GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

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December 22, 2011

Dear LDCF/SCCF Council Member,

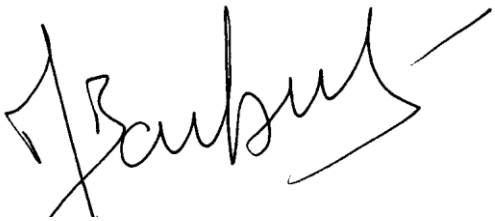
I am writing to notify you that we have today posted on GEF's website at www.TheGEF.org, a Project Identification Form (PIF) for a full-sized project proposal from UNDP entitled: ***Sierra Leone : Building Adaptive Capacity to Catalyze Active Public and Private Sector Participation to Manage the Exposure and Sensitivity of Water Supply Services to Climate Change***, for funding under the Least Developed Countries Fund (LDCF). This PIF has been posted for Council approval by mail. Council Members are invited to review the PIF and to submit their comments (in Word file) to the GEF Secretariat's program coordination registry at gcoordination@TheGEF.org by January 21, 2012.

Following the streamlined procedures for processing LDCF proposals and the new project cycle, Council members are invited to approve the following decision:

> *The LDCF/SCCF Council reviewed the PIF entitled* ***Sierra Leone : Building Adaptive Capacity to Catalyze Active Public and Private Sector Participation to Manage the Exposure and Sensitivity of Water Supply Services to Climate Change*** *posted on December 22, 2011 and approves it on a no objection basis subject to the comments submitted to the Secretariat by January 21, 2012.*

In accordance with this decision, if the Secretariat has not heard from you in writing by January 18, 2012, we will assume that you approve the PIF. Council members will receive a copy of the draft final project document that will be submitted for CEO endorsement.

Sincerely,



Copy to: Alternates, GEF Agencies, STAP, Trustee

PROJECT IDENTIFICATION FORM (PIF) [1]
PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND:LDCF

PART I: PROJECT IDENTIFICATION

Project Title:	Building adaptive capacity to catalyze active public and private sector participation to manage the exposure and sensitivity of water supply services to climate change in Sierra Leone		
Country(ies):	Sierra Leone	GEF Project ID:[2]	4599
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	4613
Other Executing Partner(s):	Ministry of Energy and Water Resources, Sierra Leone Environment Protection Agency, & Meteorological Department	Submission Date:	December 6, 2011
GEF Focal Area (s):	Climate Change	Project Duration (Months)	48 months
Name of parent programme (if applicable): • For SFM/REDD+ ☐	N/A	Agency Fee ($):	294,000

A. FOCAL AREA STRATEGY FRAMEWORK[3]:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount ($)	Indicative Co-financing ($)
CCA-1	Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas	Output 1.1.1: Adaptation measures and necessary budget allocations included in relevant frameworks	LDCF	800,000	5,200,000
CCA-2	Outcome 2.2 Strengthened adaptive capacity to reduce risks to climate-induced economic losses	Output 2.2.2: Targeted population groups covered by adequate risk reduction measures	LDCF	1,700,000	19,100,000
CCA-3	Outcome 3.2 Enhanced enabling environment to support adaptation-related technology transfer	Output 3.2.1 Skills increased for relevant individuals in transfer of adaptation technology	LDCF	300,000	600,000
		Sub-Total		2,800,000	24,900,000
		Project Management Cost[4]	LDCF	140,000	700,000
		Total Project Cost		2,940,000	25,600,000

[1] It is very important to consult the PIF preparation guidelines when completing this template.
[2] Project ID number will be assigned by GEFSEC.
[3] Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.
[4] GEF will finance management cost that is solely linked to GEF financing of the project.

B. PROJECT FRAMEWORK

Project Objective: Enhancing adaptive capacity of decision-makers in the public and private sector involved in water provision to plan for and respond to climate change risks on water resources						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Indicative Grant Amount ($)**	**Indicative Co-financing ($)**
1. Integrating climate-change considerations into water policies	TA	1. Critical public policies governing the management of water resources revised to incentivize climate smart investment by the private sector.	a. An integrated/sustainable climate information communication system established by the Meteorological Department to facilitate access to relevant high-resolution data, climate risk management tools (e.g. -maps) and information on climate change impacts on water resources. b. More than 50 officers from the Water Policy Planning, Coordinating Unit (WPPCU) and the Sierra Leone Environment Protection Agency (SLEPA), Water Societies trained to generate, analyze and integrate climate risk information, including on climate induced disasters, into water policies and investments plans; c. Climate monitoring system established for the Guma reservoir to analyze the water system's vulnerability and support decisions making on adaptation strategies. d. Regular dialogue established between parliamentarians, local council's members, traditional authorities, NGOs/Community Based Organizations, and private sector (water societies) on the impacts of climate change on water supply and access in at least 3 local councils. e. At least 2 dialogues under the Public Private Sector Forum initiated on requisite policies and supports for promoting investment and entrepreneurship development on managing climate change risks on water provision and usage.	LDCF	800,000	5,800,000

Project Objective: Enhancing adaptive capacity of decision-makers in the public and private sector involved in water provision to plan for and respond to climate change risks on water resources						
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Trust Fund**	**Indicative Grant Amount ($)**	**Indicative Co-financing ($)**
2. Strengthening the resilience of water supply systems to anticipated climate change risks	INV	2. Existing water supply storage and distribution infrastructure made resilient against climate change induced risks (droughts, floods) in Freetown and at least 3 rural districts, with the support of private sector	a. Affordable climate-resilient community based water harvesting, storage and distribution systems designed, built and rehabilitated in Freetown, with the support of private sector, to withstand projected changes over the next 20 years in rainfall patterns and intensity (e.g. 10 communal reservoirs, 1500 rooftop catchment, 1500 rainwater storage tanks and conveyance systems) b. Rehabilitation and construction of at least 30 gravity fed water systems, 100 small water reservoirs that are resilient to expected climate pressures over the next 20 years that provide water for communities and their economic activities during water shortages in at least 3 rural districts in Northern, Eastern, and Southern regions.	LDCF	1,500,000	18,100,000
	TA		c. Capacity of more than 50 Water engineers (from both public and private sector), local community based management committees, youth and woman associations developed in designing and managing climate risks on small-scale water supply systems, as well as maintaining climate-resilient infrastructure; d. Relevant experiences/lessons from community orientated climate resilient water infrastructure and management practices (including gender differentiated issues) identified, and widely shared/disseminated to facilitate replication in other vulnerable areas	LDCF	500,000	1,000,000
				Sub-Total		2,800,000	24,900,000
				Project Management Cost[5]	LDCF	140,000	700,000
				Total Project Costs		2,940,000	25,600,000

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, ($)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
National Government	Sierra Leonne Environmental Protection Agency (SLEPA)	In-kind	250,000
Local Government	Local Councils	In-kind	50,000
GEF Agency	UNDP	Grant	2,100,000
GEF Agency	UNDP	Grant	400,000
GEF Agency	UNDP	Grant	100,000
Other Multilateral Agency (ies)	Europan Union	Grant	5,700,000
Bilateral Aid Agency (ies)	DFID	Grant	17,000,000
Total Cofinancing			**25,600,000**

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the GEF focal area/LDCF/SCCF strategies:

The proposed project is fully in line with the LDCF/SCCF focal area Objective 1 to "Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level". Related expected outcomes include mainstreaming of adaptation into broader development frameworks and increase adaptive capacity within relevant development sectors and natural resources.

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

Consistent with the Conference of Parties (COP-9), the proposed project will implement priority interventions addressed in Sierra Leone's NAPA, therefore satisfying criteria outlined in UNFCCC Decision 7/CP.7 and GEF/C.28/18. It will address urgent and immediate climate change adaptation needs and leverage additional co-financing resources from bilateral and other multilateral sources. The Government requests the LDCF to finance the additional costs of achieving sustainable development imposed on Sierra Leone by the impacts of climate change. The proposed project is country-driven, cost-effective, and focused on immediate needs of vulnerable people, especially young and women and poor rural communities. It will contribute to integrating climate change risk considerations into water policies associated with the provision of effective community orientated climate resilient water infrastructure to protect life, private/public investments in the water sector facing to increasingly frequent extreme weather events. The project focus is therefore aligned with the scope of expected interventions as articulated in the LDCF programming paper and decision 5/CP.9. As climate impacts fall disproportionately on the poor, the project recognizes the link between adaptation and poverty reduction (GEF/C.28/18, 1(b), 29).

A.2. national strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The overarching goal of the project is to safeguard development benefits for rural communities from future climate change induced risks. In particular, the Government of Sierra Leone has adopted development plans based on the Millennium Development Goals (MDGs), the national Poverty Reduction Strategy (PRS), the vision for Sierra Leone in 2025, among a series of action plans which are project (short-term) driven. These sectoral development plans constitute baseline development strategies which have not taken onboard expected climate change induced. In addition, the Government has completed the second generation of the Poverty Reduction Strategy Paper (PRSP II) covering the period 2008-2012, under the title "Agenda for Change". Recognizing the slow rates of progress in attaining the MDG targets, Government has developed the PRSP II based upon four key priorities. This proposed LDCF project is aligned with the PRSPII pillar on "Ensuring sustainable human development through the provision of improved coverage of the basic social services and social protection needs of the poor and vulnerable". The proposed LDCF project will enable the Government to facilitate access to climate resilient water services for poor communities as it develops sector

policies. Moreover, the proposed project will promote climate resilient environmental sustainability goals set by the Government of Sierra Leone (GOSL). These goals are: a) integration of the principles of sustainable development into country policies and programmes to reverse the loss of environmental resources; b) reduce by half the proportion of population without access to sustainable safe drinking water; achieve significant improvement in the lives of 1.5 million slum dwellers, including displaced persons.

The proposed project is anchored firmly in the priorities identified in the National Adaptation Programme of Action (NAPA), which Sierra Leone completed in 2007 The project will address the following NAPA Priorities:

- ***NAPA Priority Project #3:*** Capacity building of the Meteorological Department through training of personnel for the country's adaptation to climate change. The purpose of this NAPA project is to recruit and/or train meteorological personnel at various levels in order to capacitate the department in its mandate to support the formulation of climate change policies by providing necessary climate information to decisions makers for mainstreaming climate change. The NAPA estimated the cost of this project to be US$152,800. In the context of the proposed project, officers from the meteorological department will be trained to generate relevant information to support policy formulation for adaptation. (component 1);

- ***NAPA Priority Project #11: Institutional Strengthening of the Water Resources Sector in Sierra Leone****:* The overarching objective of the project is to build capacity in the water resources sector through institutional strengthening with a view to ensuring the effective delivery of hydrological services, predicated on the realization that workable options for adapting to climate change is consistent with collaborative research, monitoring, and efficient management of our finite resources. The NAPA estimated the cost of this project to be US$2,250,000. In the context of the proposed project,, the National Energy, Water Policy Planning and Coordinating Unit (NEWPPCU) will be trained to use, analyse and integrate climate risks information into the formulation of Water Supply and Sanitation policy and investment plans, coordination between hydrological services and other line Ministries (Water Resources, Environment and Forestry, Meteorology, and local governance structures (local councils) will be improved, technical officers will be trained on the measurement and monitoring of water-related impacts of climate change and monitoring systems will be enhanced.

- ***NAPA Priority Project #13***: Promotion of Rain Water Harvesting and Development of An Integrated Management System for Fresh Water Bodies: The objective of the project is to increase water availability for domestic and commercial use through sensitization of communities about the possibility of capturing, storing and utilizing rainwater. The NAPA estimated the cost of this project to be US$ 2,800,000. In the context of this project water harvesting systems will be put in place in Freetown and other areas of priority.

In addition, the proposed project is complimentary to findings of the National Capacity Self-Assessment (NCSA) which indicates the weak capacity of Sierra Leone administration to manage natural resources due to data information and training constrains.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

The proposed project builds on a set of baseline projects which aim to improve the governance of water and reduce the impacts of natural disasters in Sierra Leone. These baseline projects, however , are unable on their own to address the skills deficit of water managers and the insufficient policy framework to secure the vital economic and the functionality of water management systems in a changing climate. With a view on baseline projects, the proposed project will build on the following initiatives, which are also providing the co-financing contributions summarized under Table I/B. of this PIF:

"Environmental governance and mainstreaming project (funded by the EU; financial scope: US$5,7000,000)": The EU is supporting the Sierra Leone Environmental Protection Agency (SLEPA) to be fully operational and ensures that its core functions at the central and district level are implemented. LDCF resources will be able to use this project as a platform and framework to review and update water resources policies in the context of a changing climate (under Outcome 1). The partnership built under the UN Join Vision will serve as a cooperation platform between UNDP and the EU to join their efforts and realize Public Sector Reform.

UNDP/WMO/British Meteo support to the Meteorological Department (US$100,000): UNDP has developed MOU with WMO and is working with the British meteorology agency to build capacity of the Meteorological by establishing a public Service that generates reliable data and maintains a national database for planning and monitoring development plans and programmes that contributes to good governance at national and district levels. LDCF resources will be uses to provide information regarding anticipated weather forecasts, seasonal weather predictions and projected long-term climate trends that are essential for understanding current climate-related hazards and potential future hazards.

UNDP/The Community Empowerment and Development Project (CEDP- US$ 2,100,000): The CEDP is providing a wide spectrum of assistance to rural communities by improving the delivery of social services through the construction and rehabilitation of community and government infrastructure such as water and sanitation systems and the connection of the water distribution lines to the dam and water tank (reservoirs etc) within rural communities. The activities undertaken by the project included the construction of one hundred hand-dug water wells, three gravity water supply systems, rehabilitation of the existing, but dysfunctional water supply systems, training of plumbers to maintain the systems and community institutional reforms for the sustainability of the interventions. The project was implemented in 70 villages across the country.

DFID Water, Sanitation and Hygiene programme (US$17,000,000). This baseline project seeks to strengthen the water and sanitation sector in Sierra Leone and enable rural and urban communities (and within those the most vulnerable members such as women and children) to adopt safe hygiene and sanitation practices and consume safe water. With funding by the UK government and UNDP as implementing partner, the project is supporting the development of water and sanitation facilities, promotion of household hygiene, and the training of water supply maintenance in Yele, Kono, Kambia, and Kabala. The proposed LDCF project will be closely aligned with this programme and build on the institutional interface it has created in a number of vulnerable communities. LDCF investments will be used to support water-related infrastructure to buffer the growing effects of dry spells and drought (promoting technologies such as rainwater harvesting, communal ponds), while the DFID-funded baseline project is rehabilitating and reconstructing water supply and sanitation systems, upgrading and repairing key water supply transmission lines, and promoting water use efficiency'.

Climate-Induced Problem:

The problem that the proposed project seeks to address, and that is not sufficiently addressed in any of the aforementioned baseline projects targeting business as usual development of the water sector, is the absence of skills and experiences of water managers, and insufficient finance from local public sources in Sierra Leone, to promote an efficient water systems under conditions of a changing climate.

Climate change is expected to decrease stream flow and ground water recharge and reduced annual average rainfall and run-off would aggravate desertification. The main water supply to Freetown is vulnerable as evidence highlighted in the NAPA suggests the rains appear to be becoming less predictable. Indicators of the impact of unpredictable but declining quantities of rainfall are all too apparent. For example, low rainfall in June 2006 resulted in the water level at Freetown's principal water source, the Guma reservoir, reaching a critical point resulting in widespread rationing. This shortfall highlights the long-term threat to the security of the capital's water supply. Scarcity of surface water during the dry season limits the use of

low lift pumps. Presently, wells are dug deeper during this season because of the low level of the water table. In the Freetown area, crudely built carts are used by children to transport water in (5) five- gallon plastic containers. Women travel several kilometres outside the main city to fetch water, resulting in serious human development impacts. Few people have the economic means to afford water storage tanks in their homes.

Underlying causes:

The underlying causes of the problem are multiple and encompass both climate and non-climate related factors. Report of studies relating to climate change and National Adaptation Programme of Action carried out in recent times have revealed that rainfall and temperature patterns of the country have been changing. The climate models (HADCM2, UKTR, CSIRO, ECHAM and UKMOEQ) indicate steady increase in temperature for Sierra Leone with little inter-model variance. The average temperature for the period 1961 – 1990 is projected to increase by about 7% to 9% above this average temperature by the year 2100 as shown in figure below. With regards to rainfall an increase or decrease under climate change scenario is a critical factor in estimating how climate change will affect Sierra Leone, given the country's extreme vulnerability to water related problems. The projected rainfall from 1961 – 1990 to 2100 under the General Circulation Models (GCM) output show an increase in rainfall by about 3% and 10% below current monthly and annual rainfall values respectively. Analysis carried out on local rainfall data and inter-annual variability projections linked more firmly to drier conditions in the near future.

More fundamentally, Sierra Leone is a small country with 70% of the population living below the poverty line and 26% in extreme poverty. The decade old rebel war has had a devastating impact on all facets of the economy, destroying Government's ability to adequately meet the needs of the nation. The economic and social development of Sierra Leone factor poses a major challenge to development and makes the country vulnerable to many national and international pressures. Efforts to improve the quality of life of its people have been hampered by extreme poverty, structural weakness in the economy, civil conflict and the lack of capacity weaknesses related to growth and development. All these can be further aggravated by the negative impacts of climate change.

Mainly as a result of the war, rural/urban migration has increased considerably resulting in increasing numbers of urban dwellings and pollution. In Freetown, there is a considerable urban degeneration due to poor housing facilities and inappropriate waste management, which leads to serious negative effects on environmental health. The absence of urban physical planning, inadequate investments in urban utilities combined with migration, has led to overcrowded and polluted environments. Water supply and waste management will remain one of the key challenges of the future.

Environmental destruction and poverty have close inter-linkages. The use of the environment and natural resources over the years has resulted in considerable environmental degradation. The exploitation of natural resources has not been effectively managed to the benefit of the country, its people, and has rather contributed towards increasing the incidence of poverty, and consequently vulnerability. Poor people are particularly vulnerable to both natural disasters and changes in environment conditions because they depend on the utilization of the natural resources. Despite its abundance in natural resources, Sierra Leone is recorded as one of the least developed and poorest in the world with a number of social and economic indicators being far below average levels.

Long-term solution and barriers to achieving it:

Sierra Leone has been exposed to changing climatic conditions for the last 30 years. Over this time, there has been development of some coping skills among professionals in the water and environment sector. In a long term solution, the Government of Sierra Leone (GoSL) will be called to prioritize and allocate human and financial resources to improve resilience of the water sector under conditions of climate change. However, mainly as a result of the war, there are many constraints that prevent the preferred solution from being achieved.

- ***Current policies, strategies and regulatory mechanism have limited or no consideration of***

climate change issues: Keys institutions (Water Policy Planning and Coordinating Unit (WPPCU), the Sierra Leone Environment Protection Agency (SLEPA) and Meteorological Department) are constrained by human resources with the appropriate scientific and technical expertise that is necessary to internalize climate change issues into policies, strategies and regulatory mechanisms. Without dynamic and sustainable systems, including local technical competencies to generate and use relevant information on climate change risks, and the associated economic impacts, integrated climate resilient policy formulation is severely constrained, if at all possible.

- ***Absence of reliable/up-to-date information on climate impacts on key sectors***: The decade old rebel limited institutional capacity to have reliable and capacity to systematically collect and analyze data to inform climate resilient policy formulation. Inadequate staff and poor facilities for weather forecasting and related activities have undermined the ability of the meteorological department to provide adequate support information to other sectors of the economy so that they can better adapt to the impact of climate change. Gaps in technical skills for generating information on climate change (for example, downscaled seasonal or long-term forecasts are non-existent and/or not utilized); there is limited dissemination of available forecasts; and forecasts are not packaged in a format accessible/useable to end-users such as district level planners/policy makers/managers).

- ***Weak national and local knowledge base on climate impacts, risks and opportunities***: Because of the war, desegregation of communities due to migration has severely weakened the local knowledge-base with limited transfer of indigenous skills between and within communities. The use of available global and other external knowledge bases is also limited for a number of reasons that span from awareness that various tools exist and are available to knowing what to do with the information once it is secured. Consequently, it is not surprising that there is limited public awareness of; i) climate change impacts; ii) adaptation measures to combat climate change; and iii) how human interaction can either diminish (through adaptation and preparedness) or exacerbate climate change impacts.

- ***Public financing shortfalls lead to insufficient coverage of climate-resilient water supply systems:*** Since 2008, local councils have been required to manage all urban water supply activities (except Freetown) and peri-urban water supply schemes. Unfortunately, these decentralised public bodies are frequently not prepared for the task, lacking finances, capacity and institutional authority to respond effectively to the demands of the population, specifically on climate-resilient water supply systems. Scarce public finance needs to be used to catalyse and leverage additional resources for the necessary investments for the operation, maintenance, and management of vulnerable infrastructure.

- ***Insufficient sharing and learning mechanisms on CC***: Climate risk information, adaptation options and knowledge are not shared and disseminated as widely as needed to enable communities to cope with the adverse of climate changes. There is no learning system in place to capture, codifying and inform scaling up efforts. In addition, there is no regular flow of information and dialogue on climate change between parliamentarians, local council's members, traditional authorities, NGOs/Community Based Organizations, and private sector (water societies).

B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The Government of Sierra Leone requests the LDCF to finance the additional costs of enhancing the resilience of water sector to climate risks, within the context of policy planning/budgeting and investments in the vulnerable districts.

Component 1: Integrating climate-change considerations into water policies

Baseline situation: As in many West African countries, water policies in Sierra Leone are developed through dedicated Ministries and their agencies. The Ministry of Energy and Water is responsible for water policy, planning and coordination through the National Energy, Water Policy Planning and Coordinating Unit (NEWPPCU). The Sierra Leone Environmental Protection Agency (SLEPA) is mandated to harmonize the legislative, policy and institutional framework for natural resource management. SLEPA will host the future Secretariat of Climate Change.

The Government's Poverty Reduction Strategy (2009-12), called the Agenda for Change, recognized the needs to create an enabling policy environment and to ensure that best practice in environmental and natural resource management is integrated into any strategic planning on economic growth. The European Union support, under the 10 EDF, addressed this issue and substantial funding is given to SLEPA to improve environmental governance. Under this project, SLEPA already established coordination mechanisms between key Ministries and technical support is in place to define modalities for the mainstreaming of the environment and Multilateral Environmental Agreements (MEAs) into keys policy development.

However, in the baseline, local and national capacities to adapt to climate change are not being developed. A brief review of the Water Supply and Sanitation Policy showed that climate variability and change have not taken into account comprehensively. Basically, information, including inventory and mapping, is inadequate and staffs from ministries and also local councilors have limited expertise to internalize climate changes into existing and new policies, strategies and regulatory mechanisms. In addition, the key actors (parliamentarian, local deciders and communities) supposed to lead on the development and validation of these policies has limited knowledge of climate change impacts, as well as adaptation. There is also an absence of the absence of consultative mechanisms for Public-Private Partnerships (PPP) in the water sector. Structural and systemic changes are urgently required in the way Sierra Leone manages its natural resource assets in changing climate.

Adaptation Alternative: In outcome 1, the EU Project on environmental governance will be used as a vehicle to mainstream climate change considerations into the Water Supply and Sanitation Policy. This is a prerequisite for enabling more climate smart investment.

As part of advancing this key result, LDCF resources will be dedicated in part to finance the provision of relevant climate information and train government agencies to scale-up efforts to address climate change in the water policies. The meteorological department will play an important role as data providers. LDCF resources will be used to put in place the software (skills, competencies, mandates, process mechanisms) and hardware (tools) that is necessary to support policy formulation that is informed by relevant climate change related information. It is expected that more than 50 staff from national agencies (NEWPPCU and SLEPA) will benefit from training on using/analyzing climate information and integrating climate risk information, including on climate induced disasters, into national policies and their investments plans. Greater consideration will also be given to vulnerability and adaptation in project designs, screening, selection and evaluation for better integration of climate issues and adaptation priorities. In addition, a climate monitoring system will be established for the Guma reservoir to analyze the water system's vulnerability and support decisions making on adaptation strategies.

The project will establish mechanisms for the regular dialogue between parliamentarians, local council's members, traditional authorities, and NGOs/Community Based Organizations on the impacts of climate change on water access in at least 5 local councils. This has been deemed necessary by government in order to mainstream climate change risk management into broader development frameworks at the national and sub-national level. Without this type of mechanism, and in an environment where there is limited awareness of the climate change issues, it is difficult for more sustainable solutions to be put in place eventually such as the inclusion of specific budgetary resources in relevant development and

strategic frameworks. In this context, by way of ensuring that appropriate policy signals are in place to trigger behavioral adjustments by key stakeholders (households, private sector) including effecting budgetary support from the central government, the Water Supply and Sanitation Policy will be reviewed and updated to integrate climate risk issues and enable more climate-smart investment in water security. At least, 500 individuals will be engaged in this exercise.

The project will undertake a targeted effort to mobilize financing from other sources, using GEF resources as leverage to work with private utility companies. At least 2 dialogues will be initiated within the Public Private Sector Forum on requisite barriers hindering investment and entrepreneurship for managing climate change risks on water.

Component 2: Strengthening the resilience of water supply systems to anticipated climate change risks

Baseline situation: Sierra Leone is not a water-deficient country. However, it is estimated that about two third of the rural population has no access to safe drinking water supply. A high proportion of basic infrastructure was destroyed during the civil war and maintenance is largely abandoned. The rural population depends heavily on surface-water collection, a key contributor to the high burden of disease. With such indicators prevalent today, water resources and vulnerability to climatic variability and change is causing increasing concern. Current issues with water supply have meant that Sierra Leone is now seriously off-course to meet the MDGs for water and sanitation.

In the baseline, DFID and other relevant multilateral partners are supporting the GoSL through the Water, Sanitation and Hygiene Programmes to strengthen the water and sanitation sector in Sierra Leone, to enable rural and urban communities, especially the poorest women and children, to adopt safe hygiene and sanitation practices and consume safe water. For example, UNICEF is helping to design nationwide water, sanitation and hygiene (WASH) programme; the World Bank is supporting Emergency rehabilitation and improving planning capacity for the water supply in Freetown; the African Development Bank is improving water and sanitation services to three towns and, enhancing the institutional and financial capacity of Sierra Leone Water Company (SALWACO); and UNDP is providing reliable and safe drinking water for the three most important military barracks in Freetown. UNDP is also improving the delivery of social services through the construction and rehabilitation of community and government infrastructure such as water and sanitation systems and the connection of the water distribution lines to the dam and water tank (reservoirs etc.) within rural communities.

However, the current water supply systems have shown their limitations and are expected to be hardly compatible with changing climatic conditions and increased variability. The Vulnerability and Adaptation Report showed the evident that water resources will be affected by climate change if and when it happens. The projected rainfall from 1961 – 1990 to 2100 under the General Circulation Models (GCM) output show an increase in rainfall by about 3% and 10% below current monthly and annual rainfall values respectively. Analysis carried out on local rainfall data and inter-annual variability projections linked more firmly to drier conditions in the near future. This scarcity of surface water during the dry season will limit the use of low lift pumps. Presently, wells are dug deeper during this season because of the low level of the water table. The NAPA reported that low rainfall in June 2006 resulted in the water level at Freetown's principal water source, the Guma reservoir, reaching a critical point resulting in widespread rationing. In addition, the public financing shortfalls lead to insufficient coverage of climate-resilient water supply systems. This shortfall highlights the long-term threat to the security of the capital's and rural community water supply.

Adaptation Alternative: LDCF resources will enable the principal baseline initiative in water resources management in Sierra Leone, the DFID-supported water and sanitation Programme to diversify and protect water supply, storage and dissemination infrastructure from climate change induced risks.

The project will promote water conservation to reduce the vulnerability of poorest groups in Freetown and selected Districts. In Freetown, LDCF resources will be provided to design, build climate-resilient water harvesting, storage and distribution systems (e.g. 10 communal reservoirs, 1,500 rooftop catchment, 1,500 rainwater storage tanks and conveyance systems) in vulnerable households and public services (schools, hospitals). In rural area, LDCF resources will support the rehabilitation and construction of at least 30 gravity fed water systems, 100 small water reservoirs that are resilient to expected climate pressures over the next 20 years that provide water for communities and their economic activities during water shortages in at least 3 rural districts in Northern, Eastern, and Southern regions. A Public Private Partnership (PPP) will be developed, between (i) The Guma Valley Water Company (GVWC) which provides water supply services to Freetown, (ii) the Sierra Leone Water Company (SALWACO) responsible for water supply services in six urban areas and (iii) local councils devolved until 2008 to manage all urban water supply activities (except Freetown) and peri-urban water supply schemes, to design, build climate-resilient water harvesting schemes, including optimization of total storage capacity to meet supply needs in dry periods; interconnection of isolated units to ensure equitable water supply in dry periods; improvement of structural integrity of rainwater collection and storage systems against extreme weather events; integration of filter elements to improve safety of freshwater supply.

The sustainability of investment will be built through the capacity building of water engineers (more than 50 technical officers), and local community based management committees by training them on designing and managing climate risks on small scale water supply systems. Under the PPP, support is expected from private partners to train woman and youth associations to maintain climate-resilient infrastructure.

Finally, relevant experiences/lessons based on climate resilient water technologies and management practices will be identified, including gender differentiated concerns, and widely shared/disseminated to inform replication efforts in other vulnerable areas.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":

The incorporation of climate change risk management principles into policy and policy processes is done with the expectation that it will incentivize and lead to the identification of new development priorities, revised strategies, evolution of supportive by-laws, and law enforcement mechanisms, as well as monitoring and evaluation frameworks. The adoption of a long-term climate strategy will enable national authorities to plan and sequence adaptation actions, fully taking into account the long lead-times between investments decisions made today and realizing the beneficial impacts of those investments. Climate management is a long-term process, and therefore the implementation of the strategy must be seen as a reiterative, continuous learning process.

At a local level, LDCF funding will reduce the vulnerability of communities in 4 districts in Northern, Eastern, Southern and Western regions. The LDCF financed initiative will enable the GoSL to address important investment gaps in community-based climate risk reduction by promoting climate-resilient water harvesting, storage and distribution systems in vulnerable households and public services (schools, hospitals). This is a vital contribution towards helping Sierra Leone to advance progress on MDG 7 targets.

LDCF resources will help to foster improved awareness in communities about the impacts of climate change and enable access of risk and early warning information by disadvantaged and marginalized groups. Gender and the specific role of women in the use and maintenance of village and household level infrastructure, specifically water provisioning infrastructure and measures to mitigate disaster risk, is a critical element that the proposed initiative will promote. Information about climate change

and adaptation measures will be designed and disseminated to ensure that women and girls – especially those who are poor or have been denied the right to an education – can easily have access to and absorb the necessary information. The project will ensure that all key outputs take account of the specific gender related concerns, such as the linkages between women and children and natural disasters and differences in access to key infrastructure between men and women. Specifically, gender concerns will be mainstreamed when designing soft and hard adaptation measure that will be implemented by the implementing partner and communities. During the project formulation phase, a gender expert will systematically analyze and address in all outputs the specific needs of both women and men; and targeted interventions to enable women and men to participate in – and benefit equally from – development efforts.

B.4 Indicate risks, including climate change 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:

Risk	Level	Mitigation
Social resistance hinder the adoption of new resilient practices	M	One of the project's first activities is the full development of the 'local stakeholder involvement plan'. In addition, the project will enter into strategic partnerships at the local level, not just with local government, but in particular with local NGOs and community based organizations on the choice of technologies, specifically women. The project's communication and outreach strategy will take this into account. Furthermore, local governments and technical services will have a key role in supporting this adoption.
Duplication and lack of coordination with other initiatives, resulting in inefficient use of resources, and a loss of opportunity for building climate change resilience in Sierra Leone	M	At the governmental level, the SLEPA, Climate Change focal point and mandated to harmonize the legislative, policy and institutional framework will use its coordination mechanisms to ensure better use of existing financial mechanisms/opportunities on adaptation. Given that adaptation is a shared issue, various consultations mechanisms will be set up to share a common vision and build among institutions for better coordination and implementation. In addition, a detailed delivery strategy will clearly identify roles and responsibilities of specific institutions for the overall management of the project. Better programmatic coordination with development partners (IFAD, WB, UNDP, DFID and EU) will be ensured through coordination mechanisms established by the UN Join vision and by giving periodically information about project progress and tools.
Limited capacity of local and national institutions	*L*	Government capacity is not likely to represent a risk for the project because there is strong policy will behind this project. While capacities are short, efforts will be made to develop the capacities of key institutions to participate fully in project implementation. The risk of non compliance will be mitigated by mobilizing the capacity of different actors, projects, programmes and bilateral agencies to work intensively with government and transfer skills to government counterparts.
Reluctance of key stakeholders to endorse and participate in project activities.	L	The risk of reluctance of stakeholders is low. Nevertheless it will be addressed by local participation in project formulation and implementation. In particular, existing areas where income has been generated from adaptation activities will be demonstrated to other landowners and replicated where possible.
Too many different/divergent stakeholder interests in target sites may prevent efficient consensual decision-making	L	During the PPG, efforts will be focused on the identification of appropriate government agencies, implementing partners and project implementation arrangements prior to project inception

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

Key stakeholders	**Expected roles**
Sierra Leone Environment Protection Agency - SLEPA	Coordination of the overall project. Expects to benefit directly from the project's capacity building activities. Institutional and human resources capacity building in climate change; To support the creation and production of informative material about climate change and agriculture (leaflets, guide books, videos, etc.);
Ministry of Energy and Water Resources	Institutional and human resources capacity building in climate change and water resources; To support the revision of the Water policy with the view of integrating issues related to climate change. Support local communities on demonstration project on water conservation and groundwater recharge To support the creation and production of informative material about climate change and agriculture (leaflets, guide books, videos, etc.);
Ministry of Economy, Planning and Cooperation	Aims to assist mainstreaming climate change considerations into relevant policies and others country key planning documents and also to strengthen competency in resources mobilization Support the output on financial strategy
Meteorology Department	Research development and Possible partnership for the execution of activities in the project sites
Local Government in Freetown, Kambria Districts and in 3 rural districts in Northern, Eastern, and Southern regions	Contribution to the implementation of the project's activities in the pilot sites. Expects to benefit directly from the project's capacity building activities
Indigenous people (Neighborhood associations, community based organizations, women and youth associations	Beneficiaries of adaptation measures and conurbation to the design designing and managing climate risks on small scale water supply systems. They will also part of the updating of relevant water policies at local level (participants
Private sector (The Guma Valley Water Company (GVWC) which provides water supply services to Freetown, (ii) the Sierra Leone Water Company (SALWACO), Small Water providers)	Support the establishment of framework for policies and supports in promoting investment and entrepreneurship development on adaptation, the designing of climate resilient to design, build climate-resilient water harvesting schemes and
DFID, EU,	Making synergy to their ongoing programmes and contribution to the project implementation

PPG resources will be utilized to engage key stakeholders at the national/sub-national and community level during the project design phase. In alignment with the approved project objective, comprehensive stakeholder analysis will be conducted to determine stakeholder needs vis-à-vis adaptation to potential climate change impacts, the effectiveness of current local responses, barriers to adaptation, expertise that might be helpful in designing the implementing the project and those who may have been involved in similar initiatives or planning processes.

B.6. Outline the coordination with other related initiatives:

As outlined in Section B.1, the proposed project will build on UNDP's existing portfolio and thereby coordinate with the following UNDP-led initiatives (e.g. The Community Empowerment and Development Project) The project will also build on other existing initiatives, specifically EU and DFID programmes, and will be closely coordinated both geographically and in terms of sectoral focus and approach. These projects will provide financial resources for complementary investments, especially in the field of policy review, effective delivery of basic social services, community preparedness and early warning, ecosystem management.

Other related initiative concerns the ongoing IFAD-LDCF project "Integrating Adaptation to Climate Change into Agricultural Production and Food Security in Sierra Leone". The scope of that project is mainly on the agriculture sector and has 3 components: (i) Sustainable development of inland valley swamps for rice / other food production; (ii) Integrated water and natural resource management for adaptation; (iii) Capacity building and awareness raising on climate change at both institutional and local level. While this project is specifically dedicated to the agriculture sector, there is potential duplication on the capacity building component. During the preparatory phase, coordination with IFAD, World Banka and others at the national level will take place to identify exactly where the potential overlap could occur. One possibility (to be explore in detail during the preparatory phase) is that activities will be undertaken to establish, under the leadership of SLEPA (CC Focal Point and mandated to harmonize policy frameworks) an integrated climate information communication system, that will draw on the input of the two LDCF financed projects. This will require facilitate all national partners to draw on relevant high-resolution data, climate risk management tools (e.g. maps) and information on climate change impacts from a single tool and avoid duplication. During the preparatory phase, discussions with IFAD and World Bank will take place to ensure that duplication is avoided and synergies are maximized.

Better programmatic coordination with development partners will be ensured through coordination mechanisms established by the UN Join vision and by giving periodically information about project progress and tools. During the PPG phase, in-depth consultations will be undertaken to establish partnerships and practical modalities for linking and collaborating with the above ongoing initiatives so that duplication is avoided and that LDCF resources build on the progress and achievements made to date through such initiatives. A strategy and plan for collaboration with relevant ongoing and planned initiatives will be prepared during the preparatory phase, including defining the roles and responsibilities of critical stakeholders.

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

UNDP's comparative advantage in implementing this project is underpinned by UNDAF 2008-2010 where UNDP is expected to lead the output 3 "Improved delivery of public services (particularly basic services such as power, water, roads, housing and sanitation) and enhanced accountability in the public service its Country Programme". It is also linked with its Country Programme Document for the current cycle (2008-2011) as well as the next cycle (2011-2012), in which strengthening institutions and local governance capacity is given a particular emphasis.

UNDP's comparative advantage for the proposed project lies also in its work on water governance and infrastructure development.

The role of UNDP to improve policies in the water sector in SL (project component 1) is demonstrated until the International Drinking Water Supply and Sanitation Decade (IDWSSD). UNDP supported the establishment of the Rural Water Supply Unit within the Water Supply Division of the Ministry of Energy and Power in 1981. This unit was responsible for planning and implementation of rural water supply and sanitation activities by developing standards, policies and guidelines. Rural water supply

and sanitation projects were implemented to cover the entire country, supported by various donors. An integrated approach was adopted, involving community sensitization, community mobilization, and community involvement in site location, construction, installation, operation, maintenance and monitoring. There was total involvement of all key players: Donors, Implementing Partners, Government Agencies, and Communities. In 2008, Sierra Leone benefited from support by the UNDP GoAL WaSH programme that aims to accelerate achievement of the water and sanitation MDGs through strategically targeted interventions that strengthen governance of the water and sanitation sectors at appropriate levels. Specifically, the support has allowed Sierra Leone to identifying gaps, needs, constraints and opportunities in national water and sanitation plans, strategies and capacities, governance reform, leadership and policy advocacy and developed recommendation to incorporation of water and sanitation into national MDG and related poverty reduction strategies.

UNDP is also involved in the improvement of public services delivery, particularly basic services such as power, water, roads, housing and sanitation (project component 2). UNDP implemented two investments projects in WATSAN:

- UNDP Peace building commission Project on rehabilitation of the WATSAN facilities of the Army barracks (US$ 2,144,440): The project is design to provide an immediate improvement to the living conditions of the army personnel, their families, within the three most densely populated barracks in Freetown (Wilberforce, Murray Town and Goderich). The first output will be an adequate, reliable and safe drinking water. This will be delivered through the installation of new pipes, proper connection with Freetown's main water network, provision of stand-by power supply to pumping stations, provision of secondary water treatment capacity in accordance with the World Health Organisation standards, the installation of large water reserve tanks and the purchase of water bowsers to fill up the reserve tanks during periods of drought and failures in the main water supplies.

- The Community Empowerment and Development Project (CEDP- US$2,108,501): The CEDP was to provide a wide spectrum of assistance to rural communities by improving the delivery of social services through the construction and rehabilitation of community and government infrastructure such as water and sanitation systems and the connection of the water distribution lines to the dam and water tank (reservoirs etc) within rural communities. The activities undertaken by the project included the construction of one hundred hand-dug water wells, three gravity water supply systems, rehabilitation of the existing, but dysfunctional water supply systems, training of plumbers to maintain the systems and community institutional reforms for the sustainability of the interventions. The project was implemented in 70 villages across the country.

Also, UNDP Public-Private Partnerships for Service Delivery (PPPSD) is a programme that seeks to increase the access of the poor to basic services such as water, waste, energy, education and health by promoting inclusive partnerships between local government, business and communities. In Sierra Leone, a joint project with UNIDO is supporting the government to/through national partners to establish and operationalise a public-private sector mechanism that is capable of advising the government on requisite policies and support programmes for promoting investment and entrepreneurship development. This framework will be used to leverage private sector finance and technical support for adaptation issues.

Country office level operations are supported by regional advisory capacity based in the UNDP/GEF Regional Centre in Pretoria. UNDP has dedicated Regional Technical Advisers focusing on supporting adaptation programming and implementation in a range of technical areas relevant to this project including disaster management, infrastructure development, and ecosystem based adaptation, capacity development, and local governance reform. Our network of global Senior Technical Advisors provide additional technical oversight and leadership helping to ensure that programmes on the ground achieve

maximum policy impact.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

US$2,200,000 of co-financing will be brought through UNDP's engagement in the water sector (Community empowerment project) and in supporting the Meteorological Department. In addition UNDP Sierra Leone will provide US$400,000 from its own resources in order to support the project during the implementation phase.

C.2 How does the project fit into the GEF agency's programme (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The proposal is in line with the UNDP Country Programme Action Programme, CPAP 2011-2012 aligned with strategic priorities developed under the Joint Vision of the United Nations' Family (UN JVP, 2009 – 2012). The UN family agreed to combine efforts behind one overall priority of furthering the consolidation of peace in this country and four programmatic priorities: the economic integration of rural areas, the economic and social integration of the youth, an equitable access to health services and an accessible and credible public service. In particular, the scope of the project is aligned with five UN Joint Vision Programmes (JVPs) implemented by UNDP, particularly:

- *Access to Justice and Human Rights (JVP2)*: the project will provide necessary support to ensure greater involvement of women (water technologies beneficiaries, involvement in climate impacts awareness (component 1) and water technologies/Community Disaster Risk Management Plan development (component 2);

- *Public Sector Reform (JVP11)*: the project will ensure effective implementation of government priority programming and coordination across Ministries, Departments and Agencies when reviewing national policies on water and environment (Component 1);

- *Local Government and Decentralisation (JVP16)*: Under Outcome 2, the project will provide necessary information on climate risks to target communities and provide support to design and develop resilient water supply storage and distribution infrastructure.

- *The development of a Environmental Cooperation for Peace-building (JVP 21):* Project outcome 1 will provide consistent, transparent and comparable information on climate changes as well as flexible manner, taking into account specific national circumstances. Raising awareness and knowledge of the population on climate change related issues in Sierra Leone and to strengthen the ability of the country to participate in different mechanisms aimed at curbing Greenhouse Gas emissions from its territory and to fulfil other commitments to the UNFCCC.

The UNDP Sierra Leone Country Office is well resourced to provide the necessary support to the GoSL in implementing a further LDCF funded programme. The programme will primarily engage the recovery for development area (4 professional staff), as well as the Deputy Resident Representative for programming. Country office level operations are supported by regional advisory capacity based in the UNDP Regional Centre in Pretoria. UNDP has dedicated Regional Technical Advisers focusing on supporting adaptation programming and implementation in a range of technical areas relevant to this project including Green Low Carbon Climate Resilient Development, ecosystem based adaptation and Water and Ocean Governance. Our network of global Senior Technical Advisors provide additional technical oversight and leadership helping

to ensure that programmes on the ground achieve maximum policy impact.

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

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

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Dr Kolleh Bangura	GEF Operational Focal Point	Environment Protection Agency	**08/15/2011**

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.					
Agency Coordinator, Agency name	**Signature**	**DATE** *(MM/dd/yyyy)*	**Project Contact Person**	**Telephone**	**Email Address**
Yannick Glemarec Executive Coordinator UNDP		December 6, 2011	Mame Dagou DIOP (G-LECRDS/Water)	+27 7187 38 492	mame.diop@undp.org