I. Introduction and Context

Country Context

Senegal has felt the brunt of the successive economic shocks from poor rainfall, rising food and fuel prices, the global financial crisis, and floods. While most of Africa has enjoyed acceleration in its economic growth, the economy in Senegal has slowed down since 2005. The weak economy was exacerbated by a succession of external shocks including poor rainfall in 2006/07 followed by Sahel droughts in 2010 and 2012, severe flooding in 2012, and poor rainfall in 2014. Not surprisingly, the rate of poverty reduction has stagnated since 2005. This is worst for the rural areas where the gains in poverty reduction have been the smallest, even since 1995. As a result, close to half of the rural population (47 percent in 2011) falls below the poverty line and two thirds of the poor now live in rural areas.

In this context of chronic poverty and successive external shocks, an increasing number of households have become increasingly vulnerable to food and nutrition insecurity. The most affected households are those without education, living in remote areas, with poor access to basic health care services, no access to safe water and who depend on livestock, daily labor, or informal trade. A rise in food prices is by far the most important shock households cite when asked in 2010, followed by an accident or illness of a household member. Food prices have been highly unstable in the last five to 10 years with a first surge in 2008 as a result of a global food price crisis particularly affecting the price of imported rice, which was up by more than 50 percent and makes up 60 percent of the rice market in Senegal, followed by another surge in 2011, mainly of locally produced foods such as corn, sorghum, millet, local rice and groundnuts, which were up by 25 to 37
percent compared to 2010. Faced with these shocks, the principal coping strategy cited by those households is to economize on expenditure, notably health care and food consumption.

External shocks are likely to become more frequent and more widespread in Senegal as a result of climate changes. Climate trend analysis shows how the area covered by adequate rainfall has retreated southward by about 30 kilometers over the past 20 years. Similarly, temperatures have increased by one centigrade across much of Senegal. According to recent estimates, yields will drop by 15%; calorie availability in 2050 will be less than that in 2000; and child malnutrition may increase by 20%. Among the policy recommendations is to support community-based adaptation strategies.

**Sectoral and Institutional Context**

Food and nutrition security is premised on sufficient quantities of food being available consistently, sufficient access to appropriate foods for a nutritious diet, and appropriate use based on knowledge of basic nutrition and care. In many parts of Senegal this is a challenge. The country is heavily dependent on rain for agricultural output and on imports for food consumption. This leaves the country highly vulnerable to the changing climate conditions, notably decreasing and erratic rainfall and shorter cropping cycles. Food security is a complex issue linked most directly to health outcomes through nutrition.

First of all, malnutrition directly weakens the individual's immune system, making him/her more vulnerable to infectious diseases such as diarrhea, acute respiratory infections and malaria. But just as important, malnutrition impedes economic and human development. Under-nourished children have higher mortality, lower cognitive and school performance, and 10-17% lower income potential as adults. Malnutrition contributes to almost half of all deaths of children under age 5: of the 34 thousand children under age 5 who died in Senegal in 2010, more than 16 thousand died because of some form of malnutrition. Survivors are likely to start school later (7 months on average), more likely to drop out of school, and less able to learn. Iodine deficiency alone (concentrated in the Eastern part of the country) has been shown to permanently lower IQ by 10 to 15 points. Similarly, low birth weight has shown to lower IQ by 5 points; suboptimal breastfeeding nibbles another 4 points; stunting has shown to lower IQ by 5 to 11 points; and anemia reduces the IQ by another 8 points.

Senegal recognizes the scourge of malnutrition on human development and economic growth and identified the reduction of malnutrition as a priority in the national strategy for poverty reduction and economic development. Also, recognizing the multisectoral nature of food and nutrition policies and interventions, Senegal has moved the responsibility of nutrition policy oversight and coordination under the Prime Minister’s Office while an autonomous office is in charge of the day-to-day management of the food and nutrition program. This program, developed over a period of 12 years, has put in place a decentralized platform of community-based service delivery through local governments. The national nutrition program initially focused uniquely on the prevention of chronic malnutrition (i.e., stunting) through the implementation of an evidence-based integrated package of high impact cost-effective interventions. As a result of this program, exclusive breastfeeding for the first six months doubled from 17 to 38%, and chronic malnutrition dropped from 30% to 16% between 2000 and 2012.

As the program started to show successes in scaling up high-impact interventions through a
community-based service delivery platform and lowering chronic malnutrition rates, renewed concerns were raised about the persistently high levels of acute malnutrition of around 9%. The difference with chronic malnutrition is that acute malnutrition (most often) is not permanent and children go in as well as out of a state of acute malnutrition. Depending on the incidence rate, the proportion of children under five that suffer from a bout of acute malnutrition in a given year is higher than the prevalence rate. Similarly, the proportion of children who have reached the age of five years that have suffered from one or more bout(s) of acute malnutrition in the course of the first five years of life can be as high as or higher than the rate of chronic malnutrition. Moreover, the incidence of acute malnutrition is not evenly distributed over the country, but is often concentrated in certain regions where the prevalence rate can be as high as 15-20%. In other words, acute malnutrition is, and has remained, a significant and stubborn problem in Senegal, despite the roll-out of the national nutrition program. From 2008, the program gradually added the management of acute malnutrition to its scope of interventions. However, the focus on acute malnutrition has been limited to curative aspects, such as screening, diagnosis, treatment and follow up.

Recurrent external shocks pose a serious threat to a fragile nutrition situation and the successive shocks of the past five to seven years have been key drivers of the stagnation of most nutrition outcome indicators. Only 9% of children aged 6-23 months received a minimum acceptable diet in 2010-11 and the exclusive breastfeeding rate has started to drop again to 33% in 2014. Other nutrition outcome indicators have also stagnated; after a period of progress, the rate of stunting is back on the rise again climbing to 19% in 2014; wasting which is a transient form of undernourishment, has not seen an improvement since 2000 and remains high at 9%; and low birth is estimated to affect 15-20% of births.

Until now, each individual crisis triggers an individual crisis response. Such crises responses are expensive to run and hardly change the determinants. The effects of climate change and the anticipation of continued recurrent shocks demand the development of a structural approach to building community and household resilience to the effects of external shocks on their food and nutrition security situation. The national nutrition program made a first attempt to address some of the cyclical underlying causes of acute malnutrition by developing a pilot experience with a cash transfer scheme in response to the food price crisis of 2008/09. This experience which ran from 2009-2012 generated several best practices around community targeting, community mobilization, and social communication. Moreover, while useful in mitigating the impacts of external shocks, the general perception of the pilot cash transfer experience was that it still remained a stop gap measure that was insufficient to break the cycle of recurrent crises following each external shock. The proposed Grant intends to respond to the looming policy gap on developing an exit strategy of the cyclical humanitarian assistance by testing new approaches and technologies that will make up the elements for a new approach to resilience building for household food and nutrition security which if successful can be scaled up through the existing nutrition program.

**Relationship to CAS/CPS/CPF**
The proposed Grant activity directly responds to a focus area of the CPS, namely disaster risk management which affects sector investments and development efforts. The CPS has began to focus on specific activities in the area of Disaster Risk and Sustainable Land Management as foundations for building resilience. The country particularly needs to build resilience for reducing vulnerabilities to disasters that affect a sector’s investments as well as its development efforts. The series of recent shocks experienced by Senegal have contributed to slowed growth and the stalling...
of poverty reduction. All activities in the upcoming CPS period will be focused on the goal of mitigating potential shocks in order to enhance resilience against future events. Therefore, the CPS proposes to contribute to the country’s resilience by supporting the development of government wide systems and processes for identifying and managing risks, i.e., building a disaster risk management framework – with particular emphasis on a few sectors such as agriculture, forest management, transport, health, and nutrition.

In response to the succession of external shocks, the Bank, in collaboration with UNICEF, the EU and the Canadians, will support a policy and partnership TA that will focus on strengthening nutrition policy and program implementation as a way to protect the poor and vulnerable. With nutrition indicators stagnating of late and several other problems with major human development implications (e.g., low birth weight, iron deficiency anemia, maternal undernutrition, and acute malnutrition) having received little or no attention, a review of policy effectiveness is needed to raise the importance of these issues including household and community resilience to food and nutrition insecurity shocks as a new priority in nutrition policy development. The AAA task aims to support the Government of Senegal in providing policy and strategic leadership in the area of nutrition by developing an Investment Case for nutrition which would seek to: (i) rationalize the use of resources for cost-effective interventions; (ii) mobilize actors and resources; (iii) strengthen the visibility of nutrition interventions in different sectors; (iv) favor synergy of interventions and investments; and thereby (v) inform the new Multisectoral Nutrition Strategic Plan presented under a new label of “Total Nutrition”. Contrary to earlier strategic plans, this Plan will: present a flexible financing plan based on coverage indicators to include potential donors with specific interests; tailor (community) services according to Regional contexts; and build capacity for and visibility of nutrition priorities and actions in relevant sector. The proposed Grant will feed into this TA by piloting effective approaches of resilience building to food and nutrition insecurity shocks at household and community level.

II. Project Development Objective(s)

**Proposed Development Objective(s)**

The PDO is to provide access to food and nutrition security enhancing services among vulnerable households in selected areas of the Recipient's territory as a new and innovative approach of reducing the recourse to recurrent crises responses. The vulnerable households will be identified by an objective and verifiable targeting approach that will be developed during project preparation and build on the best practices from the pilot cash transfer experience. In nutritional terms, the most vulnerable people to food and nutrition insecurity shocks are women and children in mostly remote areas of the country. Women generally have limited control over resources yet play essential roles in household production, consumption, and reproduction. Food and nutrition insecurity is typically concentrated in certain Regions and areas of the countries. After each economic or climatic shock, a rapid increase in malnutrition and food insecurity can be observed in these "pockets" of high vulnerability. The JSDF grant will seek to assist these households and communities in enhancing their resilience to the negative impacts of external shocks. The immediate beneficiaries will be women and children in food and nutrition insecure households and communities. The intervention areas will be identified during project preparation but will likely include selected counties (département) in the Louga and Diourbel Regions, although Kolda, Kaolack and Matam Regions may also be considered when selecting the intervention areas.

**Key Results**
Household food security is a complex issue linked most directly to health through nutrition. Food and nutrition security is premised on sufficient quantities of food being available consistently, sufficient access to appropriate foods for a nutritious diet, and appropriate use based on knowledge of basic nutrition and care. Food and nutrition security will thus need to address, in addition to in-season crop cultivation, the following specific issues of value chain management for a variety of locally appropriate food commodities: off-season household food production; diversified household food production; household food conservation and transformation; distribution and trade (of local food products as well as production inputs) as part of an enhanced local food economy; health-hygiene-nutrition education, and social and behavior change communication centered around the growth of young children and the well-being of their caregivers. The program already has extensive experience with community education and behavior change communication. The proposed project will build on these community-based communication experiences by introducing targeted food security enhancing interventions to vulnerable households. By raising product availability and diversity through production, conservation and transformation, the project will contribute to the strengthening of the local food economy. The Grant will thus develop a model for nutrition-led agriculture (including small animal husbandry) by applying and combining new approaches of community mobilization, organization, and targeting; skills transfer and empowerment; and promotion of appropriate technologies. All of this will be led by ongoing nutrition education, and social and behavior change communication.

Likely key results of this Grant thus include:

(i) the number of vulnerable women organized in women groups that are empowered with new knowledge and skills to secure sufficient quantities of food consistently available throughout the year;
(ii) the number of women who have adopted new technologies for the production and transformation of nutritious foods;
(iii) the number of communities empowered to target and monitor food and nutrition security enhancing services to vulnerable households.

III. Preliminary Description
Concept Description
The purpose of the Grant is to develop a replicable model for building household and community resilience to food and nutrition insecurity shocks that when scaled up can contribute to breaking the cycle of crises response and humanitarian assistance. There is no quick fix to this; instead, an integrated approach is needed. This new approach will put in place the elements for a nutrition-led food-based economy at community level. It aims to help vulnerable households and communities to resist the impact of external shocks with a package of innovative household and community interventions aimed at strengthening a profitable food economy at community level, while ensuring optimum utilization at household level. The project will build on best practices from the national community nutrition program, the pilot cash transfer project, as well as relevant experiences with appropriate technologies on the continent. In doing so, the Project will introduce a range of innovations related to solidarity measures, appropriate technologies and local governance. These activities will be piloted while case management programs and relief efforts continue in the same areas. The design of the project will broadly include four main components:

1) Women organization and empowerment; This component will focus on women with young children as well as adolescent girls from the most vulnerable households and enhance their capacity
to produce, buy and provide adequate food for the household notably the children and themselves, and promote their health status. Working with vulnerable women, the Grant will test the establishment of economic support and solidarity networks for enhanced food production and utilization. These networks, building on existing women groups, will be composed of beneficiary women and become a resource for enhanced capacity among women to engage in food production, transformation and commercial activities. The women groups will be the platform for: (a) the promotion of innovative solidarity measures such as: (i)"children cereal banks" by which the women will set apart small amounts of foods to be accessed when children are found to have become malnourished; and (ii) getting women to join and benefit from the Government subsidized community-based health insurance scheme; (b) training on new techniques and technologies as well as basic financial management; and (c) social and behavior change communication aimed at promoting essential life skills as well as care of pregnant and lactating mothers, and enhancing child care and feeding practices. With diversified food intake being one of the key messages, the women groups will be encouraged to develop new recipes for complementary feeding of children aged 6-23 months.

II) Improved varieties and appropriate technologies for micro scale applications at household level; This second component will identify and test new technologies for year-long household food production by women, community-based food transformation and preparation adapted to the local context, household water purification and hand washing facilities. On the production side, the Grant will test the adoption and dissemination for micro scale production of improved and bio-fortified plant varieties and/or animal races as well as household-level production technologies which are better adapted to the changes in climate and provide better quality food. The Project will liaise with the Senegal Agriculture Research Institute (ISRA) and the International Food Policy Research Institute (IFPRI) which are jointly concluding research on a number of bio-fortified food commodities (e.g., vitamin A-rich orange-flesh sweet potatoes, and iron-rich beans) to identify those that are suitable for the intervention areas. Similarly, where possible, the project will promote new technologies for water-efficient backyard or micro-gardens. On the conservation, transformation and utilization side, the project will identify a few promising technologies, such as cheese making from goat milk, improved granaries, solar drying, firewood-efficient cooking stoves, and hands-free hand washing techniques for dissemination in the intervention areas. Poor households will receive basic inputs free of charge on the condition that a percentage of the proceeds go to community revolving schemes and a moral condition that children and women are the first to benefit through improved dietary intake.

III) Community leadership and governance; The third component will develop the governance structure by which the social objectives of identifying and assisting the most vulnerable households will be integrated with commercial/economic objectives of enhancing the economic viability of vulnerable households. This component will: (a) develop an approach for community dialog on resilience development, including the introduction of community score cards, the identification of the most vulnerable households and consensus on the most appropriate food security enhancing interventions; (b) test the idea of creating a network of social entrepreneurs in the target communities who will take on the role of promoting new technologies, varieties and races to the women support and solidarity networks on a commercial basis, meaning that both social entrepreneurs and beneficiary households are encouraged to participate in the local food economy while investing in healthy growth and nutrition of the very young children; and (c) set up revolving schemes for production inputs to be managed by community governance structures, which will receive coaching support to ensure that part of the production benefits (e.g., baby chicks; seeds) will
be repaid into a revolving scheme whereby other households can benefit from the same food security enhancing interventions.

IV) Project Management, Monitoring and Evaluation: Based on the Development Objective, the Project will develop the theory of change for improved food and nutrition security among vulnerable households. The theory of change will form the basis for the development of a monitoring and evaluation plan. Simple techniques will be introduced to monitor the progress of the project and identify best practices. These techniques include community score cards to strengthen the local authorities' capacity to monitor and evaluation performance of the Project interventions; and lot quality assurance surveys (LQAS) to track results. In addition, a process evaluation is envisaged to better understand the efficiency issues in the project. This component will also support essential project management functions such as planning, budgeting, training, supervision and project monitoring.

IV. Safeguard Policies that Might Apply

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V. Financing (in USD Million)

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