

Project Identification Form (PIF) entry – Full Sized Project – GEF - 7

Improving Water Availability in The Gambia's Rural and Peri-Urban Communities for Domestic and Agricultural Use

Part I: Project Information
GEF ID
10199
Project Type
FSP
Type of Trust Fund
LDCF
CBIT
No No
Project Title
Improving Water Availability in The Gambia's Rural and Peri-Urban Communities for Domestic and Agricultural Use
Countries
Gambia
Agency(ies)
AfDB
Other Executing Partner(s) Executing Partner Type
Ministry of Fisheries, Water Resources and National Assembly Matters (MFWRNAM) Government

GEF Focal Area

Climate Change

Taxonomy

Sustainable Livelihoods, Sustainable Land Management, Land Degradation, Focal Areas, Income Generating Activities, Community-Based Natural Resource
Management, Sustainable Agriculture, Least Developed Countries, Climate Change Adaptation, Climate Change, Ecosystem-based Adaptation, Livelihoods, Climate
resilience, Community-based adaptation, Mainstreaming adaptation, Strengthen institutional capacity and decision-making, Influencing models, Participation, Type of
Engagement, Stakeholders, Consultation, Information Dissemination, Beneficiaries, Awareness Raising, Communications, Local Communities, Gender results areas,
Gender Equality, Access and control over natural resources, Capacity Development, Gender Mainstreaming, Land and Soil Health, Food Security in Sub-Sahara Africa,
Integrated Programs, Integrated Land and Water Management, Gender Dimensions, Resilience to climate and shocks, Smallholder Farming, Sustainable Production
Systems, Adaptive Management, Commodity Supply Chains, Smallholder Farmers, Food Systems, Land Use and Restoration, Integrated Landscapes, Landscape
Restoration, Sustainable Food Systems, Training, Knowledge Generation, Capacity, Knowledge and Research, Knowledge Exchange, Adaptive management, Learning

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 2

Duration

48 In Months

Agency Fee(\$)

831,644

Submission Date

4/5/2019

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	LDCF	7,149,766	7,679,021
CCA-2	LDCF	1,800,000	2,691,206
	Total Project Cost (\$)	8,949,766	10,370,227

B. Indicative Project description summary

Project Objective

To build resilience to climate change and variability by enhancing water supply for domestic and agricultural use, and ultimately improving livelihoods in rural and peri-urban areas of The Gambia

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Provision of Climate Resilient Water Supply Infrastructu	Investme nt	1.1 Increased access to reliable and clean water supplies for household and	1.1.1 Water source point development, rehabilitation and/or upgrading in target areas and climate-proofed (additional boreholes with solar pumping)1.1.2 Climate-proofed water schemes installed	LDC F	6,400,000	5,828,816
re		agricultural use (climate- resilient technologies	for households and agriculture, including livestock (water tanks, pipe networks, reservoirs, animal watering points)			
		and practices promo ted locally)	1.1.3 Diversification of water sources, including rainwater harvesting and storage (domestic and communal) for water security during dry seasons and droughts.			
		1.2 Vulnerability of physical assets reduced: water supply infrastructure	1.2.1 Water source protection measures (e.g. concrete lining, targeted vegetation around boreholes to limit topsoil loss, erosion and contamination)			
		climate-proofed to reduce water scarcity,	1.2.2. Anti-salinity techniques assessed and tested in selected lowland communities			
		contaminationa nd damage (better able to withstand the	1.2.3. Stormwater management measures and interception wells assessed and introduced as flood defense and artificial recharge tactics			
		effects of	1.2.4. Assessment and development of concurrent groundwater recharge systems to enhance storage capacity			

climate change and extreme weather events)	1.3.1 Climate change risks identified and documented, including vulnerability assessments of communities, water supplies
1.3 Increased awareness of	(quantity and quality) and technologies
climate change	1.3.2 Assessments of risk, vulnerability, and
impacts and	adaptive capacity needs influence the project's
vulnerability, and	strategic investments (location, sizing, depth,
institutional	etc.)
capacity	
strengthened	1.3.3 Districts better target and manage the
to integrate	provision of water supply and sanitation
adaptation into	facilities by considering climate threats: risk
water resources	prevention, surveillance and early warning plans
management	developed in cooperation with other partners

2. Enhanced Institutiona I Capacity for Adaptation and Hydro- meteorolog ical	Technical Assistan ce	2.1 Institutional and technical skills strengthened to identify, implement, and monitor adaptation measures	2.1.1 Support to national level institutions (DWR, DoH, DCD) , including training of staff to enhance water supply and sanitation delivery in the context of a changing climate 2.1.2 Strategic planning for water management and risk prevention: training of DWR and NAWEC staff in CCA strategies	LDC F	1,000,000	2,691,206
Monitoring		2.2 Enhanced monitoring and planning of hydrological	2.1.3 Workshops targeting district officials on how to integrate adaptation principles into water and sanitation programs (highlighting the link between climate change and health)			
		resources, leading to improved early warning and response	2.2.1 Improved climate and water monitoring capacity: institutional strengthening of relevant departments in hydro-meteorological and groundwater surveillance			
		capacities	2.2.2 Training of district water monitoring assistants to help track water quantity/quality			
			2.2.3 Monitor coverage and functionality of rural water supply and sanitation systems			
3. Community Land and Water- based Adaptation	Investme nt	3.1 Vulnerability of communities and natural systems to climatic and other shocks reduced: SLWM increases resilience to the impacts of climate change and variability 3.2 Capacity	3.1.1 SLWM measures introduced in communities to protect soils and reduce vulnerability of agricultural livelihoods (soil fertility and erosion control measures applied and up-scaled) 3.1.2 Application of climate smart agriculture (CSA) practices on community lands (hectarage) 3.1.3 Pilot livelihood diversification through livestock and sustainable rangeland management to improve adaptive capacity of households 3.2.1 Communities organized to manage and maintain new water facilities: workshops on CCA and integrated water resources management 3.2.2	LDC F	800,000	672,802

developed at local level for CCA and enhanced use of water conservation and management measures 3.3 Adaptation measures in the WASH sector improve socioeconomic indicators, especially for women and children, including for health (e.g. reduced incidence of water-borne diseases and child /infant mortality rates), education (e.g. improved school enrolment rates), and

income

Communities mobilized to improve adaptive capacity, including empowering people to participate in water committees (at least 50% female participation) 3.2.3 Capacity building for village development committees (VDCs) and village water committees (VWCs), including in operation and maintenance of new water and sanitation technologies and facilities 3.2.4 VDC/VWC members trained in water and sanitation planning, community facilitation, and principles of CLTS 3.2.5 Support to local authority council areas, including training and provision of tools necessary for effective planning and implementation of water and sanitation services in collaboration with communities 3.3.1 Sensitization campaign to ensure the uptake of climate-resilient WASH measures: number of community meetings and field days held to increase awareness and adoption 3.3.2 Sanitation and hygiene promotion: educational workshops targeting community members 3.3.3 # of freshwater sources protected through improved sanitation practices

cation ctivition on cl d sar amin M&E s all lev d other	treme n and ties 4.1.3 climate nitation ng guidelines system vels 4.2.2 er 4.2.3 ees and	LDC F	333,110	672,802
e ada _l	isseminated aptive -scaling Sub 1	Fotal (\$)	8,533,110	9,865,62
		LDCF	416,656	504,60
	Sub '	Total(\$)	416,656	504,60
	Total Project	Cost(\$)	8,949,766	10,370,22

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	Transition Support Facility - Pillar 1	Grant	Investment mobilized	3,470,625
GEF Agency	ADF	Grant	Investment mobilized	4,164,750
GEF Agency	RWSSI-TF	Grant	Investment mobilized	2,346,142
Government	Government of The Gambia	In-kind	Recurrent expenditures	388,710
			Total Project Cost(\$)	10,370,227

Describe how any "Investment Mobilized" was identified

The amounts reflected under the co-financing refer to the financing plan of the approved Climate Smart Rural WASH Development Project (baseline project) which lists grants financing secured as "investment mobilized" and in-kind contribution from the Government listed as in-kind "recurrent expenditures".

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
AfDB	LDCF	Gambia	Climate Change	NA	8,949,766	831,644	9,781,410
				Total GEF Resources(\$)	8,949,766	831,644	9,781,410

E. Project Preparation Grant (PPG)

PPG Amount (\$)

PPG Agency Fee (\$)

200,000

18,584.7

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
AfDB	LDCF	Gambia	Climate Change	NA	200,000	18,584.7	385,847
				Total Project Costs(\$)	200,000	18,585	218,585

Core Indicators

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

The target numbers mentioned for LDCF indicators in the excel sheet attached to the PIF titled "CCA Core Indicators and Metadata Gambia 2" will be further refined during PPG phase.

Part II. Project Justification

1a. Project Description

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);

The Gambia is located in the Sahelian zone of the West Coast of Africa. It is the smallest country on the continent's mainland and is entirely surrounded by Senegal except for its coastline on the Atlantic. The River Gambia flows through the center of the country from east to west, dividing it in two strips of land 25 to 50 km wide. Given its small size and agro-ecological characteristics, The Gambia has limited land resources and many soils with low fertility, making food production difficult. The country faces significant developmental challenges due to a rapidly growing population, limited resources, and increasing threats by climatic change.

The Gambia is among the poorest countries in the world, ranking 174thout of 189 countries in the 2017 Human Development Index (HDI). Of its total population of about 1.9 million, 40% is rural. Poverty has increased since the 1990s, with over 60% of Gambians today considered poor (of which 63% are women). Poverty is predominantly a rural phenomenon although regional variations are strong, with a higher prevalence rate in the eastern half of the country where agro-climatic conditions are more difficult. 70% of the economically active population is employed in agriculture. Farming is normally subsistence rainfed production. Soil and water conservation measures are uncommon, and the growing number of people using unsustainable methods of cultivation is increasingly affecting the resource base.

The Gambia lies in the Sahelian agro-climatic zone and its climate is characterized by two main seasons: a rainy season from June to October, and a longer dry season from November and May. Two major geographical zones can be distinguished: the uplands and the lowlands. In the uplands, weathered tropical soils are found which have low fertility and low water retention capacity. The lowlands include the floodplain in the Upper Valley (UV) and tidal plains in the Central Valley (CV) and Lower Valley (LV). Lowland soils are flat, fine and poorly drained, and at risk of saturation and salinity, particularly in the LV.

The Gambia River presents fairly good water supplies while its floodplains, riverbanks and wetlands are important to local livelihoods. However, due to the country's flat topography, there is a significant marine influence while the river's high seasonality and salinity have consequences on land use, productivity and livelihoods. Surface water is thus rarely a source of drinking water in The Gambia because of the saline conditions in the lower reaches of the River and its tributaries, where most of the population centers are located. The potable water needs for households, tourism, industry, irrigation and livestock are predominantly supplied by groundwater sources (FAOSTAT).

The Gambia is among the least water stressed countries in the world as total water withdrawal is less than 1.5 % of the total renewable water resources potential of 6.5km3 per year. However, uneven distribution of fresh sources and constraints in water resources development and management of safe drinking water make access difficult for many segments of the population, especially those in the rural areas who often rely on unsafe water sources. The JMP (2015 update) figures suggest that the country met its MDG targets for the sector. Reportedly, access to potable water is a little over 86.1% (NDP, 2018) while access

to improved sanitation is about 64.9% (2016) across The Gambia. Open defecation is prevalent in rural areas, and most communities in the peri-urban areas are not able to provide sanitation facilities for their household use thereby contributing to high prevalence of preventable WASH-related diarrhoeal diseases. Per capita waste generation is above the capacity of the municipal councils in the peri-urban/rural growth centres resulting in severe challenges in waste management and high vulnerabilities among communities.

In addition to water contamination, The Gambia's climate and human-induced environmental problems include deforestation and desertification. Deforestation is primarily caused by the expansion of agriculture (primarily by slash-and-burn) while land degradation is a combination of unsustainable cultivation practices and changing climatic conditions. A 30% decrease in rainfall over the last 30 years has increased the rate of desertification and influenced water availability. Furthermore, water pollution is a significant problem due to lack of adequate sanitation facilities and awareness. These problems will grow acutely in the face of a changing climate and the absence of compensatory and adaptive management strategies.

A key and growing challenge in The Gambia is to sustainably develop and manage water resources to meet ever higher demands in the context of a changing climate. The impacts of climate change and variability coupled with increasing abstractions, urbanization, and poverty mean that adaptation planning and measures are essential. Climate and population pressures have a significant influence on the status of The Gambia's natural resources, and on the economic sectors which depend on those resources. Climate change is best exemplified by a negative trend in rainfall levels and a rise in average monthly temperatures since the late 1960s, which has placed tremendous pressure on resources and ecosystems. From 1950 to 2000 average annual rainfall decreased by about 30% and its temporal distribution has worsened. The start of the rainy season as well as its duration have become more variable, and dry spells have increased significantly.

The Gambia experienced severe drought in 2011 and 2014 which resulted in very low agricultural production. Given its high dependence on agriculture and levels of poverty, The Gambia is considered very vulnerable to climatic fluctuations. According to the country's National Adaptation Programme of Action (NAPA), global warming trends and changes in precipitation patterns will have significant impact on the structure and performance of the economy, which rests on key sectors (agriculture, livestock, forestry, energy and tourism) which are highly sensitive to adverse weather, climate variability and change.

Changes in temperature and rainfall will alter hydrological cycles in The Gambia. The combination of global warming, sea level rise, and changes/reductions in rainfall patterns will impact the country's freshwater resources. The steady decline in rainfall over the past decades has caused reduced quantity of freshwater flow into the River, and increased salinity in the lowlands and aridity in the uplands. Surface evaporation is expected to increase while groundwater recharge capacity to decrease. Higher frequency and severity of extreme weather events such as drought and flooding in The Gambia will lead to increasing water quantity and quality problems, including salinization in wetland and mangrove ecosystems and loss of productivity of croplands in both uplands and lowlands. Reduction in the freshwater flow into the River Gambia has increased salt water intrusion into the estuary and its adjacent forest and agricultural lands. The reduction the groundwater recharge system has also resulted in falling water levels and reduced water columns in wells and boreholes.

Changes in rainfall and temperature are certain to constrain productivity of key crops in The Gambia. Erratic and declining rainfall will affect agriculture and increase the severity and length of the "hungry season" (July-September), when staple foods from the previous harvest are seriously depleted. Moreover, land that has lost its productive capacity pushes people to urban areas, exacerbating urbanization and migration. Variability of yields will increase in the absence of compensatory and adaptive management strategies. Much of the wet season rainfall now falls in short but heavy storms, with risk of washout. This has serious implications for the environment as well as human health. There is a need to plan and ensure water availability in The Gambia, not just for domestic and sanitation purposes, but also for agriculture.

The negative impacts of climate change are not limited to the economic and environmental spheres, but also to health. In addition to affecting livelihood security and poverty, climate change affects the health and wellbeing of populations. It can lead to problems related to heat stress and waterborne diseases, to which a significant portion of The Gambia's disease burden is attributable. The incidence of infectious disease transmission (malaria, dengue, yellow fever, etc.) will increase due to higher insect vector populations and infectivity caused by higher temperatures and flooding/contamination. Malaria continues to be the leading cause of death in children under age five.

Water insecurity constrains social and economic development, and challenges will be exacerbated in the context of climate change. Predicted changes will present important short and long-term challenges to development efforts in The Gambia, making adaptation efforts critical. Adaptation needs for The Gambia have been formulated into ten priorities in its NAPA (listed below). Issues of key concern for the country are reliable and affordable water supplies, control of water-related infectious diseases, and improved flood management.

NAPA priority projects

Project 1: Rehabilitation of Early Warning Systems on Climate-Related Natural Hazards

Project 2: Improvement of Fresh Water Availability

Project 3: Diversification and Intensification of Agricultural Production, Processing, and Marketing

Project 4: Expansion of Community Participation in the Management of Forests and Protected Areas

Project 5: Expansion and Intensification of Agro-forestry and Re-forestation Activities

Project 6: Briquetting and Carbonization of Groundnut Shells

Project 7: Reduction of climate change related diseases

Project 8: Improved livestock and rangeland management for food security and environmental sustaina bility

Project 9: Restoration/Protection of coastal environments

Project 10: Increasing fish production through aquaculture and conservation of postharvest fishery products

In early 2008, the Government of The Gambia, through the Ministry of Fisheries, Water Resources and National Assembly Matters (MFWRNAM), began to implement a new National Water Policy. The overarching objective of the policy is the establishment of a sustainable and inclusive framework for managing the country's water resources based on Integrated Water Resources Management (IWRM) principles and the promotion of an enabling legal and institutional framework. However, implementation of IWRM in The Gambia faces a number of challenges. There is lack of supportive enabling frameworks and sector institutions are not structured and organized. The implementation of the policy also requires tools and human resource capacities with integration of adaptation considerations.

Significant challenges remain in providing adequate water supply and sanitation in The Gambia. Although considerable efforts are being made by the Government and other entities, there are still major gaps and challenges are increasing in the context of climate change. There is a severe shortage of needs for IWRM functions and CCA, including water resources planning, management of hydro-meteorological data and information systems. Water assessments and information suffer due to shortage of data collection, processing, and dissemination.

The threat to water resources means that water, sanitation and agriculture-related planning must integrate climate change considerations. The main barriers that the proposed project will seek to address are related to: increasingly scarce and threatened water resources; ineffective water supply management, especially in rural and peri-urban areas; low adaptive capacity of agriculture and social spheres; limited knowledge of options and technologies for increasing adaptive capacity; and lack of reliable (climate, hyrdology) information and its use/dissemination.

Successful adaptation will require addressing and overcoming existing barriers regarding data availability and accessibility, reducing vulnerability of people, ecosystems and structures (natural and man-made), as well as the limited capacity to conduct water management and hydro-meteorological monitoring. The Gambia's goals for poverty reduction can only be attained by improving water supply and sanitation services in ways that integrate adaptation. This proposed LDCF project specifically targets project number 2 of the NAPA, but will also have positive repercussions on other priorities, particularly 1 and 7, in addition to more general positive impacts on food security, livelihoods, and the environment.

2) the baseline scenario and any associated baseline projects

The associated baseline project is the Gambia Climate Smart Rural WASH Development Project (CSRWASHDEP) which aims to increase access to safe and sustainable water supply, sanitation and hygiene in The Gambia, targeting residents of rural and peri urban communities, and deprived urban communities with poor waste management practices in an environment facing increasing climate change threats of flash flooding and periods of extreme drought1. The Project is designed to deliver the objectives through an Integrated Water Resources Management (IWRM) approach. The IWRM approach entails coordinated stakeholder interventions to improve the quality of economic and livelihood-driven interaction with nature's water cycle (the *Hydrological Cycle*) in a manner that promotes safe, equitable and sustainable utilisation of the water resources; the approach naturally embeds the need to improve sanitation, and to address the potential climate change impacts.

The overall goal of the project is to contribute to the National Development Plan – water sector goal of "improved equitable access to safe and affordable water supply and sanitation, good hygiene practices and environmental protection promoted for all". The specific objectives of the baseline project are to: (i) increase sustainable access to safe water by 17% and access to safely managed sanitation by 2%; (ii) enhance services delivery capacity in the sector; and (iii) improve livelihoods through nurturing safe water and sanitation services related opportunities for women and youth employment. The project is designed to achieve the objectives through well-coordinated stakeholder interventions aimed at improving the quality of economic and livelihood-driven interaction with nature's water cycle (the *Hydrological Cycle*) in a manner that promotes safe, equitable and sustainable utilisation of the water resources while paying due attention to related climate change impact adaptation.

The project is structured in the following four components:

COMPONENT	COMPONENT DESCRIPTION
Component 1: Water Supply and S	· Construction of 40 solar powered climate informed design w
anitation Infrastructure	ater supply systems in rural and peri-urban communities.
	· Construction of 224 on-site public sanitation facilities includi
	ng gender and disability friendly innovative public health units
	and school WASH facilities, and demonstration units for house
	hold toilets. []
	· Rainwater harvesting systems in 40 schools.

	Global Environment Facility (GEF) Operations
	· Construction of one (1) 200kW power-generating waste treat
	ment sepinfrastructure (waste-to-energy).
Component 2: Capacity Enhancem	· Establishment of the Rural Water Supply and Sanitation Depa
ent for Sustainable Services Delive	rtment (RWSD) including office building.
ry	· Institutional strengthening for climate adaptation and water r
,	esources monitoring as well as for effective sector coordinatio
	n and performance through provision of tools and amenities, in
	cluding development of the National WASH Program & Invest
	ment Plan, Groundwater & Flood mapping as well as hydro-met
	eorological equipment, and Web-based sector M&E system.
	Enhancement of the capacity for improved sanitation and hy
	giene practices at the local level through baseline and KAP stu
	dies, development of gender sensitive training and promotiona
	I material for health and climate resilience; and demand creati
	on for household sanitation facilities through sanitation marke
	ting, and behavioural change campaigns targeting women & yo
	uth, as well as the Under 5yr. 🔛
	· Development of inclusion and gender framework [32]
	· Training of national and local level stakeholders & beneficiari
	es to improve practices in hygiene sanitation, water resources
	management and climate adaptation.
	· Training of school teachers and children to improve their kno
	wledge and skills in irrigation and climate change adaptation,
	with relevant linkage to nutrition. [F]
	· Provision and Installation of Irrigation kits in school gardens
	for promoting irrigation knowledge and practice.
	· Establishment of sanitation revolving fund to be managed by
	The Gambia Social Development Fund (SDF) to provide microc
	redits to increase the uptake of appropriate household sanita
	tion.[sep]
	· Support for participation in study tours and conferences,
	ocumentation and sharing of project specific experiences.
	· Knowledge products including operational standards and gui
	delines.
	· Technical/Vocational training of Water and Sanitation Artisa
	ns.
	· Strengthening partnership with local transport operators (Ga
	mbia Transport Union – Tippers Garage & Cesspit emptier Ass
	ociation) to stepsustainably improve solid and liquid waste colle

	, ,
	ction services.
	· Project related work experience for 15 Interns.
	· Technical Assistance and Advisory Services
Component 3: Water Resources M	· Sustainable practices & entrepreneurship training for micro-
anagement for Improved Livelihoo	enterprises/youth & women groups whose livelihood is/can be
ds: the	derived from water resources management related activities in
	cluding fisheries and agricultural value chain activities, and wa
	ste recycling & re-use
	· Establishment of Aquatic Resources SME Revolving Fund (A
	QUAREF) at SDF to facilitate financial inclusion and improved li
	velihoods for youth and women. The Fund proceeds shall finan
	ce (i) micro-enterprises involved in the waste transportation an
	d waste re- use; and (iii) income generating activities of fisheri
	es and agricultural value chain primary actors within the conte
	xt of aquatic environment sustainability and as a means for str
	engthening climate adaptation capacity.
	Technical assistance to SDF for the fund setup and operation
	s.
	Construction of 20 communal waste collection/materials rec
	overy facilities; Improvement of two (2) waste dump sites
	Revolving fund to facilitate local transport associations to ac
	quire vehicles for collection in partnership with the councils –
	project seed fund for at least 20 vehicles managed by SDF.
	Support for evacuation of existing waste heaps and restorati
	on of regular flow of streams by dredging of waste dump obstr
	uctions.
	Provision of two (2) additional organic compost production f
	acilities.
Component 4: Project Managemen	Technical Assistance for project implementation
t	ESMF/ESMP Implementation and Monitoring [52]
·	Project Monitoring & Evaluation, including MTR & PCR
	· Annual Financial Audits
	· General Project Operations & Logistics

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project

The Gambia submitted its NAPA to the UNFCCC in 2007. The water resources sector was identified as one key priority area, with the objective to reduce its vulnerability to the impacts of climate change and to concurrently improve livelihoods. This LDCF project is meant to primarily implement project 2 of the NAPA on the improvement of freshwater availability. The project is designed to address, as expressly requested in the NAPA and in line with the LDCF strategy, urgent climate threats through actions that: deliver immediate adaptation benefits; contribute to building local and national adaptive capacities; and create awareness and build foundations at all levels for maximizing long-term adaptation benefits.

The water supply and sanitation sub-sector is particularly vulnerable to anticipated changes in climate conditions (especially temperature and rainfall) and the frequency and intensity of extreme weather events. Integrating climate change adaptation considerations means assessing the climate risk and undertaking technical and managerial actions to alleviate/mitigate those risks. This project will help increase, improve, and ensure access to climate-resilient water supply and sanitation services, which will have beneficial effects on humans, assets and ecosystems.

Improved access to water and sanitation addresses basic human needs and helps to promote overall human capacity to respond to shocks and stressors (not only climatic). Given the severe risks that climate change poses to these sectors in The Gambia, it is critical that water and sanitation interventions are integrated with specific CCA activities, in order to guarantee the efficacy and longevity of those very services. LDCF funding is sought to both upscale and complement the baseline project components. Some activities will serve to scale up baseline investments, while others are fully additional to the baseline, integrating climate change well into its design.

It is critical to remember that climate change and water and sanitation are inseparable. Climate change, as experienced most on the ground and by people, is first and foremost water change, and it affects poor rural people most, especially those with limited access to water and sanitation services. The links are clear: higher temperatures and longer dry spells mean water scarcity and people (mostly women) must walk further to collect water; aridity affects soil fertility and floods spread disease when there are no hygiene facilities; lowering or contaminated surface and ground waters; and so on. Having access to a reliable and clean water supply and to safe sanitation facilities are fundamental for reducing vulnerability. Adaptation activities must take into account the impact on water resources and, by extension, the water security and health of individuals and communities. Climate change – combined with rising population growth, urbanization, and environmental degradation – will raise new challenges. More attention to water management, options for water storage and monitoring are needed to cope with future water demands in all regions of The Gambia. Closing infrastructure, capacity, and information gaps will be essential to address adaptation priorities and for enabling The Gambia to better respond to existing and anticipated climate variability and change.

The LDCF project will be based on four components:

- Component 1: Provision of Climate Resilient Water Supply Infrastructure
- Component 2: Enhanced Institutional Capacity for Adaptation and Hydro-meteorological Monitoring
- Component 3: Community Land and Water-based Adaptation
- Component 4: Knowledge and Monitoring

Component 1: Provision of Climate Resilient Water Supply Infrastructure

The Gambia will face an increasing number of challenges associated with the impact of climate change on water resources, from drought to torrential rains, flooding, drainage congestion, washout, and more. Climate change will manifest itself in the water sector in terms of too little, too much and/or poor temporal distribution of rainfall. Shortfalls in aquifer/groundwater recharge and base flow are expected to affect water availability for domestic and agricultural uses. Water shortage (and in other cases, water excess) risks increasing poverty and worsening both living conditions and health in Gambian communities. Floods

not only increase economic and infrastructural damage, but also increase health risks through contamination of drinking water. The negative impacts will include the spread of parasitic and infectious diseases, with the public health consequences of floods lingering on well after their occurrence. All this will consequently lead to increased food insecurity, poverty, and poor health.

Component 1 seeks improvements in water supply and management for securing livelihoods and adaptive capacity. Since much of the wet season rain in The Gambia now falls in short but heavy storms, water conservation and improved water management are essential to ensure crop production and food security throughout the year. Poor water management has traditionally meant that certain segments of the Gambian population have been underserved, particularly in rural and peri-urban areas. The component will build upon the activities of the baseline project to increase access to and the number of new and climate resilient water supply sources for household and agricultural use. It is expected that the availability of resilient water supply systems will expand, and climate change adaptation considerations will be integrated into water and sanitation infrastructure.

In line with NAPA priority 2, the overall objective of the component will be to ensure adequate supply of fresh water and the reduction of the negative impacts of natural disasters. The specific objectives will be: to enhance water supply facilities in rural and peri-urban areas; to improve water quantity and quality in both surface and ground waters, suitable for agricultural and domestic needs; to reduce vulnerability of physical assets; and to reduce drought impact. In order to provide water supply resilient to climate change, in addition to the enhanced provision and rehabilitation of hand or solar pumped sources and standalone water points by the baseline investment, the LDCF resources will climate proof the baseline water infrastructure, provide diversified and alternative water sources, and increase conservation and storage capacity. Climate proofing investments means assessing the climate risk to the interventions and pursuing technical and managerial actions to alleviate/mitigate those risks.

Activities may include: new and/or upgraded infrastructure, including the construction or refitting of water supply/control/storage infrastructure (storage facilities, new boreholes installed with solar powered water supply systems), rehabilitation of existing water supply facilities, construction of deeper wells depending on the hydrological and geological conditions in an area; and promoting the diversification of water sources (rainwater harvesting). Rainwater harvesting is a cost-effective way to improve water supply, especially in rural communities with no direct access to formal distribution systems. Techniques could include ponds, recharge pits, recharge wells, percolation trenches, etc. as per a site specific demand and availability of rain water (exact options will be decided during PPG). Such developments will not only improve water availability but also enhance its quality, resulting also in better health in communities. These activities will ensure an increased number of people with access to safe water.

Climate change is also expected to raise sea levels, and given The Gambia's flat topography, its water resources and lands are at risk of salinity. Saltwater intrusion, resulting in increasing salinity of drinking and agricultural water, is expected to become an increasingly serious issue, and one which has not been fully explored. Sea-level rise, extreme weather events, coastal erosion, changing precipitation patterns, warmer temperatures, and increased abstraction could all escalate the threat of saltwater intrusion. The problem will be exacerbated by flooding and changes in the flow of the River Gambia due to changing rainfall patterns. Reducing salinity threats therefore means reducing the concentration of salt in groundwater sources. Stormwater management and artificial recharge together not only allow reduced damage from excess rainfall and flooding, but allow infiltration of rain water into groundwater resources, which will reduce salinity while enhancing recharge capacity. As such, this component will also assess and introduce such techniques while pursuing actions in the design and targeting of infrastructure to reduce water scarcity, contamination and damage, including source protection, relocation of critical facilities and flood protection.

With the exception of a few areas that already have groundwater quality problems, freshwater availability is not (yet) a major problem in The Gambia. However, increased variability, a persistent drop in regional rainfall, and salinity are expected to impact both surface and groundwater systems. It is thus critical for The Gambia to assess its vulnerabilities in this regard and plan accordingly. Monitoring and planning of water resources (quantity and quality) will be critical. Water supply facilities will need to be placed in areas away from threat saline intrusion while stormwater management devices will limit flood damage. The component therefore also envisions assessments of vulnerability issues to precede and influence investment decisions. Flood, drought and salinity prone areas will be identified to ensure that climate-resilient infrastructure is designed and installed as appropriate given expected conditions (for example, boreholes of appropriate depth to consider fluctuating groundwater resources). Risk and vulnerability assessments will be used to inform programmatic action in the water and sanitation sector.

Component 1 will be the largest component of the project because of its investments focus. The investments, however, must be accompanied by the right capacity development. Increased awareness of climate change vulnerability and institutional capacity strengthening are critical to integrating adaptation into water resources management. A capacity building program will be developed targeting relevant institutional and district actors in addition to communities. Districts must be able to better target and manage the provision of water supply and sanitation facilities by considering climate threats. The preparation of risk prevention, surveillance and early warning plans (in cooperation with other partners to avoid overlap) will help meet such objectives.

The component will thus apply a demand responsive approach in implementing the activities that consists of a comprehensive package including baseline assessments, infrastructure development, community mobilization, planning and monitoring, and capacity building at user level for effective use and sustainable operation. The expected long term benefits will be greater water security in rural and peri-urban areas, increased protection of infrastructure, and reduced vulnerability of communities and physical assets.

Activities/Outputs:

- Water source point development, rehabilitation and/or upgrading and climate-proofed in target areas (additional boreholes with solar pumping)
- Climate-proofed water schemes installed for households and agriculture, including for livestock (water tanks, reservoirs, pipe networks, animal watering points)
- Diversification of water sources, including rainwater harvesting and storage (domestic and communal) for water security during dry seasons and droughts
- Water source protection measures (e.g. concrete lining, targeted vegetation around boreholes to limit topsoil loss, erosion and contamination)
- Anti-salinity techniques assessed and tested in select lowland communities
- Stormwater management measures and interception wells assessed and introduced as both flood defense and artificial recharge tactics
- Assessment and development of groundwater recharge systems to enhance storage capacity
- Climate change risks identified and documented, including vulnerability assessments of communities, water supplies (quantity and quality) and technologies
- Assessments of risk, vulnerability, and adaptive capacity needs influence the project's strategic investments (location, sizing, depth, etc.)
- Districts better target and manage the provision of water supply and sanitation facilities by considering climate threats: risk prevention, surveillance and early warning plans developed in cooperation with other partners

Component 2: Enhanced Institutional Capacity for Adaptation and Hydro-meteorological Monitoring

Climate change threats can be contained through better technical, management and surveillance responses. Increasingly common natural disasters require better monitoring, early warning and planning for disaster preparedness. Component 2 will build upon the issues that underlie component 1 and focus on concurrent and necessary monitoring and institutional capacity building needs, focusing especially on building skills to facilitate engagement and technical

expertise in the monitoring of water resources. The overall objective will be to enhance emergency and disaster readiness to reduce impact on communities, assets and human health.

The component will be carried out by seeking active collaboration with the UNEP project "Strengthening Climate Services and Early Warning Systems in the Gambia for Climate Resilient Development and Adaptation to Climate Change – 2nd Phase" which is mean to implement priority 1 of The Gambia NAPA. The UNEP project is focused on strengthening climate monitoring and forecasting capabilities by generating reliable hydro-meteorological information, early warning systems, and information for responding to climate shocks and planning adaptation. To complement the UNEP project, the focus of this component will be on groundwater monitoring and the monitoring of water resources as linked to health and sanitation concerns. Such a focus is complementary and very timely, given especially increasing concerns for groundwater recharge capacity, contamination and salinization threats.

The activities will include strengthening institutional and technical skills to identify, implement, and monitor adaptation measures; strengthening technical capacity of staff in hydro-meteorological and groundwater surveillance to enhance monitoring and planning of hydrological resources; improving the dissemination of information, especially before impending events; and monitoring coverage and functionality of water supply and sanitation systems, including provision of regular data on drinking water supply for schools, health centers and communities. Groundwater monitoring equipment and data management systems will be installed if needed in key areas to monitor long term trends in order to take appropriate action in a timely manner. These activities will result in improved early warning and response capacities.

Activities/Outputs:

- Support to national level institutions (DWR, DoH, DCD), including training of staff to enhance water supply and sanitation delivery in the context of a changing climate
- Strategic planning for water management and risk prevention: training of DWR and NAWEC staff in CCA strategies
- Workshops targeting district officials on how to integrate adaptation principles into water and sanitation programs (highlighting the link between climate change and health)
- Improved climate and water monitoring capacity: institutional strengthening and training of relevant departments in hydro-meteorological and groundwater surveillance
- Training of district water monitoring assistants to help track water quantity/quality
- Monitor coverage and functionality of rural water supply and sanitation systems

Component 3: Community Land and Water-based Adaptation

Land degradation in The Gambia is a critical problem adversely affecting the functional integrity of its catchments. It is largely the result of intense pressures on land resources, coupled with recurrent droughts. Gambia's ecosystems are affected in different ways: decreasing rainfall has increased aridity in the uplands and acidity/salinity of soils in the lowlands. Moreover, upland ecosystems have degraded largely because of intensive cultivation, overgrazing, and soil erosion, while lowland ecosystems and riverine wetlands are at risk from erosion, siltation, sedimentation and saltwater intrusion resulting from upland degradation and the reduced flow of the Gambia River.

Climate change is first and foremost endured in poor communities whose livelihoods depend on the land. In addition to impacting water availability and quality, climate change will affect land-based activities in The Gambia by impacting soil health and ecosystem functions. Erratic rainfall patterns and increasing drought frequency are resulting in soil degradation and declining productive capacity, which is worsening poverty and food insecurity. Concurrently,

unsustainable land and water management practices exacerbate the impacts of climate change: they put increasing anthropogenic strains on soils and landscapes as a whole. Intensive cropping, shorter fallow periods, deforestation, all threaten soil fertility and affect hydrological cycles. This, coupled with the disappearance of freshwater swamps and soil salinization, particularly in lowland areas, will continue to negatively impact crop production (including rice), and consequently the lives of farmers in these areas. Women farmers who are traditionally the prime rural actors in lowlands will particularly feel the strain. Better soil management and enhanced awareness on sustainability measures can go a long way in improving adaptive capacity of communities.

The purpose of component 3 is to support the beneficiary communities to test and adopt additional land-based adaptation activities which will complement and further enhance the water supply components. Rainfed agriculture is the major source of employment and livelihood in The Gambia. This makes communities extremely vulnerable. Component 3 will involve the identification and implementation of SLWM measures, based on an approach that combines participation to generate commitment and proactive learning; awareness raising on the impacts of climate change and suitable responses; and capacity development to enhance stakeholder knowledge.

Activities will include support to SLWM practices so as to reduce soil loss, erosion, flooding, and catchment degradation; the promotion of climate smart agricultural practices; revegetation, especially around water sources for protection; and the promotion of diversified, mainly dry season activities based on improved livestock/rangeland management to complement crop farming. The latter can include feed/fodder conservation, improved livestock watering, demarcation and regeneration of rangelands. Component 3 activities will help ensure a more stable natural resource base for rural livelihoods and enhance resilience. Improved land management also has positive repercussions on water resources and hydrological cycles.

Together with activities on the ground, a number of actions will be pursued to sensitize local stakeholders on the effects of climate change and its direct impact on socio-economic activities, and increasing awareness on suitable adaptation strategies (from disaster preparedness, diversification, water harvesting and alternative income generation). It is also critical for the project to promote sensitization to WASH issues amongst target communities so that they will be more likely to adopt and sustain the new climate-friendly/resilient technologies/pratices. Community mobilization and capacity building can ensure sustainability of the installed facilities. The village water committees (VWCs), village development committees (VDCs), other farmer organizations, and local authority council areaswill be trained in areas such as: water and sanitation planning, community development and facilitation, health and hygiene promotion, and CLTS principles. Local water user committees will also be trained in the operation and maintenance of new facilities. The awareness activities will be performed in synergy with and to complement Component 1 investments.

Component 3 will: strengthen beneficiary/stakeholder capacities and knowledge to plan, implement, manage, operate, and maintain SLWM measures and WASH facilities; strengthen local government and community level institutions in water and sanitation services provision; increase the participation of women and youth in water and land management activities; increase knowledge on adaptation through awareness campaigns; develop the capacity of a wide range of sectoral support organizations, including nongovernment organizations (NGOs) and community-based organizations (CBOs), to provide efficient and cost-effective support to local authorities so as to improve service delivery. A community mobilization strategy will be adopted which includes capacity building for leadership structures to enhance knowledge, ability and attitude towards WASH. Communities will learn adaptation options as a result of learning-by-doing and direct participation. District teams and civil society partners will work closely with community members at all levels. Emphasis will be placed on tailoring the awareness sessions to reach all members irrespective of gender and social strata.

Activities/Outputs:

- SLWM measures introduced in communities to protect soils and reduce vulnerability of agricultural livelihoods (soil fertility and erosion control measures applied and up-scaled)
- Application of climate smart agriculture (CSA) practices on community lands
- Pilot livelihood diversification through livestock and sustainable rangeland management to improve adaptive capacity of households
- Communities organized to manage and maintain new water facilities: workshops on CCA and integrated water resources management
- Communities mobilized to improve adaptive capacity, including empowering people to participate in water committees (at least 50% female participation)
- Capacity building for VDCs and VWCs, including in Operation and Maintenance (O&M) of new water and sanitation technologies and facilities
- VDC/VWC members trained in water and sanitation planning, community facilitation, and principles of CLTS
- Support to local authority council areas, including training and provision of tools necessary for effective planning and implementation of water and sanitation services in collaboration with communities
- Sensitization campaign to ensure the uptake of climate-resilient WASH measures: number of community meetings and field days held to increase awareness and adoption
- Sanitation and hygiene promotion: educational workshops targeting community members
- # of freshwater sources protected through improved sanitation practices

Component 4: Knowledge and Monitoring

Knowledge and experience learned from the approaches and technologies applied in the project will help stakeholders involved in the project and others across the country learn how to cope with water supply challenges. Component 4 will help the learning process by drawing lessons and making them available during project implementation (for adaptive management) as well as for future use. The LDCF funds will be used to disseminate good practices and lessons-learned for up-scaling by partners and stakeholders, improve evidence-based decision and strategy making, and address barriers to weak technical and operational capacities of institutions, agricultural extension and health advisory services.

A strong M&E system will also be set up which will specify the impact, outcome and output indicators. Best climate change adaptation practices will be reviewed based on indicators for their potential to reduce climate risks, economic viability, environmental friendliness, social uptake, gender sensitivity, and income generation. Guidelines for the WASH infrastructure will be developed to ensure continued and sufficient consideration of climate related risks, but also to guide additional considerations to existing infrastructure that are already in place.

Activities/Outputs:

- Communication plan to facilitate emergency action in the case of extreme weather events
- A mobilization and outreach plan for community activities
- Knowledge products produced on climate change impact on the water and sanitation sector, including climate change mainstreaming guidelines for WASH infrastructure
- M&E system designed and implemented at all levels
- M&E project reports, briefs and other
- Compilation of project good practices and lessons learned documented and disseminated to raise awareness on effective adaptive management options for further up-scaling

4) Alignment with GEF focal area and/or Impact Program strategies

The project is being proposed to the LDCF to finance additional activities in water supply, to climate proof the baseline investments, to fully integrate considerations for climate change into the hard and soft components of the project, and to further promote IWRM.

The project will prioritize interventions in water resources management through the following: infrastructure development/upgrading (water security, flood mitigation, sanitation), hydro monitoring (M&E, reducing risk), sustainable land and water management (SLWM) (conservation/optimizing land and water, food security), planning and knowledge (preparedness, reducing risk). Activities will include adaptation-focused investments (physical assets, new/alternative technologies and production methods, etc.), institutional and technical capacity building for adaptation and IWRM at national, district and local levels; information and knowledge improvement (on vulnerability, climate information, planning, M&E, etc.); and public awareness on WASH.

The project approach focuses on a key set of objectives:

- reduce the dependence of communities and agriculture on rainfall and/or groundwater;
- protect natural resources, especially water sources and soils, at risk from climate or human-induced threats (including drought, contamination, saltwater intrusion, and land degradation);
- better assess climate risks and design adaptive management responses to such risks and suitable to target locations;
- improve governance of water resources;
- reduce the degree of exposure and/or sensitivity of human and natural systems to climate threats;
- increase the resilience of communities, physical infrastructure and croplands.

Accordingly the project is aligned with the GEF focal area for CCA under LDCF and supports the attainment of the following CCA Strategy following objectives, outcomes and outputs:

OBJECTIVE 1: Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation

Outcome 1.1 Technologies and innovative solutions piloted or deployed to reduce climate-related risks and/or enhanc e resilience

Output 1.1.1 Physical assets made more resilient to climate variability and change

Output 1.1.2 Livelihoods and sources of income of vulnerable populations diversified and strengthened

Output 1.1.3 Vulnerability to climatic hazards/variability is reduced through new or improved early warning systems /cl imate information systems

Output 1.1.4 Vulnerable ecosystems and natural resource assets strengthened in response to climate change impacts

OBJECTIVE 3: Foster enabling conditions for effective and integrated climate change adaptation

Outcome 3.2 Institutional and human capacities strengthened to identify and implement adaptation measures

Output 3.2.1 Capacities strengthened to identify, implement and/or monitor adaptation measures

Output 3.2.2. Increased awareness of climate change impacts, vulnerability and adaptation

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing

Although commendable in its water and sanitation objectives, the AfDB baseline project in The Gambia does not integrate enough considerations for climate change in its design, given the expected and very real impacts that climate change will have on these sectors and Gambia as a whole. The proposed LDCF project aims to expand upon the activities carried out in the baseline project to ensure that the water supply sector remains resilient even in the context of climate change by building adaptive capacity on the ground. As such, funds are being requested from the LDCF to finance additional activities for adaptation. The additional cost reasoning is based on the following considerations:

- 1.Climate proofing the baseline water supply investments;
- 2. Fully integrating considerations for climate change into the hard and soft components of the project;
- 3. Promoting IWRM;
- 4. Promoting both immediate and longer-term adaptation measures.

The project will deliver adaptation benefits in relation to water resources management that is sustainable in the face of both predicted and unexpected climate changes, risks and weather events, and the protection of livelihoods by: determining and deploying the right adaptation technologies for climate resilient water supply infrastructures and select land-based activities; improving readiness of district and community institutions to better monitor and manage the negative impacts of climate change on water resources; and fostering an inclusive and participatory approach to promote ownership and raise awareness at all levels.

The LDCF funds will scale up baseline financing so The Gambia can benefit from much needed investments in water supply and sanitation facilities integrating considerations for climate change adaptation. Accordingly, building on the baseline project, the LDCF activities will strengthen the overall operation by addressing climate risks and ensuring suitable response measures.

In 2010, The Gambia received financing from the African Water Facility (AWF) of the AfDB to support IWRM in line with the National Water Policy and the IWRM Roadmap. This would facilitate efficient, effective and equitable water resources management throughout the country and support economic growth and improve livelihoods so as to reduce poverty. That project is presently still being implemented and expected to address most of the policy shortcomings described above. New interventions, including this LDCF project, aim to target the other barriers to effective CCA and IWRM.

In addition to climate proofing the interventions and infrastructure, the LDCF project will also encourage the uptake of integrated land and water resource management practices. The additional funding will increase the availability of a resilient water supply in rural and peri-urban communities; expand climate-resilient and environmentally-friendly WASH systems (solar powered water pumps, revegetation at water points); climate proof the water distribution networks (such as elevate water tanks to avoid contamination from flooding); promote new livelihood strategies, all coupled with enhanced planning and assessments, and awareness raising activities. The LDCF project will guarantee both a holistic water and sanitation approach in implementation with integrated adaptive management needs. Finally, in addition to climate proofing and ensuring inclusive access, the LDCF funds will also support the empowerment of district councils and rural communities (with particular emphasis on women and youth), monitoring and evaluation, and improving governance and accountability of service delivery.

The proposed project responds directly to priorities and actions in the Gambian NAPA. It will directly support the implementation of priority #2 on freshwater resources, with positive repercussions on others, mainly 1, 7 and 8. These priorities will be further complimented by other cross cutting elements, such as: assessment of vulnerabilities/risks; dissemination of timely risk information to better plan and manage production and livelihood strategies; and strengthening institutional and technical capacities to promote adaptation in water and land, including enhancing the management capacity of the main water actors.

The baseline project's key priority is to expand access to safe water supply and sanitation services in rural areas. While the baseline is well positioned to support the advancement of the WASH sector in The Gambia, it contains limited considerations for ever more critical CCA concerns. Consequently, the integration of the proposed LDCF activities will help increase resilience of The Gambia's water supply and add vital elements to the baseline. As a result, the project will help secure the following in line with the LDCF strategy: CCA-1: Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation; CCA-3: Foster enabling conditions for effective and integrated climate change adaptation. The project complies with NAPA-identified urgent needs, the LDCF strategy, and also supports national development goals and achieving SDGs.

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The primary problem is that about 30% of the Gambian population does not have access to a safe water supply source. The number of communities requesting water supply sources (primarily through solar) has risen notably. Climate change will exacerbate this situation. Indeed, lower rainfall has already resulted in many wells drying up. Communities are also increasingly aware that clean water reduces both the incidence of disease and the opportunity cost of

the time taken to fetch water. The LDCF project seeks to ensure that new developments in the water and sanitation sector in The Gambia are carried out by integrating climate change considerations, and will guarantee the sustainability of resilient water supply and quality for some of The Gambia's poorest population segments.

The project aims to deliver both immediate and long-term adaptation benefits on the ground, build local and national adaptive capacity, and improve public awareness of CC and adaptation for a better foundation for long-term benefits. The expected adaptation benefits and outcomes in accordance with the LDCF and NAPA priorities are as follows:

- 1. Reduced vulnerability and exposure to climatic stresses: reduced vulnerability of people and ecosystems to climatic and human-exacerbated degradation, and reduced damage to physical assets and the hydrological/land-based impacts of climatic variations and changes (e.g. flooding, drying soils).
- 2. Reduced climate sensitivity: reduced sensitivity of water and land resource and impact of variations in climate and weather by adopting adequate adaptation strategies.
- 3. *Increased resilience and adaptive capacity*: the ability to withstand and/or recover from climate related shocks is improved in addition to awareness increased on adaptive management issues.

These benefits will be achieved by developing and upgrading physical assets for the reduction of water sector vulnerabilities; introducing alternative technologies and production methods for better adaptive capacity; enhancing the technical capacities of government agencies, beneficiaries and extension workers; and enhance monitoring and evaluation of subsector status.

Furthermore, in addition to promoting adaptation benefits, planning and capacity building in the water supply sector, the project will secure additional environmental and climate change mitigation benefits through the use of solar energy technology in water pumping systems, the planting of vegetation cover, conservation and protection of water/land resources, and the increased application of CSA to complement new water infrastructure. Finally, the anticipated socio-economic benefits of the baseline + LDCF project will include, inter alia:

- Increased number of people with access to water supply and sanitation services
- Increased number of people with improved hygiene
- Adequate and safe water at a reasonable distance from communities/homes
- Girls and women spend less time fetching water, thus freeing up time and availability to engage in other income-generating activities
- Reduction in incidence of diseases related to climate change (e.g. waterborne illnesses) through improved water supply and hygiene awareness
- Increased and more stable production through expansion of water availability and adaptive production
- Increased income generating capacity of vulnerable groups (youth, women) from agriculture, thereby reducing poverty
- Rural employment stabilized and opportunities created, reducing rural-urban migration
- Better/optimal use of natural resources
- Higher and more stable productivity levels, with year round availability of produce enhancing income and nutritional status of beneficiaries
- Cleaner/healthier environment/ecosystems and landscapes
- Healthier population
- Improved food security

7) Innovation, sustainability and potential for scaling up

The baseline project's main objective is to improve the socio-economic and environmental conditions of the rural and peri-urban population through improved access to sustainable WASH infrastructure and services in The Gambia.

To ensure sustainability of the baseline project, there is a need to take into account the negative impacts of climate change and its role in water security.

The full project is innovative in its comprehensive and holistic view of the water supply sector and a more sector- wide approach to WASH. Water supply at village level in The Gambia is the responsibility of the DWR while NAWEC operates urban water supply systems in the surroundings of the capital and in provincial growth centers. There are therefore two distinct institutions with different mandates that do not overlap, a situation that is complicated by rapid urbanization. It has been realized and recognized that given this division of programming, the peri-urban communities are often a "forgotten" group that fall in an administrative grey zone and suffer. Not considered rural, they do not qualify for DWR's rural water supply programs, and because of NAWECs limited financial capacity, urban water distribution networks often do not reach peri-urban settlements. The project is innovative in targeting this limitation and gap, emphasizing the need at national level to rethink water supply planning and management. A more holistic and coherent approach is required through more inclusive interventions.

Water resource development aspects (capture, treatment, conveyance, delivery) consist in matching domestic demand and creating excess capacity for productive uses. Sustainability aspects on the other hand require that greater attention be paid to risks such as saline intrusion, groundwater reduction/depletion and pollution; the socialization of water resources development; and its management issues. In terms of sanitation, most rural and periurban residents cannot afford to provide for the construction of sanitary latrines, and are unaware of good hygiene practices. This project targets all the required awareness campaigns needed to enhance WASH with considerations for how CC influences the sector.

The project takes a holistic view of water and sanitation provision so as to have greater reach and impact. The Gambia is a small country, and the lines between urban and rural are often blurred. In order to ensure the most viable economic and cost effective solutions to meeting water supply coverage targets (potable water for all by 2020), a larger planning framework for water supply and adaptive management is needed. The various technical solutions (hand-dug wells, drilled wells, solar powered reticulations or extension of distribution systems) will be chosen based on current and future population levels, on an economic analysis, and – with the LDCF funding – on greater adaption potential. These considerations underline both innovation and sustainability.

In order to improve access to potable water in rural and peri-urban areas, the DWR has used four different approaches:

- Hand-dug wells (1.60 m ID), equipped with one or two hand pumps, to provide clean drinking water in smaller rural settlements in areas with shallow water tables (<25 m);
- Drilled wells (4 ½ -inch tubed) equipped with a hand pump for small rural settlements with deeper water tables (>25m), or where dug wells are not suitable for other reasons (e.g. low recharge rates, water quality, potential for conversion to mini solar pumping system, etc.);
- Drilled boreholes (6-8-inch tubed), supplying piped water to medium to larger size rural communities by means of a stand-alone solar powered pumping unit, elevated water tank, a simple distribution network and public tap stands;
- Or, in collaboration with the NAWEC, extended existing urban water supply grids to nearby settlements.

Hand dug wells, with a concrete lining, drainage structures and a manual pump, are used for small communities and are appropriate to the local context given the fact that small contractors can carry out much of the work at a reasonable capital cost. The cost of drilled tubed wells compares very favorably with that of hand-dug ones where the water table is relatively deep (>25m). Drilling is a particularly economically and technically viable alternative in The Gambia, as

there are many drilling companies highly experienced with the local hydrogeology, a capability that needs preserving. Moreover, a water point can be completed in a much shorter time span (3 days) than a deep hand-dug well (3-6 months), and because mechanical drilling allows full penetration into productive aguifers they are still unaffected by drought spells. These areas are also earmarked for future conversion to mini solar systems.

The hand pump-based water supply systems are accompanied by a community based cost-recovery and maintenance system, including a network of trained area mechanics, well-established country-wide since the early 1990s. DWR adopted a standard hand pump (the PB Mark II) for which basic spare parts are sold in distributor shops throughout the country, thus considerably facilitating maintenance and repair in the rural environment. The solar systems instead have proven to be popular, reliable and cost effective. But given the high capital cost it can only be justified for villages with a population above 1,000 people or with deep water tables where manual drawing of water is tedious and hand pumps do not work well. The demand for these solar systems far exceeds supply; and DWR has set criteria to select villages that qualify for a solar system to ensure maximum social and economic benefits. There is also a need to upgrade old solar systems given age and to expand the distribution networks.

Together with the baseline, the LDCF project will strengthen DWR at central and district levels to provide sustainable water supply services, and the Department of Health together with the Department of Community Development to deliver sanitation, hygiene promotion and education activities, all with an underlying consideration for climate change. Community level structures will be strengthened in planning and implementation, operation and maintenance, and monitoring of activities and technologies. Such institutional and local development activities facilitate successful implementation of project outputs and safeguard long term sector sustainability.

Sustainability of project outputs is a central concern of this project, and it will be ensured by an implementation method based on a demand responsive approach and concerns for technical, financial and operational feasibility and sustainability. The project approach consists of a comprehensive package which includes baseline assessments, infrastructure development, community mobilization, planning and monitoring, and capacity building at user level for effective use and sustainable operation. Stakeholders, including communities and water users, will be involved in project cycle activities to ensure a sense of ownership and commitment to the project. The project will use the integrated WASH approach which combines the provision of water and sanitation, sensitization and mobilization of communities, and promotes the participation of the communities themselves in the identification and implementation of the facilities in their areas, which enhances the continuity of the services, technologies and outcomes to be provided by the program.

To ensure sustainability of baseline and LDCF-funded activities, the project will support the formation and strengthening of community institutions for better management and sustainability of development interventions, in addition to continuously conducting community sensitization and promoting effective participation. Indeed, beneficiaries themselves (i.e. water users in the communities) and the village committees will contribute during the implementation phase by being involved in the actual design, operation, maintenance and costs of the water supply schemes in their respective areas as well as the management of water services through the VWCs. The use of beneficiaries and committees will better guarantee operational sustainability and an operational/financial structure more resistant to time. Moreover, there will be training of community VDCs and VWCs and local service providers in the O&M of the select technologies. Like this, once the project closes, the technologies and knowledge will persist, thereby maintaining the value of the LDCF and baseline investment.

More specifically:

- Financial and operational sustainability will be assured by ensuring that beneficiaries (water users) contribute towards the operation, maintenance and costs of water supply schemes in their respective areas as well as the management of the services through the VWCs. The use of such committees better guarantees a sustainable structure more resistant to time. Financial sustainability will be assured by ensuring that the selected communities contribute towards the operational costs of water supply schemes in their respective areas, as occurred during phase I of the project. Work will begin in an area once there is evidence of this contribution and other in-kind contributions (method and amount to be determined during the baseline appraisal missions). The beneficiary communities will be fully responsible for the operation and maintenance costs as well as the management of the services through the VWCs. In addition, they will provide land on which the installations will be made and labour for excavation and backfilling of the pipelines. The project will support the development of harmonized O&M strategies/plans and coordination with other development partners.
- Technical sustainability will be ensured through the use of technologies for which the relevant technical expertise exists in the country. Solar powered water schemes have been implemented in The Gambia for over 15 years, and over this period the country has built systems and capacities involving the public and private sectors. The private sector actors that can supply the solar components are also responsible for maintaining the systems for up to five years after installation. In addition, there will be training of community VDCs and VWCs and local service providers in O&M of the select technologies.
- Environmental sustainability will be assured through the use of non-environmentally invasive solar technology, increased vegetative cover, SLWM practices (including CSA), and timely implementation of the Environmental and Social Management Plan (ESMP) which will be developed following baseline project appraisal (as always done for AfDB projects).

Finally, the project will include community mobilization and strong, cross-cutting capacity building to ensure sustainability of the installed facilities and gained knowledge. Investments must be accompanied by the right capacity development leading to increased awareness of climate change vulnerability and response capability. A capacity building program will be developed targeting relevant institutional and district actors in addition to communities. The project will support institutional, management and capacity building activities at various implementation levels, as evidenced by cross-cutting capacity development measures in each operational component. It will include institutional and technical capacity building for adaptation and IWRM at national, district and local levels; information and knowledge improvement; and public awareness on WASH. The activities will seek to strengthen national, local government and community level institutions in water and sanitation services provision underlaid by adaptation considerations. These activities will lead to DWR, DoH, DCD and the area councils to have sufficient capacity to facilitate and deliver RWSS and CCA services more effectively.

Public-private partnerships for the operation and continuity of community-based water facilities in The Gambia have proved successful in promoting sustainability of technologies and knowledge in the past, and the project aims to again use this approach. The government intends to adopt a more programmatic approach for the development of water supply and sanitation services in both urban and rural parts of the country. Such an approach also underlines the scale up potential of the project so that no community is left behind. The proposed AfDB/GEF project will ease the transition into a sector-wide spatial framework. While this project does not target all regions of The Gambia, the practices it introduces can be replicated in other areas of the country, especially given the limited geographic scope of the country itself. Through knowledge sharing and comprehensive capacity building, replication is guaranteed. Establishing the knowledge base will provide opportunities for replication in future planned rural water supply systems. Knowledge development and information sharing are essential parts of component 4.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.



13°28'N 16°36'W / 13.467°N 16.600°W / 13.467; -16.600

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities Yes

Civil Society Organizations Yes

Private Sector Entities No.

If none of the above, please explain why:

n/a

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

The Project is targeted at the rural and peri-urban areas where over 45% of The Gambia's 1.9 million people live, with coverage of 79.4% but inequitable access to safe water supply, and limited access (40.8%) to improved sanitation compared with national average figures of 86.1% for water supply and 64.9% for sanitation. The Project includes delivery of better waste management services to improve environmental conditions and better protect national water resources in changing climatic conditions, particularly in riverine and coastal communities. An estimated 500,000 people will be direct beneficiaries of the project, contributing to the realisation of SDG 6 (water and sanitation) in particular. The project will particularly benefit women and children, who are primarily affected by poor access to water and poor quality water.

The proposed project will use existing government structures for implementation, incorporating lessons and experience gained through similar operations in The Gambia, especially the RWSSP. The MFWRNAM will be the Executing Agency (EA) of the Project. Other institutional actors involved will include: NAWEC, Ministry of Local Government and Lands (MoLGL) including its Department of Community Development (DCD), National Environment Agency (NEA), Women's Bureau, the Ministry of Health and Social Welfare, and The Association of Non-Governmental Organizations (TANGO). The DWR within MFWRNAM will be responsible for implementation, and shall delegate operation to a Project Management Unit (PMU). Additional staff with specific expertise (CCA, Rural Water Supply Engineer, Social/Sanitation specialist, M&E specialist, etc.) will be hired as necessary and as assed during PPG. At regional and community levels, the project will be implemented through decentralized structures, including local government authorities (area councils), VDCs and VWCs. A Technical Advisory Committee will provide technical guidance and quality assurance to the PMU, which will be determined during the project preparation phase, in addition to a Steering Committee.

A broad range of stakeholders will be engaged in the planning, design and implementation of the project, from the central government to the community level. These shall include policymakers in government agencies, health and local government officials, beneficiary community groups, village committees and NGOs. A participatory consultative process will be pursued throughout identification and implementation to get stakeholder feedback about proposed activities and to incorporate their views in final project design. During PPG, additional field visits will be undertaken to validate baseline data and information collected, and to assess the involvement of beneficiaries and local communities. The basic premise of engagement will be to ensure that various stakeholders (including civil society and the private sector) have meaningful roles in overall design and oversight.

Government agencies at central and regional levels, the private sector and the civil society are indirect beneficiaries of the Project. Staff from government departments will receive training in relevant project management skills; the private sector will be involved in construction and supply of project goods and services, while civil society/NGOs will provide services for community mobilization, organization, and training/awareness building. Effective supervision will be ensured through technical assistance by the Bank to the DWR.

In The Gambia, rural water assets installed through Government financing are owned by the Government but are operated and managed by the beneficiaries themselves through water user groups, i.e. the VWCs. VWCs are a sub-committee of the VDCs, which are responsible for village planning developments. VMCs are elected by the community members and seek gender balance. The key responsibility of VWCs is operation and maintenance of village water supply and sanitation facilities. At sub-district/local level, the project will rely on existing community structures. Each community involved will be represented through its VDC.

The project will use the integrated water supply and sanitation approach which combines the provision of improved water supply, sensitization and mobilization of the communities, and promotes the participation of the communities in the identification and implementation of the facilities in their areas, thus enhancing sustainability of the services and technologies. Design and implementation will thus be based on a responsive approach. Main beneficiaries will be involved in the project cycle to guarantee a sense of ownership and commitment.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Approximately 64% of people residing in rural Gambia are poor, compared to 36% of those in urban areas. A difference also exists in poverty rates between genders: more females (63%) than males (48%) are considered poor, and more women (15.1%) than men (8.5%) are extremely poor. Women in The Gambia make up over 50% of the agricultural labor force and produce around 40% of total agricultural output. Rice farming, especially in lowland areas, is traditionally performed by women, but productivity is low due to the elementary technologies and practices. Traditionally, women do not own or control land. They often lack access to credit for income-generating activities and generally play a limited role in the decision-making that affects their lives. On top of this, poor water and sanitation account for more than 20% of the rural under-5 mortality in The Gambia. These numbers and issues highlight the need for rural development and poverty alleviation efforts in The Gambia to take gender inequality and equity into account during project development and implementation.

Water and sanitation challenges affect men and women differently, a difference which will be aggravated by climate change. Women and children in The Gambia disproportionately bear the consequences of poor water supply as they are traditionally responsible for obtaining water for household use. When a member of the family falls ill (from a waterborne disease, for instance), women usually take on the role of caretaker. Limited access to water sources requires women and girls to make significant investments in time and energy to fetch water. This increases the likelihood of girls missing school hours, and of women lacking extra time to devote to additional income-generating activities. The lack of safe and clean latrine facilities in public areas may also deter women and girls from engaging in community activities outside the home. Particular attention, effort, and resources must and will be dedicated to improving water supply and sanitation delivery in public spaces in the project target areas, such as schools, marketplaces, and health facilities.

By improving access to safe and clean drinking water, the project will have a very positive impact on the lives of Gambians and benefit in particular women and children. Successful implementation of this Project will result in healthier communities, better schooling attendance, improved incomes, increased survival rates (even of children) through reduction in water-related and other diseases (such as dysentery, malaria, cholera). Their sense of security and health conditions are expected to improve through provision of better water and sanitary facilities in public places.

The project will ensure that gender considerations are integrated in all activities. This will include a balanced representation of both men and women in project activities, and the provision of facilities that are most convenient to women and girls. The Gambia Local Government Act of 2002, which introduced the decentralization program, also pushed for female representation and involvement in political decision-making processes at the local level. As a result of this act, women must be members of VDCs, which have a constitutional responsibility to push forward all development planning at the community level. During community mobilization and training, the project will ensure that there is minimum 50% women participation and representation. The projectwill also implement training targeting women to equip them to participate more effectively in VDCs and VMCs, including taking up leadership positions. A gender analysis will be carried out during baseline appraisal and further during PPG so as to ensure gender considerations are fully integrated into the preparation and implementation of baseline and LDCF activities. The analysis will influence project design and delineate the actions to be taken, and will be shared with the GEF at CEO endorsement submission. As examples, the project already envisions the preparation of gender responsive district WASH investment plans, and training and communication materials will be developed which will be gender and culturally sensitive to promote safe sanitary practices and proper hygiene behavior. These will cover such topics as personal hygiene, cleanliness within the household, prevention of diseases, disposal of waste, proper use of sanitation facilities, hand washing, etc.

The project will improve the socio-economic empowerment and living conditions of women through the direct benefits associated with access to enhanced WASH services, and through the indirect effects of water and sanitation availability on other areas of their lives, such as education or income. This is especially true in rural areas. Examples of social and gender related indicators that could be used in the project will include:

- Number of people trained by gender
- Number of gender-segregated and sensitive public and school sanitary facilities constructed
- Village water committee membership by gender
- % of female heads of household benefiting from the project
- Number of training on gender mainstreaming or gender related issues conducted for key project stakeholders
- Under-5 and infant mortality rates

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources; Yes

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

No

Please briefly explain the rationale behind your answer.

The basic premise of engagement will be to ensure that various stakeholders, including the private sector, have meaningful roles in overall design and oversight. The private sector will be an indirect beneficiary of the Project. Mostly the private sector will benefit through their involvement in the construction and supply of project goods and services.

5. Risks

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)

The principal risks faced by the project are institutional and operational, through limited capacity in both national and local institutions which could threaten progress and impact; and climatic. The frequency of droughts and irregularity of rainfall pose threats to vulnerable populations and to the activities planned for the project. However, the LDCF project is in fact meant to reduce that very risk to the project itself and the country as a whole.

Risk	Level	Mitigation measures			
Weak institutional capa	Medium	The proposed Project will use existing government structures for imple			
city to implement the pr		mentation, incorporating lessons and experiences gained with similar o			
oject		perations in The Gambia. The DWR will be responsible for implementati			
		on with a PMU made up of all needed expertstechnical assists. The proj			
		ect team will be multi-disciplinary, while there will be provisions for out-			
		sourcing to competent third parties (NGOs, CSOs, specialized technical			
		service providers, consultancy firms, etc.) where necessary. Project im			
		plementers and AfDB will work closely to ensure optimum conditions fo r implementation.			
		Targeted support will be offered for institutional, management, and cap			
		acity building activities at various implementation levels, including proje			
		ct management with full involvement of communities.			
		Key stakeholders at district and local levels will be involved in identifica			
		tion, design, and implementation.			
Water and sanitation se	Low	Involve the recently reactivated Water and Sanitation Working Group an			
ctor remains uncoordin		d use Joint Sector Reviews. Reach out to other donors working in the se			
ated and fragmented		ctor and other LDCF project agencies for improved coordination of inter			
		ventions. Project will allocate resources for effective coordination and			
		monitoring.			
Operation and Maintena	Medium	To ensure the sustainability of the facilities, the beneficiaries will be sup			
nce of new infrastructur		ported with the necessary technical support for O&M of new installatio			
e is ineffective		ns. An O&M strategy/plan will be developed. Sustainability will be assur			
		ed by ensuring that the communities contribute towards the operational			
		costs of water supply schemes in their respective areas.			
Local communities ske	Low	Continued engagement with and participation of local communities as			
ptical about new adapta		a project strategy. Consultations with local stakeholders to explain activ			
tion measures and wate		ities and solicit support. Focused awareness activities will be develope			
r and land conservation		d and implemented. Use of CSOs to deliver messages and awareness b			

practices		uilding. Communication and training programs to be developed so that
		messages are clear beyond project end.
Delayed community res ponse to sanitation mea sures which causes con tinued contamination of water sources	Medium	Changing behavior can take time. The project will deliver a sanitation a d hygiene promotion program, continuous education, and pursue persistent stakeholder consultation and engagement. Project will strengthen ocal community groups and associations and empower them in good vater management.
Climate change: increas ed frequency and intens ity of extreme events an d their impacts (unpredi ctable rain, high temper atures, etc.). Potential e ffects include drought, fl oods, reduced groundw ater recharge and increa sed evapo-transpiration which may affect the pr oject	Medium	The LDCF project aims to increase adaptive management and resilience e as an overarching goal. The positive socio-economic and environmental impacts of the baseline and overall sustainability will be exponentially increased with integration of CCA considerations. The project will promote measures to climate-proof investments, anticipate and plan for commate-induced events, and pursue adaptation measures (e.g. water conversation techniques, drought-resistant crops, etc.). Better planning and M&E too.
Environmental impact	Low	Environmental sustainability will be assured through the use of non-environmentally invasive technology (e.g. solar), increased vegetative coverand SLWM measures applied locally. The baseline infrastructure involves drilling boreholes to be equipped with solar powered pumps, rehabilitation/upgrading existing schemes to solar powered facilities, and construction of latrines. These facilities are elocated on multiple sites none of which are in protected or sensitive areas. The project has no detrimental effects and most of the impacts will be temporary during construction (such as dust emissions, noise pollution, etc.). All the impacts, including permanent ones (such as installation of water tank infrastructure) will be mitigated through the implementation of an Environmental and Social Management Plan (ESMP) at each site.

6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The proposed LDCF project is designed to complement other key projects financed by the AfDB and other development partners in The Gambia to enhance coordination, development efforts and the country's adaptative capacity. The LDCF grant will be part of a wider support by the AfDB to The Gambia's National Water Development Program.

A project coordinating unit (PCU) will be established. The Implementing Partners shall be supported by the recruitment of PCU technical experts and other specialist advisors. The agency representatives together with the PCU technical experts and advisors shall be responsible for providing the necessary technical supervision and quality assurance of consultants and works contractors who will be at the forefront of delivering the project goods and services. A Project Steering Committee (PSC), jointly chaired by the Permanent Secretaries of MFEP and MFWRNAM, will provide policy oversight and guidance through quarterly meetings or hold extra-ordinary meetings, as required, to address special circumstances. The PSC shall be the ultimate forum for dialogue with the Bank's supervision missionsand will facilitate sector stakeholder coordination to continue during implementation through a Project Steering Committee with representation from all relevant sector stakeholders. The PCU Coordinator, in consultation with the head of the Rural Water Department, will be the PSC Secretariat, and shall be answerable to the Permanent Secretary of the MFWRNAM.

The EU has been the lead donor in the water and sanitation sector since the 1990s but other major donors (World Bank, IsDB, JICA) recently also intervened. These donors have helped support capacity building related to WASH, but there is still a pronounced need for further support for water resources management. The AfDB has vast experience in supporting similar rural water supply and sanitation operations in other countries as well as having previous initiatives in The Gambia (see below) which lay good groundwork for this intervention. The LDCF project can also build upon the AfDB Land Degradation project in The Gambia, "Participatory Integrated Watershed Management Project" which recently ended and which aimed to increase land productivity and reduce soil erosion by promoting SLWM practices. Hence, it can feed into the activities of this project too. AfDB will bring much expertise and apply best practices and the lessons from these projects to this new intervention. Financing the proposed project will consolidate the Bank's continued involvement and support for the water sector in The Gambia.

AfDB Projec t Nam e	Amo unt	Descript ion	Peri od
Water Suppl y and Sanita tion St udy fo r The Gamb ia	UA 1.2 Milli on	Master Plan for Water S upply an d Sanita tion in major ur ban are as and d etailed d esign fo r priority areas	200 6-2 008
Natio nal W ater S ector Refor m Proj ect of The G ambia	Euro 2 Mil lion	Reform of the w ater sec tor in Th e Gambi a	201 1-2 014
Rural Water Suppl y and Sanita tion P roject	UA 5.35 Milli on	New sol ar powe red wat er syste ms and constru ction of sanitary latrines	201 2-2 017

Although donor approaches do not conflict, the sector could benefit from improved coordination. This would allow for a more sector-wide approach to planning, the harmonization of technologies and delivery mechanisms, and consistent cost recovery and maintenance schemes. DWR, being the authority coordinating all major donor programs in the sector and this project's executor, is in the right position to ensure complementarily of initiatives. DWR has established clear guidelines for donor interventions aimed at efficient use of resources, for instance by designating geographical donor-intervention concentration areas. The project will make sure to plan frequent coordination meetings between the major donors and NGOs. Through the project DWR will also improve its relationship and collaboration with NAWEC, enabling a more holistic approach to water management in The Gambia.

The government of the Gambia specifically designated the AfDB as the agency for implementation of project 2 of the NAPA (Improvement of Fresh Water Availability), which will allow increased coordination with other GEF funded projects. Indeed, other NAPA priorities (e.g. #1, 3, 8, 9) are being implemented by UNEP, FAO, and UNDP (see list of projects below). The proposed project will coordinate with these agencies to facilitate the translation of formal commitments from the NAPA into programmatic action. These interventions will be reviewed and partners consulted to identify avenues for collaboration and to avoid unnecessary programmatic overlap and duplication. All these projects are complementary but also have different adaptation/sector focuses, and will allow a more complete implementation of the NAPA.

AfDB and the PMU will enhance collaboration to identify opportunities and mechanisms to facilitate synergies. The collaboration mechanism could include informal communications between GEF agencies and other donor partners, and information exchange and outreach between projects. The NAPA projects are meant to be mutually supportive and complementary in order to reduce systemic sectoral and regional vulnerabilities, with shared objectives for poverty reduction too. They thus form a coherent package to deliver clear benefits to communities and enhance capacities at all levels for CCA. AfDB will work jointly with others to better deliver the portfolio of priorities as a holistic package.

Agency	Project titles	Objective	NAPA prio rity
UNEP	Strengthening Climate Services and Early Warning Systems in the Gambia for Climat e Resilient Development and Adaptation to Climate Change – 2nd Phase of the GOTG/ GEF/UNEP LDCF NAPA Early Warning Proje ct (GEFID: 5071)	To strengthen the climate monitoring capabilit ies, early warning systems and available infor mation for responding to climate shocks and planning adaptation	1
FAO	Adapting Agriculture to Climate Change in the Gambia (GEFID: 5782)	To promote sustainable and diversified livelih ood strategies for reducing the impacts of cli mate variability and change in agriculture and livestock sector	3, 8
UNDP	Enhancing Resilience of Vulnerable Coasta I Areas and Communities to Climate Chang e in the Republic of Gambia (GEFID: 4724)	To reduce Gambia's vulnerability to sea-level ri se and associated impacts of climate change by improving coastal defenses and enhancing adaptive capacities of coastal communities	9

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

The proposed project takes into account existing national policies & strategies such as the Water Policy (2006), Sanitation Policy (2015-2020), NAPA, and Agricultural Policy in addition to the SDGs, particularly SDG 6 on water and sanitation. The project aims to deliver both immediate and long-term adaptation benefits on the ground, build local and national adaptive capacity, and improve public awareness of CC and adaptation in accordance with the LDCF and NAPA priorities. The government of the Gambia specifically designated the AfDB as the agency for implementation of project 2 of the NAPA (Improvement of Fresh Water Availability), which will allow increased coordination with other GEF funded projects. Indeed, other NAPA priorities (e.g. #1, 3, 8, 9) are being implemented by UNEP, FAO, and UNDP (see list of projects below). The proposed project will coordinate with these agencies to facilitate the translation of formal commitments from the NAPA into programmatic action. These interventions will be reviewed and partners consulted to identify avenues for collaboration and to avoid unnecessary programmatic overlap and duplication. All these projects are complementary but also have different adaptation/sector focuses, and will allow a more complete implementation of the NAPA. Further the project also aligns to meet the objectives as set forth in the National Action Programme To Combat Desertification (NAP). Indeed the project supports the adoption of soil and water conservation measures to protect soils and reduce the vulnerability of agricultural livelihoods.

Moreover, the proposed project is aligned with the National Development Plan (NDP) (2018-2021) which provides the framework for implementing the Government's development agenda. The Goal of the NDP is to deliver good governance and accountability, social cohesion, and national reconciliation and a revitalized and transformed economy for the wellbeing of all Gambians. Governance and economic management, agriculture modernization, human capital development, infrastructure & energy, tourism, gender equality, youth empowerment as well as private sector development constitute the strategic priorities of the NDP. The NDP defines the water and sanitation sector goal as "Improved, Equitable Access to Safe and Affordable Water and Sanitation, Good Hygiene Practices, and Environmental Protection Promoted for All"; and recommends three (3) key measures to improve the quality of life of Gambians as: (a) increased resource mobilization through donors and public private partnerships to construct and upgrade water supply and environmental sanitation infrastructure to improve access and enhance public health; (b) strengthening of community structures for effective maintenance and management of facilities; and (c) strengthening of social and behavioural change communication through sensitization campaigns.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Knowledge management and M&E will be important to capitalize upon lessons learned during the implementation of the project. Knowledge generated during implementation will be well documented. As part of the RWSSP, the AfDB supported the revival of the Water and Sanitation Working Group (WSWG) and introduced annual Joint Water Sector Reviews which will be used as effective platforms for knowledge generation and management. The WSWG will act as a stage for sharing information and coordination. The knowledge gained will enrich the Bank's continued learning process and its support to other regional member countries.

To ensure that the project is managed and implemented effectively and that project benefits are maximized and reach target groups, M&E will be a key activity during implementation. A gender sensitive M&E strategy will be developed, and monitoring will be conducted periodically to gather information from multiple sources to determine whether inputs have resulted in expected benefits to the target beneficiaries. The M&E process will also help in pursuing timely corrections to improve resource efficiency, benefits, outcomes, and impacts. Indicators to be monitored will be formulated during PPG. Selected indicators will include the Bank's Core Sector Indicators, and will relate to physical progress, resilience, project impact with gender disaggregated data, and institutional capacity.

Over the course of the project, M&E reports will be produced and updated at regular intervals. These outputs, combined with a results-based management approach to project implementation, will help ensure quality knowledge management for the project. The implementation and monitoring processes are planned to be participatory and shall involve all key stakeholders, including the beneficiaries themselves.

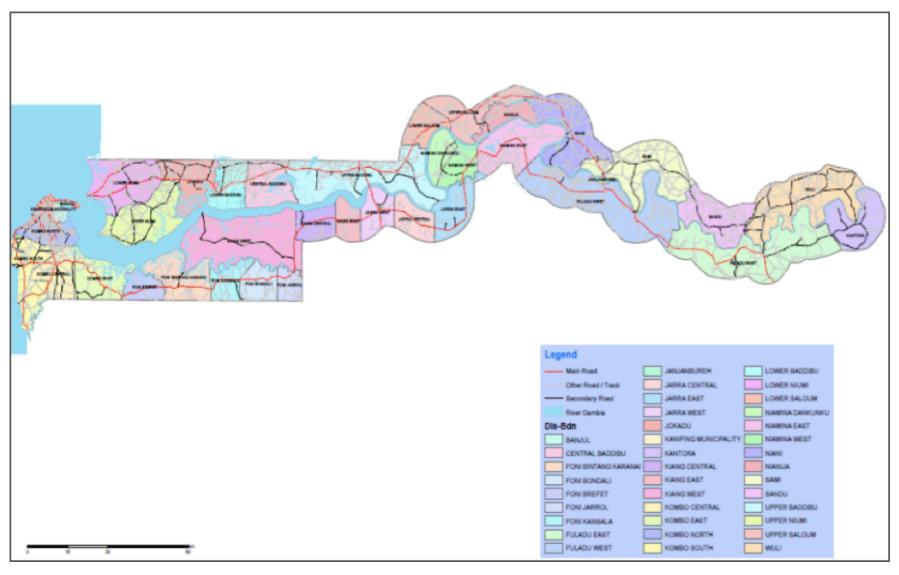
Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Momodou Jama Suzareh	Executive Director and GEF OFP	Ministry of Environment	3/5/2019
CCA Core Indicators and Metadata Gambia	CCA Core Indicators and Metadata Gambia	CCA Core Indicators and Metadata Gambia	4/26/2019

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place



13° 26' 44.83" N and 15° 18' 22.04" W