



Project Identification Form (PIF)

PROJECT TYPE: **Full-sized Project**

TYPE OF TRUST FUND: **LDCF**

Project Title:	Strengthening land & ecosystem management under conditions of climate change in the Niayes and Casamance regions- Republic of Senegal		
Country:	Senegal	GEF Project ID:	5566
GEF Agency:	UNDP (select) (select)	GEF Agency Project ID:	4964
Other Executing Partner(s):	Ministry of Environment and Sustainable Development	Submission Date:	September 24, 2013
GEF Focal Area (s):	Climate Change	Project Duration (Months)	60
Name of parent programme (if applicable):	n/a	Agency Fee (\$):	389,500

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK:

Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCA-2 (select)	LDCF	2,200,000	4,700,000
CCA-3 (select)	LDCF	1,900,000	39,000,000
Total Project Cost		4,100,000	43,700,000

INDICATIVE PROJECT FRAMEWORK

Project Objective: The enabling environment for ecosystem based adaptation measures is strengthened in the Niayes and Casamance regions of Senegal.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
1. Climate and socio-environmental information platform for determining climate-driven vulnerabilities and cost effective adaptation options in Niayes and Casamance	Inv	Effective forecasting, preparedness and decision making information management systems for determining and tracking climate impacts on ecosystem systems established	<p>Output 1.1: Weather, climate and hydrological observation network and relevant equipment for data collection in target sites strengthened through the acquisition and installation of: (i) at least 4 meteorological monitoring stations, including upper air monitoring station; (ii) 4 hydrological stations; (iii) about 50 rainfall stations in each target sites; (iv) at least 05 workstations (server) and suitable software; (v) 1 oceanographic instrument measure, etc. (vi) at least 2 climate models and (vii) satellite receiving equipment and establishment of data/image processing facilities.</p> <p>Output 1.2. An integrated region-specific information system for climate change risk assessments and adaptation planning established to support stakeholders capacity development on adaptation and identification of cost effective adaptation measures.</p>	LDCF	2,000,000	4,000,000

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Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
2. Reducing climate driven risks in target ecosystem and land through adaptive restoration measures	Inv	Ecosystem based adaptation options including the adoption of climate resilient land and ecosystem management practices in two target area (Niayes and Casamance) reduce exposure to climate induced risks	<p>Output 2.1: At least 10 hectares of mangrove plantations are planted to reduce the impact of storm surges, coastal erosion and restore mangrove-based livelihoods benefiting 3 social units (e.g. oyster exploitation).</p> <p>Output 2.2: Climate resilient multi-purpose community woodland tested in the Niayes vegetable gardens to protect production from wind erosion and prevent the encroachment of sand dunes by (i) the planting windbreaks around individual vegetable cuvette in Mboro area; (ii) the reforesting 20 hectares in key vulnerable areas with specific species <i>Leucaena sp</i>; (iii) and the reforestation of lake Ourouaye with <i>filao</i> trees</p> <p>Output 2.3. At least 5 women groups in Casamance supported to implement climate resilient agroforestry and sustainable water management practices in rice fields to protect production from climate impacts</p>	LDCF	1,100,000	38,000,000
3. Knowledge and information support mechanisms	TA	Community, household and individual capacities will be strengthened for greater advocacy towards climate change responses and effective support to adaptation efforts	<p>Output 3.1: Long term human technical capacity strengthened of (i) staff from the MET department to maintain and use the equipment/predictions tools to support climate resilient coastal management practices at the local and policy level; (ii) extension service officers from the Ministries of Water Resources, Agriculture, Environment, Livestock, etc. trained on climate risks management guidelines/tools and how the results of climate risk/vulnerability assessments can be used to adjust regulations, policies and plans governing the management of land and ecosystems; and (iii) council members on how to integrate climate changes risks and opportunities into their programming and planning decisions.</p>	LDCF	804,762	1,000,000

PART II: PROJECT JUSTIFICATION

PROJECT OVERVIEW

A.1. Project Description.

A.1.1. The problem, root causes and barriers that need to be addressed

Changes in climate-related hazards and likely impacts in project areas

Senegal is vulnerable to drought, locust invasion, flooding and related health epidemics, sea-level rise, coastal erosion and its corollaries, and bush fire. According to FEWSNET, rainfall in Senegal declined rapidly between 1950 and the mid-1980s, and partially recovered in the 1990s. Between 2000 and 2009, however, the recovery slowed, and the 2000–2009 mean remained about 15 per cent lower than the 1920–1969 mean. Under this situation, there is a strong trend towards the aridity of the central and northern regions, and a more or less strong tendency towards the semi-aridity of southern regions. Since 1975, temperatures increased by almost 0,9° Celsius (°C) across much of Senegal. This transition to an even warmer climate could reduce crop harvests and pasture availability, amplifying the impact of droughts. Such warming, in regions with very high average air temperatures, can amplify the impact of water shortages.

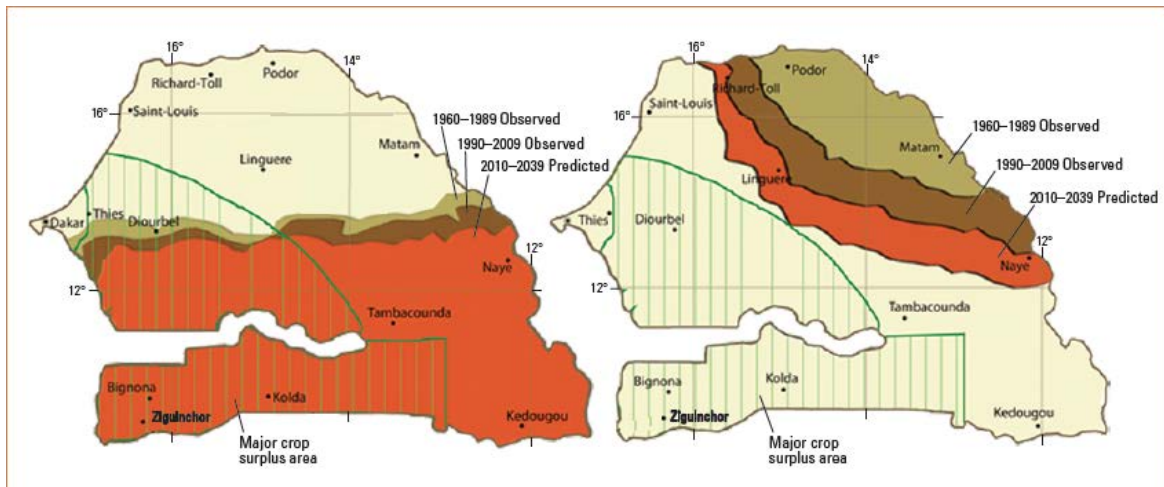


Figure 1. Climate change in Senegal: The left map shows the average location of the June–September 500-millimeter rainfall isohyets for 1960–1989 (light brown), 1990–2009 (dark brown), and 2010–2039 (predicted, orange). The green polygons in the foreground show the main crop surplus regions for millet and maize. The right map shows analogous changes for the June–September 30 degrees Celsius air temperature isotherms (Source: USGS/USAI/FEWSNET, 2012).

In Senegal, droughts are the result of climate variability that more recently has manifested by a late onset of the rainy season, irregular spatial distribution of rains, and an early end to the rainy season. Over the last decades, the increased incidence of drought has drastically changed both the water regime and the profile of vegetation as well as adversely affecting soil quality by gradually reducing the productive capacity of the environment. Critical impacts identified for targeted regions are:

Casamance Natural Region: Casamance comprises three administrative regions, Ziguinchor, Sedhiou, and Kolda, with a combined area of approximately 28,400 square km and a population of 1.5 million. Geographically, Casamance differs in a number of respects from the rest of Senegal: it has higher rainfall, and its landscape, which includes forests; rainforests and beaches are a major tourist attraction. The Casamance region of Senegal has for the last 30 years, been under-going Africa’s longest lived low-intensity conflict which has caused hundreds of deaths and injuries. The crisis has prevented the region from fulfilling its considerable economic potential both as an agricultural productive area and a tourist destination.

The main economic activities in these areas are mainly focused on oyster and rice production. These activities experiencing difficulties related to a number of factors including environmental degradation including pressures of climate change. According to the country's NAPA, the increased incidence of drought has drastically changed both the water regime and the profile of vegetation as well as adversely affecting soil quality by gradually reducing the productive capacity of the environment. Reduced water availability with ground and surface waters affected by salt-water intrusion in Casamance. Many valleys in Casamance are now affected by salted water intrusion resulting from reduced rainfall and lack of appropriate storage under changed conditions. Traditional lands for rice cultivation are also gradually affected by salinity, reducing the capacity of land to regenerate its fertility. In Low Casamance, the mangrove ecosystem is also affected by the decrease in rainfall and continental runoff favoured the development of salt flats and the reduction of their extent and productions that are attached (ex. oysters, arches, shrimp).

Niayes Natural Region: The Niayes ecosystem is a strategic food-growing region for Senegal, because two thirds of the vegetables consumed in the country are grown in the Niayes. The region encompasses a strip of fertile land running north along Senegal's western coastline from the outskirts of the capital, Dakar. The National Statistical Demographic Institute (ANSD) reported that vegetable cultivation is expanding with the area dedicated for farming increasing by nearly 70% between 2009 and 2011. The institute estimated the total income for vegetable growers at \$430 million. The 750,000 tonnes of fruit and vegetables produced here in 2011 accounted for more than 40% of the country's total.

However, the Niayes agricultural basins are progressively losing their only barrier against the encroachment of sand. Agricultural productivity is threatened by drought and desertification impacts with sand encroachment of the soil due to dune advancement, diminishing of water table levels and salinization of ground water. Since 1958, the Senegal national water and forests service has been running a programme to preserve the balance of the natural environment. Forest services have progressively planted filao trees to fix the dunes and protect the land from ocean winds and sand. But, there is a low regeneration of forestry species under the combined effect of the worsening climatic conditions and anthropogenic pressure (NAPA 2006).

Finally, while Senegal has enjoyed a strong economic performance and a steady growth over recent years, the population's living standards are still very low. GDP growth averaged 4.4 % during the period 2000-05 and 3.4% in 2006-10, but it will recover only slightly to 4-4.2% in 2010-11. According to the 2011 national household survey, the incidence of poverty in the country is at 46.7% of the population. Poverty in Senegal is most prevalent in rural areas, where roughly 60% of the population resides. The three regions composing Casamance (Ziguinchor, Kolda, and Sedhiou) are among the poorest in Senegal, with poverty levels at least 20 percentage points higher than the national average. The other 40% are found in urban areas, where the majority live in rapidly growing urban suburbs. Low agricultural production, limited capacity of the economy to create sustainable jobs, and inadequate resource allocation for social services contribute to poverty.

A.1.2 The baseline scenario and associated baseline projects

The LDCF financed project will be implemented in the framework of on-going national efforts to strengthen local development and restore socio-economic living conditions of communities. It will contribute to on-going initiatives aimed at increasing production and marketing in Niayes and Casamance, supported by the Canadian International Development Agency (CIDA). The baseline investment from CIDA is estimated to be US\$36M. It also builds on UNDP/EU led efforts to protect coastal and marine resources. Key baseline projects investment for the proposed LDCF financed initiative include the following:

CIDA: "Programme for Land Use and Economic Development of Niayes (PADEN)"; CAN\$ 19,9 Million 2009-2018. The goal of this initiative is to increase production and marketing of onions, garlic, potatoes, beans, tomatoes, cabbages, limes, watermelons, mangoes, papayas, and strawberries in the Niayes region. The purpose of the project is to increase the incomes of 17,000 producers (women and men), to make them true entrepreneurs, and to protect the region's natural resources. At least half of these producers are women. Additional funding from LDCF is expected to protect vegetable production from climate change impacts (e.g. increase of wind leading the sand encroachment). LDCF

resources will build on this project by promoting climate resilient adaptation options that help to restore/protect Niayes critical ecosystem.

Foreign Affairs, Trade and Development- Economic Development of Casamance Programme (PADEC-CAN\$ 19, 8 Million; 2009-2015)

The goal of this initiative is to support about 10,000 small-scale producers (women and men) active in the honey, mango, cashew, and banana supply chains in Casamance. An approach based on value chains, including all links in the chain (from production through processing to marketing) is favoured for this purpose. The programme is targeting operators (individuals, community groups, and associations), apex organizations, and policies and institutions (Government of Senegal, central and/or extension services, and local communities). Additional resources from LDCF are expected to provide climate information and support the development of adaptation technologies to support the resilience of the supply end of the value chain associated with these crops.

EU/WWF/UNDP: “*Programme on Coastal and marine resources Governance in the West African Ecoregion*”. With a total budget of US\$ 14 Million (2012-2017, of which the expected co-financing for this LDCF project is approximate US\$2 Million), the programme aims to strengthen and promote the adoption of best practices on sustainable use of marine and coastal resources in the West African Marine and Coastal Ecoregion (WAMER-7 countries). This baseline project will contribute towards developing communities and technical management capacities of the coastal zone through: the establishment of sustainable financial mechanisms at local level, (linked with component 1); and enhance resilience of local communities through promotion of suitable technologies for the rehabilitation of coastal erosion, management of climate risk (linked with component 2). Additional resources from LDCF will enhance capacity of technical services in Casamance and Niayes coastal areas to better manage resources under changing climate.

In terms of institutional measures and reforms, policy responses and the development of capacity for enabling climate change adaptation, Senegal has a long history of adapting to climate variability and dealing with locust invasion, floods, coastal erosion, and droughts. The Government is supporting the establishment of relevant data on climate changes, ecosystem monitoring and socio-economy through technical services of relevant Ministries (Transport, Environment, Water, Planning, etc.). In addition, numerous projects that address the impacts of current climate variability are on going at the local level. These include reforestation, irrigation, soil restoration, irrigation and mangrove restoration schemes, as well as risk and disaster management plans. Integrated approaches are emerging, including a project called “Adaptation to Climate Change—Responding to Climate Change and to Its Human Dimensions in West Africa through the Integrated Management of the Coastal Area” (ACCC) and the Climate Change and Development Adapting by Reducing Vulnerability (CC DARE) Project. Senegal also hosts a large collection of NGOs and research institutes whose primary goal is to improve adaptation capacities and build adaptation networks (such as INFOCLIM, CONGAD, and ISRA). Other development organizations and agencies, such as the Japanese International Cooperation International Agency (JICA) and the UNDP, among others, are making efforts to realize co-benefits between adaptation interventions, such as in the agricultural and health sectors.

However, the current “**baseline scenario**” does not necessary take the impacts of climate change into consideration making the task of developing short and long terms responses for disaster mitigation strategies extremely difficult with respect to the management of natural and social assets in the two project zones. Adaptation strategies in Casamance and Niayes are likewise difficult to formulate unless decision makers use climate information to facilitate change in the way that natural resources and ecosystems are valued and managed.

A.1.3 The proposed alternative scenario, with a brief description of expected outcomes and components of the project

The preferred long-term solution

The **preferred solution** is to ensure that land and ecosystem management under climate uncertainties in the Niayes and Casamance regions is enhanced. This includes strengthening the capacity of region based sources of technical support services (e.g. extension services), local leaders and decision-makers and communities to (i) better assess vulnerability to climate change and effect of adaptation, (ii) to monitor and manage the land and ecosystem sensitivity

to various pressures including projected climate changes; and demonstrate and promote autonomous adoption of adaptation techniques to reduce exposure to climate risks. Three sets of overarching barriers stand in the way of advancing towards the preferred long-term solution.

Barrier #1: institutional capacity constraints to translate climate information into decisions and land/ biodiversity management support and responses

Senegal made significant progress in term of land and ecosystem planning with the development of key policies such as the Forestry, Biodiversity, Environmental Policies and action plans. At local level, regional and local development plan exists in target projects areas and constitute potential opportunities to mainstream climate changes. But, local deciders and technical services (specifically water, environmental and forest departments) **lack of understanding and practices on how to use climate information** for reducing the negative impacts of climate variability and climate change and for better planning land and ecosystems.

Barrier #2: Insufficient climate knowledge, tools and data to support climate resilient sustainable land and biodiversity management

The Met department has **insufficient capacity in the dissemination and communication of climate information** to relevant people. The key challenge is to make it as easy as possible for decision makers, staff from technical departments and communities to use climate information and to facilitate change in the way that natural resources and ecosystems are valued and managed under conditions of climate change. The key issue for the local met services is centred on how best to ensure that climate information is used in an integrated manner with other data to convince decision makers at all levels (national, sub-national and local) and facilitate the use of it for advancing climate resilient ecosystem management, taking into account:

- Need for strategic planning (multiple urgency, time and spatial scales).
- Other drivers of change (including economics, policy, demography), which are dynamic.
- Methods of communication between information providers, decision makers and other stakeholders.

Moreover, in this framework, the gender-specific climate services are not sufficiently acknowledged, and catered to (communication channels, reach and inclusion). This is complicated by the fact that many decision makers are non-professionals who serve the vulnerable communities and groups whose subsistence livelihoods depend on traditional land use activities in remote areas with poor communication infrastructure.

Even with the existing sources of weather data, **the national meteorological Agency has insufficient ability to meet the needs of decision makers and technical services** for the immediate future. This includes constraints in formulating short-range forecasts, seasonal long-range forecasts and more long-term decadal projections. The limited coverage of climate networks and climate services is a constraint, but also the availability and usage of models that give spatial details for appropriate decision-making.

Natural resources and biodiversity cannot be effectively management in ignorance of fundamental climate-ecosystem dynamics. Adaptation solutions need to be framed by a basic understanding of how climate interacts with ecosystems and species – the ecophysiological, evolutionary, and ecological processes and responses that determine ecological system productivity and resilience; along with the productivity and resilience of the dependent social systems. However, there is a **lack of institutional coordination** to facilitate the systematic integration of relevant climate information with other pertinent information to inform planning and management of natural resources by relevant agencies in Senegal. Integrated catchment management models require integration of stream flow records with rainfall and evaporation timer-series from the same watershed. This kind of coordinated environmental monitoring is rarely achieved.

Barrier #3: Climate resilient practices that can regulate ecosystem services against climate vulnerabilities are not widely promoted within Senegal

At present, natural resource management is advanced largely through the improvement of productivity, capacity building of producers or ecosystem management/land & forest restoration. What is lacking, under conditions of climate change, is climate adaptive interventions to address climate-driven factors such as securing mangrove from the

impacts of storm surges, coastal erosion; protecting Niayes from wind erosion and the advancing of dunes, etc. This, in turn, will help local communities and producers to ensure continued availability and access to natural resources that support livelihoods and reduce their vulnerability to shocks and ultimately to adapt to changing conditions.

Expected outcome and component of the project

In the context of the above, LDCF funds will help to strengthen capacity within Senegal to use climate information and implement appropriate adaptation strategies to ensure the adequate provision of ecosystem services for the well being of both people and biodiversity in Niayes and Casamance regions.

By taking a holistic approach that integrates recognition of climate change scenarios together with information on ecological and socio-economic management systems, the LDCF financed project seeks to catalyse transformational change for the way in which natural resources and biodiversity are managed. Key project outcomes include: (i) Effective forecasting, preparedness and decision making information management systems for tracking climate impacts on ecosystem systems established; (ii) Ecosystem based adaptation options including the adoption of climate resilient land and ecosystem management practices in two target area (Niayes and Casamance) reduce exposure to climate induced risks; (iii) the enhancement of stakeholders' capacity for greater advocacy towards climate change responses based on improved access, use of projected vulnerabilities, impacts and risks. The collaborative approach between local decision-makers, technical staff, civil society and vulnerable communities in designing and implementing adaptation responses will contribute to creating conditions for the realization of the project outcomes as well as laying the ground work for replication and up-scaling.

A.1.4 Additional cost reasoning and expected contributions from the baseline, the LDCF/SCCF and co-financing

Component 1: Climate and socio-environmental information platform for determining climate-driven vulnerabilities and cost effectiveness adaptation options in Niayes and Casamance

Baseline for Component 1:

Currently, the National Meteorology Agency of Senegal (ANACIM) is managing and coordinating all operations of applied research in meteorology. Their work is based on the existing meteorology network in the target areas, including two synoptic stations (St. (Cap Skirring and Ziguinchor) and 2 agro meteorological / climatological stations in Thies and Louga. The operation of the current network is financed out of ANACIM's budget and estimated to be approximately US\$ 1 million/year. ANACIM regularly publishes weekly newsletters meteorological and agro-meteorological, monthly newsletters and decadal bulletins (<http://www.meteo-senegal.net/html/prdmtto.htm>).

Ecological and hydrological databases in selected regions are spread among several ministerial departments such as Forestry, Water management, Environment, Soils, etc. Since 1987, the Ecological Monitoring Center (CSE) has regularly monitored, with the use of advanced techniques (satellite data), parameters linked to vegetation, fires, pluviometry, agriculture and farming. The Department of Management and Planning of Waters in Senegal (DGPRES) is monitoring more than 147 hydrological stations. It has established a GIS based system to support monitoring of watercourses in Senegal.

The total estimated amount of Government "baseline project" for Component 1 is **\$4 million** over the lifetime of the project. In spite of these investments, the coverage of weather stations within the network remains insufficient in selected sites to effectively identify hazards and forecast potential impacts on land and ecosystem. In addition, the use of global and regional climate models (such as GCM, PRECIS) has limited capacity to effectively predict impacts at local level. There is a need to go further at the local level, in terms of tailoring, downscaling, refining the prediction to make it more informative for very localized adaptation related decision-making.

Relevant ecological, hydrological and socio-economic data still remain scattered and managed by few institutions. Without coordination and comprehensive socio-economic and environmental information, staff from the meteorological department may have difficulties to calculate risks for potential natural resources (e.g. mangrove,

forest, etc.) or development sector (agriculture, fisheries, water, etc.). This makes the current system deficient in terms of developing robust information and analysis that combines timely climate risk and vulnerability information with information related to the management of natural and social assets. Even though some limited amount of climate information is available (based on weather monitoring and some short term (daily) forecasts) and spread across different government departments and ministries, information on specific hazards experienced by different sectors is not available. The information that is produced by the current system is also not helpful for planning reforestation, managing degraded land and water, etc. Furthermore, without translation of the information into formats that can be easily understood by users (e.g. forestry, environment, water regional divisions), the information is unlikely to be used.

Additionality for Component 1:

In alternative scenario that is enabled by the LDCF funding, the delivery of climate/ecological information & projections will be improved for land and ecosystem sensibility, adaptation and vulnerability assessment, monitoring and planning. The project expect to have positive impact in the planning process at subnational level by strengthening local system for the analysis of climate-driven vulnerabilities and support cost-effective planning of specific adaptation interventions (highlighted in Component 2 but also beyond this project). It will support the gathering and storing of relevant climate and environmental data that will in turn support planning, monitoring and evaluation of concrete, on-the-ground adaptation measures to be implemented in the two project zones. This will be achieved through the following outputs:

Under **Output 1.1**, the weather, climate and hydrological observation network and relevant equipment for data collection in target sites will be completed to provide real-time information to decision-makers and communities at risk and to monitor the evolution of detected climate risks. Following instruments and tools will be provided:

- (i) At least 4 meteorological monitoring stations, including upper air monitoring station will be procured and installed to fit within the existing network used for monitoring key climate parameters. In addition, about 50 rainfall stations in each target sites will be installed and partnerships (with schools, women & producers association, cooperatives and NGO's) established for the manning and upkeep of rainfall stations. The establishment of a climate network in Niayes and Casamance Regions is expected to result in homogeneous, continuous and good quality observation data for improving numerical weather predictions used by mangers and communities in land and water management;
- (ii) At least 1 oceanographic instrument measure will be installed in Casamance for identifying sea level rise impacts on mangrove ecosystems, dangerous floods before they occur, etc.
- (iii) At least 4 hydrological stations to identify changes in catchment management to guide improve water quality and flow, and to better allocate water between the often competing demands of environmental flows, urban consumption and agriculture;
- (iv) At least 5 workstations (server) and suitable software will be procured and installed for regional services of Environment, Water, forestry, etc. to undertake systematic storage of data;
- (v) At least 2 climate models to strengthen the capacity of the MET Department to produce improved and sector tailored weather forecasting.
- (vi) Where needed, satellite receiving equipment and establishment of data/image processing facilities to use for planning and management purposes in the context of land, ecosystem and water management linked to livelihood development.

An integrated region-specific information system for climate change risk assessments and adaptation planning will be established to support stakeholders' capacity development on adaptation and identification of cost effective adaptation techniques (**Output 1.2**). An analysis of climate-driven vulnerabilities and cost effective adaptation options for target ecosystems (Niayes, mangrove) will be undertaken using data on trends in key climate variables, in environmental indicators and in relevant socio-economic indicators, future trends in population, urbanization, poverty, education, human health, energy needs, and water consumption, etc. that would also impact land-use change and hence ecosystem stresses. Climate monitoring information and forecasts, generated under Output 1.1, will help to identify climate change impacts on biodiversity and also to facilitate resilience enhancing approaches. This will help to predict the likely responses of mangrove species and other ecosystems to climate change and help develop adaptation options to increase their resilience. A platform for data providers will be established to help synchronize and organize

data, foster collaboration between research organizations through awareness of data resources, facilitate mutual co-operation through agreed data sharing.

Component 2: Reducing climate driven risks in target ecosystem and land through adaptive restoration measures

Baseline for Component 2:

At the level of project sites, the following programmes, projects and interventions are addressing baseline issues of relevance to the proposed LDCF financed project:

Financing from CIDA the Niayes Programme (PADEN) is currently underway to enhance entrepreneurship capacity of about 17,000 producers (women and men). The project is also helping foster cooperation among the various ministries through, which is ensuring the stability of the Senegalese government's activities in the area of horticulture at the end of the project.

In Casamance, a CIDA financed project is financing the establishment of a cashew collection center and 35 sub-projects focused on strengthening the supply chain associated with cashew, honey and fruit. About 150 stakeholders are trained on gender issues and 540 stakeholders trained in product marketing. Five completed market studies are also available.

In spite of this support, agriculture in Casamance is still hampered by land salinization in the alluvial valleys of Casamance and of Senegal River. According to the NAPA, climate change will contribute towards accelerated land degradation due to the removal of vegetation and subsequent propagation of water deficit.

In addition, there is a EU/WWF/UNDP programme that is promoting the sustainable use and management of coastal/marine resources (specifically in mangrove ecosystem). National and local consultations are currently underway to identify major problem and develop management plan.

The total estimated amount of CIDA and UNDP “**baseline project’ for Component 2”** is estimated to be **\$38 million**. While these business-as-usual development efforts are addressing producer's capacity to operate businesses, improve supply chains and promote ecosystem management in the project zones (Niayes and Casamance), they are not fully taking into account the effects of climate change. There are not enough efforts being dedicated to developing capacity to adapt to climate change and very little practical experiences with adaptation

Additionality for Component 2:

In the alternative scenario made possible by the LDCF funding, the exposures to climate risks will be reduced through the adoption of climate resilient management practices in land and ecosystem management. The underlying purpose of the project is to promote adaptation measures that help to restore/protect critical ecosystem (such as Niayes and mangrove) and/or to rehabilitate traditional lands for rice cultivation that is gradually affected by climate induced salinity. The expected environmental and social impacts of the project are mainly related to the implementation of this component which is designed to support the promotion of climate resilient measures such as mangrove replantation, establishment multi-purpose community woodland in the Niayes vegetable gardens, agroforestry and sustainable water management practices in rice fields (Casamance). With GEF/LDCF resources it is expected to yield substantial positive social impact in the target areas, specifically women involved in the development of climate resilient activities.

Specifically, LDCF resources will be used to restore mangrove-based livelihoods that are focused on oyster harvesting, salt extraction, and agroforestry. In this context, **Output 2.1**, focuses on at least 10 ha of mangroves plantation established to reduce the impacts of storm surges, and coastal erosion. Based on information provided in Component 1, applied research will be promoted within institutes such as Senegalese Agronomic Research Institute-ISRA, Dakar and Ziguinchor Universities, and the French Research Institute-IRD to explore, using an experimental design framework, the impact of the introduction of new mangrove species with vigorous regenerating abilities or adoption of plantation techniques that sustain the necessary plant density per hectare and increase the abilities of mangrove

plantations to adapt to climate change-related pressures (salinity, inundation, temperature, wind). Women and youth will be engaged in all testing and replication processes including the development of plant nurseries.

Climate resilient-multi-purpose community woodland will be established around Niayes vegetable crops to protect production from wind erosion and the advancing of dunes (**Output 2.2**). Indicative activities include: (i) the planting of windbreaks around individual vegetable cuvette in Mboro area using the following species: *Leucaena leucocephala*, *Parkinsonia sp.* and *Casuarina*; (ii) the reforestation of 20 hectares in key vulnerable areas with various species such as *eucalyptus*, *Casuarina*, *niaouli* and *Leucaena sp.*; (iii) and the reforestation of lake Ourouaye where filao trees are heavily degraded due to uncontrolled urbanization. Forestry regional services will support women and youth associations to establish community agroforestry nursery to supply planned reforestation actions and develop private entrepreneurship spirit (acquisition of resilient forest varieties, farm running equipment, etc.). Contribution of the Senegalese Agronomic Research Institute (ISRA) is expected to work with the forestry services in testing varieties that fit best to the agro-ecological zones and different types of climate risks and based on indigenous knowledge. Research will also focus on the use of species with high economical values for communities' income generation.

At least 5 women groups in Casamance will be supported to implement climate resilient agroforestry and sustainable water management practices in rice fields located in high climate risks zone (**Output 2.3**). Actions for conserving water and soil and soil protection and restoration will be conducted in conjunction with ISRA, National Advisory Agency on Rural and Agronomic Development (ANCAR), Regional Direction for Rural Development (DRDR) and Forestry Services. Smallholder nurseries will be developed in making suitable seedlings accessible at the local level. It will establish a careful selection of high quality of adapted germplasm with ISRA and forestry services to create a demand for both seedlings and agroforestry products.

Component 3: Knowledge and information support mechanisms

Baseline for Component 3:

Several efforts are undertaken to strengthen capacity for extension services, producers and local deciders on participative and sustainable environmental governance. The Senegalese Government has made substantial efforts in improving the quality of extension services by expanding the knowledge base on natural resources and the environment, by the availability of information on the condition of natural resources and the environment, and strengthening operational, technical, and institutional capacities of the State and local communities to improve working conditions at the Ministry. In this framework, the Forest Training Center in Thies is playing a central role in training or upgrading skills. Since 1991, the Centre has strengthened the technical and operational capacity of over 5230 staffs in the following areas: environment & natural resource management, wetlands management, coaching of women association on organisation and training local deciders on decentralization of resources natural (knowledge on policies).

Currently, CIDA's PADEN project will be training about 9000 producers on marketing and finance. Local deciders will improve their skills in planning and coordination of socio-economic development; and extension services on programme and project management. In Casamance, CIDA supported the training of 150 stakeholders on gender equity and 540 stakeholders are trained in product marketing.

The total estimated amount of Government & CIDA "baseline investment" for Component 1 is **\$1 million**. However, the institutional and technical capacity to adequately manage and protect natural resources against the negative impacts of climate change needs to be strengthened. Despite recognition of the critical role of local institutions in managing natural resources, little systematic analysis has been done to identify the factors of successful performance in strengthening climate resilience and the support they require to enhance their role in facilitating adaptation.

Additionality for Component 3:

Building on current government and CIDA financed efforts to strengthen local capacity, this project will contribute to expanding capacity for tackling climate challenges at the regional and local levels. In the alternative scenario,

Community, household and individual capacities will be strengthened to effectively support adaptation efforts by developing and delivering targeted training courses and extension materials.

Under **Output 3.1**, LDCF resources will be used to strengthen long term human technical capacity strengthened of (i) staff from the MET department to maintain and use the equipment/predictions tools to support climate resilient coastal management practices at the local and policy level; (ii) extensions services officers from the Ministries of Water Resources, Agriculture, Environment, Livestock trained on how the results of climate risk/vulnerability assessments could be used to adjust regulations, policies and plans governing the management of land and ecosystem. Regional capacity of environmental technical services will be built for assimilating forecasts and monitoring information into existing Water, Forestry and Environmental management plans /tools, and disaster management systems. (iii) Finally specific training will target local council members on how to integrate climate changes risks and opportunities into their programming. These engagements could also serve as opportunities to select a team within each commune that is willing to work further on Local Development Plans for climate change mainstreaming. The training will include modules on risk and vulnerability assessment and on the evaluation of financial and economic costs and benefits of risk management options, climate change adaptation investment planning and budgeting.

Output 3.2 will establish communication strategies and processes to enhance the ability of governments, societies and institutions to access and use climate prediction and information. Methods of presenting data (maps, tables, statistics, narrative), mode (sms, internet, face-to-face, TV, radio, newspaper, periodicals, newsletters), and terminology used (shared definitions, vernacular expressions, employing stakeholder verbiage), and timeliness of delivery (matched to decision cycles, up-to-date, available at time of day and in mode most advantageous to user) are all critical to successful use of climate information for effective decision-making. There is need to foster a change in social communication by developing and implementing strategy for gender-specific climate service to be acknowledged, and catered to (communication channels, reach and inclusion). Mechanisms will be built into the information flow that should allow for identification of gaps between information available and services needed, rapid adoption of new information, rapid response to emergent climate product needs, and adaptive management strategies that are flexible to meet changing situations. Stakeholder engagement will be a critical component for developing climate information products.

Finally, benefits of adaptation measures undertaken will be tracked and shared with public authorities, target communities and partners to enable replication in other communities (**Output 3.3**). An iterative and participatory process will be developed to evaluate impacts and generate lessons learned. Results will be shared using communication means such as participatory rural appraisals, community consultations, leaflets, posters, radio and exchange visits, etc. The Communication Unit of the Ministry of Environment will provide support and operationalize interventions that enhance adaptive capacity to climate variability and climate change. It will (i) develop tools for collecting and communicating challenges and results achieved by the project (such as reports, DVDs, films, documentaries, radio shows, brochures), (ii) prepare newsletters, workshops and roundtables, etc. to help share lessons learned across the country, and (iii) Organize exchange visits between project demonstration sites to afford dissemination and exchange information about techniques promoted. Links will be created with the mechanism UNDP- ALM (Adaptation Learning Mechanism) and WikiADAPT to ensure that the lessons from this project reach a wider audience, including international agencies, donors and the Secretariat GEF.

A.1.5 Adaptation benefits

<u>Benefits</u>	<u>LDCF Project</u>
Socio-economic benefits	Decrease the exodus of rural population to urban centers and migration with the restoration of land and ecosystem (youth and women can now develop economic activities related to the wise use of mangroves resources and exploitation of Niayes); Improve income generating opportunities;
Environmental benefits	Strengthening of databases, access to climate information to better manage risks on ecosystems; Preservation and restoration of natural habitats and ecosystem integrity; Increased carbon sequestration and biodiversity conservation.
Gender	The project will ensure that all key outputs take account specific gender related concerns. Information about climate change and adaptation measures will be designed and disseminated to ensure that women and girls – especially those who are poor or have been denied the right to an education – can easily have access to and absorb the necessary information. During the project formulation phase, a gender expert will systematically analyse and address in all outputs the specific needs of both women and men; and targeted interventions to enable women and men to participate in – and benefit equally from – development efforts.

A.1.6 Sustainability and Scale-up

In term of innovativeness, the project will support local stakeholders to implement a coherent monitoring, data and information system to strengthen decision making for the management of ecosystems. This will be developed to assist the process of disseminating climate / environmental information to stakeholders within the region, where information is currently limited. The innovativeness is embedded also in the solution-based approach of the project. The project will take into account gender concerns considering the fact that the issue of resource degradation and natural disasters (drought, salinization) affects differently men and women and vulnerable groups (children, young and old).

By improving access to information and long term capacity through training, activities carried out at the local (community) level will be better understood, thereby strengthening the likelihood of the sustainability of the interventions supported by this project. In addition, the development of a germplasm bank by research center and establishment of plants nursery at community level will contribute to the scaling of initiative.

A.2. Stakeholders. Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project preparation:

<u>STAKEHOLDER</u>	<u>RELEVANT ROLES</u>
Ministry of Environment and Sustainable Development	Coordination of the project through its specific directions: Directorate of Water, Forests, Hunting and Soil Conservation will be responsible for integrating climate data into water, soil and vegetation cover analytical tools. Directorate of Environment and Classified Establishments (DEEC), responsible for implementing government policy on the environment will provide overall support for the replication of project initiatives and support policy development where necessary. Department of National Parks (DPN) with a mandate to exercise the prerogatives of the State in the management of classified areas and the protection of nature reserves will be in charge of identifying critical areas and negotiating set asides and contract-plans with local communities for their management towards resilience. Centre for Ecological Monitoring (CSE) will be a provider and recipient of data within this project, building local capacities for data collection, monitoring and interpretation while at the same time receiving project support to broaden the scope of its own parameters to include vulnerability, resilience and climate related information. Institute of Environmental Sciences (ISE) will support both project outcomes to enable

STAKEHOLDER	RELEVANT ROLES
	scientific codification and replication of best practices, ground truth proposed models and provide feedback on the feasibility and manageability of proposed data management systems and structures.
National Assembly	Parliamentary Network on Environment National Assembly will support communication, lobbying and sensitization around the issue of climate change and adaptation. In particular members of the network will be exposed to on the ground activities and initiatives of the project with a view to increasing government budgetary support for similar interventions and their replication.
Agricultural Ministry	The National Institute of Soils (INP): the projects will coope the large, on the ground presence of this institute and its focus on soils to support outcome 2 and in particular interventions intended to replenish or maintain productive capacities.
Research and technical services (ISRA-CRODT, ANAMS, regional water and forestry Division, Agriculture, LPA, ANCAR)	Support the development of the climate information systems that contribute to research development and assistance to target communities on understanding climate impacts and adopting climate resilient activities. Under the project, the use of climate information is based on a combined approach. Regional seasonal forecast is associated with both a scaling or "downscaling" and an analysis of agro-climatic parameters. The scaling statistics used to refine the prediction to make more precise compared to the study area with the partnership of the Laboratory of Atmospheric Physics (LPA); The analysis of agro-climatic parameters used to define the probability greater, start dates and end of the season rainfall. It is made by the National Meteorological Agency (ANAMS) Research on agroforestry species will be under the responsibility of ISRA. Research on marine resources is under the responsibility of CRODT. Agency on Rural and Agronomic Development (ANCAR) is responsible of rural counselling of soil protection and restoration practices
The Socio-Economic Groups (CBOs producers, etc.).	They will be the direct beneficiaries and the project will strengthen their capacity and support to reduce their vulnerability to CC. In addition, they will be involved in the management of field activities. National Council for Dialogue and Cooperation for Rural (CNCR) and the Association for the Development Projects Base (ASPRODEB)
Government Ministries (including decentralized)	They will be involved in the Project Steering Committee and in various aspects of the project technically supporting the communities in the implementation of adaptation activities. They also benefit from capacity building in this project.
Press	Network of Journalists for the Environment. In place since the Rio Conference, with communication professionals, they participate in all phases of preparation to produce policy documents (PAN/LCD, NAPA)

A.3 Risk. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable):

Risk	Level	Mitigation
Low commitment and low underlying capacity of technical structures supporting adaptation measures	M	Although this project intends to develop capacities of the technical structures regarding climate change, some prerequisites, in terms of institutional capacities, will form the basis of good implementation of institutional measures. However, a solid and sustained level of institutional support by consultants mandated under this project should mitigate this risk.

Existence of unresolved land disputes	M	Preventive conflict management will be developed as well as dialogue among stakeholders. The Board in charge of rural land management will approve plans and management systems to implement in territorial units.
Climate / Drought	M	The perturbations of climate can annihilate efforts. The project will develop mitigations measures and strengthen communication on potential climate risks based on improved climate information (appropriate adaptation technologies, etc..)
Potential Environmental and social risks	M	During the preparatory phase, the project will prepare an Environmental and Social Management Framework (ESMF), to be integrated in the project document, that describe and propose measures and plans to reduce, mitigate and/or offset adverse impacts and enhance positive impacts. Community organizations, associations of civil society, and producers groups will actively participate in the design and in the implementation of the ESMF. The overall environmental impact of the project is positive and the adopted ESMF will provide enough information for making decision on safeguards aspects during the implementation phase.

A.4. Coordination. Outline the coordination with other relevant GEF financed and other initiatives:

National Initiatives

- GEF/IFAD: *Climate Change adaptation project in the areas of watershed management and water retention*
The project will increase the resilience of agriculture production system and value chains to climate changes. The project expect to: (i) build national capacity, awareness and knowledge on climate change and agriculture production; (ii) to promote water harvesting and watershed management; (iii) promote water conservation and efficient conservation. While the two projects are intervening in different sites, it is expected exchanges of experiences and adaptation practices in the framework of Ministry of Environment.
- Adaptation Fund project *-Adaptation to Coastal Erosion in Vulnerable Areas*
The two projects are targeting the impacts of sea level rise impacts in the Coastal zone. The AF project is supporting the implementation of actions to protect the coastal areas of Rufisque, Saly, and Joal against erosion, actions to fight the salinization of agricultural lands used to grow rice in Joal with the construction of anti-salt dikes; assisting local communities of the coastal area of Joal, especially women, in handling fish processing areas of the districts located along the littoral and to conduct awareness programme and training related to adaptation and its adverse effects; communicating on the adaptation, sensitize and train local people on climate change adaptation techniques in coastal areas and on good practices, to avoid an aggravation of the various situations encountered; and developing and implementing the appropriate regulations for the management of coastal areas. As the Ministry of environment is implementation partner of the AF project, GEF project will benefit experiences and tools developed to implement efficient adaptation measures in the coastal zone.

Regional Projects

World Bank -Senegal River Basin Climate Change Resilient Development Project

The GEF project will increase the sustainability of and the resilience of the Basin's agriculture-dependent population in the face of climate change and improve environmental management practices in the SRB. In term of Institutional Strengthening, the project is seeking the inclusion of Guinea as a signatory to the SRB Water Charter; and (ii) the development and delivery of a capacity development and training program on climate change adaptation for OMVS National Cellules and pre-identified National Agencies. It will strengthen the regional and national data knowledge base for Basin management with an emphasis on developing and integrating climate variability and change. Finally the project will implement climate change adaptation measures and integrate water resource management practices in the SRB.

UNDP-National Projects on *"Strengthening climate information and early warning systems for climate resilient development and*

adaptation to climate change”.

GEF project are seeking to (i) Enhance capacity of national hydro-meteorological (NHMS) and environmental institutions to monitor extreme weather and climate change and (ii) promote efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term development plans.

Overall, the Ministry of Environment established the National Climate changes Commeetee (COMNACC) as an exchanges platform for stakeholders intervening in climate changes. During the PPG phase, in-depth consultations will be undertaken in this framework to establish partnerships and practical modalities for linking and collaborating with the above on-going initiatives so that duplication is avoided and that LDCF resources build on the progress and achievements made to date through such initiatives. Key potential initiatives and partners are laid out in the section on additionality and baseline. During the preparatory phase a strategy and plan for collaboration with relevant on-going initiatives will be prepared, including defining the roles and responsibilities of critical stakeholders.

Description of the consistency of the project with:

B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.:

The project is anchored in the *Strategy Paper Poverty Reduction III* (2013-2017), framework for economic and social development policies in Senegal and contributes to lifting the challenges identified. It focuses on the following strategic areas: (i) Growth, productivity and wealth creation, (ii) Human capital and sustainable development, (iii) Governance, Institutions, Peace and Security. The project will contribute to reduce impacts of climate changes on local development strategies by promoting appropriate adaptation technologies and involving all users in the formulation of priorities for local development (contributing to the Strategic Axis 3). The proposed project is also consistent with the Ministry of Environment and Nature Protection's *Framework of the Short Term Sector-based Expenses* (CDSMT), based on three strategic orientations: (i) Improve basic knowledge in environment and natural resources; (ii) Intensify the fight against the current rate of degradation of the environment and natural resources in line with international conventions hereunder; (iii) Build the actors' institutional and technical capacities in the implementation of environment and natural resources preservation.

The project will contribute to the implementation of the Agro Sylvo Pastoral Orientation Law (LOASP) focused on the creation of an attractive and generate incentive in the rural area, the promotion of family exploitation. This new orientation of the agricultural policy is based on the shift from extensive production systems to sustainable, diversified and intensive systems and the respect of the natural resources. The specific objectives of the policy of agro-forestry-pastoral focus on reducing the impact of climate hazards, economic, environmental and health through water control, diversification of production and training. This project is expected to materialize at local level objectives LOASP by supporting the integration of climate resilient practices.

Finally, the project complies with Senegal's *National Adaptation Programme of Action (NAPA)*. The NAPA identified four priority sectors: coastal protection, agro-forestry, water resources, awareness and education. The proposed project will address NAPA priority identify in Niayes and South regions focused on dunes protection, mangrove restoration and water management (Component 2). In addition, relevant climate information will be provided to help technical services and communities to better plan and manage climate risks (component 1).

B.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities:

This project is consistent with LDCF eligibility criteria and financing strategy. It is in-line with LDCF/SCCF focal area objective 2 “Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level” and objective 3: Promote transfer and adoption of adaptation technology. It is specifically aligned with outcomes linked to these objectives including increased knowledge and understanding of climate variability and change-induced risks at country level and in targeted vulnerable areas, strengthened adaptive capacity to reduce risks to climate-induced economic losses, successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas and enhanced enabling environment to support adaptation related technology transfer.

A.1.2: FOR projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

Ownership: Senegal is a Party to the UNFCCC, having ratified it on December 1994. The country is also a signatory of the Kyoto Protocol since 2001. As required by the UN Framework Convention on Climate Change, Senegal prepared the first National Communication in 2000 and completed the National Adaptation Plan of Action (NAPA) in December 2006. These reports are prepared with the support of the National Committee on climate changes (COMNACC) and through a participatory approach involving all national stakeholders involving diverse stakeholders. The country is also hosting the Interim Secretariat of NEPAD.

Compliance with programme and LDC Fund policies: Senegal is among the least developed countries (LDCs), thus making it eligible for funding from the Least Developed Countries (LDC). The proposed project is consistent with the strategic objective of the LDCF fund to promote the LDCs’ “climate compatible” development options and support the achievement of the MDGs under conditions of climate change. The project complies with the NAPA rules and procedures and represents the response of Government of Senegal to urgent and immediate adaptation needs.

Financing: The project is designed to reflect the additional adaptation costs of priority actions identified in the NAPA and builds on several other projects and programmes. The co-funding for this project is also within the stated guidelines with more than \$ 10 m in prospective funding. These amounts will be clarified during the project preparation phase. It should be noted that the among likely co-financing is twice the amount required by the LDCF guidelines for the amount of LDCF resources being requested by the Government of Senegal for this project.

Institutional Synergy and Coordination: The implementing partner is the Ministry of Ecology and Nature Protection (MENP). MENP will delegate specific project activities to appropriate ministries, including the Ministry of Decentralisation, the Ministry of Livestock, the Ministry of Agricultural, the Ministry of Water, etc. Sub national authorities, civil society (women and youth associations, NGOs, media, Community Based Organizations) and the private sector will be important partners of the project and will be provided with adequate space to contribute. The COMNACC and its break-up at regional level (COMRECC-established through UNDP support) will also play a great role in identifying, disseminating and supporting adoption of relevant adaptation options. Details of the institutional arrangements will be spelt out during the PPG phase.

Monitoring and Evaluation: The implementation of the project’s activities will reflect GEF monitoring and evaluation standards and procedures as well as UNDP guidelines on monitoring and evaluation of projects on adaptation policy. As the project will be on NIM modality, the national Cellule of Project Coordination (CAP) will ensure the compliance of the Project monitoring and evaluation with Senegalese Procedures. Details for monitoring and evaluation will be articulated during the project development phase.

B.3 The GEF Agency's comparative advantage for implementing this project:

Present in Senegal since 1975, UNDP supports the efforts of the Senegalese Government in improving the living conditions of communities by improving youth and women employment through particular skills / qualifications and developing the potential of MFI / micro-projects as well as promoting High Intensity Work (HIMO) in areas concentration, the increase in income of vulnerable groups (disabled, people living with HIV / AIDS, etc.).

Under the Environmental and sustainable management of natural resources framework, UNDP programmes allowed; (a) the introduction of reliable and reproducible methods to rehabilitate degraded land, resulting in the development of a recovery process 400 ha of saline land, restoring nearly 3,000 acres of farmland through the integrated management of soil fertility through agroforestry and conservation of water and soil, and the development of participatory management plans for about 2972 ha; (b) improving the participatory management of local communities, with consequent reduction of bushfires (90%) in four characteristic ecosystems of Senegal, and supported legal access to land for farmers through the creation of Pastoral Units; (c) the establishment of green savings and loan systems targeting the sustainable use of natural resources, diversification sources of revenue to reduce poverty. These achievements have been conducted through partnerships with the GEF.

Recently, UNDP supported the Government to implement the Senegal component of the Africa Adaptation Project. Support was provided for Senegal to mainstream climate change adaptation across key sectors and into development processes. Under the "Boots on the Ground" Programme, UNDP has placed national officers in 24 Country Offices (including Senegal) to provide climate policy support to governments. It is expected that countries will climate-proof their development paths assisted by a package of focused climate change services.

At local level, UNDP is supporting the implementation of the Down to Earth: Territorial Approach to Climate Change (TACC-Senegal 4M USD). The project is part of a partnership between the United Nations and sub-national governments for fostering climate friendly development at the sub-national level. The TACC project is supporting the integration of climate change adaptation and mitigation measures into sustainable development planning and programming by: (i) Developing partnerships with UN and specialised agencies, national and sub-national governments, centres of excellence and regional technical institutions, and the private sector; (ii) Making available methodologies and tools for long-term climate change participatory planning to regions and cities and sharing best practices; (iii) Providing regions with information about climate change challenges and opportunities and technical and financial solutions; (iv) Providing technical support for the preparation of regional climate change plans, including identification of priority mitigation and adaptation measures; and (v) Providing technical support to identify policy and financing instruments to implement priority climate change measures. The TACC-Senegal is implemented into 5 regions.


Finally, at institutional level, UNDP supported the Government of Senegal to improve the absorptive capacity of resources, including the introduction of mechanisms through the Projects and Programmes Support Unit (CAP) within the Ministry of Economy and Finance. Currently, technical and financial partners of Senegal as the World Bank, the Spanish Cooperation, and the Luxembourg Cooperation and to some extent, the Belgian Technical Cooperation and the African Development Bank made use of the CAP mechanisms. This reflects recognition of its effectiveness in improving capacity planning, monitoring and controlling projects. This has resulted in greater transparency and traceability of expenditure on external resources.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mrs. Marilyn Diarra	Director of Environment	MINISTRY OF ENVIRONMENT	SEPT. 10, 2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Adriana Dinu, Officer-in-Charge, and Deputy Executive Coordinator, UNDP/GEF		Sept. 24, 2013	Ms Mame Dagou Diop (GLECRDS)	+27 12 354 8115	mame.diop@undp.org