level of public debt. Also, despite ongoing efforts to enhance the quality of public investment, the PSE's structural impacts could be lower than expected thus reducing medium-term expectations. If improvements in the investment climate are slow to come, there will be less incentive for further private investment. Finally, while Senegal is slowly diversifying its economy, the volatility of agricultural production may also affect growth outcomes.

Oil and food prices should recover more rapidly than expected, thus pressuring the external balance. Main trade partners (including Europe and China) face their own growth challenges, which may affect Senegal's export perspectives. Continued uncertainty linked to regional security issues may delay the recovery of tourism and constrain private investment. On the other hand, nascent activity around new oil and gas reserves may boost FDI, allowing production and exports to be ahead of schedule.

Social Context

Poverty remains high in Senegal, affecting 46.7% of the population. GDP growth is well below the rates necessary for significant poverty reduction, and a growing reliance on capital-intensive exports rather than labor-intensive sectors limits the creation of new jobs. Repeated shocks in recent years have further hampered progress, with poverty incidence decreasing only by 1.8 % between 2006 and 2011, and the number of poor actually increasing to reach 6.3 million in 2011.

Inequality in Senegal is moderate, and slightly lower than the Sub-Saharan African average. However, geographic disparities are very pronounced, with almost two out of three residents poor in rural areas, especially in the south, versus one in four in Dakar. Progress has been made on access to education, but a significant number of youth only go to Koranic schools that are not aligned with the public school curriculum. Child begging related to some of these schools remains a problem, notably in Dakar.

To promote the welfare and human capital of the poorest, President Sall has committed to accelerating the roll out of the National Family Security Transfer Program (Programme National de Bourses de Sécurité Familial).

10.3.2 Agriculture Sector Analysis

Based on the recent study from Badiane *et al* (2016), the metrics describing agricultural development in Senegal are, on average, positive. Over the 10 years prior to 2013, Senegal made the transition from net agricultural importer (US\$47.9M) to exporter (US\$16.3M). Over this Agricultural production index has increased by 25%, mainly supported by improvements in rice yield (doubled to 4T/ha), and a large increase in horticultural production (mainly beans, tomatoes, and mangoes) (Badiane *et al*, 2016). Millet, sorghum, and maize have all remained constant. Groundnut still retains the number one position for both land area (>1M ha), and value of production (US\$600M). From an export value perspective, the horticultural crops have seen a marked growth in importance, now moving into second place behind groundnuts.

Economic modelling by Badiane *et al* (2016) has also identified horticulture, coffee/tea/cocoa, spices, and sugar, as having significant Comparative Advantage for future production, over other sub-Saharan countries.

While value-add returns to number of workers and land areas have increased (6.7 and 23 %), they still lag behind the sub-Saharan African average. When referring to actual employment, the good growth in the sector has spurred a 30% increase in agricultural employment.

The fact that these positive results have occurred in an environment of decreasing share of government expenditure on agriculture (9% vs 6%), also shows the increased importance and availability of private sector investment. Anecdotally, a large proportion of investment is from Senegalese entrepreneurs, rather than outside investment.

Metrics regarding nutrition and poverty have remained fairly constant over this time period.

Gender considerations are extremely important in the fast-growing, high value sectors, such as horticulture and agro-industries. Female employment is significant to this sector, representing 90% of labor in mango/bean exporting companies, and 60% in the tomato export companies. However, there is a great bias against women capturing more of the production value through actually growing themselves, and competing for the supply contracts to these exporters. The factors that exclude female participation in the contracting are their lack of access to productive resources – land, labor, water, finance.

When considering Climate Vulnerability Indicator, calculated from the coefficient of variation of rainfall, the entire population of Senegal is highly vulnerable. Rainfall variation over the period 2000-2015 is shown in Figure 7.

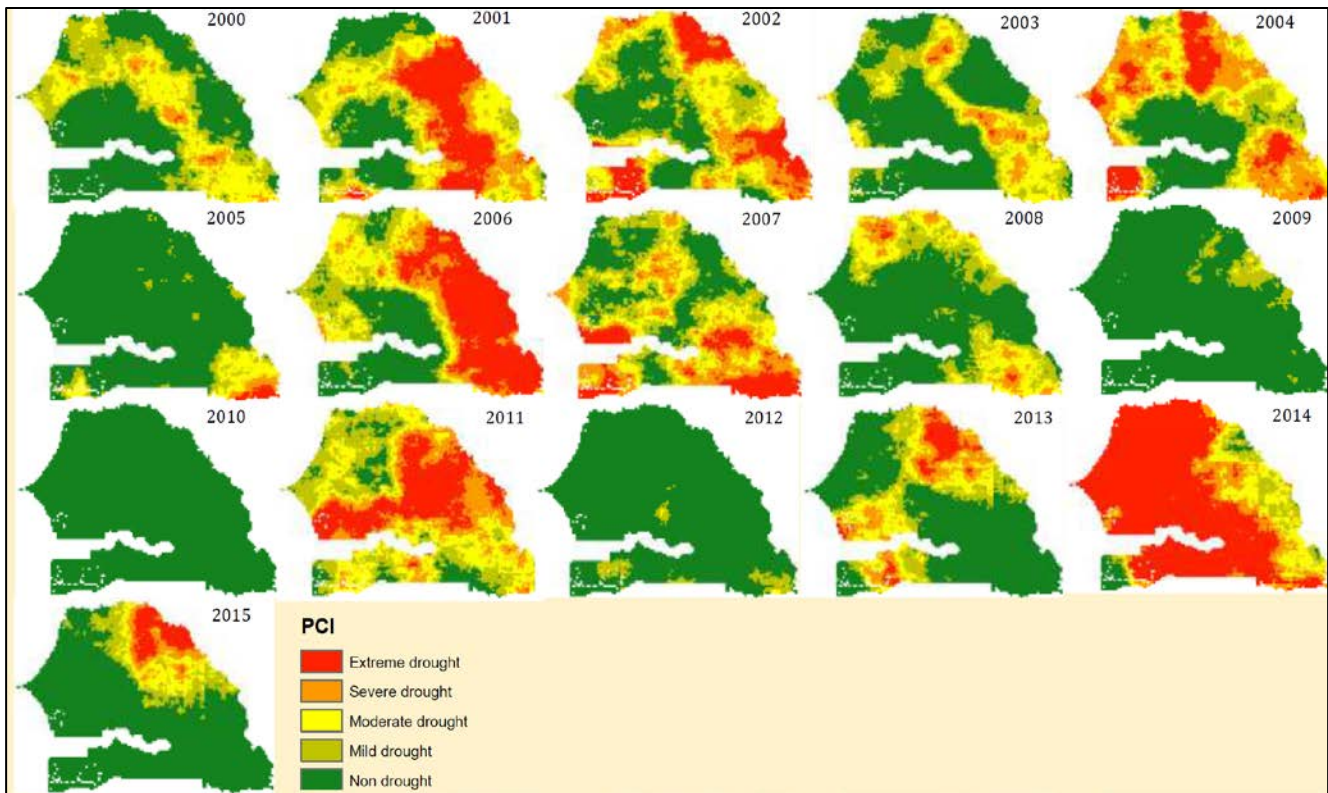


Figure 7. Precipitation variability over the period 2000-2015 (Badiane, 2016).

10.3.3 Feed the Future Value Chain Activities, Achievements and Remaining Challenges

Feed the Future Senegal Naatal Mbay was launched in March 2015 with the aim to significantly scale-up and expand successful smallholder-centered and market-driven value chain approaches developed under the USAID/Economic Growth Project (PCE). The focus remains on irrigated rice in the Senegal River Valley, maize, millet and rain-fed rice in the Southern Forest Zone of Casamance and Lower Peanut Basin. The activities are organized around three main components: i) boosting productivity, ii) improving agricultural markets and iii) strengthening the overall policy environment. The activity is implemented in collaboration with three local strategic partners: a think tank, a country-wide farmers' organization and a firm specialized in risk management and crop insurance

Introducing a new model for contract farming in irrigated rice, maize, and millet value chains, is PCE/Naatal Mbay's most prominent intervention, and arguably has generated the most impact from among all of its interventions. In the Delta of the SRV and in The Lower Saloum, it generated a broadly adopted robust contract farming system that addressed systemic structural market issues. Through this market-based approach Naatal Mbay significantly reduced the risks, difficulties,

conflicts, and uncertainty of procuring rice, maize, or millet on the open market and consequently resulting in transformative changes and increasing the sustainability of USAID investments. In the Anambe Valley in upper Casamance, it generated the first-ever Integrated Model of Financing. Based on lessons learned from the Delta, this model is helping hundreds of small farmers to expand their production by having the means to access higher quality seeds and other inputs. These key successes among others were made possible mainly by the soft facilitation and collaborative approach that guides all Naatal Mbay interventions.

As outlined by the LEO report 49 (Case studies on facilitating systemic change), there are signs the contract farming model as a whole is becoming increasingly adopted. The 3 processors interviewed for the study are now supporting over 3,000 smallholder farmers annually, compared to approximately 400 that they used to support before. Additionally, 20 processors and small-scale millers are participating in the system, allowing for in-kind reimbursement, with over 55,000 tons of paddy worth \$12 million estimated by the project in the 2016 dry cropping season.

This model is a modification of the traditional filière that is widespread in francophone countries, in which farmers are provided inputs, which the contracting entity (typically tied to the state) deducts from the cost of those inputs (sometimes highly inflated) when it buys the final product. The following table compares the model promoted by Naatal Mbay with a typical filière system.

Table 2. Traditional Filiere system approach versus Naatal Mbay contracting agriculture approach (source: LEO report 49, Case studies on facilitating systemic change)

ASPECTS	FILIERE SYSTEM	NAATAL MBAY MODEL
Buyer	There is a single buyer – typically a state entity	Multiple buyers compete to purchase the rice
Repayment currency	Payment made with crop mainly	Payment can be made with crop or cash
Side Selling	Farmers must sell their entire crop to the single buyer	Farmers do not have to sell their entire harvest to the buyer – only enough to clear their crop loan
Repayment value	Price is typically set based on the market value of the crop during the harvest period	A uniform price is agreed immediately before harvest
Quality assurance	Poorly understood by most actors, not widely disseminated.	Well understood by all actors; widely disseminated through flyers.
Bargaining power / market governance	Monopolistic; farmers have no bargaining power. Only large companies maintain records on production	Market based; producers can sell to any of multiple buyers competing for product Redundancy is purposely built into the system: all actors (including farmers associations) maintain records on production and draw on these during negotiation

In the Delta of the Senegal River Valley and Lower Saloum, for irrigated rice and maize value chains, Naatal Mbay consolidated and scaled up this integrated value chain financing model. USAID helped mobilize in FY16, US\$ 13M of credit in the irrigated sector, which represents 300% of increase

compared to the 2012 startup year. In the same time, the average default rate recorded by the agricultural credit bank decreased from 30% to 5%. To consolidate the innovation, a computerized platform is set in motion for real-time monitoring of paddy rice stocks as in-kind repayment of loans, which fills a huge gap in the irrigated rice value chain financing system.

None of the market actors involved in the machinery leasing model have discontinued their participation. Rather, most actors have actually expanded their operations. To be profitable, processors need enough quality rice for their newly acquired rice mills to operate for at least eight months. Farmers are reliant on credit, and so are keen to demonstrate their creditworthiness. Millers all plan to support more farmers in order to pay back the cost of their equipment to Locafrique. This has given the millers a vested interest in making the system work. Locafrique represents the most significant case of potential adaptation of the initial model introduced by Naatal Mbay. They have adapted their product offering to leasing larger agricultural equipment like rice millers, and now plan to convert into a bank that will offer working capital financing to actors in the rice sector. Locafrique has also sourced new lines of credit at more favorable rates to be able to reduce the interest rate that it is charging its clients in the SRV.

In Casamance, the South Forest Zone, dissemination of high-yielding upland and lowland rain fed rice varieties, and associated climate-smart best practices, is a core Feed the Future activity. Initially centered on upland Nerica varieties, the technology portfolio has expanded to lowland varieties, including varieties outside the Nerica portfolio. Beyond certified seeds and improved farming methods, the best practice package disseminated by USAID/PCE partner networks includes conservation farming with ripping for land preparation and mechanized seeding. Upland rice technology is not only about certified seed of new varieties such as New Rice for Africa (NERICA) but also requires adoption of line planting, attention to seeding density and regular weeding. PCE/Naatal Mbay also promoted conservation farming's limited tillage technologies that mitigate the risk of rainfall interruptions, improve fertility and boost yields to more than 2T/ha. In 2016, small holder farmers in Casamance started generating tradable surpluses leading to commercial rice production.

Naatal Mbay used a mix of interventions that featured a strong facilitation approach, but also undertook interventions in providing high direct subsidies through cost sharing. This includes their work in the seed sector, in which seed treatment centers were renovated or built through PPP, and their cost-sharing financing of extension and database management staff to support contract farming. This support gave local systems actors' capacity to deliver extension services, inputs, and financing that includes insurance. The use of organized and inclusive local producers' networks as main field partners and delivery channels of activity support services facilitated effective community appropriation of productivity-enhancing technologies and best management practices even in the traditional rice farming system of Casamance where women are fully engaged in the take-up process.

Today, in the Senegal River Valley and the South Forest Zone, 100,326 cereal grassroots producers including 40,133 women across 82,899 farm households, and 134 private enterprises including 12 medium size cereal processors directly benefitted from value chain development activities.

Training on production and post-harvest best practices including quality standards were delivered to these grass root farmers through 2,527 mixed producers' organizations and 340 women's groups. Farmer-owned cloud databases are operational within 130 producers' networks and mainly used to support cross learning, market interactions and increased professionalization of producers' organizations. Naatal Mbay is on track in realizing its performances by 2019.

The value of agricultural loans mobilized with support from the activity reached \$25.3 million (M) in FY16 and 18,022 farmers subscribed to crop insurance. Around \$10M of these loans were mobilized by wholesalers/processors, micro, small and medium enterprises (MSME). Production surplus and greater access to market allowed 72,862 small-holder cereal growers to realize \$14.5 M of incremental sales by commercializing 96,793 metric tons of maize, millet, and rice. The number of full-time equivalent jobs created in rural area reached 10,068.

There has been ongoing investment by all actors involved in equipment leasing, with little direct involvement by Naatal Mbay. Locafrique has continued to invest in its business expansion through its partnership with Naatal Mbay, including through the opening of a permanent office in Saint Louis to manage its leasing operations. This has occurred without ongoing subsidy by Naatal Mbay. IPAR leads the update and communication of value chain studies and provides technical leadership on the design and analysis of the Naatal Mbay baseline. WEAI and ASPRODEB are evolving into full-fledged implementers of Feed the Future objectives beyond Naatal Mbay. As a result of Naatal Mbay interventions, ASPRODEB is currently providing capacity building services to farmer organizations in commercial grain production, improving access to small agricultural equipment, consolidating producer networks, developing farmer friendly equipment financing formats and playing a direct role in the collection, consolidation, and analysis of M&E data at the regional level.

Reasonably strong farmers' associations and geo-referencing allowed for accurate estimates of members' production potential and input requirements. With this information, lenders have accurate information on farmers' production potential, and buyers know exactly where farmers are located. Thus, the contract farming and its related integrated model of financing resulted in increased rice farmers' yields, product quality, and profitability. Today, the participating value chain actors are demonstrating commitment to expand upon this model beyond 2019. The activity interventions across target zones and value chains revealed that a comprehensive, precise, and up to date geo-referenced database on key private actors particularly in the informal sector is highly critical and deserves more attention in the future.

To face climate change and climate variability impacts particularly on rain fed cereal, our Feed the Future value activities successfully implemented a Cross Cutting: Climate Response Integration based one: (i) Farmer-led trainings based on Climate change modules for best practice, (ii) Improved seed varieties, (iii) Climate-smart management systems, (iv) Climate information services and rainfall tracking linked to Farmer-owned databases and Regional Office for Rural Development (DRDR) monitoring system, and (v) Index Insurance. This effort needs to be consolidated by the next generation of USAID interventions. The current model is farmer-led, but to get to scale needs to have financial institutions take on more of a role to simplify and streamline procedures. Bundling insurance with portfolio credit will allow financial institutions to diffuse risk

across their portfolio and to maintain lending behavior to lower premiums for early subscribers, thus enabling more farmers to enter the system.

With support of ASPRODEB a USAID value chain activities sub-contractor that leads several initiatives in the seed and cereal sectors both nationally and in the West African region, thirteen local organizations involved in seed production developed and adopted a Three-Year Seed Plans (PTS) for rain fed rice varieties to meet the fast growing needs. They are fully committed to the success of this initiative that also involves agricultural research, other activities and programs involved in rice farming, technical support agencies, and financial institutions.

Naatal Mbay learned with time that building redundancy into the system was an important characteristic supporting systemic change. So instead of only training the rice mills on quality standards, they also built the capacity of farmers and the banks. This helps to equalize the power in the relationship at selling time, relative to enabling only one actor to be the arbiter of quality. The same lesson applied to the management of information on production levels. Naatal Mbay found that the millers, bank and farmer associations all needed to manage information on production estimates and volumes harvested and reimbursement levels. This builds the capacity of all actors to negotiate effectively and have the information needed to make their own analysis and decisions.

Key aspects that underlay Naatal Mbay's success in scaling up PCE's successful interventions were:

- Using a push-pull approach by helping producers increase yields, production, and quality and by increasing market demand through facilitating linkages to processors and distributors, and strengthening those downstream institutions.
- Kick-starting private upstream and downstream investment through subsidies, risk mitigation, and market facilitation. Examples include PCE's support for agricultural machinery leasing through Locafrique and innovating crop insurance with the GOS.
- Translating this push/pull and kick-starting into a virtuous spiral, this by 2014-15 had become increasingly self-generating.
- Aligning the incentives for farmers, banks, processors, machinery services, and wholesalers so that everyone makes money. In some cases, this has been complicated by GOS-induced distortions of prices and margins at various stages of the value chain.
- Addressing risk for key actors. This was particularly true for banks and the CNCAS and was addressed through the innovations of contracting farmer production, crop insurance, and the use of a warehouse receipts system.
- Partnering with a local think-tank as lead actor that has genuine professional interest in the subject area and technical backstopping of external specialists produced a double impact on both efficiency and local research capacity development.
- Data collection scheduling should take into account variables that are time sensitive with potentially significant variations across seasons such as grain marketing prices and women's daily occupation calendar.

Expected main remaining challenges, at the close out of USAID ongoing value chain activities,

are:

- Reaching the last mile in farm productivity. Current interventions are closing the yield gap in production, in the Delta. Future interventions there must focus on bottlenecks to double cropping and MSMEs development. The Senegal Upper River Valley and the South Forest Zone, despite huge progress on yield increases that lead to cereal surplus for markets, investments to scale up successful models in the Delta are still needed.
- Lack of a clear strategic policy orientation and effective coordination of donor supported initiatives particularly in the seed and agricultural equipment sectors hinders the dynamism and motivation of emerging private entrepreneurs who are engaged or who could potentially invest in those domains
- Lack of mid-scale storage infrastructure is crucial for effectively sustainable growth of commercial farming and particularly for integrated financing of cereal value chains. There is a need to promote a policy environment conducive to private investments in warehousing services.
- Grain markets are not solely driven by large scale formal buyers. An important intermediate level made up of small scale SMEs and wholesalers represents a powerful segment that needs to be integrated in the value chain development strategy, especially in the more remote zones.
- Unlocking the potential of cereal value chains can lead to more job creation and women's economic empowerment, increase small holders' resilience through diversified cash revenue sources. This will require strengthening private sector actors in processing and agricultural services particularly in the Senegal River Valley where the level of double cropping is a strong indicator of value chain integration and competitiveness in accessing urban markets. Furthermore, USAID value chain activities need to adapt and replicate PCE/Naatal Mbay's successful interventions in other potential value chains.

10.3.4 Water Management Schemes in Senegal

The following is a summarized version of iDEV (2016).

The purpose of the study is to identify the potential of small irrigation schemes and analyze best practices in Senegal

The specific objectives of the study were:

- To survey existing strategies for improved management and use of water resources;
- To analyze Senegal's current and prior experience related to water use for productivity in order to derive best practices.

Study recommendations are based on documentation research, discussions with stakeholders and field visits which focused more specifically on the following questions:

- On-going schemes with their strengths and weaknesses;

- Realized infrastructures and the partners who implemented them;
- Ways people get water and how it is managed;
- The implementation of water management schemes and how the local population was involved;
- The operating process with the costs and performances associated;
- The ways equipment is transferred to users;
- The relevance of the components financed;
- Role and importance of social engineering and the sustainability of the initiatives;
- Scales of intervention of the projects;
- Duration of the projects and the importance of each phase;
- Strategic integration of women and youth in the projects;
- Role of private sector and local government;
- Possibility to improve and to scale up the best models.

Considering the results of the field visits and the interviews, the study concluded the following:

Findings

Water supply systems include:

- Drillings, wells, pumps to access ground water;
- Water retention basins fed by pumped water;
- Dams to collect rain water;
- Pumps to extract water from rivers.

Realized infrastructures include:

- Big perimeters with a good management system, in the Senegal River Valley;
- Dams in the Kayanga and Anambe basins;
- River infrastructure in the center and the south;
- Anti-salt dams in the southern and central regions of Senegal;
- Banana perimeters in the Gambia river valley;
- Vegetable growing perimeters.

The report provided a list of the various irrigation systems found in the area of study. They included:

- The Californian system;
- Watering sprinkler;
- “Gandiolois” system near vegetables perimeters;
- Drip (goutte a goutte) irrigation;
- Flooding.

Several interesting observations:

- In the vegetable growing perimeters of villages and banana producing areas, access to land is possible through administrative acts issued by the collective. Members of a farmer or other group, such as GIEs, pay a financial contribution.
- Banana perimeters are operated mainly by men;

- In the Senegal River Valley and lowlands, women cultivate rice and vegetables. In Casamance, men and women both work on rice perimeters; men own the land but sometimes turn it over to women to cultivate.
- Youth work in banana perimeters.

Constraints underlined by the stakeholders:

- Lack of enough water in banana perimeters;
- Lack of enough fertilizer in banana perimeters (the amount of fertilizers subsidized is limited);
- Failure of pumping systems (many systems stop functioning soon after the end of the support from the projects or partners);
- There is lack of secondary infrastructures in the Senegal River Valley and lowlands. The water is not well managed down-stream of the valley;
- Lack of capacity of the population to repair and maintain the equipment at the end of the projects funded by the Government or certain partners. In banana perimeters where people are supported and trained, results seem to be more sustainable;
- Lack of coordination between partners; and,
- Lack of labor mainly in perimeters cultivated by women.

10.3.5 MSME Study

Introduction: Purpose and Background

One of the most viable strategies to achieve national development goals in both developing and developed nations is to promote micro, small, and medium-sized enterprises (MSMEs). MSMEs increase competition, generate employment, and promote entrepreneurship while boosting economic vitality at the community level and creating sustainable livelihoods.

In Senegal, MSME's are the dominant form of business organization and the main source of job creation and income generation for the majority of the population both in the urban and rural areas. Concerned with rising youth unemployment and persistent poverty, the GOS and its development partners have renewed their interest in and prioritized MSME promotion as a means to address these problems, especially among youth.

Youth unemployment is a major quandary for Senegal (see Figure 8); it inhibits the nation's economic well-being. Recently, the extension of the retirement age, coupled with a public sector hiring freeze, has made it even more difficult to find jobs. Older employees remain in the labor market while opportunities for job creation are limited. In response, young people have turned to the informal sector to survive. This is evident in urban areas where more than 43.9 % of workers from age 15–24 work in the informal sector. Others resort to illegal migration, typically to Europe, that regularly results in death at sea or deportation. Crime has also become an alternative for troubled unemployed youth, particularly in drug trafficking, theft and drug-use.

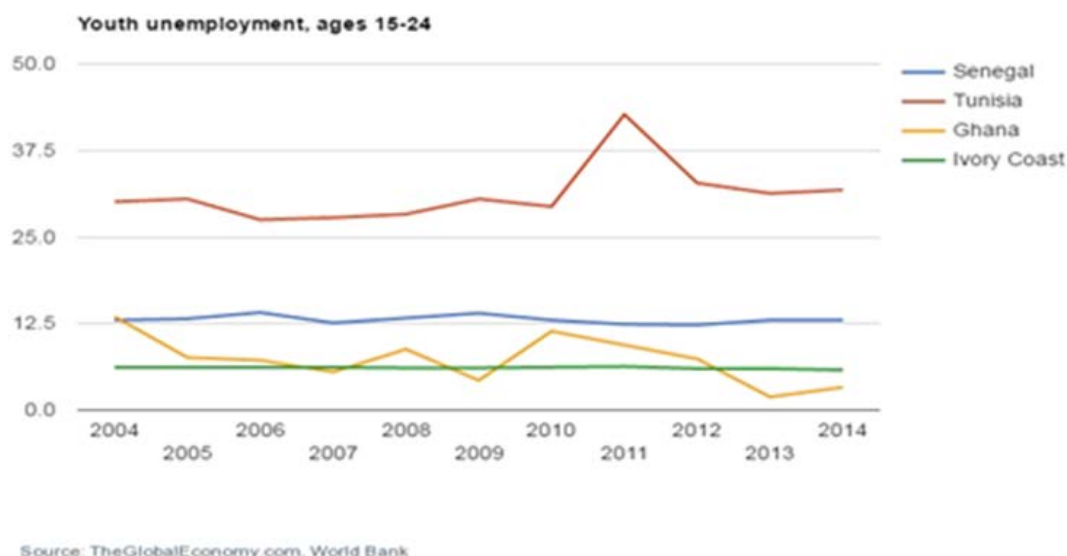


Figure 8. Youth Unemployment rates (GlobalEconomy.com, World Bank)

Several challenges must be addressed to provide a basis for the development of a viable and effective MSME development strategy that promotes jobs and incomes for poor people in rural and urban areas. This document lays out the key challenges affecting the MSME sector and proposes a strategy for addressing them. The document is divided into five (5) sections:

- trends in MSME performance
- constraints to MSME development
- Potential opportunities
- framework for promoting MSME development
- implementation issues to consider

The strategy draws on a recent desk study commissioned by USAID and the results of extensive consultations by EGO/Senegal staff with cross-sections of private and public sector actors in strategic regions and sectors. Information from lessons learned and key results from evaluations of various Feed-the-Future (Feed the Future) projects have also been used to inform the strategy. Some of these documents are included as attachments.

Trends in MSME's Development in Senegal: Growth and Contributions

According to a GOS study, the informal sector employs 2,216,717 persons, or 48% of the active population and it accounts for 41.6% of GDP and 57.7% of non-agriculture value added. As for SMEs in the formal sector, 71.8% of their activities are concentrated in the tertiary sector, while manufacturing and construction represent 12.9% and 7.5%, respectively. Medium-size enterprises realize 94.2% of total SME sales. Only 5.3 % of the surveyed businesses are involved in exports. Commerce and vehicle maintenance represent 37% of total exports, followed by other services

(22.1%), manufacturing (17.4%), construction and public works (15.0%). Investment amounted to CFA 87 billion. Most of the investment is concentrated in the following sectors: commerce and vehicle maintenance; other services; and construction.

Definition of MSME's under Senegal's legislation:

Micro and very small enterprises are defined as those:

- employing from 1 to 20 employees;
- keeping simplified accounts internally or through a duly authorized private accounting center; and
- realizing annual sales (before taxes) not to exceed the amount to be liable for the Contribution Globale Unique, a global tax applied to micro and small businesses.

Medium enterprises are defined as those:

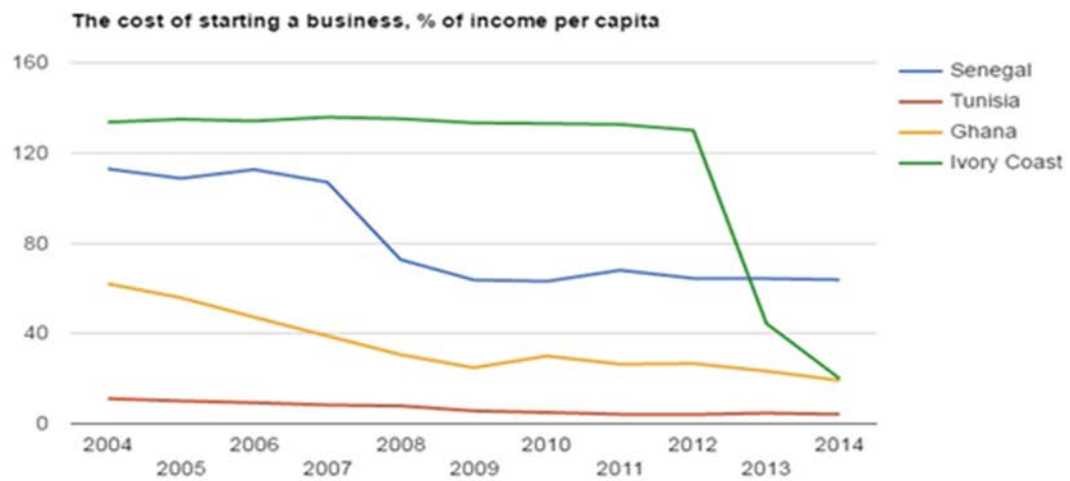
- employing from 21 to 250 employees;
- keeping regular accounts in compliance with the current accounting system prevailing in Senegal and certified by a member of the National Association of Chartered Accountants; and
- realizing annual sales (before taxes) not to exceed CFA 5 billion.

While MSMEs are a key driver of growth, they do not yet play a key role in driving economic development. Although 300,000 SMEs account for 90% of businesses in Senegal, they only account for 42% of total employment and just 33% of total value added.

Constraints to MSME Growth and Development: Business Environment, Capacity, and Markets

Despite being a significant source of employment and contribution to GDP, MSME's face a variety of challenges that inhibit their growth, including: an improving but still unfavorable business climate; limited access to credit; inadequate managerial and technical skills; limited access to information; limited competitiveness; high regulatory burdens; and limited formalization.

According to The World Bank Doing Business 2016 report, Senegal has taken important steps to improve its business enabling environment with the creation of the Presidential Council on Investment, the establishment of a one stop shop for business registration and the reduction of corporate tax rates. However, in the opinion of business leaders, as conveyed in the World Bank Doing Business Report, sustained efforts are still needed to improve the regulatory aspect of business, despite some successes over the last decade (Figure 9).



Source: TheGlobalEconomy.com, World Bank

Figure 9. Cost of Starting a Business (Global Economy.com, World Bank)

The administrative burdens for paying taxes, the inefficiency of contract enforcement, the time and cost involved in registering property, and the strength of minority shareholder protections against misuse of corporate assets by directors for their personal gain, increase cost and risk to businesses, prevent them from having access to world-class services, and hinder investment and competitive business performance. These factors have discouraged entrepreneurship and new business formation and have resulted in large numbers of informal firms that have labor productivity levels that are only 7% to 10% that of formal ones.

MSME sustainability is also a major challenge. Information from the newly established Dakar Municipal Small Business Incubator suggests that more than 60% of microenterprises do not survive after two years of activities (CEPEM- 2016). The main reasons provided for the low survival rate are the lack of information and the absence of technical support and training. A review of SME performance indicators such as labor productivity, capital productivity, economic profitability, and financial profitability also suggests that SMEs are performing less well than the aggregate of enterprises in the formal sector. (Direction des Petites et Moyennes Entreprises- DPE- 2005). This finding is confirmed by the *Agence nationale de la statistique et de la démographie* (ANSD)-SME survey which indicates that despite their numbers, SME contribution to the country's wealth creation is relatively weak, as illustrated by its 25.4% contribution to GDP. The survey also highlights SMEs' low competitiveness and limited investment capacity.

The 2016- 2017 Global Competitiveness report highlights the 10 most problematic factors for doing business in Senegal. Of these, the three most critical factors are: (i) access to finance (26.3%); (ii) tax rates (15.2%); and (iii) corruption (7.8%). Such diagnosis is consistent with the findings of the ANSD survey on SMEs. According to ANSD, 48.7% of surveyed enterprises cite access to bank

lending as a constraint in addition to 40% of a group of firms that cite difficulty accessing decentralized financial institutions. Tax rates are also cited by 78.5% of the enterprises as a major impediment to doing business.

Most of these challenges are confirmed by the ANSD surveys of the informal sector. The surveys show that the key constraint to informal sector activities is its inadequate customer base, as cited by more than 60% of surveyed businesses. The other constraints include: (i) stiff competition (36.7%); (ii) inadequate access to credit (27.3%); (iii) heavy tax burdens (19.2%); and (iv) inadequate input supply (19.1%). (ANSD 2013)

To summarize, these constraints to MSME development in Senegal fall in three main areas: poor business environment that raises the cost of doing business; ineffective strategies meet the demands of the market for the sectors in which they operate; and inadequate managerial and technical capacity to effectively operate an efficient and competitive enterprise.

For MSMEs to play greater roles in employment creation and income generation and to reduce poverty, addressing these challenges is essential. With the vast majority of businesses in Senegal either small or medium-sized, the growth of the MSME sector can generate significant employment and income for the Senegalese population.

Potential Opportunities: Local and External

Over the last several years USAID has, supported and continues to support projects that have created a strong foundation for the development of an MSME promotion effort in key sectors. Notable among these are the following:

- USAID/Yaajeende is a five-year Feed the Future (Feed the Future) project designed to reduce malnutrition in the Matam and Kédougou regions as well as the Department of Bakel — an area representing the northeastern one-third of Senegal. The project is implemented by NCBA/CLUUSA (prime awardee) and Counterpart International, Heifer International, and Sheladia Associates (sub-awardees). The project's goal is to accelerate the participation of the very poor in rural economic growth and to improve the population's nutritional status. The development hypothesis of USAID/Yaajeende, one of USAID's first Feed the Future projects, is that an integrated approach to agriculture, economic growth, and nutrition can lower the rate of undernutrition much more rapidly than by focusing on agriculture or economic growth alone.

USAID/Yaajeende activities are divided into five major areas: increasing the availability of food by improving the diversity and sustainability of agricultural production and promoting sustainable land management; increasing and diversifying revenues from agriculture by stimulating key agricultural markets and value chains; reducing undernutrition and ensuring a healthy diet through improved utilization of foods; improving capacity for local governance of food-related resources; and cross-cutting activities, such as expanding the role of women in food security and nutrition.

- COMFISH - The Collaborative Management for a Sustainable Fisheries Future (COMFISH) in Senegal is a five-year project that began in 2011. The initiative is supported by the USAID/Senegal, and is being implemented by the CRC with local government, NGO, and private sector partners as

well as fisheries stakeholders. The project goals are to promote sustainable fisheries co-management and to support the government of Senegal's efforts to achieve reform of its fisheries sector as delineated in the Fisheries and Aquaculture Sector Policy Letter of 2008.

- USAID Cereal Value Chain Project (CVC) - The purpose of the project is to increase agriculture production, productivity, and incomes, by both increasing direct income to men and women farmers, as well as through various value-added, income-generating activities carried out by value chain actors (including input suppliers, farmers, traders, processors, wholesalers, buyers, and exporters). The project will also support services that strengthen the value chain including agricultural technology providers and financial service providers. The USAID CVC project seeks to identify and contribute to resolving key constraints with respect to the local and international enabling policy environment, to allow systematic and long-term transformation of the agricultural sector, led by the cereals value chains. Activities includes, improved crop management and productivity of rice, millet and sorghum; Agricultural technology development and promotion; Market linkages; Promotion of trade; Irrigation infrastructure and management; Support water user associations; Soil management practices; Resiliency techniques promoted; Capacity building.
- USAID is working with Senegalese local private actors such as Coumba Nor Thiam, a medium-sized rice milling firm in northern Senegal, to improve smallholder rice farmers' ability to scale up rice production through improvements in processing capacities, storage facilities, modernized harvesting equipment and to access urban markets. By partnering with local companies in Senegal's rice value chain, USAID is working to increase food security and decrease poverty and strengthen SME development.
- Trade Africa is a partnership between the United States and sub-Saharan African countries to increase internal and regional trade within Africa, and expand trade and economic ties among Africa, the United States, and other global markets. American support for the development of Africa's economic growth is a strategic decision. For both the U.S. and Africa, trade generates new export markets for goods and services, allows for new job opportunities for unemployed and disaffected youth, and improves the overall business environment, making conditions more appealing for private investment.
- Power Africa is a partnership between the United States and sub-Saharan African countries to add more than 30,000 MW of cleaner, more efficient electricity generation capacity and 60 million new home and business connections.

In 2013, Power Africa was launched, bringing together technical and legal experts, the private sector, and governments from around the world to work in partnership to increase the number of people with access to power. Two out of three people in sub-Saharan Africa lack access to electricity.

In addition to these donor-based projects, the GOS has undertaken a number of initiatives to support MSME development among which the following offer additional opportunities:

- Subcontracting with larger firms. In 2000, the GOS launched the Senegal Subcontracting and Partnership Exchange ("Bourse de Sous Traitance et de Partenariat du Senegal" (BNSTP-S) based

on the Tunisian model. This institution is an information center that brings together larger producers and smaller providers on a continual basis. In 2008, the GOS supported the preparation of a charter, as a framework defining the relationships among the stakeholders. According to the SME survey, only 18.3% of surveyed businesses are involved in outsourcing activities. It is therefore important to increase the number of meetings and business contacts to help large enterprises to be better informed about potential linkage-type arrangements with the SMEs. (ANSD, 2014).

- Access to GOS procurement and acquisition of goods and services. According to the SME survey, only 46.6% of surveyed firms are aware of GOS procurement and acquisition opportunities which are annually valued at more than CFAF 800 billion. By getting better informed and strengthening their management capacities, SMEs will be able to benefit from such opportunities.

Beyond these project-based opportunities lie significant opportunities ranging from emerging entrepreneurial opportunities enabled by the information age to increased engagement by the burgeoning Senegalese diasporas in the US and Europe. Over the last several years, Senegal has increased its profile in the IT space with a number of Senegalese entrepreneurs developing platforms that serve local and regional markets. Some of these entrepreneurs have also benefited from the USG Young African Leaders Initiative. Further, the Senegalese Diasporas are active in financing businesses and providing social support to the home land. While these efforts have not needed donor support to continue, they can be leveraged, enhanced, or supported to generate greater employment and income effects by modifying and employing tools that have proven effective in other contexts such as the Lebanese, Indian, Chinese, and Taiwanese diasporas.

Thanks to its strong credibility and leadership, the United States Government (USG) has sufficient leverage to advocate for an inclusive dialogue between the GOS and all segments of the private sector to build a balanced relationship of trust and confidence between the parties. The Donors' Private Sector Working Group, which is led by the US Ambassador, could be an ideal instrument to support this initiative.

Increased support to strengthen the MSME's through value chain approaches is essential to help Senegal attain economic transformation and growth. USAID/ Senegal is continuing to support the GOS reform agenda aimed at better exploiting the major opportunities for the agricultural sector. Therefore USAID may play a leading role in facilitating the dialogue between the GOS and other stakeholders. The "Conseil Supérieur d'Orientation Agro- Sylvo- Pastorale" (CSAOP) was instituted in 2008 as a framework for an inclusive and direct dialogue of the Head of State with the rural actors. That structure has never held a meeting.

Strategic Framework for MSME Development

For Senegal to take adequate advantage of these opportunities to create jobs and incomes for regions and populations with low incomes, a strategic approach that sufficiently alleviates these constraints is needed. Such an approach must address firm-level challenges as well as challenges arising from the poor business climate and the limited capacity to meet the demands of the market.

The USAID/Senegal Economic Growth MSME strategic plan has three broad components. The first focuses on lessening governmental constraints that impede MSMEs growth and development to contribute to the private sector economic growth of Senegal. The second part addresses the development of a range of services to support MSME development such as incubation services, technical assistance, entrepreneurship, information services, financial services, etc. Such services are critical over the long-term if MSMEs are to grow and become more competitive in local, regional, and international markets. The third component seeks to strategically build and strengthen market linkages to help increase access to better markets and reduce risks. USAID’s proposed strategic framework, highlighting the key elements, is presented in Figure 10 below:

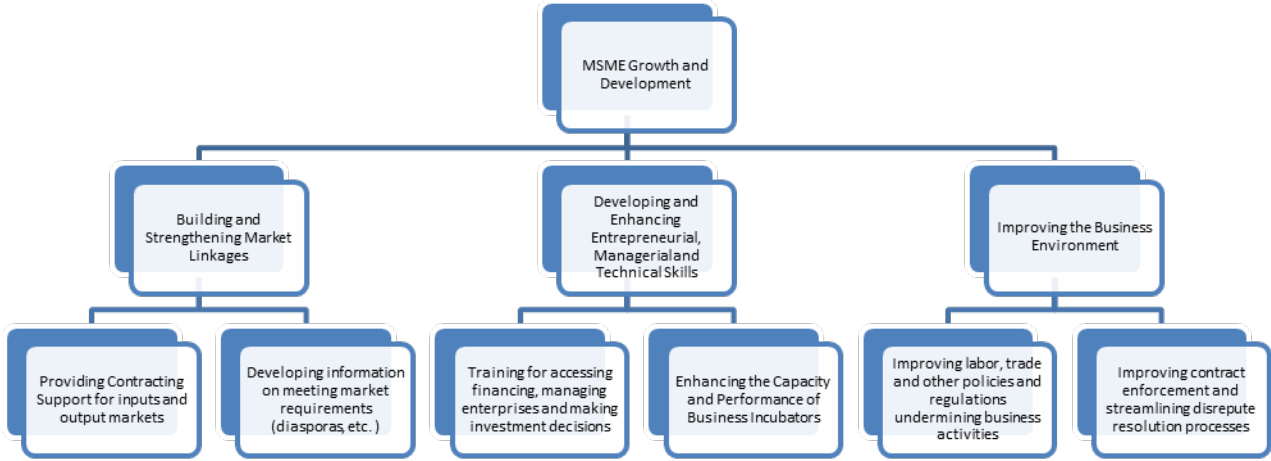


Figure 10. Strategic Framework for MSME Growth and Development

The goal of this framework is to promote MSME growth and development through three key channels: 1) Building and strengthening market linkages; 2) Developing and enhancing entrepreneurial, managerial and technical skills; and 3) Improving the business environment.

Building and strengthening market linkages

Building and strengthening market linkages will entail the use of appropriate mechanisms to reduce moral hazard and other risks, thereby increasing access to key inputs and output markets on a more viable and stable basis. Drawing on the experience from northern Senegal where USAID has successfully used contracts to increase access to credits, inputs and other output markets in the cereal value chains, MSMEs will be assisted in forging viable contracts for improved market access.

This effort will also entail developing key external market information systems such as on the Diasporas to increase the capacity for Senegal’s products to serve those markets. This would entail market research, publicity and outreach efforts. The Diasporas effort will include building relationships to facilitate Diaspora investments in key MSMEs as well as MSME’s potential to supply the Diasporas.

Developing and Enhancing Entrepreneurial, Managerial and Technical Skills

To address skills gaps and expand the pool of entrepreneurs, it is crucial to support existing business incubators and provide technical training to improve managerial and operational performance of MSMEs. This will entail working with established business incubators to reduce critical gaps and improve their output of viable entrepreneurs with the skills to identify business opportunities, identify financing and effectively establish and manage business enterprises. If necessary, new incubators will be created to augment existing ones.

Since the business incubators are expected to provide the main conduit for improving entrepreneurship and promoting the establishment of new viable enterprises, they must meet some basic criteria. At a minimum, the attributes of incubators will be the following:

- Dedicated incubation facilities consisting of independent office units which vary in size from three to more than eight person offices. The facilities will offer flexible terms to serve startup needs during their first two years of operations.
- Logistical services to provide the right kind of user friendly environment to enable startup companies to accelerate their development.
- Shared facilities and services to provide for incubated companies, including: conference and meeting rooms, administration and reception services, internet connection, phone/fax/copy facilities, etc.
- Strategic support services including a wide spectrum such as: management team support, development, mentoring and guidance; strategic planning and market positioning; business planning and feasibility assessment; organizational development
- Operational support services including marketing and public relations; talent acquisition and recruitment; training and educational programs; accounting services; legal services
- Interaction and networking opportunities between its incubated and established companies, the Diaspora and investor community, and strategic partners through formal mechanisms and events.

Improving the Business Environment

It is important to improve the business environment to reduce inefficient administrative processes and contract enforcement procedures that substantially increase the cost of doing business for all businesses. These burdens drastically reduce the competitiveness of MSMEs in particular because they often have lower profit margins. This effort will focus on policies and regulations that disproportionately undermine the profitability of MSMEs and prioritize ways to address them through the project and in collaboration with other USAID projects and development partners.

Key Issues to Consider in Implementation

Sectoral Focus: Cereals, Fisheries, Horticulture, and Agro-industry

This strategy is expected to build on USAID value chain development efforts focused on rice, maize and millet in northern Senegal and incorporate other sectors such as horticulture that are potential sources of income and employment creation in southern Senegal. Over the last several years USAID

has implemented a successful Feed the Future project promoting value chain development that has yielded results regarded agency-wide as a model. These efforts focused on cereals and the promotion of productivity through the use of contracting mechanisms to improve access to high quality inputs, better production techniques and expanded markets. An evaluation of this effort summarizes the project results as follows:

Fisheries have benefited mainly from support for management and governance of ecosystems and have the potential to support job and income generation through improved business practices and marketing. The fisheries sector is also a focus in the MSME strategy.

An assessment by EGO staff in Southern Senegal revealed substantial potential and activities in horticulture and upland rice cultivation which have not been a significant focus of recent USAID programming efforts. These sectors, especially fruits (mangoes) and vegetables (lettuce, eggplant, etc.), currently sell in local and regional markets but face specific challenges that could be addressed through tailored business support services. This project is expected to target these sectors in Southern Senegal with activities designed to enhance and expand current efforts to improve incomes and employment. Applying lessons learned from the experience in the Feed the Future projects in northern Senegal, the efforts in the south are expected draw on relevant experiences and build linkages for the mutual benefit of the two regions.

The focus will be on providing technical support to MSME's in these value chains to generate incomes to producers, ensuring that markets are developed and that processors and packers are able to reliably and cost effectively contract production from Senegalese producers. The objectives of these engagements will include the following:

- Improve collaboration among critical value chain participants
- Scale up the adoption of more effective management techniques;
- Strengthen links to products and input markets
- Improve productivity quality and standardization
- Effectively utilize innovation and technology to access new markets

Regional Focus: Senegal River Valley, Southern Senegal, and Urban Support Services

The geographic focus of this effort will be the Senegal River Valley, Southern Senegal, and urban areas where agro-industries and/or agricultural support services are located. The approach in each region will be linked to the specific needs and challenges of each location. In the Senegal River Valley where agro-industries are at a higher level of development and have already benefited from substantial USAID value-chain related support, the effort will be focused on higher business support services geared to scaling up and expanding their market reach. In southern Senegal, where the level of development is below the national average and industries face complex and basic challenges, activities will aim at capacity-building until adequate levels of development have been achieved. In urban areas, the effort will respond to opportunities that support other activities at other project locations such as by connecting rural MSME's to urban support services and markets.

Linkage to Youth Employment Strategy

The MSME development framework will be closely linked to the youth employment strategy as these are expected to be mutually reinforcing. With youth employment initiatives expected to increase the supply of skilled youth, this may become a potential source of labor for MSMEs. To ensure that this happens, youth and employment-focused activities are expected to work together in training and job placement efforts to minimize transaction costs.

The GOS is committed to addressing the challenges youth face. Many youth do not possess skills or experience needed for employment and young entrepreneurs often have limited resources and business networks. Expanding access to education and training especially for previously neglected youth populations will increase human capital levels. The GOS should support private sector technical and professional training programs and donors should support statistical surveys of the labor market. To develop entrepreneurship skills, donors and government must facilitate access to financial services, business management training, and consultative support for start-up businesses.

Leveraging Public and other MSME's Support Programs

The MSME strategy is expected to align closely with existing projects and GOS agencies supporting business development and MSMEs in the informal sector. In particular, projects supported by the World Bank, UN, bilateral donors and NGO's should be harmonized and GOS agencies such as ADEPME, the Ministry of Trade and the Ministry of Agriculture should help identify opportunities to support these key objectives.

Leveraging Other USAID/USG Programs

USAID will leverage existing programs to increase agricultural productivity, marketability, and responsiveness to markets. This will enhance the sustainability and competitiveness of targeted Senegal agro-businesses in domestic and export markets. It will also leverage opportunities from Trade Africa to increase access to regional and global trade by increasing the capacity of select MSMEs to meet SPS and Technical Standards for exports to select external markets. Linking up with particular activities in the mango value chain project (under design in Trade Africa) will also help to enhance complementarity and avoid duplication of efforts. This effort will also include working with existing programs to take advantage of food safety and certification programs to enable exports into valuable European, American, and other regional markets. MSMEs in certain niche markets will be expected to participate in training and other programs on how to access international markets under Trade Africa.

Power Africa is considering a project to strengthen access to power for agro-industries and to expand renewable energy supply in Senegal. The MSME strategy can support the business aspects of those efforts by working with relevant private sector entities and existing MSMEs to reduce their energy costs and assure reliable access to power to enhance their competitiveness.

MSME surveys and database development

To provide the statistical basis for examining MSME growth and development and inform effective policy making and programming, MSME data gaps must be addressed. Work with GOS statistical

agencies and other institutions will support improved data collection and analysis related to MSMEs.

10.3.6 Environment

Background

EG4ALL activities are an outgrowth of the EGO's past and current portfolio adjusted for the learning from current and past implementation, evaluations, consultations, and studies conducted in preparation for the new design. Two recent in-depth assessments help inform the Mission on environmental threats and opportunities facing the agricultural sector and compliance requirements related to proposed activities:

- the Environmental Threats and Opportunities Assessment (ETOA) performed in September 2015 reflects consultations, review of data and evidence and,
- the USAID Senegal Food Security and Natural Resource Management Initial Environmental Examination (IEE) document reflects careful analysis of the agricultural sector, and categorization of intervention categories. This IEE reviewed a rich panoply of documents including the ETOA.

The IEE categorizes risks in each of 12 intervention categories. Only two of the categories include a deferral of threshold decision: E. Building productive infrastructure and K. Agricultural Research and Innovation (including analytical testing services) and Agricultural Extension. These two categories, developed EG4ALL's activity 1, 4, and 5, may include water structures for irrigation, processing equipment, solar or other powering of agriculture schemes, and agricultural research.

Once more details are available,

Environmental Threats and Opportunities:

Senegal has a large protected area network with six national parks, six bird reserves, four Ramsar sites and 213 forest reserves. In addition, rural populations retain many sites as places of worship. These areas make up about 1.6 million ha of the total land area in Senegal. Many of the protected areas are threatened by poor management, poaching, and overexploitation.

According to the International Union for Conservation of Nature (IUCN) Red List, one species in Senegal is extinct in the wild, nine are critically endangered, 26 are endangered, 71 are vulnerable, and 54 are near threatened. The damma gazelle and giraffe were extinct, but were then reintroduced. The total number of plant species listed (14) is less than 1 % of total plant diversity. However, the number of animal species listed (147) is about 27 % of all animal life.

Senegal Forest ecosystems are found in three phyto-geographical areas following a distribution from North to South (Sahelian domain, Sudanese domain and the Guinean domain). The main

vegetation types occupy an area of 679,450 hectares of which 44% is savanna, 27% crop areas, 18% steppe, 4% forests, and 1% mangroves. A 2015 estimate cites that Senegal loses about 40,000 ha of forest each year. Forest cover is being steadily reduced by bush fires, agriculture, charcoal, overgrazing, and pruning wood, the effects of which are additional climate worsening, including a long period of drought.

Agriculture is the driving force of the economy in Senegal, as almost 80% of the population relies on agriculture as their main source of employment and income. Rain-fed cereal crops occupy most of the cultivated land during the growing season. They are mainly intended for self-consumption, and are very sensitive to climate shocks. The main cash crops are peanuts and cotton. Agronomic potential has been seriously altered by population dynamics, the expansion and practice of extensive farming with slash burning, drought, bush fires, and the disappearance of plant cover.

Fisheries play an important economic role in Senegal. Fishery products make up 12.3% of export earnings and comprise 1.3% of GDP, not including fish marketing, artisanal and industrial processing, inland capture, and other post-harvest activities. Fishing provides direct and indirect employment to around 600,000 people. Fisheries are also extremely important to food security, as annual per capita fish consumption is 26 kg, placing Senegal among Africa's biggest consumers of fish.






The Senegalese territory offers great varieties of mineral substances including the noble metals (gold and platinum), the base metals (iron, copper, chromium, nickel), industrial minerals (industrial phosphates, limestone, salts, barytine, etc.) heavy minerals (zircon and titanium), decorative stones, and building materials. Senegal also has a wealth of diverse, unexploited mineral deposits. However, a new mining code adopted in 2003 and the significant investment promotion driven by the Senegalese government and its development partners are resulting in diversification of the mining sector.

Senegal has significant potential for water resources, both for surface water and groundwater. The availability of water resources is estimated at around 4,747 m³/capita/year. The main surface water resources are the Senegal River basin and the catchment areas of the Gambia, Casamance, and Kayanga rivers. There are also significant groundwater resources spread over the entire territory and through different types of aquifers. The deep groundwater aquifers in sand and sandstone of the Maastrichtian layer cover four-fifths of the Senegalese territory. The main threats to water quantity and quality are climate change and related rainfall variability.

Root Causes of Environmental Degradation

To identify the actions necessary to protect the environment and conserve natural resources, the root causes of the direct threats must be identified and addressed. The table below defines the root causes of environmental degradation for each of the direct threats identified. This synthesis categorization of root causes is based on the overall analysis of threats, stakeholder consultations, and documents reviewed.

Ecosystem Color key:

ECOSYSTEM	COLOR REFERENCE
Forests	
Agricultural and Pastoral	
Marine and Coastal	
River and Lake	
Protected Areas	

DIRECT THREAT	ROOT CAUSES AND AFFECTED ECOSYSTEMS
Expansion of low productivity agriculture (land use change of forested areas particularly in the North and Anambe area of Casamance) and pastoralism/livestock management (including overgrazing)	<ul style="list-style-type: none"> • Agricultural expansion because of shorter, shifting growing seasons (climate change) • Limited technical, managerial, and financial capacity of pastoralists and livestock managers
Loss of habitat (terrestrial and marine) for charismatic indicator/endangered species (e.g., chimpanzees, dolphins, manatees, marine turtles, birds)	<ul style="list-style-type: none"> • Land use change (e.g., agriculture, exploitation of mineral resources) • Weak local governance • Urban population growth • Deforestation • Climate change (shifting habitats) • Increased demand for water, energy, and food • Mining
Flooding	<ul style="list-style-type: none"> • Climate change (exposure via alteration of rainfall patterns) • Weak (or lack of) infrastructure (increases vulnerability) for drainage of floods (grey) or regulation of flows (green) • Lack of scientific equipment for surveys, monitoring, and early warning
Illegal logging for illegal timber trade (especially in Casamance region)	<ul style="list-style-type: none"> • Lack of economic opportunity in Casamance region • Strong black market in Gambia for illegal timber export
Illegal logging for domestic use (pastoralism, construction (especially Dakar))	<ul style="list-style-type: none"> • Competing land uses/land tenure • Weakness of environmental/classified border enforcement • No financial repercussions for breaking the law or for not replanting • Ability of local authorities to manage weakened by third decentralization reform
Logging for charcoal (i.e., cooking fuel/energy)	<ul style="list-style-type: none"> • Need for cooking fuel • High prices for alternatives (e.g., natural gas)
Uncontrolled fires/bushfires	<ul style="list-style-type: none"> • Slash and burn in agriculture • Pastoralist fires • Wrong financial incentives/price signals for forest conservation • Inadequate funds for paid professional forestry officers • Insufficient financing for conservation of tropical forests
Greenhouse Gas Emissions	<ul style="list-style-type: none"> • Land use change (deforestation, development of wetlands)

DIRECT THREAT	ROOT CAUSES AND AFFECTED ECOSYSTEMS
(causing climate change)	<ul style="list-style-type: none"> • Bush/forest fires • Industry and transportation
Overfishing and illegal fishing causing overall marine resources, especially fish, to decline or disappear	<ul style="list-style-type: none"> • Unlimited open access to the resource • Inappropriate fishing materials (e.g., monofilament) • Climate change • Deficiency of data about marine resources • Lack of human resources, technical capacity, and equipment to overlook the resources • Lack of access to information on the status of resource stocks
Pollution (i.e., inland surface, ground, and coastal water, and air)	<ul style="list-style-type: none"> • Industry (e.g., mining, agribusiness, cement plants) • Gaps in Environmental Impact Assessment or implementation of required mitigation measures • Offshore oil and gas development (prospection and exploitation) • Human and animal waste • Inadequate solid waste management systems
Coastal Erosion	<ul style="list-style-type: none"> • Extraction of marine sand • Climate change (sea level rise)
Land use change for large-scale energy infrastructure	<ul style="list-style-type: none"> • Need for electricity for development
Invasive species and spread of aquatic vegetation	<ul style="list-style-type: none"> • Introduction by foreign sources • Climate change
Implementation of irrigation schemes and associated salinization/acidification of land	<ul style="list-style-type: none"> • Agricultural expansion because of shorter, shifting growing seasons (climate change) and increased demand for water for agriculture
Poaching	<ul style="list-style-type: none"> • Limited technical, managerial, and financial capacity of parks and park staff • Local bushmeat
Disease (causing low park attendance or damaging economic growth) <ul style="list-style-type: none"> ● Zoonosis (Ebola) ● Malaria 	<ul style="list-style-type: none"> • Waste mismanagement • Deforestation, habitat degradation

Recommendations to Address Root Causes

To address each of the root causes, the assessment team identified the following recommendations (actions) to enhance environmental protection and promote sustainable natural resource management (NRM). In addition to the table below, other valuable recommendations are made by assessment teams. When appropriate, these recommendations will be incorporated in SOWs/PDs and both the IEE and ETOA documents will be shared with potential bidders during the procurement stage.

KEY ROOT CAUSES	ACTIONS TO ADDRESS ROOT CAUSES
-----------------	--------------------------------

KEY ROOT CAUSES	ACTIONS TO ADDRESS ROOT CAUSES
<ul style="list-style-type: none"> • Agricultural expansion because of shorter, shifting growing seasons (climate change) • 	<ul style="list-style-type: none"> • Increase productivity of fertile lands through additional/improved seed varieties, weather/climate information systems, and water control/regulation (grey and natural infrastructures) <ul style="list-style-type: none"> ○ Promote agroforestry (awareness and technical capacity) ○ Expand programs that have demonstrated success on the ground (e.g., Yaajeende) • Create incentive mechanisms (such as identification of new products and markets and the introduction of supportive policies) for conserving biological diversity in agriculture
<ul style="list-style-type: none"> • Land use change • Competing land use • Weak local governance • Urban population growth • Deforestation • Climate change (shifting habitats) • Increased demand for water, energy, and food • Mining 	<ul style="list-style-type: none"> • Help to improve the land use planning with local government involvement • Support the enforcement of the « Loi du Littoral » and other environmental laws and regulations • Support an already well-founded EIA process for specific projects <ul style="list-style-type: none"> ○ Support environmental assessments of strategic/cumulative effects of mining, agriculture and roads ○ Support the implementation of the Environmental Management Plan (EMP), associated with the Environmental and Social Impact Assessments (ESIAs) of large-scale irrigation projects
<ul style="list-style-type: none"> • Climate change (exposure via alteration of rainfall patterns) • Weak (or lack of) infrastructure (increases vulnerability) for drainage of floods (grey) or regulation of flows (green) • Lack of scientific equipment for surveys, monitoring, and early warning 	<ul style="list-style-type: none"> • Reinforce the monitoring of the buoys on channel and the critical coastal locations (like some parts of the Parc National de la Langue de Barbarie) • Support Senegal Universities and Research Centers for continuous collection of data to assist in disaster prevention • Look to the Netherlands Project, working on modelling a technical solution (not yet completed) for “La Brèche” of Saint-Louis issue • Improve the protection and management of forests, wetlands, and floodplains providing critical water regulation ecosystem services by preventive strategies and action plans, including capacity building and law enforcement • Support GOS Disaster Risk Reduction Strategy and Action Plan
<ul style="list-style-type: none"> • Lack of economic opportunity in Casamance region • Strong black market in Gambia for illegal timber export 	<ul style="list-style-type: none"> • Identification and promotion of community-led/participatory forestry opportunities • Enforce border control with Gambia
<ul style="list-style-type: none"> • Competing land uses/land tenure • Weakness of environmental/classified border enforcement • No financial repercussions for breaking law or not replanting • Ability of local authorities to manage weakened by third decentralization reform 	<ul style="list-style-type: none"> • Support the development of application text (i.e., directives) to support the implementation of existing environmental laws so that each respective Ministry can fully carry out the laws. • Develop specific guidelines, monitoring and evaluation tools, and training tools for law enforcement • Youth/farmer education

<ul style="list-style-type: none"> • Need for cooking fuel • High prices for alternatives (e.g., natural gas) 	<ul style="list-style-type: none"> • Develop distributed renewable energy opportunities and simultaneously promote high-efficiency electrical cook stove technologies
<ul style="list-style-type: none"> • Slash and burn in agriculture • Pastoralist fires • Wrong financial incentives/price signals for forest conservation • Inadequate funds for paid professional forestry officers • Insufficient financing for tropical forests conservation 	<ul style="list-style-type: none"> • Ensure adequate funding for the environment through the national budget, local tax revenues, and budgets that are funded by natural resource-based industries (e.g., timber) • Allocate more funds to local authorities along with the decentralization of funds and the decentralization of environmental management • Build the technical and managerial capacity of forestry staff
<ul style="list-style-type: none"> • Land use change (deforestation, development of wetlands) • Bush/forest fires • Industry and transportation 	<ul style="list-style-type: none"> • Implement GOS National Action Plan on Climate Change
<ul style="list-style-type: none"> • Overfishing • Illegal fishing • Unlimited open access resources • Inappropriate fishing materials (e.g., monofilament) • Climate change • Marine resources data deficiency • Lack of human resources, technical capacity, and equipment to oversee the resources • Lack of access to information on the status of resource stocks 	<ul style="list-style-type: none"> • Improve fishing sector governance <ul style="list-style-type: none"> ◦ Expand on programs that have demonstrated success (e.g., Collaborative Management for a Sustainable Fisheries Future (COMFISH)) • Finalize, adopt and publish the new Fishing Act • Strengthen capacity for local fishing organizations <ul style="list-style-type: none"> ◦ Support the development of human resources • Help develop knowledge base on marine biological resources, and develop a marine resource information system, including a monitoring database <ul style="list-style-type: none"> ◦ Reinforce the technical equipment for overseeing marine resources
<ul style="list-style-type: none"> • Industry (e.g., mining, agribusiness, cement plants, etc.) • Gaps in Environmental Impact Assessment or implementation of required mitigation measures • Offshore oil and gas development (prospection and exploitation) • Human and animal waste • Inadequate solid waste management systems 	<ul style="list-style-type: none"> • Support established GOS ESIA procedures <ul style="list-style-type: none"> ◦ Support the implementation of the EMP associated with the ESIA's of large-scale projects • Support efforts to ensure adequate finances and financial responsibility for the implementation of cost-effective mitigation measures • Promote climate-smart agriculture • Support the formalization of artisanal miners and training on pollution prevention and hazardous materials management • Improve solid waste management in coastal/tidal areas • Support the development and improvement of drinking water systems from source (i.e., water protection) to tap
<ul style="list-style-type: none"> • Need for electricity for development 	<ul style="list-style-type: none"> • Ensure proper evaluation of upstream and downstream effects of hydropower projects for managing floods and providing local benefits to farmers • Promote distributed solar power (Sahel comparative advantage)
<ul style="list-style-type: none"> • Introduction by foreign sources • Climate change 	<ul style="list-style-type: none"> • Educate and raise awareness of risks and uses for invasive species • Link to GOS's existing priorities for avoiding the introduction of new pests (e.g., avian influenza which resulted in a ban on U.S. poultry)

KEY ROOT CAUSES	ACTIONS TO ADDRESS ROOT CAUSES
	<ul style="list-style-type: none"> • Support the development of invasive species management action plans <ul style="list-style-type: none"> ○ Support programs using technologies based on invasive species economic valuing
<ul style="list-style-type: none"> • Limited technical, managerial, and financial capacity of parks and park staff • Local bushmeat 	<ul style="list-style-type: none"> • Develop financial instruments to support conservation goals and ensure that parks and park staff are adequately resourced <ul style="list-style-type: none"> ○ Develop park infrastructure (e.g., internal roads, checkpoints) • Strengthen the cross-border park partnership with Guinea to conserve migratory corridors

10.3.7 Agriculture Sector Climate Vulnerability Assessment and Options Analysis

Through the African and Latin American Resilience to Climate Change (ARCC) Program, a Climate Change Vulnerability Assessment and Options Analysis (CCVA&OA) was begun in Senegal in 2012 and culminated in 2014. The purpose of the CCVA&OA was to determine the various causes of climate change vulnerability of households in Eastern Senegal, and identify those causes that can be remedied through programming. The study expects: Annual rainfall levels in the coming decade to return toward those experienced in the 1970s and 1980s; Continued spatial and temporal climatic uncertainty at multiple timescales; Increased frequency of extreme events and the decreased viability of rain-fed agriculture; Greater impacts on crops and pasture in the North thus increasing pressure for land in the South; Greater pressure on moist lowlands and pond ecosystems; Impacts most strongly felt by most the vulnerable groups, hence the importance of early warning systems and safety nets for the poorest.

One of the most important findings of the assessment, based on rough climate scenarios is that for major crops grown in Senegal, the impact of the worst case projected climatic changes would be significant damage at all stages of plant development. More importantly, the research findings confirmed that, as elsewhere in Africa, mixed systems are game-changers in that livestock production is better adapted to the projected changes in climate than crop agriculture is. The study reported increased importance of capital in livestock holdings (both cattle and small ruminants). Despite differences in geographic and technical focus, conclusions can be drawn from this study to inform the overall farming and livestock sectors.

Fisheries Sector Political Economy Analysis-PEA

The purpose of the PEA process was to better understand why unsustainable artisanal and industrial fishing continues in Senegal, looking into long-standing and intractable issues in the fisheries sector through PEA lens, and gaining new insights as compared to traditional

assessments. The key preliminary findings and recommendations primarily focus on artisanal fishing. Further research is underway to better understand prevailing political economy factors that contribute to unsustainable industrial fishing and processing. Overall findings will influence thinking during the design, implementation and monitoring & evaluation of activities. These could include:

- Fast cash and cultural norms reinforce open access regime
- Fisheries are in a downward spiral whereby producer organizations lack political savviness and stakeholders prioritize their own interests over sustainable fisheries management
- Information and power asymmetry skew the marketplace with women having less power in the CLPA and marketplace
- Policy implementation is key, but government structure and resources competition with other sectors make it challenging
- Transparency and accountability should be strengthened
- Marine tenure reforms need more investment

10.3.8 Gender Analysis Study

Despite the crucial role women play in small-scale agriculture, gender inequality persists in many ways, compromising food and nutritional security. This observation emerged from the gender in Senegalese agriculture assessment study from July 18th to August 31st, 2016. This focused primarily on the cereal, horticulture, livestock, and fisheries value chains with cross cutting water and agricultural policies also analyzed. Literature review and the assessment team field qualitative data collection in Dakar, St. Louis, Matam, Kaolack, Kolda, Kédougou, and Sédhiou allowed the team to answer seven research questions:

1. What are the widest gender disparities in the agriculture sector? What are the consequences for the well-being and opportunities for women, girls, men, and boys?
2. What changes have occurred for women in the agriculture sector over the last 10 years?
3. What current approaches are being taken by EGO to address gender in the agriculture sector?
4. How well are the current EGO approaches addressing gender disparities in terms of narrowing the gaps between men and women?
5. How are other donors tackling gender in the agriculture sector?
6. What remaining gaps need to be addressed?
7. Based on current systems and perceptions, what are the most strategic opportunities and/or approaches for intervention to narrow these gaps?

Even though vital information was gathered throughout this assessment exercise, there were certain limitations observed during the study. These mainly concerned:

- The period the field visits took place coincided with the rainy season and made certain areas inaccessible;

- The limited time available which prevented surveying some of the regions;
- The absence of secondary statistical data disaggregated by sex, value chain, and region.

Results and Conclusions by Question

AQ1. Findings show disparities related to: i) access to and control of land; ii) difference between sexes in the level of participation in value chains, with commercial crops under the monopoly of men; iii) access to agricultural production equipment; iv) access to financing; and v) decision making, which was limited within the family as well as within organizations. These disparities demonstrate the vulnerability of women in the sector, with repercussions for the well-being of the whole household.

This situation requires concrete actions, from advocacy for better access to land, to functional literacy for women in Information Technology (IT) through improvement of their agricultural condition and status at home. In addition, there needs to be an emphasis on revitalizing organizations as well as facilitating appropriate financing.

AQ2. In analyzing the changes that occurred over the course of the last ten years, especially with Technical and Financial Partner (PTF) programs such as Yaajeende, it appears that a minority of women leaders of a certain profile made significant progress. These women now have repositioned themselves within their social context. It is important now for these women to share their experiences with other women in order for others to benefit from this experience through exchange visits.

AQ3-AQ4. The USAID Economic Growth Office (EGO), using its global approach that puts gender at the heart of its programs and Feed the Future projects, led a series of activities in favor of agriculture and food security. Even though gender was not at the center of these activities, projects like Yaajeende and COMFISH were particularly beneficial to women in terms of diversifying their revenues, improving their nutritional habits, and building institutional capacity. However, there is still much work to be done to integrate gender into indicators, particularly when it comes to qualitative indicators.

AQ5. The Support Program to Agricultural Development and Rural Entrepreneurship (PADAER) and the Agricultural Value Chains Support Project (PAFA), funded by IFAD (the International Fund for Agricultural Development) are great examples of programs that support women in agriculture and lowland rice production in the South. Unfortunately, donors, in general, do not really address the disparity in land accessibility, which ought to have been a priority in order to cause a ripple effect throughout value chains.

AQ6. Despite donor programs, gaps still exist. Socio-cultural, institutional, financial, and technical factors impede progress. Drivers of change should be activated to alleviate these gaps, especially through focusing on raising awareness in the community, including among women. USAID will have to connect strategic actors and support other actions, such as training, lobbying, relationship building, advocacy, material support, etc.

AQ7. Despite socio-cultural realities and customs, USAID can take a range of actions to bridge these gaps. Whether it is a cereals, horticulture, livestock, fisheries, water, or agricultural policy project, gender gaps can be highlighted in order to bridge these inequalities that disadvantage women. Appropriate interventions can be taken to better position women in the short- and medium-term, with positive consequences for the well-being of the whole household. Indeed, whether by either creating exchange networks or taking appropriate trainings, women will be able to evolve sustainably in the agricultural sector in the next 5 years, especially if there is an institutional framework in place (e.g. Plan for an Emerging Senegal (PSE), National Strategy for Equity and Gender Equality (SNEEG), Program to Accelerate Senegalese Agriculture growth (PRACAS)).

Some Recommendations for Future Activities

To respond to the disparities identified in this study, the assessment team recommends the following actions for future USAID activities:

- Develop important and effective advocacy and communication programs (using facilitators, local resources, and systems) to implement the Agro-Sylvo Pastoral Orientation Law (LOASP) Article 54, which states that: “the state ensures equal rights to men and women in rural areas, particularly in farming. Furthermore, access to land and credit available to women.”
- Raise awareness among men, land commissions within municipal councils and local authorities (Administrative and technical services, village councils, local leaders, local collectivities) to change perceptions, systems and practices to help expand land allocated to women.
- Advertise and disseminate good advocacy practices for women leaders and other actors concerning land allocation to women (ex: National Council for Rural Collaboration (CNCR) and Association of Senegalese Jurist (AJS) programs).
- Change the operating modes of institutions (GOS, PTFs, and NGOs) that grant and support access to inputs and equipment to help them address gender disparities.
- Align women's economic autonomy programs initiated by the government and donors to reduce disparities linked to access to factors of production.
- Exploit new drill-pump technologies to facilitate access to water (water points, supply) for homes and agricultural activities, especially horticulture.
- Put in place an important investment program in agricultural equipment, adapted to the needs and financial needs of women, especially for the production, storage and transformation of cereals, milk, fish and horticultural products by creating synergy between the Government, donors and NGOs.
- Promote cereals and milk sectors by promoting women's access to warehouses, storage, and modern equipment for the transformation, transportation, and commercialization of their crops.
- As part of a support program to process agricultural products, put in place semi-industrial storage and transformation units that consume less energy or use renewable energy.

- Increase the use of the USAID/Development Credit Authority by making it more accessible to women.
- Supply technical assistance to women's organizations tied to credit.
- Develop an innovative and functional literacy strategy for women, especially at the village level.
- Adapt training themes, approaches and tools based on women's needs and realities, and take into account their time availability and status: use of IT is not always appropriate.
- Reinforce technical training in transformation and commercialization sectors where women are very active.
- Develop managerial and commercial marketing training for women.
- Put in place a coaching and monitoring system: for example women leaders or literate young girls could mentor female producers.
- Put in place a female entrepreneurship support cell that includes successful female agricultural entrepreneurs. The support cell should seek to:
 - Foster relationship building between producers, transformers, and traders to build on women's presence throughout value chains.
 - Encourage women to invest themselves in decision making bodies of umbrella organizations and address women's needs.
 - Develop initiatives to reinforce women's leadership and their decision-making capacities.
 - Establish an identification mechanism for women having leadership skills and offer them opportunities to coach.
- Overcome men's resistance through adapted and effective advocacy.
- Encourage women and reinforce their capacities to participate in the administration and management of municipal councils.
- Lead effective advocacy campaigns with regional and local authorities to promote the right of women to participate in decision-making bodies.
- Develop a mentoring/sponsoring program for women to encourage other women to engage in the public sphere.
- Reinforce the capacity of elected officials to advocate for better conditions for women in agriculture.

10.3.9 Expanding and Enhancing Nutrition-Sensitive Agriculture

The Project's approach to improving nutrition (in particular, improved diets) is based on successes and lessons from current activities (Yaajeende and SPRING) as well as on data from the Feed the Future Senegal 2015-16 Interim Assessment Report and other sources.

Theory of Change

First and foremost, the theory of change clarifies the pathways through which EG4ALL will contribute to higher level goals of reduced malnutrition. Malnutrition can be driven by poor diets

and/or poor health (disease). For example, to reduce stunting, three major things must improve: (1) consumption of nutritious diets, (2) healthcare, and (3) water and sanitation. This Project will focus on the first, while the Health Project leads USAID efforts on the second and SENWASH on the third. The combined success of all three of these projects will ultimately improve nutritional status.

The Project will mobilize agriculture and markets to supply a more diverse, affordable, and dependable food basket. It will also work at the community level to facilitate individuals' ability to eat properly, especially those most vulnerable to malnutrition (mothers and young children). The Project will also contribute to nutritional outcomes by helping increase incomes, an important factor in families' ability to afford a healthy diet.

Secondarily, EG4ALL will collaborate with and complement the USAID Health and SENWASH projects' efforts to increase adoption of nutrition-promoting health and hygiene behaviors. This will largely be achieved through social and behavior change communications in synergy with rising incomes which permit families to invest more in health. This represents a minor shift compared to the approach of the current Feed the Future portfolio in which Yaajeende has a more prominent role in water, sanitation, and hygiene. Yaajeende also has activity-level targets for reduced stunting. While this new Project is expected to directly increase consumption of nutritious diets and incomes, we recognize that these intermediate results are only part of the equation towards improving nutritional outcomes, such as stunting and wasting. Health and SENWASH also will contribute significantly.

Expanding Feed the Future Nutrition Successes

The overarching Yaajeende Nutrition Led Agriculture approach has proven quite successful at diversifying the food supply, supporting families' ability to access and consume a variety of nutrient-dense foods (even in lean times), and increasing adoption of nutrition-promoting behaviors. Over the past year, SPRING began the process of expanding some of these approaches into the Sine-Saloum and adapting them for that context. These successes, which were built upon facilitating local solutions, will be further expanded across the Feed the Future ZOI under the new Project. The following list summarizes the major approaches that will be continued and expanded.

- Evidence on local nutritional deficiencies guides the selection of agriculture, market, and governance interventions specifically designed to ameliorate those deficiencies. After assessing the major nutritional deficiencies (e.g. caloric, protein, Vitamin A, iron, zinc, iodine, etc.), Yaajeende identified a range of foods rich in those nutrients and then sought to increase their availability, accessibility, and use among the target population.
- Markets and private sector are mobilized as the primary vehicle to provide local solutions and supply a broad array of goods and services needed to reduce nutritional deficiencies. The external Midterm Impact Evaluation of Yaajeende concluded that it has successfully supported the establishment of sustainable markets for agriculture, livestock, and nutrition goods and services via the Community-Based Service Provider network.
- Local governance capacity is strengthened to monitor food security, regulate food

system functioning, spur private sector and civil engagement, and protect the most vulnerable. The Midterm Impact Evaluation also determined that Yaajeende's Citizen Working Groups are "crucial to the consolidation of technical gains in productivity and nutrition" (p. 12).

- Women's empowerment is central to improved diets and nutritional outcomes among young children. Yaajeende employed a variety of means to get needed resources and capacities directly into the hands of women. Through Debbo Galle Women's Empowerment and Asset Building Groups, they gained access to: information and knowledge; productive assets such as land and livestock; agriculture inputs; business skills; income generating opportunities; food preparation and childcare best practices; nutrition and hygiene products; and leadership and decision-making skills.
- Integration of nutrition and agriculture activities is effective. The Midterm Impact Evaluation found that stunting dropped by 30% in Yaajeende villages (from 23% in 2011 to 16% in 2015) and that Yaajeende significantly reduced poverty (by 2.9 % over the same time period.) The Evaluation also found the Yaajeende villages benefitting from the full Nutrition-Led Agriculture package were better off (reduced malnutrition and improved hygiene more) than villages receiving only nutrition or agriculture support.
- Innovative, timely communications complement private sector and governance efforts. Yaajeende and SPRING have successfully integrated communications activities to follow the agriculture calendar and maximize uptake of best practices. Both also have striven to employ modes and messages that resonate with target populations, from songs to caravans to community video.

Enhancing Our Approach

We have learned a great deal over the past five years through Feed the Future implementation, evaluations, and studies. Therefore, we adapted our approach in certain key areas in order to maximize benefit from our new Project's interventions.

Understanding of the Causes of Malnutrition across the ZOI

While the myriad potential causes of malnutrition are widely known, the particular determinants driving malnutrition across Senegal are poorly understood. A recent CLM-World Bank study concluded that the nature and causes of malnutrition vary widely from one Senegalese region to another, and analysis of the existing data explains only a very small fraction of the problem. It further states that causal analyses should be conducted at the local level in order to be effective. EGO is currently conducting one such study, and this Project aims to broaden the body of knowledge by carrying out additional analyses across the ZOI. Further understanding of the determinants of malnutrition in each locale will allow for better targeting of resources. It will also help us better gauge how much a food system project (like this one) could be expected to contribute to high level outcomes (e.g. stunting, wasting, etc.) as opposed to a health or WASH intervention.

Enhanced Women's Empowerment

The Yaajeende experience has been quite instructive regarding how important women's empowerment is to food security, how to promote empowerment well, and what more needs to be done. Data from the Feed the Future midterm PBS and the Yaajeende Midterm Impact Evaluation support this point. Women in Yaajeende villages demonstrated their knowledge and desire to adopt the promoted best practices, such as exclusive breastfeeding and complementary feeding for children age 6-23 months. Prevalence of exclusive breast-feeding in Yaajeende villages increased from 1% in 2011 to 24% in 2015. Meanwhile, young children in Yaajeende villages ate twice as much meat, dairy, and fruits as children in comparison zones. Despite this important progress, much work remains to be done in order to attain high levels of adoption of exclusive breastfeeding and young children receiving a minimum acceptable diet, which lags at 7%. Women in Yaajeende villages have reported that resource limitations and labor requirements continue to constrain their ability to breastfeed properly.

Improvement on these two indicators has proved challenging, not just in the Yaajeende area, but across the Feed the Future ZOI and the country as a whole. While poverty and low incomes (one key element of empowerment) play an important role, they do not explain the full problem. The PBS revealed that attainment on minimum acceptable diet remains around 7% across the ZOI, with the northern (and most wealthy) zone performing the worst with a level of 5.3%. Further, households with little to no hunger performed as poorly on the minimum acceptable diet indicator as hungry households in the ZOI. Meanwhile, women in the ZOI perform much better on dietary indicators, with 58% of women consuming a diet of minimum diversity. Given this data, we cannot assume that increasing food availability and improving adults' diets will automatically translate into improved child feeding. Clearly, other factors beyond income are at play, perhaps related to socio-cultural norms around child feeding and empowerment (social roles, decision-making, power dynamics, etc.).

Greater Integration of Poverty Reduction and Nutrition

Following on the above points, the Yaajeende experience illustrates how important both poverty reduction and other forms of empowerment are to achieving improved diets and how much remains to be done. Under the current Feed the Future portfolio, Yaajeende operates in one part of the ZOI, and the economic/value chains project (Naatal Mbay, and its precursor, the Economic Growth Project) operates in another, with very little geographic overlap. Despite a substantial reduction in poverty in the Yaajeende villages, poverty levels remain high in Yaajeende villages (33%) and the ZOI as a whole (41%), and women report being unable to afford adopting best practices to the extent that they would like. Meanwhile, in the Naatal Mbay zone, even in regions with the best economic performance such as Saint-Louis, young child feeding is wholly inadequate. Therefore, to continue making gains towards improved diets, the new Project will employ a layering approach, with the Nutritious Food Systems Services, the Value Chain Services, and Employment and Organizational Services Components all working across the full Feed the Future ZOI.

Affordability of a Nutritious Diet

Another important distinguishing feature of the new Project is its emphasis on the affordability of nutritious foods. While the Yaajeende activity operated under the general economic precept that increased supply reduces prices, the cost of a locally-available nutritious diet was not specifically studied or targeted. Evidence shows that the poor spend a higher proportion of their income on food, despite the fact that their diets often lack diversity and are dominated by staple grains. Not surprisingly, the diversity of fruits and vegetables available on the market is much lower in low income countries. Meanwhile, despite the fact that absolute food prices tend to be lower in low income countries than in high income countries, the relative prices (average price as a proportion of average income) of vegetables and fruits are dramatically higher (19 times and 50 times higher, respectively). As a result, a majority of people in lower income countries simply cannot afford the generally recommended amount of fruits and vegetables per day. (Miller 2016) Given this reality, EG4ALL will monitor the cost of a nutritious diet to track progress in affordability and inform intervention choices.

Forward-leaning Food System Approach

Related to the above points on affordability, EG4ALL will take a holistic food systems approach that seeks to enable and promote a nutritious diet for optimal health. This means decidedly moving beyond feeding (focusing on calorie deficits) to nourishing people (focusing on all nutritional deficits, caloric, protein, micro-nutrient, etc.). A forward-leaning food system also anticipates future needs and takes the double burden of malnutrition into full account. Thus, EG4ALL will collaborate with the GOS and market actors to contemplate food system development that will promote optimal nutrition, rather than replacing the problems of under-nutrition with those associated with over-nutrition (overweight, obesity, diabetes, etc.). The food processing sector is one place where this issue is particularly relevant. For example, advancing employment and income generation opportunities through enterprises that produce highly processed foods (characterized by low fiber, poor nutrient density, high sugar content, and unhealthy fats) could be counter-productive. Therefore, EG4ALL will seek to raise awareness of optimal nutrition among producers, processors, and consumers alike.

Increased National-level Policy Engagement

The current Feed the Future portfolio engages on nutrition policy primarily through the Yaajeende and SPRING projects in the field and participation at national-level coordination fora (Scaling Up Nutrition Movement, CLM policy and strategy development workshops, etc.). The new Project will continue to do the same and also add institutional strengthening activities to support the CLM in carrying out its Multi-Sectoral Nutrition Strategy (MSNS). As a coordinating body working across many sectors, the CLM requires state-of-the-art leadership, communications, and monitoring/evaluation capabilities. Using the MSNS as a guide, we will also employ a more integrated approach to our overall policy strategy, keeping each line ministry's nutrition commitments in mind as we engage them.

10.3.10 Youth in Agriculture Assessment

The following is a summary of the full Youth report (USAID Economic Growth Office, 2016).

This assessment examined the role of youth in agriculture focused on employment and entrepreneurial activities. Using a questionnaire, the consultants interviewed informants and other stakeholders in various regions of the country. A good review of the existing programs and some literature provided useful insights on youth employment.

The relevant findings from the questionnaire and the literature include the following:

- A significant percentage of youth, 52.2 %, live in rural areas (ANSD, 2014).
- The percentage of youth in rural areas with at least primary school education is low, less than 25 % (ANSD, 2014).
- The rural economy offers 60 % of national employment opportunities to youth (ANSD, 2014).
- Youth experience severe lack of access to land (25 %) (DAPSA/MAER; Enquête agricole 2015).
- Annually, 269,000 new young applicants seek employment; 50 % apply to the agriculture sector (Rapport de présentation ANPEJ 2016).
- Twenty-five percent of youth nationally are underemployed: in rural areas, 31.7%; in Dakar urban areas, 24.1%; in other urban areas, 26.3% (Rapport de présentation ANPEJ 2016).
- *L'Enquete de Suivi de la Pauvreté au Sénégal* (ESPS 2005–2006), the last national poverty survey, confirms that rural youth experience higher levels of extreme poverty, illiteracy and inactivity than urban youth.
- Young men and women receiving “accompagnement” from international organization, public, and/or private sector programs expressed satisfaction and described making progress working or managing a small enterprise in the agriculture sector. They had no plans or interest to move to urban areas (Focus group: Kédougou).
- Politics represented the only part of civil society youth rejected. Overwhelmingly, youth stated that politicians have made and broken too many promises to warrant their trust. Youth reported that they are often manipulated or used by political parties, especially during election campaigns (Youth Map, USAID/Senegal, and International Youth Foundation 2011 study).
- Overall, youth believed that only the politically connected got ahead and found jobs (Youth Map, USAID/Senegal and International Youth Foundation 2011 study).
- The youth employment promotional projects established by the state under LOASP through ANIDA and PRODAC still struggle to attract youth and provide them with permanent jobs.
- The initiatives of ANIDA farms, when they recruit youth, suffer from a lack of technical support and measurable adoption. The recruited youth do not have a long-term vision of their status within this framework. The plots being used for farming are the property of ANIDA.
- The youth have a five-year concession for the use of the plots and this does not allow them time to find their place.
- The rice value chain is the key economic driver for the zone, and production must be expanded to expand youth employment and entrepreneurship.
- The rice value chain, with its private sector driven focus, provides youth employment activities, including rice harvesting, rice semi processing, 460 small-scale de-hulling, milling, and packaging.

- Over 60 % of small and medium enterprises (SMEs) are youth owned, and quality control and quality assurance employment are in line with world-class commodity value chains.
- The youth population is growing in the Northern Zone because the region has income 12/12 months annually. In addition, the government and private sector are investing in infrastructure—internet, hotels, night clubs, etc.—attractive to younger populations.
- Yaajeende drew special attention from young entrepreneurs for two reasons: (1) the business model (CBSP) and (2) informing Matam young farmers about the Galmi onion conservation techniques to compete on the 130,000 ton onion imports from Holland.
- Africa Rice shared a 12-point employee skills development training program tailored to the rice value chain. The training is youth focused and speaks to the current and future skill set needs of the rice value chain.
- CNCR, PADAER, Cooperation Espagnole, USDA, and Natal Mbay appeared to work closely with most youth-focused programs. They would like to increase their collaboration with organizations desiring to focus on youth employment. Kédougou and Casamance agriculture sectors have great potential but lack private investment, government programs and donor attention witnessed in the northern zone.
- At a 2014 national youth employment forum organized by the Ministry of Youth, Employment and Constructive Civism, a study was presented suggesting Senegal's livestock sector could generate 20,000 jobs targeting youth. Three food and beverage areas—dairy, fresh meat and processed meats for the domestic market—could, with the right partnerships, provide employment for semi-skilled trained youth. As a follow up, discussions have already begun between the Ministry of Youth, Senegalese Institute for Food Technology, and a local milk producer to determine the requisite planning, production, government policy and donor support as well as the expected return on investment (profitability) to create the target number of jobs in the already dynamic livestock sector.
- Sabadola Gold Operations (SGO) and Société de Développement des Fibres Textiles (SODEFITEX) partnered with young farmers in the Kédougou region to provide CFA 100 million to purchase five tractors for local farmers' associations for the production of rice and maize. Why? SGO and SODEFITEX wish to dissuade young Senegalese men from entering artisanal gold mining for environmental and food security reasons.
- Each year, 300,000 new young job seekers enter the labor market, and 50 % are in rural zones.
- Young Senegalese looking for agriculture sector employment or enterprise development face challenges gaining: (a) access to land, (b) access to finance and (c) access to continued training to compete for the few jobs that are available.

Key recommendations include:

- Include alternative energy resources for on farm (solar water pumps, wind-generated electricity for greenhouses) and off farm (solar dried fruits, vegetables, meats, etc.).
- Alternative skills development training must be market driven and job skill specific interwoven with the 3Rs (reading, writing and arithmetic).
- Young folks want 12/12 months annual agriculture employment, not seasonal work. This point should be built into all economic growth project designs.

- Youth training youth: The assessment team strongly recommends that USAID/Senegal/Economic Growth Office (EGO) consider this capacity-building option in future employment and enterprise development opportunities for youth in the agriculture sector.
- Youth in agriculture sector employment and enterprise development should be accompanied by basic rural infrastructure investment (water, electricity, and internet).

Comment

While this study provides a good overview of the key challenges, programs and policies regarding youth employment and entrepreneurial activity in agriculture, the field visit in the southern Senegal provided additional insights that need to be included to make the analysis more complete. In particular, the USAID team found significant training and business incubation opportunities in Kedougou and the Casamance that could form the backbone of a youth focused training and entrepreneurship promotion program. Further, the team learned of potential opportunities for supporting youth projects in technical schools as well as unmet demand for semi-skilled services that could be sources for promoting new businesses. Combining these insights with the assessment, it seems that finding a way to link these opportunities with potential projects and policies offer an avenue for contributing to a better integration of youth in the rural economy.

10.4 Business Enabling Environment and Competitiveness Program (PREAC)

Des textes et des procédures simplifiés pour une administration de service accessible et efficace	Des réformes structurelles et sectorielles pour un gain de compétitivité de facteurs
<p><input type="checkbox"/> L'exigence de capital minimum n'est plus en vigueur et les droits de timbre sont supprimés, pour les actes de création d'entreprises et</p> <p><input type="checkbox"/> Les droits d'enregistrement pour les acquisitions d'immeubles sont réduits à 5% et la démarche est bouclée dans les 30 jours avec l'établissement de la déclaration préalable et la procédure fusionnée d'enregistrement et de publicité foncière,</p> <p><input type="checkbox"/> La démarche de demande d'autorisation de construire se fait en ligne sur la plateforme électronique TELEDAC dans un délai 40 jours,</p> <p><input type="checkbox"/> Le Guichet Unique dédié au PME est fonctionnel à l'ONAS. L'entreprise est raccordée aux égouts dans un délai 30 jours,</p> <p><input type="checkbox"/> Le Guichet unique de raccordement des PME à l'électricité est établi au Grand Compte de la SENELEC. La valeur de l'avance sur consommation est réduite de moitié ainsi que les délais,</p> <p><input type="checkbox"/> Le contrat de stage et le contrat d'apprentissage intégrés dans la législation du travail afin d'assouplir les règles et d'accroître l'employabilité des jeunes,</p> <p><input type="checkbox"/> Les modes alternatifs de règlement des conflits promus à travers la médiation, la conciliation et l'arbitrage pour le règlement des conflits commerciaux dans un délai de 90 jours au plus,</p> <p><input type="checkbox"/> La possibilité donnée aux usagers, notamment les banquiers, les notaires, les avocats de consulter en ligne (www.seninfogreffe.sn) les biens nantis et hypothèques,</p> <p><input type="checkbox"/> En perspective, la finalisation du chantier de télépaiement et de la charte des téléprocédures va consolider les progrès dans la mise en place d'une administration de service au Sénégal à travers la généralisation de la dématérialisation pour les démarches liées à l'investissement et au commerce.</p> <p><input type="checkbox"/> Le Sénégal envisage de se doter à terme d'un tribunal de commerce pour le jugement diligent des contentieux économiques après l'adoption d'une nouvelle carte judiciaire en aout 2015.</p> <p><input type="checkbox"/> L'érection des plateformes d'investissements hors de Dakar est en cours afin d'améliorer l'offre de services administratifs dans les régions et promouvoir les opportunités d'investissements dans des espaces éco-géographiques du Sénégal (Nord, Sud, Centre, Est, Ouest), en partenariat avec les collectivités locales.</p>	<p><input type="checkbox"/> Le Sénégal a rénové et harmonisé son cadre juridique des affaires : Code des douanes, Code général des impôts, Code des procédures civiles, loi sur le partenariat public-privé,</p> <p><input type="checkbox"/> Système de facturation des conteneurs à la boîte (THC) est adopté et simplifié à 6 catégories de prix au lieu de 46.</p> <p><input type="checkbox"/> Paquet de mesure relance tourisme : TVA réduit 10% généralisé, Suppression visa, Suppression droit des timbres sur les billets d'avion, Réduction de 50% de la parafiscalité sur le billet d'avion, Crédit hôtelier cinq (5) milliards, Tourisme free Taxe, 10 ans dans les régions Sud du Sénégal,</p> <p><input type="checkbox"/> Agriculture : suspension/exonération des TVA sur les équipements hydro-agricoles.</p> <p><input type="checkbox"/> Formation professionnelle : part CFCE consacré à la formation professionnelle passe de 5 à 25% entre 2012-2015, création des Instituts Supérieurs de l'Enseignement Supérieur (ISEP),</p> <p><input type="checkbox"/> Hydraulique : mise en place Office des Forages Ruraux (OFOR), pour développer des délégations de services,</p> <p><input type="checkbox"/> Financement PME : une perspective positive pour les PME, par le développement du crédit-bail et l'information sur l'emprunteur à côté de l'opérationnalisation du FONGIP, de la BNDE et du FONSIIS,</p> <p><input type="checkbox"/> En perspective, la finalisation de la réforme foncière, de la législation du travail, l'adoption du Code des mines en plus de la rénovation du code des Investissements sont attendues en 2016 pour achever l'harmonisation du cadre juridique et fiscal des affaires avec les standards internationaux,</p> <p><input type="checkbox"/> Foncier aménagé : les projets de zones économiques et de plateformes industrielles vont entrer dans leurs phases opérationnelles et les premiers hectares fonctionnels seront disponibles dans la période 2016-2017</p> <p><input type="checkbox"/> Énergie : Exécution du Plan de Mix énergétique pour un prix du kWh sous la barre des 0,15 \$US à terme ; 120 MW de capacité additionnelle attendus en 2016,</p>