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Naoko Ishii
CEO and Chairperson

October 20, 2016

Dear LDCF/SCCF Council Member:

AfDB as the Implementing Agency for the project entitled: ***Sierra Leone: Building Resilience to Climate Change in the Water and Sanitation Sector***, has submitted the attached proposed project document for CEO endorsement prior to final approval of the project document in accordance with AfDB procedures.

The Secretariat has reviewed the project document. It is consistent with the proposal approved by LDCF/SCCF Council in March 2013 and the proposed project remains consistent with the Instrument and LDCF/SCCF policies and procedures. The attached explanation prepared by AfDB satisfactorily details how Council's comments have been addressed. I am, therefore, endorsing the project document.

We have today posted the proposed project document on the GEF website at www.TheGEF.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

Naoko Ishii
Chief Executive Officer and Chairperson

Attachment: GEFSEC Project Review Document
Copy to: Country Operational Focal Point, GEF Agencies, STAP, Trustee



Request for CEO APPROVAL
 Project Type: Full-sized Project
 Type of Trust Fund: LDCF
 For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Building Resilience to Climate Change Resilience in the Water and Sanitation Sector			
Country(ies):	Sierra Leone	GEF Project ID: ¹	
GEF Agency(ies):	AfDB	GEF Agency Project ID:	5209
Other Executing Partner(s):	Ministry of Finance and Economic Planning; Ministry of Water Resources (MWR)	Submission Date:	25.08.2016
GEF Focal Area (s):	Climate Change	Project Duration (Months)	48
Name of Parent Program (if applicable):		Agency Fee (\$):	380,000
➤ For SFM/REDD+ <input type="checkbox"/> ➤ For SGP <input type="checkbox"/> ➤ For PPP <input type="checkbox"/>			

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
CCA-1	1.2 Reduced vulnerability to climate change in the water and sanitation sector	1.2.1 Vulnerable physical and natural assets strengthened in response to climate change including climate variability	LDCF	900,000	12,000,000
CCA-2	2.1: Increased knowledge and understanding of climate variability and change-induced threats at country level and in targeted vulnerable areas	2.1.1 Risk and vulnerability assessments conducted and updated at District level	LDCF	450,000	1,500,000
CCA2	2.2 Strengthened adaptive capacity to reduce risks to climate-induced economic losses	2.2.1 Capacity of national and regional centers and networks strengthened to monitor climate change indicators and trends and rapidly respond to extreme weather events	LDCF	1,000,000	4,000,000
CCA-3	3.1 Successful demonstration and deployment of relevant	3.1.1 Relevant adaptation technology transferred to	LDCF	900,000	4,867,500

¹ Project ID number will be assigned by GEFSEC.

² Refer to the [Focal Area Results Framework and LDCF/SCCF Framework](#) when completing Table A.
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	adaptation technology in targeted areas.	targeted group			
CCA-3	Enhanced enabling environment to support adaptation-related technology transfer	3.2.1 Skills increased for relevant individuals in transfer of adaptation technology	LDCF	750,000	6,367,500
Total Project Cost				4,000,000	28,735,000

B. Project Framework

Project Objective: Building resilience to climate change in the water and sanitation sector						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
1-Ensuring access to climate-resilient water supply and sanitation	Inv	Vulnerable physical and natural assets strengthened in response to climate change including climate variability	<ul style="list-style-type: none"> -local CCR risk assessments completed in all 5437 target villages -5 District CCR Plans adopted. -1087 Priority villages for CCR measures identified -284 out of 1423 rehabilitated wells to be given special CCR attention -466 new wells located and dug to required depth to withstand CC to 2100 - 84 boreholes located and drilled to required depth -110 spring boxes created at CCR sites -18 Gravity flow schemes constructed with CCR responsive designs -18 CCR rainwater harvesting schemes in place -71 standpipes equipped with solar power -389 ecosan toilets constructed -5 solid waste disposal/recycling sites established 	LDCF	1,400,000	16,000,000

2-Building the institutional framework required for climate-resilient management of the water and sanitation sector	TA	<p>Capacity of national and regional centers and networks strengthened to monitor climate change indicators and trends and rapidly respond to extreme weather events</p> <p>National, District and Local level institutions equipped to handle CCR management tasks</p>	<p>- MWR and Met Office supported with technology, real time data recording telemetry station and analytical capabilities to observe climate trends</p> <p>- Existing Climate Change Secretariat strengthened with one new staff member responsible for CCR in water and sanitation sector</p> <p>- Existing Donor Coordination Group strengthened with more frequent meetings and fully briefed on CCR issues</p> <p>-4 key staff identified in MWR, Met Office, SALWACO and GVWC to act as CCR advisers</p> <p>- National Rural Water and Sanitation Sector Program Document published that incorporates understanding of climate risk and appropriate management options, including future technology transfer</p> <p>- Communication network established for emergency action guided by Disaster Management Committee</p> <p>-District Councils & Traditional Authorities given training and TA to manage CCR</p>	LDCF	125,000	1,000,000
3-Building improved awareness of climate-	TA	Relevant adaptation technology transferred	- 60 WASH professionals fully	LDCF	175,000	6,000,000

resilient WASH practices		to targeted groups	trained at national and local levels -100 Community trainers trained (40% female) -1000 WASH and water point committees established and trained in CCR evaluation and response processes (50% female) -20 study tours arranged for national staff and local government staff from non-project districts			
4-Establishing collaborative research and monitoring to enable efficient, climate-resilient, water management	Inv	Capacity of national and regional centers and networks strengthened to monitor climate change indicators and trends and rapidly respond to extreme weather events National, District and Local level institutions equipped to handle CCR management tasks	-Reduction in the adverse effects of floods due to improved early warning through accurate forecasting and unified data collection methods - 25 river catchments equipped with 23 stream flow gauges and 2 lake level gauges - 100 groundwater monitoring stations established; - 60 rain gauges set up -Headquarters of MWR/Met Office equipped to handle CC trend analysis	LDCF	1,800,000	1,000,000
5. Managing Knowledge and Monitoring and Evaluation	TA	Skills increased for relevant individuals in transfer of adaptation technology	-11 national and local level water resources management staff trained in understanding the risks of climate change and how to isolate them for effective early warning -Report on analysis of experiences and lessons learnt in building CCR for rural water & sanitation	LDCF	317,500	1,000,000
Sub-Total					3,817,500	25,000,000

Project Management Cost ³	LDCF	182,500	3,735,000
Total Project Cost		4,000,000	28,735,000

C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
Other Multilateral Agency (ies)	African Development Bank - ADF	Soft Loan	10,848,000
Other Multilateral Agency (ies)	African Development Bank - ADF	Grant	1,489,000
Other Multilateral Agency (ies)	African Development Bank - FSF	Grant	3,477,000
Other Multilateral Agency (ies)	African Development Bank -RWSSI	Grant	5,686,000
Bilateral Aid Agency (ies)	DFID-UK	Grant	4,977,000
National Government	Republic of Sierra Leone	Grant	2,258,000
Total			28,735,000

D. trust fund Resources Requested by agency, Focal Area and country¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
AfDB	LDCF	Climate Change	Sierra Leone	4,000,000	380,000	4,380,000
Total Grant Resources				4,000,000	380,000	4,380,000

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this

table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

² Indicate fees related to this project.

F. Consultants working for technical assistance components:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	200,000	114,000	314,000
National/Local Consultants	100,000	28,000	128,000

G. Does the project include a “non-grant” instrument?

N/A

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁴

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

³ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately

to focal areas based on focal area project grant amount.

⁴ For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter “NA” after the respective question.

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Since the PIF was prepared the Government of Sierra Leone has adopted a new Poverty Reduction Strategy and Paper (PRSP) entitled PRSP, Agenda for Prosperity. This strategy updates the earlier PRSP and contains additional information on water and sanitation issues but, taken in the round, the project design remains entirely consistent with the new strategy. A number of working papers and reports have also been produced covering aspects of the National Water and Sanitation Policy produced in 2010, but again, these documents simply advance the state of knowledge and the project design does not require amendment.

The PRSP has six sections dealing with Water Resources (p.48), Health (p.65), Potable Water (p.73), Sanitation and Hygiene (p.77) and Climate Change (p.151). Issues of special relevance to climate change resilience in the five rural districts include the need to set up Adaptation Strategies to control Coastal Erosion (p.47), the lack of policies to respond to climate variability and change (p.49), challenges to health from unsafe drinking water and poor sanitation (p.66). Detailed measures are set out for improving access to potable water and environmental sanitation and hygiene, with a major focus on strengthening Human and Resources capacity of the ministries and directorates. One of the eight Pillars for Progress is entirely directed to Gender Equality and Women's empowerment which is a mainstay of the planned GEF contribution to rural water supply and sanitation. The GEF project, and the co-financing of the Rural Water Supply and Sanitation Project (RWSSP), addresses the human development pillar by focusing on water supply and sanitation in rural areas. In addition, the preparation of Climate Change Resilience (CCR) Plans for each district will help to deliver the PRSP objectives stated above.

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

N/A

A.3 The GEF Agency's comparative advantage:

N/A

A.4. The baseline project and the problem that it seeks to address:

N/A

A. 5. Incremental /Additional cost reasoning:

Describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated [global environmental benefits](#) (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The Project Framework Expected Outcomes have been revised to match the expected Focal Area Strategy Framework outputs, but no component level changes have been made between the PIF approval and Request for CEO Endorsement (RCE) submission. A number of intermediary steps and outputs have been introduced and are accounted for below and in the Project Results Framework presented in Annex A.

Projected Climate Change

All activities have been developed in order to respond to the predicted Climate Change scenarios that have been examined in the course of the detailed project design. Annual temperatures are expected to rise by between 2⁰ and 3⁰ centigrade in the North and Eastern parts of Sierra Leone and 1.5⁰ to 2.5⁰C in the West and South by 2100, given average global warming of 2⁰C. Changes in climate variability have already reduced the length of the rainy season from around 6 to 4 months but the future pattern of rainfall is uncertain since some regional climate models show an increase while others show a decrease in total precipitation. What is likely to occur is greater variation in conditions from one year to the next. The uncertainties stem from the position of Sierra Leone in relation to the Intertropical Convergence Zone (ITCZ) where a shift of only 100 miles in the meeting of continental and Atlantic air masses can have a significant effect on local conditions.

Reduced water availability and droughts will impede the effectiveness of water and sanitation measures; whilst increased rainfall and flooding may overwhelm infrastructure that is not built to cope with it and increase the prevalence of water-borne diseases. As a general rule, all water and sanitation infrastructure will need to be designed to respond to longer periods of drought and consequent reductions in rainfall at the end of the dry season and lowering of ground water tables.

Additionality of the project:

The LDCF (Least Developed Countries Fund) funded elements of the project will ensure that interventions within the baseline AfDB project are climate-resilient. This means improving the efficiency of existing water supply systems and providing new and appropriate water supply and sanitation systems, including rainwater harvesting and ecological sanitation to mitigate incidence of water borne diseases, such as cholera, resulting from extreme weather events. In parallel with the modification of hard infrastructure, climate change resilience measures will be incorporated into the software elements of the projects including the policy and institutional frameworks, and the use of local WASH committees to increase awareness of the need for adaptation to climate change, including more efficient ways of using and conserving water and planning for high rainfall and flooding events.

Component 1: Ensuring access to climate-resilient water supply and sanitation

The design of all new or renovated infrastructure and construction methods will need to be enhanced to accommodate longer droughts, increased flooding and falling water tables. However, the risk and vulnerability analysis undertaken as part of the project preparation has highlighted the fact that up to 20% of locations (1087 out of 5437 villages) will be more exposed than the average. Existing priorities for year 1 of the implementation programme focus on repairs or reconstruction of deficient water points. Work undertaken as part of the GEF technical appraisal has included the development of a survey framework and questionnaire which will be applied in the implementation phase to ensure that subsequent year's priority villages are targeted based on climate change risks. This selection process would have been initiated under the GEF endorsement phase but had to be deferred due to restrictions on travel within Districts imposed by the Ebola curfews and lock-down. The questionnaire survey (see Annex E) will cover all localities in the five districts in order to pinpoint the areas that have been exposed to severe flooding or drought in the last ten years. The results of the survey and projection of trends under the influence of CC will be used to develop District CCR Plans and to identify villages and communities that are most at risk over the next two decades for priority attention, alongside others which are selected on the basic criteria of poor water supply and lack of sanitation, especially for children under 5, women and vulnerable groups.

The CCR (Climate Change Resilience) plans will highlight those villages that are most exposed to climate change risks and the information will be used to identify villages requiring new water points already allowed for under the Baseline Project budgets. New sanitation infrastructure will be constructed in priority schools and other public locations. Finally, communal WASH (Water/Sanitation/Hygiene) facilities will be constructed in five selected public marketplaces. These will be designed with climate change resilient technology, including solar power units, boreholes sunk to the required depths to tap permanent groundwater, water harvesting and filtration, and display boards and posters explaining the importance of WASH and observance of climate change adaptation measures in order to act as demonstration projects, one within each of the districts.

Component 2: Building the institutional framework required for climate-resilient management of the water and sanitation sector

It is important to note that the outbreak of Ebola has radically affected priorities for investment in Sierra Leone (as well as neighbouring countries) and the country's development partners, including AfDB, are engaged in discussions with the Government on restructuring existing commitments. Water and sanitation remain as one of the highest priorities because of the cross-cutting links with health and livelihoods but there is an urgent need to extend the programme to make up for time lost over the last twelve months.

The institutional framework for water resource management in Sierra Leone is currently being reformed and the process will take a number of years to complete. Enactment of the Water Resources Bill, scheduled for June 2016, will represent an important milestone. Once established, new bodies like the Water Resources Council and individual River Basin Committees will need time to build up experience and expertise. With regard to the required project implementation capacity, the baseline project co-financing provides for 140 person months of Technical Assistance (TA) to implementing agencies. The TA includes Climate Change Adaptation, Water Supply and Sanitation Engineering Hydrology/Water Resources Engineering, Hydrogeology as well as Gender and Community Development expertise. The consulting firm has already been contracted by the Government's project executing agency; the consultants for the baseline project commenced services in January 2016. In addition to technical assistance, the baseline project provides for capacity building (personnel training, tooling and equipment) of all relevant national and local level agencies, as well as sensitizing and training the local communities on primary beneficiary responsibilities. The intervention is expected to considerably enhance local community capacity and the necessary capacity of the key agencies to ensure sustainability of the project results after the end of the five year project implementation period. In this regard, the technical capacity and resources of the Climate Change Secretariat will be strengthened and technical staff in key ministries will be trained to strengthen awareness of the importance of CCR relating to WASH within all national institutions.

Further to this intervention, the baseline project provides for acquisition of a digital Groundwater Map for the entire country and establishment of a national groundwater database (GIS based). These tools will enable groundwater development, or borehole drilling for that matter, to be undertaken in areas/locations with the proven groundwater potential and long term sustainability. The knowledge and facts provided by groundwater map in combination with stream flow and groundwater monitoring stations will also ensure that groundwater recharge areas are well protected by the communities (duly facilitated through the baseline project community sensitisation and capacity building activities), and/or duly gazetted in line with the existing national Protected Areas law.

The Ministry of Water Resources and the Meteorological Office are the two institutions which are charged with primary responsible for maintaining and managing water resources management and climate information. The project will facilitate strengthening of coordination mechanism with the Climate Change Secretariat to ensure regular reporting (annual reports) of CCR measures taken in the Water and Sanitation sector. The proposed annual report format is set out in Annex F.

Component 3: Building improved awareness of climate-resilient WASH practices

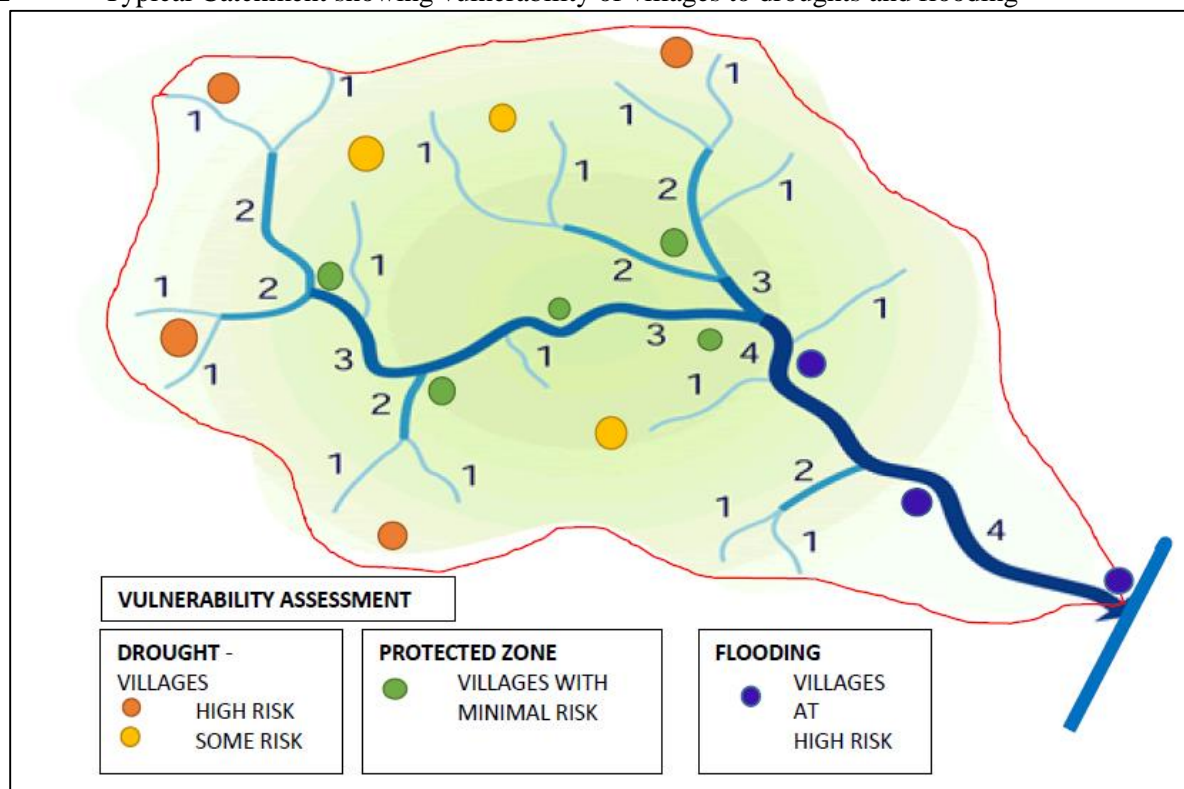
This component will add climate change awareness and responses to the basic training of 60 WASH professionals at national level, so that these professionals are able to impart climate-resilient WASH practices to local communities at District level the existing WASH Committees will be supported and strengthened to act as the principal focus for climate change resilience planning in each district. Paramount and Section Chiefs and individual community headmen will be encouraged to form water source committees in their communities. 1000 water source committees (of which 50% female members) will be formed and trained in maintenance and management of water (including availability of water, and water quality) and sanitation facilities. The 1000 water source committees will be given detailed briefs on the threats posed by climate change to their local water sources and increased risks to hygiene and health caused by reduced water availability in the dry seasons and flooding during the rains.

100 community trainers (40% female) will also be trained in improved WASH knowledge (including water availability and maintaining quality), attitudes and practices to impart that to the committees themselves. Critical elements of the training will include instruction in conducting climate change resilience surveys in each village /locality and guidance on how to recognise incipient climate change and develop appropriate response mechanisms including preparation CCR Plans. Since the baseline project also allows for greater WASH stakeholder coordination through sponsoring participation of key stakeholder representatives in stakeholder coordination fora, such as the annual Government of Sierra Leone/Development Partners joint sector reviews, the knowledge from such training is likely to be disseminated also through the broader networks.

The baseline RWSS (Rural Water Supply and Sanitation) project includes 20 study tours for national government staff and local government staff from non-project districts to raise awareness of the technologies and specific guidance on CCR planning and management will be prepared and circulated to all delegates to spread awareness of CC (Climate Change) issues and adaptation techniques.

The Government of Sierra Leone and its international partners need to take the first steps to build new infrastructure and institutions for tackling the effects of climate change in the WASH sector. However, it is ultimately individual citizens and local community leaders who will need to ensure that people are aware of the risks and take steps to adapt to increasing drought and flooding caused by global temperature rise. An important innovation in the Climate Change Resilience programme is the introduction of the concept of catchment planning. Mapping has been undertaken to identify the watersheds of all primary catchments in the five districts as shown in Annex G. Depending on their location, villages within these primary catchments share the same challenges so, for example those communities lying closest to the watershed are most exposed to drought and groundwater drawdown whereas those communities located in valley bottoms are most at risk to flooding events. (See example presented in Figure 2 below). This information will be incorporated in District CCR Plans shared with all communities (through section chiefs, village elders and TA members, and the Water Source Committees).

Figure 2 Typical Catchment showing vulnerability of villages to droughts and flooding



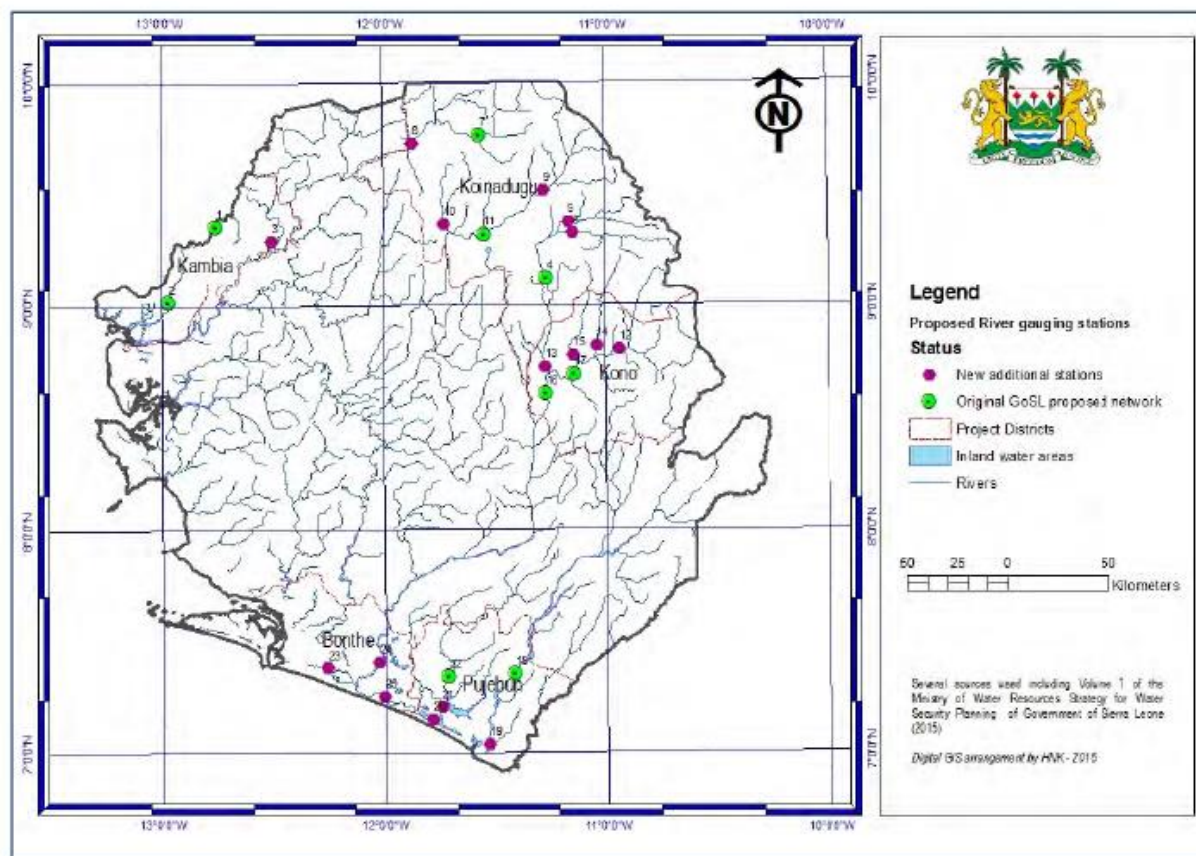
Development of Climate Change Resilience Plans for each of the five Districts will ensure that both local and national data is synthesized and translated into practical measures and responses for dealing with climate change pressures on all settlements and, in particular those communities which are identified as most at risk to drought and flood.

A training manual will be developed as part of a programme for building public awareness in CCR. A specialist will be recruited to provide technical assistance in training a group of 28 WASH sector professionals of whom 11 will be women. The professionals will be drawn from the Ministry of Water Resources, Ministry of Health and Sanitation, Ministry of Women and Youth and selected NGOs participating in the RWSSP. The specialist will also be responsible for developing the syllabus and work content of a national and district-based series of workshops to be attended by 90 individual groups of CCR trainers. Finally under this component of the overall programme, a series of national study tours will be arranged for national government staff and local government staff and leaders from within and outside the project districts to showcase successful examples of climate change resilience planning and the installation of appropriate technology.

Component 4: Establishing collaborative research and monitoring to enable efficient, climate-resilient, water management

The primary objective of putting up the hydro-meteorological stations is to capture the weather variables and hydrological parameters and develop the capacity to model and understand the natural water cycle components within the project area over a long period. This information will be the basis on which the country may develop efficient, climate-resilient water management practices. It is recognised that relevant meteorological and hydrological data will have to be assembled and analysed to enable more effective modelling of projected future conditions so as to ensure that the project infrastructure and practices are adapted to become more climate-resilient. In order to contribute to the need for a country-wide network of stations, the original project (PIF) proposed the installation of 20 stream flow gauges and groundwater monitoring stations, and 200 rain gauges in 5 river catchments. The objective of supporting the national stream gauging and climate change monitoring programme remains an essential feature of the RWSSP. However, after analysis of the hydrology of the project areas, the precise number of each type of monitoring equipment has now been revised to 25 surface water stations (23 stream flow gauges and 2 lake water levels gauges); 60 rainfall gauges, and 100 groundwater monitoring stations. In terms of cost effectiveness, the 23 stream flow gauges are the minimum number of stations that can give adequate water flux information over the project area.

Figure 3 Location of Proposed Stream Gauges (in Purple) within the five districts



These adjustments are made to increase the efficiency of the overall investment in CCR measures. What is of much greater importance is to introduce monitoring of groundwater levels since the principal impact of climate change will be a lowering of the water table in most parts of the five districts during the dry season. It is for this reason that 100 boreholes and wells will be equipped with water level automatic logging devices.

The installation of 23 main river flow gauges and 2 lake level gauges, together with associated meteorological stations will greatly enhance the national capacity to monitor average, dry weather and flood flows and record long-term trends in precipitation, temperature and other parameters. This, in turn will create the necessary data base for monitoring long term climate change and defining thresholds and trigger points for activating flood warning systems and response to drought conditions.

In the process of making infrastructure and practices climate-resilient, this project also sets up infrastructure to improve water research, monitoring and management. Mapping of the groundwater resources and installation of ground water monitoring stations enables certainty in siting of shallow and deep groundwater wells which would not dry out during extreme dry weather events, and also enables enhancement of water supply and sanitation infrastructure to prevent flood damage as necessary. Installation of surface water monitoring stations (stream gauges and rain gauges) play a key role in the creation of effective Early Warning Systems, in turn reducing potential adverse effects of flooding, such as outbreaks of cholera, typhoid and other diarrheal diseases.

The work of analyzing and interpreting meteorological and streamflow data will be undertaken by a team of 11 specialists attached to the, Ministry of Energy and Water resources and Meteorological Office. This team will be given special training in meteorological and hydrological analysis. An important goal is to provide the necessary data to facilitate early warnings regarding drought or flood situations, which also forms a critical input in the

assessment of the risk and measures to prevent outbreak of extreme climate-related diseases, such as cholera and typhoid.

In addition to the identification of permanent stream flow gauging stations, a mapping exercise has been undertaken for all first order catchments in the five districts. This information will provide the framework for gauging the sensitivity of individual villages (water point localities) to climate change as part of the CCR-W&S District Plans.

Component 5: Knowledge management and monitoring and evaluation

Monitoring and evaluation, using recognized international frameworks for results-based M&E, will form an integral part of all components. At national level the minutes of the donor and government liaison group will be reviewed in order to confirm that CCR issues are being addressed in an integrated manner. At district and local level, a mid-term evaluation mission will be arranged to assess how effectively District WASH committees and community leaders within a sample of villages have absorbed the critical messages about climate change and building resilience in water and sanitation. In addition, a final evaluation mission will be undertaken with the aim of reporting on the overall experience and sharing lessons that have been learnt within the five districts with related programmes in other parts of Sierra Leone. Monitoring and Evaluation will be carried out in synergy with the baseline project, including the undertaking of impact and flagship studies.

Many of the requirements for M&E are defined in the Environmental and Social Analysis for the Baseline RWSS Project, which was classified as a Category 2 project under AfDB safeguard standards and subjected to an Environmental and Social Impact Assessment and accompanying ESMP (Environmental and Social Management Plan). A number of different departments are identified with responsibility for M&E activities. The Ministry of Health and Sanitation, Ministry of Education, and Ministry of Social Welfare, Gender and Children Affairs will undertake M&E with regard to sanitation and education-related activities; the Environmental Protection Agency will be responsible for M&E of environmental and social impact mitigation measures (e.g. during the construction of climate-resilient water and sanitation infrastructure and thereafter); and the Meteorological Department will be responsible for M&E of the monitoring stations. In order to ensure effective coordination of M&E for the purposes of the project, the Water Directorate and Sierra Leone Water Company will coordinate the activities of all other partners in addition to their mandatory role technical oversight and quality assurance of the work which by the local councils.

In addition, explicit emphasis will be placed on knowledge management, vested within the Water Directorate of the Ministry of Energy and Water Resources, to ensure that lessons learned from the implementation of this project are available for application to other adaptation projects.

A.6 Risks

Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks are detailed below. These concerns remain relevant as potential risks, although the risk of civil strife has receded. However, two additional risks have been identified during project preparation. These concern delays resulting from Ebola, and shortcomings in other economic sectors.

A number of risks highlighted in the PIF are still relevant and mitigation measures haven been identified. These concerned:

Risk	Level	Mitigation measure
Lack of technical capacity among national agencies and District Councils (DCs) to meet	M	Provision is made for capacity building DCs, to be complemented by results based agreements between the DCs and Central Government

technical standards		Agencies to carry out monitoring activities. Technical assistance and capacity building to central government level agencies which are involved in project implementation will also be provided to ensure that their activities do not go beyond their strategic oversight and quality assurance mandate.
Political interference affects the extent to which District Councils (DCs) can be taken to task for non-performance. It is not unusual for Chieftaincies to contest the role of elected DCs and the requirement to share revenues with them. The lack of coordination between Ward Committees (WC) and DCs also poses potential risks.	L	The new decentralization policy provides the legal and policy support necessary for DCs to mitigate this risk. The World Bank financed DSDP II (Decentralized Service Delivery Program) provides for support to the WCs and DCs to allow for enhanced coordination and cooperation. Resources from the Rural Water Supply and Sanitation Project (RWSSP) co-financing will also be utilized to promote sector coordination at the Local Government level
Lack of capacity in the Ministry of Energy and Water Resources to implement the project (oversight and quality assurance)	M	Provision is made for Technical Assistance (TA) to all key implementing agencies (DCs, WD, IPAU and LGFD). TAs will be required to undertake the necessary activities in the absence of MDA staff
Absence of sector coordination weakens capacity to manage the water sector and mobilize resources	M	Provision is made under the project to facilitate the institutionalization of sector coordination mechanisms
Civil strife or social unrest	M	Project interventions are not planned in areas with a history of civil strife or social unrest, but the situation will be monitored regularly and closely as part of the M&E plan
Project implementation delays resulting from Ebola	M	The country has been declared “Ebola Free” and measures are taken by the country to avoid deterioration of the health situation
Shortcomings in other economic sectors	M	The country is recovering from Ebola and economic sectors are expected to be supported by external aid and bilateral donors for quick recovery

- **Consequences of programme delays caused by the Ebola outbreak**

The severe downturn in the economy created by the Ebola outbreak in West Africa (Guinea, Sierra Leone and Liberia) has had a demoralizing influence on local communities. Lack of progress in implementing the RWSSP and GEF component over the period July 2014-July 2015, through largely unavoidable constraints on normal functioning of national/district relationships, has left a strong sense of frustration at District and Community level with slow progress in implementing physical works on the ground. Renewed effort will be required by AfDB, all Ministry and District staff, and the district implementation teams to stimulate new enthusiasm and renewed confidence.

- **Failure to adapt to multi-faceted threats from climate change arising in other economic sectors, which may then impact water and sanitation.**

Additional risks (outside the water and sanitation sector) may arise due to the multi-faceted nature of climate change impacts on water, agriculture, other land uses and most forms of human activity. There is an urgent need to adopt a comprehensive approach to climate change adaptation at the District level and to create overarching long term plans which will integrate the efforts being made in different sectors. The concept of a **Climate Change Adaptation Plans** (CCAP) for each district is outlined in section B. Implementation of an integrated cross-sectoral CCR process will require additional funding and support beyond that allocated to the RWSS Project. However, the first steps in producing District CCR Plans for water and sanitation are budgeted for under the GEF component of this project.

Description	Ranking	Mitigation measures
The severe downturn in the economy	M	AfDB, will put increased emphasis on training and

Description	Ranking	Mitigation measures
created by the Ebola outbreak in West Africa (Guinea, Sierra Leone and Liberia) has had a demoralizing influence on local communities. Lack of progress in implementing the RWSSP and GEF component over the period July 2014-July 2015, through largely unavoidable constraints on normal functioning of national/district relationships has left a strong sense of frustration at District and Community level with slow progress in implementing physical works on the ground.		encouraging Sierra Leone Water Company (SALWACO) all Ministry and District staff and the district implementation teams to stimulate new enthusiasm and renewed confidence.
The subtleties of Climate Change and Climate Variability are not recognized by most practitioners in the WASH sector and the effects are largely indistinguishable from those caused by seasonal change in rainfall and groundwater conditions	L	<p>GEF finance is targeted on increasing awareness at all levels and this will ensure that the message that CC is real will reach all trainers, WASH committee leaders and community groups.</p> <p>Preparation of District WASH CCR Plans will highlight for the first time, those villages that are particularly vulnerable to climate change and climate variability</p>
Existing procedures for identifying wells, boreholes, spring boxes and other water sources for repair do not include an effective test for exposure to climate change risk	L	The measures for community mapping and development of District WASH CCR Plans will provide the framework for increasing efficiencies in the selection of priority water sources
Previous attempts to set up a national hydrometric network and national monitoring station for climate and climate change have failed and the present programme could suffer the same fate if appropriate measures are not put in place to install infrastructure and monitoring equipment.	M	<p>The Project team will place a high priority on identifying suitable sites for river gauging stations and building the necessary infrastructure.</p> <p>National Government will be encouraged to provide the resources for strengthening the Climate Change Secretariat and recruiting qualified staff to the Ministry of Water Resources and Meteorological Office.</p>
The process of identifying Climate Change trends is long-term and will require data gathering over several decades. Consequently, there is a risk that the lessons learnt in this five year programme may not be sustained into the future	M	<p>Institutional capacity building in terms of staff, equipment and resources will play a critical role in ensuring that long-term programmes are developed and maintained.</p> <p>The international donors' group also has an important role in ensuring that CCR is given due attention in the WASH sector and other related economic sectors.</p>
Additional risks (outside the water and sanitation sector) arise from the multi-faceted nature of climate change impacts on water, agriculture, other land uses and most forms of human activity.	H	Preparation of District WASH CCR Plans will mark the first step towards introducing a comprehensive approach to climate change adaptation at District level and create overarching long term plans which will integrate the efforts being taken in different sectors.

Description	Ranking	Mitigation measures
Logging and agriculture are examples of development areas that could undermine the provision of secure surface and ground water resources, despite efforts under the RWSSP to make these climate proof.		Implementation of an integrated cross-sectoral CCR process will require additional funding and support beyond that allocated to the RWSS Project. However, the first steps in producing District CCR Plans for water and sanitation are budgeted for under the GEF component of this project.
District administrations lack the resources and capacity to engage fully with the project and integrate project outputs with development plans.	L	District Officers and District WASH engineers will play a key role, alongside NGOs, in delivering training programmes throughout the five Districts. Project implementation will be supported with a competent team of professionals that are dedicated full time to the project.
International partners may promote CCR projects in parallel without ensuring sufficient cross- linkages.	L	The strengthening of the International Donor Group and Climate Change Secretariat will reduce the risks of duplication and help to ensure that there are positive synergies in approaches to CCR.
Failure to create ownership of the project at the local level to project interventions.	L	Project design team will involve the key stakeholders in problem identification, project design, implementation and phase out activities to create ownership at the community level and build in sustainability

A.7. Coordination with other relevant GEF financed initiatives

Two other international partners are engaged in the water and sanitation sector and are actively cooperating with AfDB. These are UK Aid (DFID) and UNDP, both members of the inter agency coordinating group.

DFID has been funding a three-year programme in the water and sanitation sector through the Ministry of Water Resources. This has concentrated on training, developing policy and creating a new institutional framework for river basin management, undertaking extensive research on rebuilding the country's water resource data archives, (see www.salonewatersecurity.com) and assisting the Ministry of Water Resources to collate, apply quality controls, and publish hydrometric data from gauging station networks across Sierra Leone. Part of the programme has concentrated on the Rokel River and extensive experimentation and training of local community groups in taking meteorological records has taken place which has a direct relationship and bearing on this programme for RWSS in the five districts. DFID is a co-sponsor of the RWSSP. A number of guidelines have been written under the DFID supported programme, which are directly transferable to the AfDB-GEF project. DFID has now approved a further four-year extension to the program under its increased aid to compensate for the impacts of Ebola.

UNDP has been actively involved in supporting climate change adaptation projects in Sierra Leone over the last five years, beginning with a project that started in 2010 in collaboration with the UK Meteorological Office, under which six automatic weather stations were installed. Two parallel LDCF projects have been "*Building adaptive capacity to catalyze active public and private sector participation to manage the exposure and sensitivity of water supply services to climate change*" and "*Strengthening climate information and early warning systems in Africa for climate resilient development and adaptation to climate change*". The latter project includes an initiative to establish an environmental monitoring system for the Guma Valley, which supplies water to Freetown, and also the coordination required to support the Water Sector Project on climate risk by mapping the country's vulnerability.

It is important to note that other partnerships between government and international agencies are actively engaged in climate change adaptation including:

IFAD which has a GEF funded project, entitled: “*Sierra Leone: Integrating Adaptation to Climate Change into Agricultural Production and Food Security*” in Sierra Leone. This includes measures to reinforce the capacity of the Meteorological Office services in relation to climate and hydrometric stations.

The World Bank has also been funding a study on “Rapid Response Growth Poles in Sierra Leone”: This includes proposals for community-based construction of six Communications Centres for risk management which will provide services in weather forecasting, disaster risk prevention, and prevention information dissemination using telecommunications.

The Climate Change Adaptation element of the RWSSP will make a major contribution to the coordination of inter-agency activities under Component 2; Building the Institutional Framework (See A.5 above).

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation

Stakeholders have been defined at four levels: international, national, district and local. The different levels of engagement are illustrated in the flow diagram below.

International Stakeholders

At the highest level it is important that the international partners establish an effective coordinating committee to ensure that all new initiatives for funding support in climate change adaptation and monitoring are integrated with existing programmes and add value to each other. The existing Sector Donor Working Group which is co-led by AfDB and DFID (with UNDP, JICA, EU, World Bank and UNICEF as regular participants) will be given an extended remit to coordinate new initiatives and investment in the water and sanitation sector. This committee will meet regularly with the Ministry of Finance to agree action programmes with the Government of Sierra Leone and encourage a similar approach within government. This process should lead to agreement of an investment programme for climate change adaptation across all economic sectors.

National Level Stakeholders

The Climate Change Secretariat (supported by officers of the Ministry of Water Resources and the Meteorological Office, who have received training under the LDCF component of the WRSSP) will be strengthened with financial and technical support under the LDCF component of the RWSSP. This in turn will ensure that there is closer cooperation between all relevant ministries and agencies, including the Ministry of Finance, Ministry of Water Resources, Ministry of Health and Sanitation, the Sierra Leone Water Company, SALWACO, Meteorological Office, Environment Protection Agency, Ministry of Lands, Country Planning and Environment, Ministry of Agriculture and Food Security, Ministry of Minerals and Mining, the National Minerals Agency, the Ministry of Gender and Social Welfare.

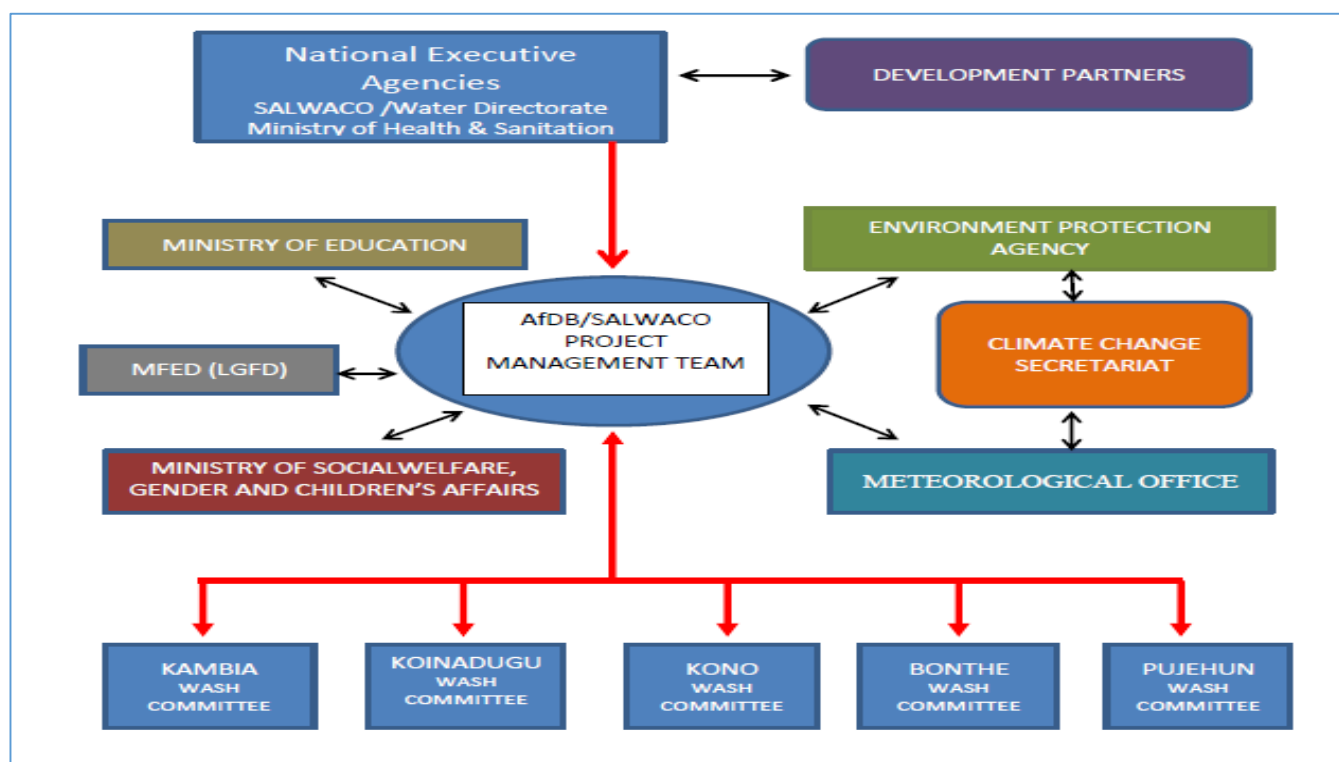
District Level Stakeholders

Decentralisation of government and administration is proceeding effectively in Sierra Leone and the biggest contribution to resolving long term threats from climate change in the water and sanitation sector can be made by engaging and influencing all elected and official members of District Administrations and Traditional Authorities, including the Paramount Chiefs as well as women leaders. This is a formal requirement of the National Water and Sanitation Policy.

Climate Change Resilience Plans for the Water and Sanitation Sector will be produced collaboratively with the full engagement of district stakeholders. The plans will be prepared by a technical group of officers led by the WASH Engineers for each district in conjunction with the District Environmental Officers and the NGOs appointed to carry out basic survey work and monitoring. CCR Water and Sanitation Plans will require the endorsement of the respective District Committees and formal approval will be given for plan adoption and implementation by SALWACO and the Ministry of Water Resources. All CCR W&S Plans will be monitored as part of the RWSSP and the results will be passed to the Climate Change Secretariat and CCR technical officers in MWR and the Meteorological Office. Guidance will be published using LDCF funding, outlining the methodology and approach required for preparing CCR water and sanitation plans. The guidance will include advice on how to extend these plans to cover multi-faceted aspects of climate change at the district level.

Local Stakeholders

Ensuring whether climate change resiliency measures are adopted in relation to individual water points and sanitary installations will rest with the Sierra Leone Water Company (SALWACO), its engineers and consultants and the local water source committees ensuring the proposed 50% representation. Water source committees in each large village (or group of smaller localities) will be the principal point of contact between local people (the ultimate beneficiaries) and the support services at national and district level.



Key Links Between The Principal Stakeholders In The RWSSP CCR Network

B.2. 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/NPIF) or adaptation benefits (LDCF/SCCF).

The activities in this project have the overarching aims of improving public health, in order to achieve the Sustainable Development Goals relating to child and maternal health (including SDGs 3, 6, and 10). By

improving health, they in turn bring about improvements in the quality of lives of Sierra Leoneans, particularly for women and children. In addition to bearing the brunt of water-borne illnesses, women typically take responsibility for collecting water. If safe water supplies are available near the home, time previously spent collecting water will be freed up for other productive activities, including increased attention to family welfare. Children, especially girls, will have more time for school work and other social activities. In addition, provision of sanitation facilities in schools will enhance girl child school enrollment and attendance rates. The formation and training of WASH committees, 40% of which will be headed by women, will empower vulnerable and disenfranchised communities and also help improve quality of life. Youth will be targeted for training in the operations & maintenance of the water supply and sanitation facilities, and youth representation will be mandatory on the WASH committees. In addition to public health and social development benefits, this project will also contribute to environmental integrity through improved water management (quantity and quality) and reduced groundwater pollution due to unmanaged human waste.

The initial RWSS project preparation phase included an Economic and Financial Analysis (Annex B7 of the AfDB's project appraisal report) which examined the economic return from improved health benefits and showed a Net Present Value (NPV) of US\$9.1million and EIRR of 25%. No allowance was made for the additional benefits that would accrue from building in climate change resilience and adaptation measures to the project.

It is estimated that the CCR proposals will benefit all communities to some extent but they will also secure permanent improvements for around 20% of all the targeted villages, which are particularly vulnerable to climate change. Using the same assumptions as were employed in the baseline, it has been calculated that the additional benefits from CCR measures for the most vulnerable communities will be in the order of 1.6 million USD per annum. This compares with the NPV from non-CCR water and sanitation infrastructure of 9.1 million USD. Allowing for the 30-year project life, the cumulative benefits of CCR measures will be substantially greater than the planned GEF investment in the project.

The specific benefits accruing from GEF funding will be the enhanced focus of the overall RWSS project on priority communities that are most at risk from drought, floods and other climate change induced threats to water supply and sanitation. All personnel receiving CCR training will be better equipped to identify specific threats and hazards and to guide communities in terms of appropriate response mechanisms.

B.3. Explain how cost-effectiveness is reflected in the project design:

A high degree of uncertainty surrounds the prediction of climate change, and differentiating between natural variations in climatic conditions and those that can be attributed to global warming is far from an exact science. These challenges are compounded in Sierra Leone by the lack of hydrological and meteorological data. An important debate took place during the planning stages of this project over where the emphasis should lie in terms of providing new data on stream flow in order to better assess changes in water supply due to variations in climatic conditions. The choice was between developing a network of gauging stations focused within the five individual districts or helping to develop the entire national framework. It was agreed that it is more cost effective to strengthen the national monitoring network by setting up new gauging stations on major rivers and creating a primary network of weather stations in selected districts (as opposed to setting up weather stations in all parts of the country). Although the proposed network of gauging stations will be more concentrated, it should nevertheless provide a clear understanding of available water resources, which will support the planning and management of climate-resilient WASH systems.

In line with this approach, a minimum number of stream gauging stations to be built has been identified that is within both the national GoSL hydrological framework and the geographical catchments of the five districts. This will strengthen the country's overall climate monitoring efforts while at the same time providing valuable climate information for the project areas. Groundwater monitoring will take advantage of largely existing boreholes

which will be fitted with water level data loggers thus cutting costs on the monitoring infrastructure setup costs. In a further bid to ensure cost effectiveness, especially with regard to operating and maintaining the monitoring infrastructure network, the originally proposed number of rainfall monitoring stations was re-examined and reduced from 200 to 60 stations, on the basis of World Meteorological Organization (WMO) guidelines.

In the longer term it will be important to extend the monitoring programme to individual catchments within the five districts and the necessary framework is being created through preparation of District WASH CCR Plans. This process will allow the identification of those communities and areas that are most vulnerable to climate change and will ensure that climate change adaptation efforts are targeted in these areas. This in turn will greatly increase the efficiency and effectiveness of project expenditure. The process of creating CCR Plans for each district involves a simple questionnaire survey administered in face-to-face interviews with section chiefs, village headmen, and elders from the Traditional Authority and water source committee members. This survey elicits information on the longevity and severity of historic flooding and drought events. Based on analysis of all questionnaire results together with information on the location (height and geographic position within the primary catchment) and socio-economic characteristics of each village, the technical team (WASH engineer and Environment Officer) will identify those communities that are most at risk to climate change. This information will allow particularly vulnerable communities to be targeted as priorities for investment.

Another important adjustment from the PIF has been the decision to reduce the number of rain gauges from 200 to 60 and to use the savings to introduce 100 groundwater monitoring stations. Most of these monitoring stations will be installed in existing or new wells and boreholes. Water level data loggers will be used to record groundwater levels. The decision to reduce the number of rain gauges is based on a pragmatic view of the difficulties in ensuring that accurate records are kept and transmitted from remote locations where most inhabitants have low literacy levels, rather than the practicality of installing the equipment. By comparison, the information that can be gathered from borehole data loggers will be of much greater significance in starting to understand regional and district-wide variability in water tables and the effects which both seasonal fluctuations and long term climate change is likely to have on rural water supplies.

C. DESCRIBE THE BUDGETED M &E PLAN:

Two monitoring and evaluation frameworks have been developed: the first is based on AMAT and is designed to give information at the CEO Endorsement stage, at Project Mid-term and at Project Completion; the second is a project level framework which is designed to track performance on individual activities on a month-by-month basis throughout the project.

The AMAT M&E Framework addresses performance under each of the LDCF objectives of:

- Reduced vulnerability to the adverse impacts of climate change, including variability at local, national, regional and international level.
- Increased adaptive capacity to respond to the impacts of climate change,
- Promoting transfer and adaptation of adaptation technology

A total of 13 indicators will be employed as part of the assessment.

Each of the three stage AMAT Framework Assessments will require the input of an independent Assessor. Each review will involve a mission of 7 working days duration.

The Project level framework is based on monitoring the delivery of each output, as summarised below:

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Quarterly Project Reports	National Project Coordinator leads the organization, in close consultation with SALWACO and AfDB.	Every 3 Months	10,000
Project Implementation Review (PIR)	AfDB LTO with inputs from the National Project Coordinator and AfDB Budget Holder. Submitted by the AFDB GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point by the National Project Coordinator.	Annually	30,000
Design and implementation of monitoring and evaluation system	National Project Coordinator with support from the Chief Technical Adviser (CTA) and the AfDB Lead Technical Officer	Within the first six months after the project inception	10,000
Field-based impact monitoring	National Project Coordinator with support from other project partners (NGOs / District WASH Engineers)	Continually	50,000
Technical reports	National Project Coordinator, Consultants, AfDB	As appropriate	Component budgets
Mid- term evaluation	External Consultant, AfDB independent evaluation unit in consultation with the project team and other partners	At mid-point of project implementation	40,000
Final evaluation	External Consultant, AfDB independent evaluation unit in consultation with the project team and other partners	At the end of project implementation	50,000
Project completion Report (PCR)	Project Coordinator	At least one month before end of project	None
NPC, CTA and project admin assistance estimate total cost for all M&E activities			30,000
TOTAL			220,000

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


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 form. For SGP, use this OPF endorsement letter).

Name	Position	Ministry	DATE (MM/dd/yyyy)
Dr. Kolleh Bangura	Director (GEF Operational Focal Point)	ENVIRONMENT PROTECTION	05/26/2012

		AGENCY	
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B. GEF agency(ies) certification

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mahamat ASSOUYOUTI, AfDB		08.25.2016	Rogers Lubunga	+23230338012	R.LUBUNGA@AFDB.ORG

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

RESULT-BASED LOGICAL FRAMEWORK Building Resilience to Climate Change through the water and sanitation sector in urban and rural areas of Sierra Leone							
GOAL: Ensure that the interventions of the Rural Water and Sanitation Supply Project (RWSSP) are resilient and proofed against the adverse effects of climate change; in accordance with the NAPA, First and Second National Communications and GEF Programming Strategy on ACC for the Least Developed Countries Fund (LDCF) and Special Climate Change Fund							
Results chain		Performance indicators			Means of verification	Risks/mitigation measures	
		Indicator (including CSI)	Baseline	Target			
Impact	Project Components 1: Ensuring access to climate resilient water supply and sanitation in five rural districts of Sierra Leone 2.Building the institutional framework required for climate-resilient management of the water and sanitation sector 3. Building improved awareness of climate-resilient WASH practices 4. Establishing collaborative research and monitoring to enable efficient, climate-resilient water management 5. Managing knowledge and Monitoring and Evaluation						
	OUTCOMES	Outcome 1: Vulnerable physical and natural assets strengthened in response to climate change including climate variability	# of people in 5 districts provided with safe water and improved sanitation # of people in targeted communities provided with improved CCR facilities and technology	0% (2010) 0% (2010)	625,000 people, of whom 293,750 are female 125,000 people, of whom 60,000 are female	CSO MDG Progress Report JMP Project Impact & Flagship Studies	Risk: Failure to carry out systematic surveys and identify real targets. Mitigation: Bank to retain competent CCR adviser for duration of the project.
		Outcome 2: Capacity of national and district centers and networks strengthened to monitor climate change indicators and trends and rapidly respond to extreme weather events.	Climate change Secretariat staffing level # of meetings of all key institutions with CCR on agenda Effective functioning of Emergency communications system (# of advanced warnings)	1 0 N/A	3 Donor group - 2 per annum District WASH committees - 10 per annum 12 Risk reports (monthly) on national media services	Annual monitoring review	Risk: Failure to secure all agencies’ commitment to role of CCS and Donor Group Mitigation: Greater engagement of AfDB and RWSSP advisers in training and guiding the respective committees / groups
		Outcome 3: Relevant adaptation technology transferred to targeted groups	Community participation in WASH service delivery increased (in %)	0	Up to 80% of the targeted communities, of which 50% of residents are women	Quarterly and Annual Progress Reports, Supervision reports M&E Reports Mid Term Review PCR	Risk: Communities lack of capacity and skill to implement a climate resilient WASH services Mitigation: The project will provide relevant training through the technical assistance and support traditional councils, District authorities and communities
		Outcome 4: National, District and Local level institutions equipped to handle CCR management tasks	Hydro meteorological structures and equipment installed and functioning within districts Headquarters staff trained and facilitated	0 0	All targets for individual equipment and staffing numbers met	Quarterly and Annual Progress Reports, Supervision reports M&E Reports Mid Term Review PCR	Risk: Delays to programme through lack of technical capacity and inadequate staffing Mitigation: This part of the overall RWSSS to be given top priority by AfDB / SALWACO

	Outcome 5: Skills increased for relevant individuals in transfer of adaptation technology	# of key personnel trained in CCR adaptation technology	0	All individuals in targeted groups are trained	M&E Report Reports from Baries Court meetings	Risk: Delays to programme through lack of technical capacity and inadequate staffing Mitigation: Early programme to be arranged for trainers of trainers
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Results chain		PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/ MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
	Project Component 1 – Ensuring access to climate-resilient water supply and sanitation					
OUTPUTS	Output 1.1: Local CCR risk assessments completed in all target villages	CC Vulnerability and Risk surveys completed for each district	0	Draft Maps by December 2016	Project Report	Risk: Existing provisions for TA may not be adequate to cover this assignment Mitigation: AfDB to consider providing additional resources
	Output 1. 2: District CCR –WASH Plans adopted	# of completed plans	0	5 plans (1 in each district) by June 2017	Planning Documents M&E Report	Risk: Lack of technical ability of those implementing this component of the project Mitigation: Training of CCR planners given high priority
	Output 1. 3: Priority villages for CCR measures identified	# of priority villages/localities selected	0	200	APRs / Mid term review M&E Report	Risk: Political and personal interest interference in selection process Mitigation: Independent review to be undertaken of selection process
	Output 1.4: Physical infrastructure constructed and operational in target communities	# of boreholes drilled following CCR assessment # of rainfall harvesting facilities in place # of standpipes equipped with solar power # of demonstration Market Integrated WASH facility projects established in each district	0	20% of all infrastructure targeted within priority communities	Site inspections / Annual project report M & E Report	Risk: Coordinating multiple interests in busy urban centers is challenging and can be frustrated by bureaucracy Mitigation: effective liaison required with all District council agencies and private sector

	Project Component 2 – Building the institutional framework required for climate-resilient management of the water and sanitation sector					
	Output 2.1: MWR and Met Office supported with technology, real time data recording and analytical capabilities to observe climate trends	Published annual report	N/a	From Jan 2017	Project Report	Risk: Staff shortages may delay purchase of equipment and training Mitigation: Early recruitment of competent staff is recommended
	Output 2.2: Existing Climate Change Secretariat strengthened with reference to the water and sanitation sector	# of staff Climate change secretariat minutes Project Reports	N/a	2 permanent staff	Annual project report M & E Report	Risk: Competing priorities and historical lack of cross sectorial engagement could limit the secretariat's effectiveness Mitigation:

	Output 2.3: Existing Donor Coordination Group strengthened and briefed on CCR issues	Minutes of Meetings	N/a	Minutes from March 2016	Annual project report	Risk: Too many competing pressures on time to ensure effective commitment Mitigation: AfDB and DFID should encourage wider donor support
	Output 2.4: Key staff in MWR and Met Office trained to act as CCR advisers	Staff performance reviews	N/a	Staff review	Annual project report	Risk: Staff shortages may delay purchase of equipment and training Mitigation: Early recruitment of competent staff is recommended
	Output 2.5: National Rural Water and Sanitation Sector Program Document that incorporates understanding of climate risk and appropriate management options, including future technology transfer	Programme Document	N/a	Published Report	Project Report Final Evaluation Report	Risk: Lack of commitment from all parties to contribute and collaborate on developing the program Mitigation: Obtain joint commitment from the Donor Team Leaders to secure the program
	Output 2.6: Communications network established for emergency action	Annual Report	N/a	Published Report	Project Report Final Evaluation Report	Risk: Lack of coordination between key agencies Mitigation: Seek political and media support for the network and publicize successful interventions
	Output 2.7: District Councils and Traditional Authorities assisted to manage CCR	Project Project Reports	N/a	Published Report	Project Report Final Evaluation Report	Risk: Too many other priorities may dilute the message on CCR for water and sanitation Mitigation: Prepare clear short guidance and publicity leaflets in local language
Outputs	Project Component 3 – Build Improved Awareness of Climate –resilient WASH practices					
	Output 3.1: Sector professionals (including 40% women) trained in the ability to deliver improved climate-resilient WASH knowledge, attitudes and practices (including water availability and quality)	# of certified trainers	None currently exist	28 professionals trained by Jan 2017 90 groups of community trainers trained by Jan 2017	Quarterly and Annual Progress Reports, Supervision reports M&E Reports MTR PCR	Risk: Untimely mobilization and sensitization of communities Mitigation: Community mobilization and participation at the onset of the program
	Output 3.2: WASH committees established and trained in CCR evaluation and response procedures	# of committees trained	N/a	1000		Risk: Apathy and lack of interest to engage, participate and own the program from communities Mitigation: Effective mobilisation strategy to actively engage communities; training and capacity building provided throughout project implementation.
	Output 3.3: Study tours arranged for national government staff and local government staff from non-project districts with 40% female representation	# of tours successfully completed	N/a	20		
	Project Component 4- Establish collaborative research and monitoring to enable efficient, climate-resilient contribution to restoration of hydrometric network and monitoring of climate change					

Outputs	Output 4.1 National water resources monitoring framework created	Operational WR monitoring framework	N/A	Completion by 2017	Published Report	Risk: Staff shortages may delay purchase of equipment and training Mitigation: Early recruitment of competent staff is recommended
	Outcome 4.2 Hydrometric Data processing centre and assessment unit operational	Unit operational	N/A	Completion by 2017	Quarterly and Annual reports	
	Output 4.3 Part of hydrometric network installed Operational rain gauges; stream gauges and well gauges	Functioning Network	N/A	50 rain gauges, 100 well gauges, and 25 stream gauges fully operational by 2018	Annual Reports from respective Met/DWR Offices Monitoring Surveys and Audit	
	Output 4.4 Coastal retreat/sea level rise surveillance system introduced	Field Measurements	N/A	Completion by 2017	Annual Reports (EPA)	
	Output 4.5 Cadre of experienced officers with detailed knowledge of CCA in post	# of officers trained	N/a	Completion by 2017	Evaluation Report	
	Output 4.6 Stream and River Gauges operational	# gauges and flow records	N/a	Annual increments	Published reports	
	Project Component 5 – Establish effective Monitoring and Evaluation and Knowledge Management System					
	Output 5.1 Monitoring and Evaluation Framework established	Full Project Report	N/a	Completion by mid-2016	Project Review	Risk: Lack of technical ability of those implementing long term M & E Mitigation: Early recruitment of competent staff is recommended
	Outcome 5.1 Accurate results provided on CCR and CCA in the RWSSP using Monitoring and Evaluation framework	Proper implementation of M&E protocols for the project	N/a	Completion by 2018	Performance Audit Comparison with parallel findings from 3 rd National Communication	
	Output 5.3 Report on analysis of experience and lessons learnt in building CCR for rural water & sanitation	Final Report	N/a			

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

US GEF Council questions (in written communications to GEF secretariat/AfDB)

Expand on how the installation of 20 stream flow gauges and groundwater monitoring stations as well as 200 rain gauges will result in an early warning system (e.g., what will be the scientific basis for making forecasts and generating accurate and timely warning, how will warnings reach those at risk, how will AfDB ensure that the risks and warnings understood, that the warning information is clear and usable, and that people prepared and ready to act to the warnings?)

In addition to earlier comments it is noted that the primary purpose of the meteorological and hydrologic gauging stations is to build up a long-term database of climatic information so that trends can be discerned and this is the most important output and function of the monitoring sites. Capacity to provide early warning of a flood event will exist on major river systems and the relevant officers in MWR/MO will telephone the emergency response center for each downstream district council giving details of the time lapse and anticipated height of the flood crest, based on rainfall data and stream gauging in upper catchments. It will take a number of years to build up a sufficiently accurate database to give precise information on the height and duration of flood events.

Expand on how it plans to maintain and operate the monitoring equipment that the project will procure and install, including training of staff.

Maintenance and operation of the equipment will be the primary responsibility of the Water Directorate in partnership with the community, in accordance with the Water Resources Management Act. Rapid advances have been made in the sophistication and reliability of instruments for recording stream flow velocities, rainfall, temperature and other climatic data. The specifications for monitoring equipment will ensure that only robust instruments are used. In most cases, these instruments are precision engineered and must be returned to the manufacturer for servicing or repairs. However, most of the equipment should give trouble free operation over many years without requiring any form of servicing and it will generally be cheaper to buy replacements rather than seek to maintain the units.

Expand on how it will ensure the sustainability of climate change adaptation education for decision makers at the national and district level;

The project involves preparation of a National WASH programme; strengthening of the Climate Change Secretariat; identification of CCR officers in the Ministry of Water Resources and Meteorological Office and the engagement of District Officers in the preparation, implementation and monitoring of District WASH CCR Plans. These measures are all mutually reinforcing and will ensure that the lessons learnt, and training delivered, on CCR in the WASH sector is constantly reviewed.

Clarify how it will communicate results, lessons learned and best practices identified throughout the project to the various stakeholders both during and after the project;

Results, lessons and best practices will be communicated through Joint Donor/Government Sector Reviews once every year, Implementation Progress Results Reports by Bank's supervision missions twice every year, Impact Surveys and Annual Technical Audits, Reports Project Completion Report, and Post Evaluation Report, all of which are provided for under the project.

The measures outlined above, and the wider programme of community awareness-raising through training of trainers and the creation of 1000 WASH committees in the individual villages will ensure that all stakeholders are fully informed during the course of the programme. In the longer term the emphasis on CCR in the WASH sector will have been passed on through the Climate Change Secretariat to the project teams revising and developing NAPA, and to the new institutions constituted under the Water Resources Management Act. The work of strengthening WASH within rural communities will need to be expanded and extended to all other parts of the five districts and remaining districts in Sierra Leone so the RWSSP should be seen as only a first stage in reaching out to all stakeholders for the foreseeable future.

Engage local stakeholders, including women, in both the development and implementation of the program.

The project already draws on a gender expert for the design of relevant sections of the programme and SALWACO, the implementing agency has employed a female full time gender and community development specialist to help train the

trainers and liaise with the NGOs who will deliver the climate change adaptation and other WASH messages to their counterparts at community level.

GEF Secretariat Review Sheet Comment 17

The mention of the role of local and indigenous communities and that of the WASH committees is made. However, this is done in a general manner. Recommended action: by CEO endorsement, please clarify the civil society and indigenous groups involved as well as the mechanisms for their involvement.

As explained in the CEO endorsement report, the process of engaging village communities in the five districts will be undertaken strictly in accordance with established practice for district level consultations which involves direct contact and discussion with the paramount chiefs, section chiefs, village headmen (and women) and the traditional authority (TA) elders. All training workshops and training activities will take place with the full knowledge and approval of the TA and local representatives of civil society and the indigenous community is guaranteed through the process of establishing 1000 WASH and water source committees at village level with full gender representation including women, youths and disadvantaged groups. The process of developing District WASH CCR Plans will involve publication of draft plans and full discussion through the baries courts (TA community meetings) with the same range of community representatives.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁵

A. provide detailed funding amount of the ppg activities financing status in the table below:

PPG Grant Approved at PIF:			
Project Preparation Activities Implemented	GEF/LDCF/SCCF/NPIF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Climate Change and Water Impacts	60,000	60,000	60,000
Consulting firm for project preparation	100,000	80,0000	100,000
Surveys and inception/validation missions	40,000	15,000	40,000
Total	200,0000	155,000	200,000

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

Not Applicable N/a

⁵ If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.

ANNEX E DRAFT CLIMATE CHANGE QUESTIONNAIRE

To be administered as a structured interview with the Traditional Authority members for each locality (village)

We need to understand past weather patterns in order to learn how the climate is changing. Please answer the following questions (as a group) by thinking about your experience over the last ten years,

RAINFALL		
Has the amount of rainfall each year	Increased	
	Decreased	
	Stayed the same	
Does the rainy season start and finish at the same time	Yes	
	No	
If the answer is no has the season	Increased in time (by how many weeks)	
	Decreased in time (by how many weeks)	
10 years ago in which month did the rainy season	Begin?	
	End?	
Now, when does the rainy season	Begin?	
	End?	
TEMPERATURE		
Ten years ago which was the hottest month of the year?		
Now which is the hottest month of the year?		
DROUGHTS		
In the last ten years how many severe droughts have you experienced? I.e. when your usual water supply has dried up for more than:	4 weeks	
	Two months	
	Three months	
In which years did the droughts take place?	2005	
	2006	
	2007	
	2008	
	2009	
	2010	
	2011	
	2012	
	2013	
	2014	
	2015	
FLOODS		
In the last ten years how many severe floods have you experienced? I.e. when houses have been made uninhabitable:	Give the year and number of houses affected	
In which years did the floods take place?	2005	
	2006	
	2007	
	2008	
	2009	
	2010	
	2011	

	2012	
	2013	
	2014	
	2015	

ANNEX F ANNUAL REPORT ON CCR MEASURES IN THE WASH SECTOR

An annual report will be prepared by the Ministry of Water Resources and the Meteorological Office in conjunction with the Climate Change Secretariat to report progress on the implementation of CCR Measures in the WASH Sector

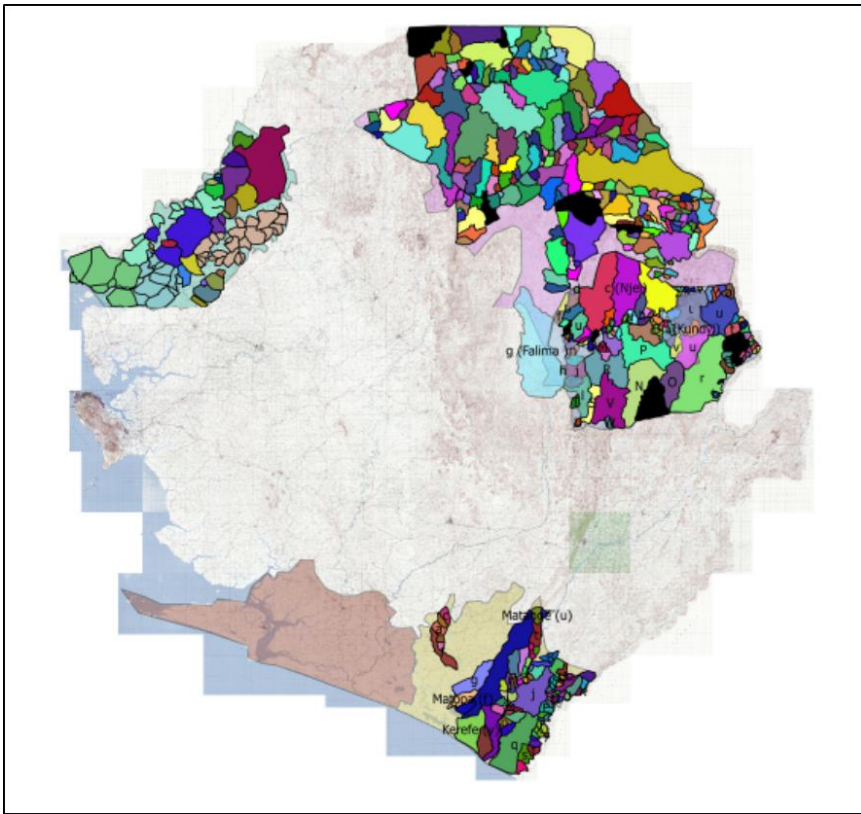
Outline Contents of the Report

1. Aims and Objectives
2. Results of the Questionnaire Survey and Vulnerability Mapping
3. Progress in Developing and Implementing WASH CCR Plans for the Five Districts
4. Description of natural disasters and extreme events in the WASH sector attributed to CC,
4. Progress in installing and operating stream flow gauges and Met Stations
5. Analysis of flow records and climatic data
6. Emergence of trends in long-term Climate Change
7. Progress in CCR building in other economic sectors, with direct impacts on WASH.

ANNEX G CATCHMENT MAPPING

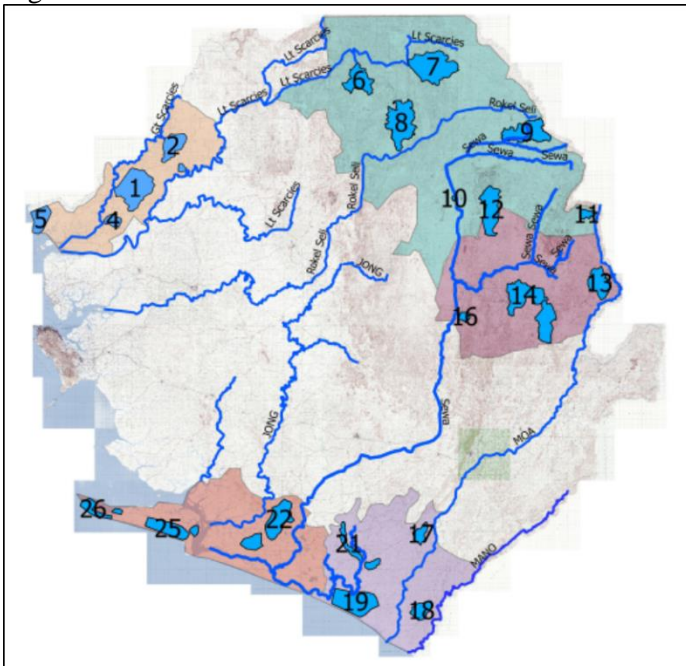
This annex illustrates the process of catchment mapping which has been undertaken during project preparation. Figure G.1 shows the breakdown of primary catchments (watersheds) within four of the five districts. (Kambia, Koinadugu, Kono and Pujehun). No mapping has been undertaken within Bonthe District because there are very few discernable catchments within the coastal plain.

Figure G.1 Distribution of Primary Catchments



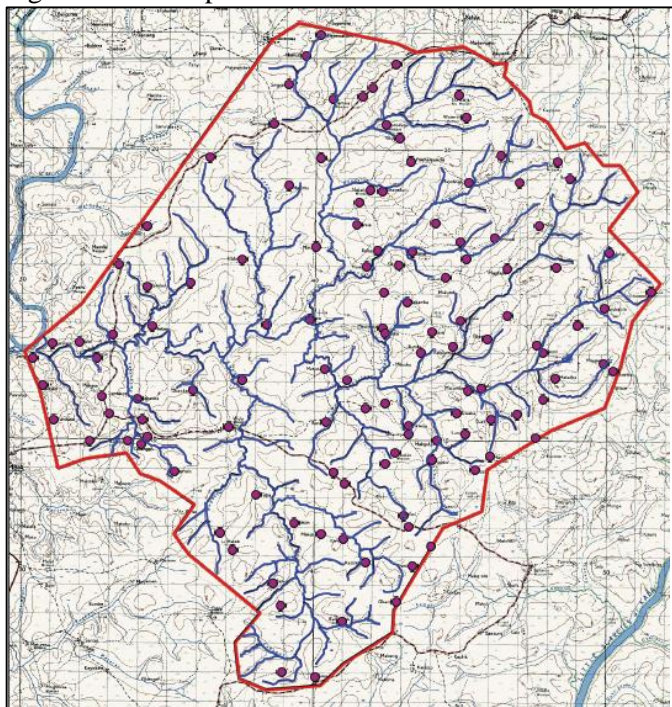
Twenty five (25) catchments were selected for closer analysis in order to develop the climate change vulnerability assessment and details are contained with the working paper. These catchments (see Figure G.2) will be used to pilot the questionnaire survey and develop the full framework of the District WASH CCR Plans.

Figure G.2 Location of Pilot Catchments



Two catchments in Kambia (sites 1 and 5) have been selected to show the characteristics of the village localities in relation to the river systems.

Figure G.3 Sample Catchment 1 Kankana River Catchment (Great Scarcies River Basin)



This is the largest of the five sample catchments in Kambia. It covers approximately 275 km². There are 134 settlements within the watershed. The distribution of streams is typical of the central plains and upland areas of Kambia.

The second example is chosen because it represents the typical conditions found along the coast. There is no discernable watershed and a high degree of hydraulic conductivity across the entire plain with extensive marshes, swamps and mangrove forest where saline water penetrates inland.

This coastal area does not represent a true catchment since the boundaries are drawn at random. However it includes the main watershed of the Mahela Creek and an important island that has several exposed settlements facing open the sea, which are vulnerable to storms and sea-level rise. The overall area is 90km² with 29 settlements

Figure G.4 Sample Catchment 5 Yelibuya Island and Mahela Creek

ANNEX H Monitoring and Evaluation Programme

Introduction

The Monitoring and Evaluation Framework for the Project has been developed at strategic and project level.

Strategic level AMAT Framework

The strategic level framework is designed to meet the criteria laid down by GEF in guidance on the Adaptation Monitoring and Assessment Tool (AMAT). This requires that a number of indicators are chosen (a minimum of one for each of the Project Components) that can be tracked quantitatively at three stages in the project – at CEO Endorsement / Approval request, at programme Mid-term and at project completion. The documents used in developing the strategic framework are:

- Table 7: Adaptation to Climate Change Focal Area Results Framework and (LDCF/SCCF) Framework;
- Climate Change Adaptation – LDCF/SCCF Adaptation Monitoring and Assessment Tool (AMAT); and,
- AMAT Excel Spreadsheet.

Project Level Framework

The project level framework is designed to track performance on individual activities on a month-by month basis throughout the project.

Both the Project Level and Strategic Frameworks are closely linked and the project level evaluations are designed to feed into the Strategic framework.

Strategic Level AMAT Framework

ADAT is structured around the three principal objectives of the Least Developed Countries Fund and the three key stages in the life of a project or programme; these stages are: at CEO Endorsement / Approval request, at Programme Mid-term, and, at Programme Completion. Targets are set at the Approval request stage against a set of outcomes and outputs using quantifiable indicators.

The targets are described in the PIM and are outlined below in summary form. (It is important to note that the objectives listed below are those established for the LDCF, rather than for the Climate Change Resilience programme itself.)

Objective 1: Reduced vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and international level

Outcome 1.1 is concerned with measures incorporated into country level development frameworks and looks for evidence that adaptation actions have been implemented, using three indicators which record the number of actions, whether or not these actions involve firm budgets and targets and to what extent the targets are achieved within the programme.

The Climate Change Resilience component of RWSSP will address a number of specific goals set out in the NAPA Second Communication and the third Poverty Reduction Strategy Paper (PRSP) Agenda for Prosperity. These are not budgeted for in the national programmes, but costs have been allocated to the work being undertaken in CCR of RWSSP and it will be possible to track under indicator 1.1.1.2 whether or not specific objectives of NAPA and PRSP are delivered. There are also proposals for policy reform (for example under the Water Resources Management Act which will be monitored under indicator 1.1.1.3.

Outcome 1.2 deals with reduced vulnerability to climate change in relation to individual development sectors. The specific indicators that are being used for CCR of RWSSP are listed below:

1.2.1	Infection rates of population to climate-sensitive (water borne) diseases as compared to past population infected per year;
-------	---

1.2.3	Number of additional people provided with access to safe water supply and basic sanitation services given existing and projected climate change;
1.2.4	Increase in water supply targeted areas;
1.2.11	% of population with access to improved flood and drought management;
1.2.14	Scores in the Vulnerability and Risk Perception Index, based on surveys to be undertaken within the five districts.

Output 1.2.1 aims to ensure that vulnerable physical, natural and social assets are strengthened in response to climate change impacts, including variability. The specific indicators that are relevant under CCR of RWSSP include:

1.2.1.1	Health measures introduced to respond to climate-sensitive waterborne disease. (Such measures include WASH training and CLTS);
1.2.1.4	Sustainable drinking water management practices introduced to increase access to clean water drinking water;
1.2.1.8	Type and level of integrated disaster response measures to extreme climate events introduced to increase number of lives saved.

Objective 2: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level

Outcome 2.1 and Outputs 2.1.1 and 2.1.2 seek to ensure that there is increased knowledge and understanding of climate variability and change-induced risks at country level and in targeted vulnerable areas and all four indicators are relevant to the CCR of RWSSP. These are:

2.1.1	Updated risk assessments are in place;
2.1.1.1	Risk and vulnerability assessments have been conducted,
2.1.1.2	Relevant risk information disseminated to stakeholders
2.1.2.1	Appropriate monitoring systems are in place

The most important of these indicators is 2.1.2.1. and the specific monitoring systems that will be evaluated, including stream flow gauging, rainfall and temperature recording, water quality (both surface and underground), and sea level rise.

Outcome 2.2 seeks strengthened capacity to reduce risks to climate-induced economic losses. Although the focus of the RWSSP is on water and sanitation rather than economic wellbeing, it is a simple fact that the state of the local economy in any areas is inextricably linked to health and individual livelihoods. Consequently any serious drought, flood or water-borne epidemic has serious economic repercussions. The relevant indicators for measuring strengthened capacity are:

2.2.1	Number and type of targeted institutions with increased adaptive capacity to reduce risks and responses to climate variability,
2.2.2	Capacity perception index

All institutions described in the PIM will be monitoring and evaluated under 2.2.1. These include:

- the International Partners' forum
- Climate Change Secretariat
- SALWACO
- Participating NGOs
- District Council WASH Committees
- All water source and water user committees

AMAT provides a framework for assessing the extent to which capacity building and knowledge transfer has succeeded in any given project or programme. This is based on an independent survey of the participating institutions and a score (disaggregated by gender) from 1 to 5 ranging from 1 = No capacity built to 5 = Full ability to supply or disseminate knowledge has been demonstrated. This survey will be undertaken at Programme Midterm and Completion.

A specific output (2.2.1) considers the extent to which the adaptive capacity of national and regional centers and networks has been strengthened to rapidly respond to extreme weather events. The themes under which this evaluation will be made include:

- Existence of Early Warning System and Vulnerability Mapping
- Policy reform
- Capacity development
- Strengthened infrastructure
- Coastal management
- Community based adaptation
- Special programmes for women
- Water storage
- ITC – development of GIS

Objective 3: Promote transfer and adoption of adaptation technology

The two outcomes under this objective look for successful demonstration of the deployment and transfer of relevant technologies and an enhanced enabling environment to support the transfer processes. The related outputs look for evidence that technologies have been successfully transferred to targeted groups (3.1.1), that skills have been increased for relevant individuals (3.1.2) and that relevant policies and frameworks have been developed (3.1.3). Indicators that have been selected under this objective are the following:

3.1.1	% of targeted groups adopting adaptation technologies by technology type,
3.1.1.2	Type of relevant climate change adaptation technology implemented in selected areas by participatory stakeholders
3.2.1	Policy environment and regulatory framework for adaptation-related technology transfer established or strengthened
3.2.1.1	Number of individuals trained in adaptation-related technologies
3.2.2.3	Number of policies developed or strengthened

Project Level Activities Framework

The overall programme evaluation will take place at the mid-term and on completion, but the delivery of climate change resilience objectives will be dependent on ensuring that each stage of the detailed work programme is completed to time and budget.

In the short term the most critical activity is to complete questionnaire surveys for all communities in the five districts and to translate the results into District-wide WASH plans, setting out the priorities for infrastructure improvement and development. It will only be possible to judge the full extent of the task of adapting WASH to the impacts of climate change when the results for each community have been assessed and the level of exposure to risk from droughts, flooding, water shortages and lack of sanitation has been confirmed.

Progress in completing each element of the programme will be assessed through monitoring reports to be prepared by the lead NGOs and submitted to the District WASH committees and SALWACO simultaneously.

Cross Cutting Activity Implementation Procedures (Gender, Youth and Disabled Mainstreaming)

The success of WASH and the incorporation of climate change resilience activities into the overall programme depends heavily on engaging those sectors of local communities who are most affected by poor health and sanitation and who are in the best position to introduce remedial actions. All the evidence points to the fact that it is women, young children (and girls in particular), youths and the disabled and elderly who fit into these category and if these groups are not adequately catered for in planning, management and decision-taking then the programme will fail.

Building climate change resilience into the rural water supply and sanitation programme depends upon engaging women at all stages of implementation, including training and awareness raising, equal representation on committees and

management boards, staffing of NGOs and training organisations, and management of the local water source and water user committees.

Generic Activity Implementation Procedures

(Identify all generic activities, such as reporting, requisition for funds, procurement, communication and correspondences record keeping, etc. and list the logical sequence of tasks with respect to each activity including forms where necessary)

ACT-IVITY	DESCRIPTION	PROCEDURES	FREQUENCY/TIMING	RESPONSIB-ILITY
A.1	Undertake Catchment Surveys	Distribute questionnaire	May-July 2016	District WASH Engineers & NGOs
		Process results	August-Sept 2016	District WASH Engineers & NGOs
		Publish findings	October 2016	SALWACO
A.2	Prepare District WASH CCR Plans	Draft each plan	Oct-Dec 2016	NGOs
		Consult on plans	Jan-Feb 2017	District WASH Committees
		Edit Plans	Mar 2017	NGOs /TA
		Adopt Plans	Apr 2017	District Councils
A.3	Upgrade Water Points	Let individual contracts to NGOs	Continuous operation throughout the RWSSP	SALWACO
		Undertake site surveys		NGOs
		Carry out improvements		NGOs
A.4	Create New Water Points	Let individual contracts to NGOs	Continuous operation throughout the RWSSP	SALWACO
		Undertake site surveys		NGOs
		Carry out improvements		NGOs/Contractors
A.5	Install Water Harvesting Schemes	Identify demonstration areas / communities	By Oct 2015	TA /SALWACO
		Design projects	By Dec 2015	TA
		Implement projects	During 2016	SALWACO/ NGOs/Consultants
A.6	Create New Sanitation Infrastructure	Select sites	Continuous operation throughout the RWSSP	TA/SALWACO
		Design projects		TA/NGOs
		Implement projects		NGOs
B.1	Promote International Cooperation	Meetings of Partners and Government	Six month intervals	AfDB / Partners
B.2	Strengthen CC Secretariat	Formalise meetings / agendas / work programme / budgets	Quarterly meetings	Government of Sierra Leone
B.3	Train CCR Officers in MWR/MO	Make staff appointments/ provide training	By December 2016	AfDB / Government MDAs
B.4	RWSS Programme Document	Set up study	By March 2017	TA/ Government MDAs
B.5	WASH administration	Establish water source and water user committees in each district	By December 2016	District WASH Committees and Traditional Authorities
C.1	Prepare WASH Manual	Draft Document	By December 2016	SALWACO / TA
C.2	Train 28 Professionals	Arrange training programme and materials	By December 2016	TA/SALWACO
C.3	Train 90 Groups of Trainers	Arrange training programme and materials	By December 2016	TA/SALWACO
C.4	Train 1000 local committees	Arrange training programme and materials	Continuous operation throughout the	TA/ SALWACO/NGOs

			RWSSP	
C.5	Arrange 20 Study Tours	Arrange schedules / select personnel	2017	SALWACO / NGOs
D.1	Develop GIS	Extend existing GIS of pilot catchments to cover all catchments	By December 2016	TA /Consultants
D.2	Gauge Stream Flows	Train specialist personnel / establish monitoring regime	Continuous operation throughout the RWSSP	SALWACO / NGOs
D.3	Install Rain Gauges	Train specialist personnel / establish monitoring regime	Continuous operation throughout the RWSSP	SALWACO / NGOs
D.4	Monitor Boreholes	Train specialist personnel / establish monitoring regime	Continuous operation throughout the RWSSP	SALWACO / NGOs
D.5	Monitor Coastal Retreat	Train specialist personnel / establish monitoring regime	Continuous operation throughout the RWSSP	SALWACO / NGOs
D.6	Pilot Solid Waste Management	Establish sites	December 2016	SALWACO / NGOs
		Design schemes	March 2017	
		Implement projects	December 2017	
D.7	Train water resource specialists	Develop training programme / manage training	December 2017	TA
E.1	Create Monitoring & Evaluation Framework	Apply methodology at Mid-term and Project completion	As required	Independent Reviewers
E.2	Project monitoring	Review progress at three monthly intervals	Continuous	District WASH Committees, SALWACO/ AfDB

ANNEX H – BUDGET FOR MONITORING AND EVALUATION

Monitoring of weekly and monthly outputs will be the responsibility of M&E Staff within SALWACO, operating under existing project revenue resources and backed up by the supervision and oversight of the M&E technical assistance advisor.

Type of monitoring and evaluation activity	Responsible parties	Time frame	Budget (USD)
Quarterly Project Reports	National Project Coordinator leads the organization, in close consultation with SALWACO and AfDB.	Every 3 Months	10,000
Project Implementation Review (PIR)	AfDB LTO with inputs from the National Project Coordinator and AfDB Budget Holder. Submitted by the AfDB GEF Coordination Unit to the GEF Secretariat. Final report also submitted to the PSC and the GEF Operational Focal Point by the National Project Coordinator.	Annually	30,000
Design and implementation of monitoring and evaluation system	National Project Coordinator with support from the Chief Technical Adviser (CTA) and the AfDB Lead Technical Officer	Within the first six months after the project inception	10,000
Field-based impact monitoring	National Project Coordinator with support from other project partners (NGOs / District WASH Engineers)	Continually	50,000
Technical reports	National Project Coordinator, Consultants, AfDB	As appropriate	Component budgets
Mid- term evaluation	External Consultant, AfDB independent evaluation unit in consultation with the project team and other partners	At mid-point of project implementation	40,000
Final evaluation	External Consultant, AfDB independent evaluation unit in consultation with the project team and other partners	At the end of project implementation	50,000
Project completion Report (PCR)	Project Coordinator	At least one month before end of project	None
NPC, CTA and project admin assistance estimate total cost for all M&E activities			30,000
TOTAL			220,000

ANNEX I TASKS AND BUDGETS FOR TECHNICAL ASSISTANCE TO RWSSP

Specialist	Status	Task / Inputs	Total Days	Daily Rate	Amount
Climate Change International Consultant	International Consultant	6 missions each of 4 weeks duration to train staff / review plans/ and monitor progress in CCR Implementation	168	500	84000
WASH Policy Author	National Consultant	To draft relevant guidance on Climate Change Adaptation for the National Water Resources Authority Two person/months	60	300	18000
Hydrologist / Water Resources International Consultant	International Consultant	Tasks as listed in Annex 1 Hydrologist Report - 22 months	440	500	220000
Community Development	National Consultant	Tasks listed in CD Report 2 year Contract	440	250	110000
M& E	International Consultant	2 missions (Mid Term and Final Evaluation)	20	500	10000
Total					442000

ANNEX G TECHNICAL ASSISTANCE PLANNED DURING PROGRAMME DELIVERY

Specialist	Status	Task / Inputs	No. of Days	Total Days	Daily Rate	Amount
Climate Change International Consultant	International Consultant	6 missions each of 4 weeks duration to train staff / review plans/ and monitor progress in CCR Implementation	168	168	500	84000
WASH Policy Author	National Consultant	To draft relevant guidance on Climate Change Adaptation for the National Water Resources Authority Two person/months	60	60	300	18000
Hydrologist / Water Resources International Consultant	International Consultant	Tasks as listed in Annex 1 Hydrologist Report - 22 months	440	440	500	220000
Community Development	National Consultant	Tasks listed in CD Report 12 month Contract	220	220	300	66000
M& E	International Consultant	2 missions (Mid Term and Final Evaluation)	20	20	500	10000
Total						398000

Probable Date of Board Presentation
18 September 2013

FOR CONSIDERATION

MEMORANDUM

TO : THE BOARDS OF DIRECTORS

FROM : Cecilia AKINTOMIDE
Secretary General

SUBJECT : SIERRA LEONE: RURAL WATER SUPPLY AND SANITATION *

ADF LOAN OF UA 9.065 MILLION
ADF GRANT OF UA 2.854 MILLION
RWSSI-TF GRANT OF EUR 5.3 MILLION
FSF GRANT OF UA 8.468 MILLION
GEF GRANT OF USD 4 MILLION

REVISED VERSION

Please find attached, the **Revised version** of the Appraisal Report relating to the above-mentioned project which was distributed to you on 22 February 2013.

The Technical Annexes will be distributed separately.

The Outcome of Negotiations and draft Resolutions will be submitted to you as an addendum.

Attach:

Cc: The President

* Questions on this document should be referred to:

Mr. S. JALLOW	Director	OWAS	Extension 2191
Mr. F. PERRAULT	Director	ORWB	Extension 2036
Mr. K. BA	Division Manager	OWAS.1	Extension 2571
Mr. R. LUBUNGA	Team Leader	OWAS.1	Extension 2245

AFRICAN DEVELOPMENT BANK GROUP



PROJECT: RURAL WATER SUPPLY AND SANITATION

COUNTRY: SIERRA LEONE

PROJECT APPRAISAL REPORT

Date: January 2013

Appraisal Team	Team Leader	Mr. Rogers LUBUNGA	Principal Water and Sanitation Engineer, OWAS.1
	Team Members	Mr. Ahmed ATTOUT Ms. Elizabeth NDINYA Mr. Abdulai ABUKARI Mr. Sandy JAMBAWAI Mr. Shiaka MOMOH Mr. Jonathan NYAMUKAPA	Senior Financial Analyst, OWAS.1 Senior Environmental Specialist, ONEC.3 Consultant, ORPF.2-GHFO Social Sector Expert, OSHD-SLFO Senior Procurement Specialist, ORPF.1-SLFO Financial Management Coordinator, GHFO
	Sector Manager Sector Director Reg. Director	Mr. Keba BA Mr. Sering B. JALLOW Mr. Franck J. M. PERRAULT	OWAS.1 OWAS/AWF ORWB
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AFRICAN DEVELOPMENT BANK GROUP



PROJECT : RURAL WATER SUPPLY AND SANITATION

COUNTRY : SIERRA LEONE

PROJECT APPRAISAL REPORT

Appraisal Team	
	Regional Director : Mr. F. PERRAULT, ORWB
	Sector Director : Mr. S. JALLOW, OWAS/AWF
	Sector Manager : Mr. K. BA , Manager, OWAS.1
	Team Leader : Mr. R. LUBUNGA, Principal Water and Sanitation Engineer, OWAS.1

OWAS DEPARTMENT

September 2013

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Currency Equivalents

As of June 2013

Currency Unit	=	Sierra Leone Leone (SLL)
UA	=	SLL 6,482
EUR	=	SLL 5,625
GBP	=	SLL 6,580
USD	=	SLL 4,325
UA	=	EUR 1.15
UA	=	GBP 0.99
UA	=	USD 1.50

Fiscal Year

01 January – 31 December

Weights and Measures

1 metric tonne	=	2204 pounds (lbs)
1 kilogramme (kg)	=	2.200 lbs
1 metre (m)	=	3.28 feet (ft)
1 millimetre (mm)	=	0.03937 inch (“)
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

Acronyms and Abbreviations

ADF	African Development Fund	OpsCom	Operations Committee
AfDB	African Development Bank	PAR	Project Appraisal Report
AMCOW	African Ministers' Council on Water	PCC	Project Co-ordination Committee
AWPB	Annual Work Plan and Budget	PCN	Project Concept Note
CLTS	Community Led Total Sanitation	PCR	Project Completion Report
CSI	Core Sector Indicator	PHU	Peripheral Health Unit
CSO	Country Status Overview	PIU	Project Implementation Unit
CSP	Country Strategy Paper	PRSP	Poverty Reduction Strategy Paper
DCs	District Councils	QPR	Quarterly Progress Report
DFID - UK	United Kingdom Department for International Development	RWSS	Rural Water Supply and Sanitation
DP	Development Partner	RWSSI-TF	Rural Water Supply and Sanitation Initiative – Trust Fund
DSDP	Decentralised Service Delivery Program	RWSSI SP	Rural Water Supply and Sanitation Initiative Strategic Plan (2012-2015)
EA	Executing Agency	RWSSP	Rural Water Supply and Sanitation Project
EC	European Commission	SALWACO	Sierra Leone Water Company
EcoSan	Ecological Sanitation	TAs	Technical Assistants
ESIA	Environmental and Social Impact Assessment	TBD	To be determined
ESMP	Environmental and Social Management Plan	TTWSSP	Three Towns Water Supply and Sanitation Project
FSF	Fragile State Facility	TYS	Ten Year Strategy
GEF-GEF	Global Environment Facility – Least Developed Countries Fund	UA	Unit of Account
GFS	Gravity Flow Scheme	UNICEF	United Nations Children's Fund
GoSL	Government of Sierra Leone	VIP	Ventilated Improved Pit
HH	Household	WASH	Water, Sanitation and Hygiene
IPAU	Integrated Project Administration Unit	WB	World Bank
IsDB	Islamic Development Bank	WCs	Ward Committees
IWRM	Integrated Water Resources Management	WD	Water Directorate
JAS	Joint Assistance Strategy	WHO	World Health Organisation
JICA	Japan International Cooperation Agency	WSP	Water and Sanitation Program
JMP	Joint Monitoring Program		
LGFD	Local Government Finance Department		
MDA	Ministries, Departments and Agencies		
MDGs	Millennium Development Goals		
M&E	Monitoring and Evaluation		
MICS	Multi-Indicator Cluster Survey		
MFED	Ministry of Finance and Economic Development		
MTR	Mid Term Review		
MWR	Ministry of Water Resources		
NSC	National Steering Committee		
NGO	Non-Governmental Organization		
O&M	Operation and Maintenance		
ODF	Open Defecation Free		

Loan & Grant Information

Client's information

BORROWER/RECIPIENT:	Republic of Sierra Leone
EXECUTING AGENCY:	Sierra Leone Water Company (SALWACO)

Financing plan

Source	Amount (million)	Amount (UA Million)	Instrument
ADF	UA 9.065	9.065	Loan
ADF	UA 2.854	2.854	Grant
FSF	UA 8.468	8.468	Grant
RWSSI-TF	EUR 5.30	4.607	Grant
GEF	USD 4.00	2.667	Grant
GoSL	SLL 5,120.00	1.184	
TOTAL COST		28.845	

ADB's key financing information

Loan currency	USD
Interest type	N/A
Interest rate spread	1% up to year 20 & 3% thereafter
Commitment fee	0.5%
Other fees (Service charge)	0.75%
Tenor	50 Years
Grace period	10 Years
Project EIRR (base case)	25%

Timeframe - Main Milestones (expected)

Concept Note approval	June, 2012
Bank Project approval	September, 2013
GEF Project Approval	TBD
Effectiveness (Bank)	December, 2013
Effectiveness (GEF)	TBA
Last Disbursement	June, 2019
Completion	December, 2018
Last repayment	1 st September, 2063

Project Summary

Project Overview: The proposed Rural Water Supply and Sanitation Project covers five rural districts selected from the Northern, Southern and Central regions of Sierra Leone. The project is expected to increase access to safe water supply from 40% to 49%, and access to improved sanitation from 7% to 13% in rural Sierra Leone, including improved sanitation access for 91,000 school children. The project also includes the development of a comprehensive national program for Rural Water Supply and Sanitation. The project cost is estimated at UA 28.845 million and shall be implemented within a period of five years.

The project will directly benefit an estimated 625,000 people (47% women), provided with access to safe water, including restoring access for 361,000. An estimated 42,860 HHs will be enabled to improve hygiene and sanitation habits, of which at least 22,700 HHs (160,000 people) will gain access to improved sanitation facilities, thereby significantly reducing water borne diseases. The EIRR of the project is estimated at 25% and the NPV at US\$9.1 million.

Needs Assessment: Safe water and improved sanitation coverage in Sierra Leone is estimated at 57%¹ (57%²) and 13%¹ (40% considering shared sanitation facilities²) respectively, of the 5.9 million inhabitants. Although Sierra Leone is among the eight sub-Saharan African countries which performed above the regional average of 26% in terms of the population that gained access to safe water during the last 15 years, the country is off track for achieving the water and sanitation MDG. The high infant mortality in Sierra Leone is largely attributed to low water and sanitation coverage. Cholera epidemics are not uncommon with the most recent having occurred in August 2012. Rural water supply coverage currently stands at 40%¹ (48%²) against the national target of 74%, while rural sanitation coverage is at 7%¹ (32%²) against the national target of 66%. 39% of the rural population practice open defecation. Progress in the sector in the coming years will require action on multiple fronts taking into account the limited financial and institutional capacities. Recent progress in the improvement of public financial management systems, as well as sector policies and legislation, provide a good basis for intervention.

Bank's Added Value: The Government has specifically requested continuation of the Bank's engagement in the sector during the next PRSP period. The proposed project allows the Bank to extend its demonstrated comparative advantage in fragile countries to the rural water sub-sector in Sierra Leone. The project is in line with the Bank's TYS, FSF and RWSSI at the core of which is strengthening institutional capacity, beyond creating enabling policies and legal frameworks. The innovative aspects include the integrated approach in addressing relevant technical, institutional, environmental and climate change challenges and application of FSF fast disbursement procedures. The specific measures include frontloading of capacity building activities through use of NGOs with proven performance, performance bonuses to ensure timely implementation and provision of opportunities for women and youth, in addition to strengthening early warning systems and preparedness for water supply and sanitation related climate change effects.

Knowledge Management: Knowledge will be generated through supervisions, impact and flagship studies including technical and value for money audits, Annual Sector Reviews, Mid-Term Review and Project Completion reports. Knowledge in co-financing arrangements and interventions in post-conflict fragile states will be enhanced through the Resource Mobilisation Conference and experiences arising out of co-financing with DFID and GEF.

¹ JMP Report, 2013: http://www.wssinfo.org/fileadmin/user_upload/resources/JMPReport2013.pdf

² Sierra Leone Multiple Indicator Cluster Survey 4 Final Report, December 2011

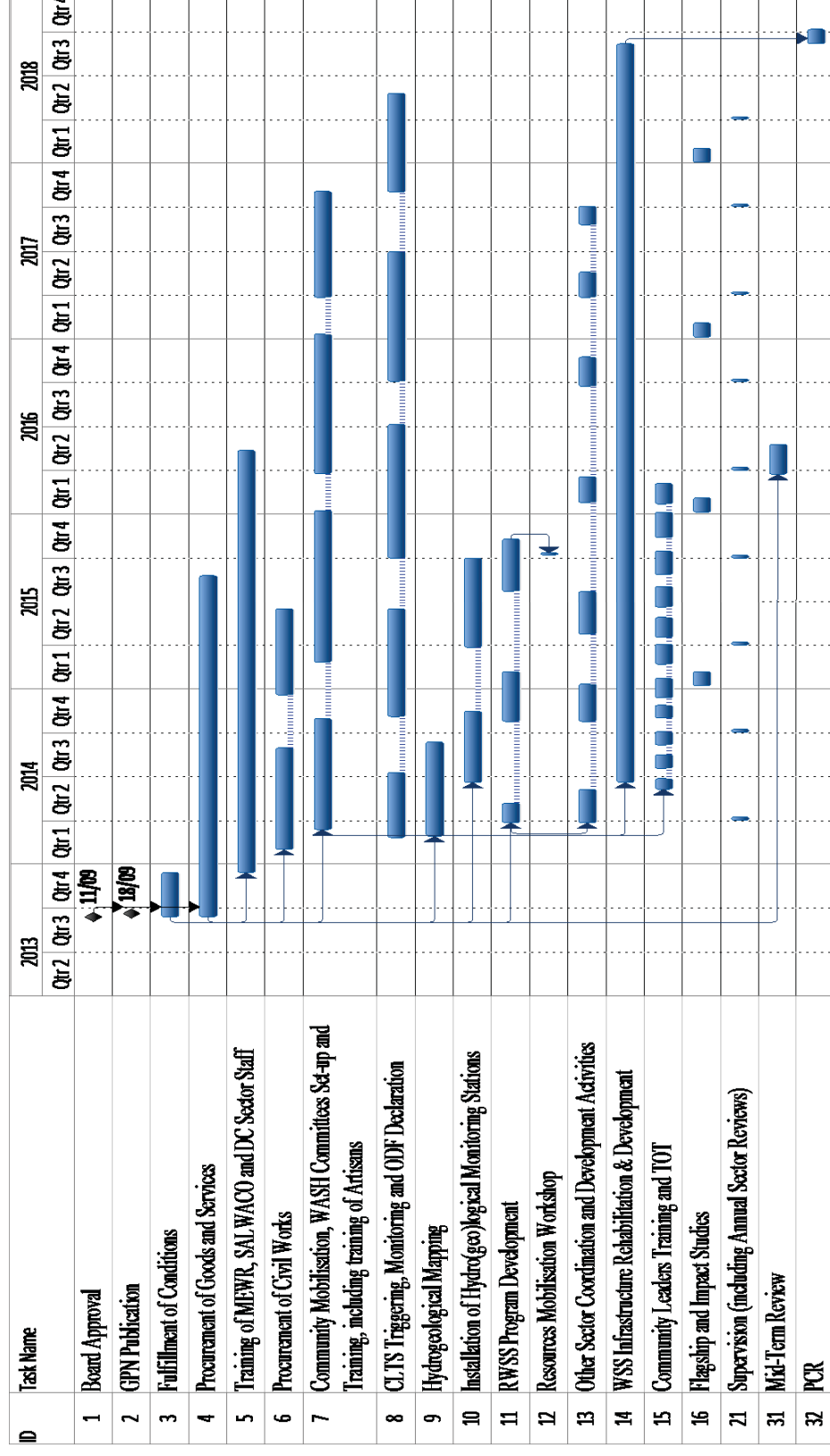
Result-based Logical Framework

Country and project name: Sierra Leone – Rural Water Supply and Sanitation Project
Purpose of the project : To contribute to the increase in access to sustainable improved water and sanitation in the rural areas of Sierra Leone

	RESULTS CHAIN	PERFORMANCE INDICATORS			MEANS OF VERIFICATION	RISKS/MITIGATION MEASURES
		Indicator (including CSI)	Baseline	Target		
IMPACT	Impact: Contribute to sustainable human development (as per Agenda for Prosperity 2013-2017)	1.1 Under 5 Mortality Rate 1.2 Increase in school girl's enrollment rate.	1.1 192/1000 1.2 64%	by 2017 1.1 60/1000 1.2 100%	JMP MICS Report DHS PRS Progress Report	Risk: Failure to implement WSS reforms Mitigation: Continuous dialogue between government and donors – Bank will actively promote donor and policy dialogue in the water sector through strengthening Bank's local presence in the sector
	Outcome 1: Increased number of people with improved access to safe water supply and basic sanitation	1.1 Access to improved water sources in Rural Sierra Leone (CSI); additional # served 1.2 Access to improved sanitation in rural areas (CSI)	1.1 40% (2010) 1.2 7% (2010)	1.1.1 49% (2017) 1.1.2 625,000 persons 1.2.1 13% (2018) 1.2.2 Additional 22,700 HHs with un-shared latrine.	CSO MDG Progress Report JMP Project Impact & flagship studies	Risk: Weak sector coordination resulting in duplication and obscure accountability. Mitigation: Bank to catalyse sector leadership and project resources to be provided for promoting regular stakeholder coordination forums.
OUTCOMES	Outcome 2: Better managed water and sanitation sector	2.1 Joint Govt/DP Sector Working Group established & operational 2.2 Functional Sector Donor Coordination Group	Both Groups Established but not fully functional	2.1 Annual Joint Sector Review Commenced by September 2013 2.2 Regular Quarterly Meetings	Proceedings of Annual Joint Sector Review Minutes of Meetings	Risk: Delayed implementation of organisational and HRD reforms & attendant limited capacity of implementing agencies.
	Outcome 3: Improved WASH Knowledge, Attitudes and Practices & Improved Capacity to Deliver Sustainable Rural WSS Services	3.1.1 # additional ODF Communities 3.1.2 Additional HHs with Latrine 3.1.3 Incidence of Cholera and Diarrhea 3.1.4 Water Point Functionality rate in project area	3.1.1 N/A 3.1.2 N/A 3.1.3 Cholera 4% Diarrhea 14% 3.1.4 60 – 68%	3.1.1 1000 by 2018 3.1.2 22,700 by 2016 3.1.3 Cholera – Nil; and Diarrhea – 3% by 2018 3.1.4 75–80% by 2018	Project Impact & flagship studies Demographic & Health Survey (DHS)	Mitigation: Technical assistance to the key implementing agencies, i.e. the three DCs, WD, SALWACO and LGFD. Risk: Resistance to accountability for non-performance of DCs due to negative political interference, besides poor coordination of lower local government establishments and DCs, slowing down project implementation.
OUTPUTS	Component 1: Water Supply and Sanitation Infrastructure Output 1.1 New water points constructed/rehabilitated Output 1.2 Institutional Toilets Output 1.3 Water M&E Infrastructure. Output 1.4 Appropriate water supply and sanitation technologies for Riverine areas constructed.	1.1.1 # of hand-dug wells & spring box 1.1.2 # of boreholes 1.1.3 # of GFS taps provided 1.1.4 # of solar power pumped schemes taps provided 1.1.5 # rainwater harvesting systems constructed 1.2.1 # of Toilet Stances Constructed in Schools & PHUs 1.2.2 # of ODF Communities 1.3.1 # of Stream flow gauges & GW Monitoring stations installed 1.3.2 # of Rainfall gauges installed 1.4.1 # of Toilets & Water Points	1.1.1 3300 1.1.2 283 1.1.3 580 1.1.4 23 1.1.5 25 1.2.1 1713 1.2.2 N/A (households) 1.3.1 Nil 1.3.2 Nil 1.4.1 Nil	By 2017 or indicated otherwise 1.1.1 3880 (580 New) 1.1.2 367 (84 New) 1.1.3 740 (160 New) 1.1.4 275 (252 New) 1.1.5 50 (25 New) 1.2.1 2,382 of which 47% girl/women stances 1.2.2 840 1.3.1 Maps available by Dec 2013 1.3.1 20 1.3.2 200 1.4.1 30 EcoSun Toilets & 30 safe water points	Supervision reports Annual and quarterly Project Progress Reports Water Point Atlas updates Annual Technical Audits	Mitigation: Project will facilitate coordination at local levels; in addition to coordination support provided under World Bank financed DSDP II.

KEY ACTIVITIES	COMPONENTS		INPUTS	
	OUTPUTS	OUTPUTS	OUTPUTS	OUTPUTS
Component 2: National RWSS Program Development Output 2.1: Framework for Improved and Coordinated Subsector Management developed Output 2.2: Resources for RWSS Investments mobilized Component 3: Capacity building Output 3.1: WASH Sector Professionals Trained Output 3.2: Beneficiaries Trained, including CC Adaptation training Output 3.3: Tools for Improved Functionality of Water Points Output 3.4: Sector Coordination Meetings held Output 3.5: Knowledge products for subsector Component 4: Project Management Output 4.1 Effective and efficient planning and implementation of project activities	2.1 Validated RWSS Program 2.2 Resource Mobilisation Workshop 3.1.1 # Local Council WASH staff attended short-term courses 3.1.2 # of MWR Staff attended short and long-term training 3.2.1 # Community Trainers trained 3.2.2 # Study Tours for Community Leaders and Change Agents conducted 3.2.3 # WASH Committees established and trained 3.2.4 # of Community Artisans trained 3.2.5 # CLTS Triggered Communities 3.3.1 Groundwater map 3.3.2 Field & Office equipment 3.4.1 SPCT Meetings 3.5.1 M&E, O&M and CLTS manuals; 4.1.1 Project completed on time & within budget/disbursement schedule. 4.1.2 Timely submission of acceptable Reports to the Bank (AWPB, QPR, Annual Audit) 4.1.3 Timely convening of PSC meetings	None N/A	2.1 Validated document distributed to stakeholders by September 2015 2.2 Workshop convened by December 2015 By 2018 or indicated otherwise 3.1.1 22 at least 40% women 3.1.2 33 at least 40% women 3.2.1 100 Trainers at least 40% women 3.2.2 20 Study tours 3.2.3 1000 Committees; at least 40% headed by women 3.2.4 165 (50% youth) 3.2.5 1000 Communities 3.3.1 GW Map by June 2015 3.3.2 6 Vehicles; 2 Boats; 8M/cycles; 29 Computers, 6 Printers; 6 Copiers; 3 Terrameters by 2013 3.4.1 One meeting every quarter 3.5.1 Seven (7) Manuals /Guidelines including on cost recovery 4.1.1 100 % of all planned targets timely achieved by 2018 4.1.2 AWPB by 30 November; QPR within 15 days of end of quarter; Annual Audit Reports by 30 June 4.1.3 Within 10 days of the end of the quarter	2.1 Validation workshop proceedings 2.2 Resource Mobilisation proceedings Quarterly and Annual Progress and M&E Reports Annual technical audits Annual Technical and Financial Audits Project Progress Reports Supervision Reports
Component 1 : Water Supply and Sanitation Infrastructure Component 2 : National Rural Water Supply and Sanitation Program Development Component 3 : Capacity Building Component 4 : Project Management		Total : UA 28,845million		

Project Timeline



REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARDS OF DIRECTORS ON THE PROPOSED LOAN AND GRANTS TO SIERRA LEONE FOR THE RURAL WATER SUPPLY AND SANITATION PROJECT

Management submits the following Report and Recommendation on a proposed ADF Loan of UA 9.065 million, ADF Grant of UA 2.854 million, RWSSI-TF Grant of EUR 5.3 million, FSF Grant of UA 8.468 million including DFID earmarked contribution of GBP 5.70 million, in addition to GEF co-financing of USD 4.00 million for Sierra Leone Rural Water Supply and Sanitation Project.

I – STRATEGIC THRUST & RATIONALE

1.1. Project linkages with country strategy and objectives

1.1.1 The proposed Rural Water Supply and Sanitation Project (RWSSP) is aligned with the country's PRSP III 2013-2017, Agenda for Prosperity (A4P). The A4P builds on the foundation established by the Agenda for Change 2008-2012, with a vision of attaining middle income status in 25 years through inclusive green growth. The A4P has eight reinforcing pillars namely i) Economic Diversification; ii) Managing Natural Resources; iii) Promoting Human Development; iv) Promoting International Competitiveness v) Employment and Labour; vi) Social Protection; vii) Governance and Public Sector Capacity; and viii) Gender and Women's Empowerment. The human development pillar, which focuses on addressing challenges in the water and sanitation sector, education sector and promoting healthcare, provides a perfect framework for developing and implementing the proposed Rural Water Supply and Sanitation project. The project seeks to support accelerating the achievements of the Millennium Development Goals (MDGs), especially those targets related to access to rural water and sanitation in line with the National Water Policy (2010)..

1.1.2 The project is in line with the Bank's Ten Year Strategy (TYS) on the basis of its focus on rural areas as a factor of inclusion, addressing climate change issues, rural private sector development and improving water sector governance. It supports the objectives of Fragile States Facility, as well as the RWSSI-SP which aims to accelerate access to safe drinking water supply and sanitation in rural Africa in a sustainable way, with the overall goal of achieving full water supply and sanitation coverage by 2025, besides the immediate objective of meeting the MDG targets in Regional Member Countries, especially in fragile states. It is also in line with Bank's IWRM policy and Climate Risk Management & Adaptation Strategy. The project is consistent with the ADF-13 operational priorities as articulated in the new CSP 2013-2017 especially under Pillar two that supports the Government's infrastructure development agenda for inclusive green growth, with increased household access to safe drinking water and sanitation as one of the key objectives.

1.2. Rationale for Bank's involvement

1.2.1 Water and sanitation coverage in Sierra Leone is estimated at 57% and 13% respectively (*JMP 2013*) of the 5.9 million inhabitants. Sierra Leone is not on track for achieving the water and sanitation MDG, but it is among the eight sub-Saharan African countries which performed above the regional average of 26% in terms of the population that gained access to safe water during the last 15 years. Rural water supply coverage currently stands at 40% against the National target of 74%, while rural sanitation coverage is at 6% against the National target of 66%. The national water point mapping done in June 2012 established 62% functionality of water point and confirmed the case for additional water

points (Annex A2). With regard to sanitation, 39% of the rural population practice open defecation. The financing gap for rural water supply and sanitation is estimated at USD 44 million per annum (*AMCOW Country Status Overview (CSO2)*). Infant mortality in Sierra Leone is largely attributed to the low water and sanitation coverage. The current effort which is mainly supported by DFID, EU and World Bank will yield good results but their geographical coverage is limited, and the investments are short of the requirement to enable the country attain the MDG targets. Reducing the large disparity between rural and urban water supply coverage is also critical.

1.2.2 The major constraints in the rural water and sanitation sub-sector include: (i) lack of a comprehensive strategy and investment plan; (ii) limited capacity of institutions at national and local levels; (iii) weak coordination among both Government agencies and Development Partners; (iv) absence of an effective sector monitoring and evaluation system, coupled with a decimated water resources monitoring network and lack of basic scientific information and operational guidelines, coupled with lack of ownership which constrains sustainability of constructed facilities; and (vi) Cholera outbreaks are not un-common, especially in riverine areas, where the traditional water point and household sanitation technologies are inapplicable. The project design addresses these constraints by providing for training at all levels, including community capacity building, supporting program development and sector coordination and monitoring and promoting appropriate technologies for difficult areas as well as development of tools and climate change adaptation interventions to engender sustainability.

1.3. Donors coordination

Players - Public Annual Expenditure (average 2006 - 2009) ³				
	Government	Donors		
USD million	1,032,000	9,422,000	<i>AfDB</i>	1.4%
			<i>DFID</i>	43.9%
%	18.7%	81.3%	<i>UNICEF</i>	17.3%
			<i>World Bank</i>	15.2%
			<i>EU</i>	8.4%
			<i>JICA</i>	3.8%
Level of Donor Coordination				
Existence of Thematic Working Groups			Yes	
Existence of SWAPs or Integrated Sector Approaches			No	
ADB's Involvement in donors coordination			Member	

1.3.1 Development Partners' coordination mechanism for the water sector (Water Sector Development Partners Group – WSDPG) was recently formalised following the endorsement of the Terms of Reference by all sector development partners in May 2012. The main objectives of the WSDPG are to generate and maintain continuous dialogue, review sector performance and improve harmonisation and alignment of GoSL and Development Partners procedures. Donor coordination will be supported through strengthening Bank's local presence in the sector by posting international staff to the Field Office. In addition, the project will provide TA support to strengthen Government's sector coordination, strategic planning and development activities. On-going donor interventions are detailed in Appendix III. The interventions are concentrated outside the proposed project target area.

³ Sierra Leone Public Expenditure Review for Water and Sanitation 2002 to 2009, WB Water Partnership Program.

II – PROJECT DESCRIPTION

2.1. Project Objective

2.1.1 The overall goal of the project is to contribute to the Sierra Leone's Poverty Reduction Strategy (PRS) - Agenda for Prosperity and achievement of the water supply, sanitation and hygiene targets set out in the Millennium Development Goals (MDGs). Its specific objective is to: (i) increase sustainable access to safe water and basic sanitation in rural areas, and (ii) develop a comprehensive national framework for rural water supply and sanitation investments. The project will benefit an estimated 625,000 rural Sierra Leoneans, and result in nine percentage points increase in safe water coverage, including restored access, and at least six percentage points increase in improved sanitation coverage, besides a better managed sector and improved knowledge, attitudes & practices of the primary beneficiaries.

2.2. Project components

2.2.1 The proposed Project comprises four components described in Table 2.1.

Table 2.1
Project components

Nr.	Component name	Est. Cost (millionUA)	Component Description
A	Water Supply and Sanitation Infrastructure	ADF(L): 6.199 ADF(G): 1.116 FSF: 5.361 RWSSI-TF:1.346 GEF: 2.012	The objective of this component is to provide water supply and sanitation infrastructure. The following will be financed: <ul style="list-style-type: none">• Rehabilitation of 1443 old water points & construction of 576 hand-dug wells and spring boxes, 84 boreholes, 25 rainwater harvesting systems; and at least 160 GFS taps, and 250 solar power pumped standpipes.• 390 sanitation facilities, including EcoSan toilets in public institutions;• Climate risk management infrastructure, including 100 rain-gauging stations and 20 surface and groundwater monitoring stations
B	National Program Development	RWSSI-TF: 0.540	The objective of this component is to develop a comprehensive framework to facilitate effective sector management and resource mobilisation. The following will be undertaken: <ul style="list-style-type: none">• National Rural Water Supply and Sanitation Program development Resource Mobilisation Conference.

Nr.	Component name	Est. cost (millionUA)	Component Description
C	Capacity Building	ADF(L): 2.866 ADF(G): 0.487 RWSSI-TF:2.280 FSF: 2.472 GEF: 0.636 GoSL: 0.053	<p>In line with the RWSSI Strategic Plan, in particular the recommendation to focus on fragile and post conflict states to ensure adequate capacity development for sustainable transitioning from emergency to development, this component includes a broad set of capacity development activities that, when considered collectively, will provide for durability and continued use of the infrastructure put in place by the project and thereafter, thus:</p> <ul style="list-style-type: none"> • Training of 30 professionals, including WASH, water resources management and climate change; • Training of 165 small scale service providers, including pump mechanics and other artisans for infrastructure construction & maintenance; • Strengthening of CBOs, including Training and supporting 40 Community leaders & 100 Sanitation and Hygiene Education Trainers • CLTS triggering & monitoring, WASH and Climate Change Adaptation education and sensitization at community level, including schools, and the setting-up and training of over 1000 care-taker Committees • Sanitation marketing; • Case studies, including technical and value for money audits • Ground water mapping and monitoring, and development of guidelines for construction of water and sanitation facilities; • Support to WASH stakeholder coordination and provision of field and office equipment and tools; • Implementation support and on-the-job training through Technical assistance for District Councils, WD, SALWACO and LGFD. • Sector coordination and development support, including Annual Sector Reviews (ASRs)
D	Project Management	ADF(G): 1.251 RWSSI-TF:0.441 FSF: 0.634 GoSL: 1.131	<ul style="list-style-type: none"> • Overall project coordination and administration; • Technical Oversight and quality assurance; • Supervision of service providers, Monitoring & Evaluation and Reporting, including Environmental and Water Quality Monitoring. • Office supplies and logistical support for all implementing agencies.

2.3. Technical solution retained and other alternatives explored

2.3.1 The provision of simple rural water supply and sanitation facilities is not feasible in some parts of the country because of the unfavourable geotechnical conditions. Therefore, a menu of technical options will be promoted including renewable energy (solar/wind) and GFS among other low maintenance solutions. Sanitation improvement will be through Community Led Total Sanitation (CLTS), Sanitation Marketing (SM) and Hand Washing (HW), complemented by provision of public sanitation facilities in markets, schools and public health units. The technology choices are therefore based on the different conditions that pertain to the different locations within the project area. The following alternatives were considered and rejected.

Alternative name	Brief description	Reasons for rejection
Surface water sources	Abstraction, treatment and piped distribution of water from rivers and/or dams	<ul style="list-style-type: none"> • Not financially viable due to high cost of O&M inputs for typically small communities in rural areas • The relatively higher level of skills required for superintendence are not available in rural areas.
Pour flush excreta disposal facilities	Water is poured down a sit or squat type excreta receptacle and the excreta is washed after each use, and retained, into a constructed underground tank. The tank is occasionally emptied and faecal sludge transported for treatment and disposal at a gazetted location.	<ul style="list-style-type: none"> • Technology not sustainable in rural areas: • Septic tank emptying services are not available in rural areas; if provided by the project, the O&M costs will be out of reach of the rural schools and public facilities. • Environmental management challenges posed by faecal sludge disposal sites are beyond the rural communities' capacity at this stage.
Excreta disposal facilities at house-hold level	Construction of toilets for private house-holds	<ul style="list-style-type: none"> • Merely providing toilets does not guarantee their use or result in improved sanitation and hygiene.

2.4. Project type

2.4.1 Investment project is preferred because of complete absence a SWAp framework. The project will facilitate development of a SWAp. Basket funding could also not be considered in the current circumstances of very weak donor coordination. The project design provides for strengthening of coordination among development partners.

2.5. Project cost and financing arrangements

2.5.1 The total cost of the project, including physical and price contingencies, is estimated at UA 28.845 million. The foreign exchange portion is estimated at UA 18.144 million representing 63% of the total project cost. The local cost portion excluding taxes is UA 10.701 million. A summary of costs by component is provided in Table 2.3 below. All project costs are estimated on the basis of the prevailing prices for goods, works and services in Sierra Leone in July 2012 and updated in November 2012. The price contingency of 14% is a result of the compounded foreign and local inflation rates over the project period⁴.

2.5.2 The Project will be financed by the Bank Group, United Kingdom Department for International Development (DFID-UK), Global Environment Facility (GEF) and the Government of Sierra Leone. Co-financing from DFID-UK will be GBP 5.70 million (Approx. UA 5.758 million) to be channelled and disbursed as FSF resources, while co-financing from GEF will be USD 4.0 million (Approx. UA 2.667). Bank Group financing comprises ADF Loan of 9.065, ADF Grant of UA 2.854 million, FSF Grant of 2.71 Million and RWSSI-TF Grant of EUR 5.3 million (Approx. UA 4.607 million). The Bank Group, DFID and GEF resources will finance 100% of the foreign exchange costs and 99% of local costs. The Bank, including DFID FSF earmarked resources will finance 88% of the infrastructure rehabilitation and development costs, 100% of the program development activities, 92% of capacity development costs and 67% of the project management costs, with the FSF Pillar I funds exclusively used for financing infrastructure rehabilitation. GEF will finance climate change adaptation interventions, including infrastructure development and capacity building. Government's contribution will cover salaries and a portion of the cost of office supplies and operation of vehicles. The project financing plan, expenditure categories and expenditure schedule are shown in Tables 2.3, 2.4, 2.5 and 2.6.

⁴ (i) African Economic Outlook 2012; (ii) Ministry of Finance and Economic Development

Table 2.3
Project cost estimates by component

Component \ Amount	Sierra Leonean Leone (SLL) million			Unit of Account (UAC) '000			% Foreign Exch.	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
A. Water and Sanitation Infrastructure								
1. Sanitation Facilities	3,359	12,103	15,462	518	1,867	2,385	78	10
2. Water Supply Facilities – Rehabilitation	3,252	11,717	14,969	502	1,808	2,309	78	9
3. Water Supply Facilities - New Construction	11,806	47,867	59,673	1,821	7,385	9,206	80	38
Subtotal - Water and Sanitation Infrastructure	18,417	71,688	90,104	2,841	11,059	13,901	80	57
B. National Program Development	863	2,344	3,197	133	360	493	73	2
C. Capacity Building	16,796	31,728	48,524	2,591	4,895	7,486	65	31
D. Project Management	14,361	2,824	17,185	2,216	436	2,651	16	11
Total BASELINE COSTS	50,437	108,573	159,010	7,781	16,750	24,531	68	100
Physical Contingencies	1,451	3,627	5,078	224	560	783	71	3
Price Contingencies	17,478	5,409	22,888	2,696	835	3,531	24	14
Total PROJECT COSTS	69,367	117,610	186,976	10,701	18,144	28,845	63	118

Note: Exchange rates are provided in the introduction of this report (page i)

Table 2.4
Sources of financing [amounts in thousands UA equivalents]

Component Source of Financing	A. Water and Sanitation Infrastructure				B. National Program Development	C. Capacity Building	D. Project Management	Total Project Costs	% Total Project Costs
	Sanitation Facilities	Water Supply Facilities		Subtotal					
		Rehabilitation	New Construction						
(ADF) Loan	1,009	-	5,190	6,199	-	2,866	-	9,065	31.5
(ADF) Grant	-	-	1,116	1,116	-	487	1,251	2,854	10
FSF Grant	663	2,602	2,095	5,361	-	2,472	634	8,468	29.5
RWSSI-TF Grant	1,087	-	259	1,346	540	2,280	441	4,607	16
GEF Grant	-	-	2,012	2,012	-	636	20	2,667	9
GoSL	0	-	0	0	0	53	1,131	1,184	4
Total	2,759	2,602	10,672	16,034	540	8,795	3,477	28,845	100

Table 2.5
Project cost by category of expenditure [amounts in thousands UA equivalents]

Category \ Source	A. Works	B. Goods	C. Services	D. Operating Costs	Total PROJECT COSTS
ADF Loan	5,321	456	3,288	-	9,065
ADF Grant	1,116	20	640	1,078	2,854
FSF Grant	5,361	30	2,814	263	8,468
RWSSI-TF Grant	1,087	20	3,154	346	4,607
GEF Grant	1,627	120	901	20	2,667
GoSL	0	-	-	1,184	1,184
Total	14,512	646	10,796	2,891	28,845

Table 2.6
Expenditure schedule by component [amounts in thousands UA equivalents]

Component	2014	2015	2016	2017	2018	Total
A. Water and Sanitation Infrastructure	88	2,932	6,692	4,188	-	13,901
B. National Program Development	99	197	197	-	-	493
C. Capacity Building	1,103	2,633	2,257	1,473	20	7,486
D. Project Management	324	558	621	590	559	2,651
Total BASELINE COSTS	1,614	6,320	9,767	6,252	578	24,531
Physical Contingencies	15	175	361	223	9	783
Price Contingencies	78	603	1,401	1,213	236	3,531
Total PROJECT COSTS	1,707	7,098	11,528	7,689	823	28,845

2.6. Project's target area and population

2.6.1 The project area is comprised of five (5) districts (Appendix V) located in three regions - Northern, Eastern and Southern. The total rural population of the project area is estimated at 1,340,000 people and expected to grow to 1,550,000 people by the end of the project in 2018⁵. Water supply coverage varies widely among the five districts with the lowest estimated at 27% and highest at 55.7% compared to the national average of 57%. Improved sanitation coverage is extremely low varying between 2.9% and 12.9% at district level, with four of the five districts below 5.7%, compared to the national average of 12.8%⁶. Selection of the project area was further refined based on the National Water Point Atlas which was prepared in May 2012. The five districts emerged as relatively much worse off in terms of the average number of users per water point, infant mortality and incidence of water borne diseases (Technical Annex B2).

2.6.2 Given the low water point functionality rate due to post war emergency interventions which did not prepare the communities for their operation and maintenance responsibilities, besides lack of standards and poor construction quality, the project will prioritise rehabilitation of existing infrastructure. The project will henceforth restore safe water access to 360,000 people and enable an additional 265,000 people to gain access to safe water and improved sanitation. Their WASH knowledge, attitudes and practices will be improved, in addition to increased awareness of climate change effects to safe water and sanitation, and improvement of their adaptation capacity. Development Partners coordination will also be improved resulting in more efficient and equitable utilisation of available resources. The regionally balanced selection of target districts is also intended to enhance good governance and peace.

2.7. Participatory process for project identification, design and implementation

2.7.1 Bank's Identification, Preparation and Appraisal missions consulted widely with the stakeholders, at national and local levels, including representatives from water, health, education, social welfare and local government agencies, as well as NGOs, Civil Society and beneficiary community as well as the private sector. Development Partners who are active in the water sector were also consulted, resulting in the co-financing from DFID and GEF-LDCF. The major issues raised during the consultations included the need for effective coordination among sector stakeholders, including Development Partners; the need for training of water source caretakers and user communities; the need to strengthen sector monitoring at national and local levels; and marginalization of riverine and coastal areas where vehicular access is very limited, if not impossible, and traditional water supply and

⁵ Statistics Sierra Leone

⁶ Sierra Leone Multiple Indicator Cluster Survey 4 Final Report, December 2011

sanitation technologies are inappropriate. The PRSP II articulation of higher levels of technology in rural areas through promoting power pumped systems and pipe borne water, as opposed to hand-pumped point water sources, was also heavily emphasized. These outcomes have been taken into account in the choice of the project area, selection of interventions as well as choice of technologies, and the design of procurement, implementation and monitoring arrangements as reflected in the respective sections of the PAR.

2.8. Bank Group experience, lessons reflected in project design

2.8.1 Bank Group's portfolio for Sierra Leone consists of 10 ongoing operations at different stages of implementation, with a total commitment of UA 116.11 million (Appendix II). Overall portfolio performance is satisfactory with rating of 2.4 and 12.5% PAR. This is a significant improvement over the 50% PAR rate reported under the 2011 CPPR. Sierra Leone has no backlog of Project Completion Reports (PCR). The overall rating for the completed operations is 3. The key lessons learned (Technical Annex) led to following aspects of project design: (i) Implementation responsibility is mainstreamed within established national and local institutions to facilitate enhancement of their capacity, because use of PIUs does not offer opportunity for sustainable capacity building of the national institutions, which is very much needed to effectively emerge from a fragility; (ii) Provision is made for additional technical assistance to the executing agency to secure smooth implementation of the RWSSP, besides overcoming the institutional capacity related challenges exacerbated by the increased workload due to a recent increase in Government spending in the sector and additional projects financed by JICA, India Exim Bank, BADEA and IsDB, which have led to a slow pace of the on-going Bank financed TTWSSP; (iii) The concept of quarterly performance bonuses instead of regular monthly allowances for EA counterpart staff is introduced as an incentive for timely implementation; (iv) Bank's strengthened field presence is enabling support to further enhance implementation readiness and reduce persistent delays in commencement of physical implementation; and (v) Effectiveness and disbursement conditions were identified during preparation and due redress followed up during appraisal and the period leading to negotiations – satisfaction of conditions precedent to disbursement will not be a protracted burden.

2.8.2 Recent analytical work and technical studies carried out by other partners⁷ largely formed the basis for the capacity building activities and choice of project area, approaches and technologies. Emphasis is placed on increasing the level of functionality from the current 60-68% to at least 75% in the project area through facilitating professional siting of water sources taking into account potential climate change effects, standardising hand pumps and application of acceptable standards of materials and workmanship, besides following through user community capacity building to ensure user ownership and due maintenance. CSOs and natural community leaders will be supported beyond the training to ensure accountability. Annual technical/value for money audits have been provided to ensure vigilance on quality of infrastructure. Sanitation and hygiene education also ensures maximum benefit from the improved water sources which in turn contributes to sustainability of the infrastructure.

⁷ (i) Evaluation of Shock Chlorination and Water Quality Assessment in Cholera Hot Spots, May 2010; (ii) Hand Pumps Spare Parts Supply Chain Study, April 2011; (iv) An evaluation of the CLTS Program in Sierra Leone, May 2011; (iii) Sierra Leone Water Point Report and Atlas, June 2012, <http://www.sl-wash.org/>

2.9. Key performance indicators

2.9.1 The key indicators for monitoring progress towards the main outcomes of the project during implementation include: (i) the number of water points and water quality at each point; (ii) Number of toilet stances constructed for girls relative to the total number constructed in schools; (iii) proportion of school children and households practising hand washing with soap; (iv) number of communities which have attained Open Defecation Free (ODF) status; (v) number of trained sector staff, including proportion of females, who are active in their posts; (vi) proportion of active WASH Committees headed by women; (vii) availability of manuals for construction and maintenance; (viii) number of youth engaged in the provision of goods and services to the project; and (ix) convening of the Resource Mobilisation conference.

2.9.2 The indicators will be contained in the Implementation Progress Results Reports (IPRR) to be prepared by Bank's supervision missions every six months, as well as MTR and PCR Provision is made for Statistics Sierra Leone to establish the baseline for the outcome monitoring indicators and to carry out outcome assessments once every year, besides technical audits which will be carried out by audit firms. The reports shall be duly disseminated to all stakeholders for their appropriate action, where required. The Annual Sector Review (ASR) will be another important forum for jointly reviewing progress and following-up implementation of recommendations.

III – PROJECT FEASIBILITY

3.1. Economic performance

Table C.1: Key Economic Figures

EIRR 25%	NPV US\$ 9.1 million
NB: detailed calculations are available in Annex B7	

3.1.1 The project is economically viable as shown by the above indicators. The assumptions that serve as the basis for calculations of the EIRR are provided in Annex B7. The main assumption is based on the investment, operations & maintenance and re-investment cost during the life of project. The economic returns of the project consist of health benefits resulting from a decline in water-borne diseases, time savings and increase in productivity, in addition to a general improvement in health conditions. The project is also expected to generate additional, non-quantified environmental and social benefits such as increased school girls' enrolment.

3.1.2 Most of the project facilities would have almost reached the end of their economic live, such that the salvage values would be negligible and would not make an impact on the evaluation of the project EIRR. Hence, and as a conservative measure for the computation of the EIRR, no residual value has been considered at the end of the project's life span. Sensitivity analysis has been carried out and examined against different risks associated with the project. A combination of two adverse effects (i) cost overrun of 15% and, (ii) reduced realization of project benefits for 15%, will cause EIRR to decline to 19% which indicates that, even with critical risks associated, the project remains economically viable.

3.2 *Environmental and Social Impacts*

Environment

3.2.1 Overall, the project is environmentally beneficial. An initial environmental evaluation found that the sub-project components involve simple, appropriate, low cost technologies that do not pose any significant environmental consequences. The project has been classified as Category 2. The provision of safe drinking water and proper sanitation facilities is expected to have a significant positive impact on the improvement of livelihoods and the environment, including reduction in groundwater pollution. Some minor and temporary negative environmental impacts may occur, resulting mainly from the construction activities. The key positive impact will be better and properly sited sanitation facilities will reduce the risk of contamination of surface and groundwater resources. The negative impacts, mitigation measures and timetable for their implementation at a total cost of UA 573,000 as well as responsibilities are elaborated in Technical Annexes B8 and C6. They include (i) risk of industrial accidents during construction (ii) management and disposal of construction waste (iii) increased risk of HIV/AIDs and STDs due to interactions of contractor staff and the local population. In accordance with the recommendations of the ESMP, implementation of the environmental and social mitigation measures will be undertaken as an integral part of the community empowerment and infrastructure construction activities. The TOR and specifications for undertaking community empowerment and construction activities shall cover all the mitigation measures, the cost of which shall be subsequently included in the relevant services and civil works contracts which are indicated in the procurement plan. In addition, resources are provided for the EPA to monitor implementation of the ESMP through the Environmental Officers located at district level.

Social

3.2.2 The impact of the project is expected to be positive in various respects leading to an improved quality of life, accruing from : (i) improved quantity and quality of safe drinking water (ii) reduction in water related diseases such as diarrhoea, dysentery, cholera, typhoid and thereby minimizing the cost of healthcare to households (iii) reduction in infant, child and maternal mortality and morbidity due to improved sanitation services (iv) reduced distances to water points which will lead to gain in productive time for women and girls, and (v) the formation of over 1000 WASH committees, 40% headed by women, will empower vulnerable and disenfranchised communities. Youth will be especially targeted for training in the operation & maintenance of the water supply and sanitation facilities with mandatory representation on the WASH committees. Poor women-headed households, the elderly and disabled people shall also be duly represented in WASH committees and have equal access to potable water. Access to potable water and increased sanitation awareness among the rural population and children will improve health and sanitation. Improved health conditions will contribute to reduction of the child mortality rate and incidence of waterborne and skin diseases. The number of hours spent on collecting water will be reduced significantly by the establishment of water points and public water standpipes closer to public institutions and homesteads. This will allow women to spend time in productive activities and family welfare. Children, especially girls, will have more time for school work and welfare activities. The interaction between the community members in the committees and trainings will help to enhance community social cohesion and reduce the incidence and levels of conflict and violence in the communities. The regionally balanced selection of project target districts is also intended to enhance good governance and peace.

Gender

3.2.3 In most rural communities, women carry the burden of providing water for the household. Improving water supply and sanitation will improve women's living conditions by giving them more time for productive endeavours, adult education, empowerment activities and leisure. It will also improve their security and safety and reduce the risk of harassment. Female representation on user committees will strengthen the role of women in society and will have far-reaching socio-cultural impacts. The improved socio-cultural position of women has the potential to provide them with privacy and dignity as well as increased status within the family and wider community. The project's gender mainstreaming strategy will undertake to promote equal participation of women and men at all stages of planning, decision-making, and management of project activities. At least 40 % of the water sector professionals to be trained shall be women. It is also anticipated that 40% of the WASH Committee executives shall be women. The WASH Committee training will enhance women's capacity to participate in all project activities. Women will be specifically consulted in the identification and selection of location of the facilities in order to ensure their safety and security when collecting water or using sanitation facilities. The proportion of girl/women stances to the total number of stances in school sanitation facilities will be at least 47%.

Disabled

3.2.4 Disability/vulnerability issues will be incorporated at all stages of the project implementation. Baseline data will be collected about disabled people and their needs and the development of appropriate and accessible facilities for the disabled will be based on clearer understanding of their problems and what already works for them. The benefits of the project to disabled people will be closely monitored and specific opportunities will be provided for disabled people to participate in project implementation.

Youth Participation

3.2.5 The youths will be engaged in the production of low cost raw materials for construction of water and sanitation facilities. The result of this is, besides bringing economic development to the local community, a substantial reduction in costs of constructing the facilities. A total of 165 small scale services providers including pump mechanics and other artisans consisting mainly of youths will be trained in the construction and maintenance of the facilities to ensure sustainability, and also empower them by enhancing their income earning capacities. The youths will also comprise 50% of the 100 Hygiene Education Trainers that will be trained under the project. Community youths will also be engaged in activities, such as district-wide radio production and broadcasting, rural community theatre and school-based campaigns focusing on safe water, sanitation and hygiene education in the bid to promote youth activism for change in the hygiene and sanitation status of communities. School Sanitation and Hygiene Education (SSHE) will help to improve learning and increase school attendance, particularly of young girls.

3.3 Climate Change Adaptation

3.3.1 Climate change adaptation measures are embedded in the project design. The project will facilitate the implementation of related aspects of the National Adaptation Program of Action (NAPA) priority list for the water and sanitation sub-sector. In this regard, the project will finance the following: (i) improvement in water research and monitoring through the development of the country's hydrogeological map, and establishment of 100 rainfall stations and 20 stream flow gauges and groundwater monitoring stations to enable collection of water resources data and information that will be used in responding to climate change

effects through early warning to water users in (20) selected catchments which contribute to the water resources potential of the project area. The early warnings are a critical input in the assessment of the risk and measures to prevent outbreak of extreme climate related diseases such as cholera and typhoid due to shortage and/or pollution of water resources. (ii) promotion of rainwater harvesting through construction of 25 rainwater harvesting schemes for schools and administrative centres; (iii) promotion of alternative energy sources such as bio-gas plants in institutions and solar powered pumping systems for the water supply schemes (iv) promotion of appropriate and safer water supply and sanitation technologies for coastal and riverine environments due to the vulnerability to extreme climate impacts. The technologies will include 30 EcoSan toilets and 20 deep wells instead of pit latrines or pour flush toilets and shallow wells.

IV – IMPLEMENTATION

4.1. Implementation arrangements

4.1.1 Sierra Leone Water Company (SALWACO) will be the Executing Agency. The Water Directorate (WD) will be responsible for external monitoring including re-establishment of water monitoring infrastructure while the Local Government Finance Department (LGFD) will provide fiscal oversight. The WD Monitoring Unit including its 21 Monitoring Officers located at district level is being strengthened with support from WSP. The project will complement WSP's support with technical assistance and logistical support to ensure effective operation of the Monitoring Unit. Field activities will be carried out by the District Councils, under the technical oversight and quality assurance of SALWACO, WD and LGFD as well as the ministries of Education and Health & Sanitation, in line with their core mandates as central government agencies. The District Councils (DCs) will be primarily responsible for planning, procurement and supervision of local service providers, as well as local level monitoring and reporting, in which the user community and CSOs will duly participate. The implementation organisation structure and specific responsibilities of the various stakeholders are included in Technical Annex B3.

4.1.2 In order to ensure effective coordination, a Project Coordination Committee (PCC) will be established at national level. The PCC will be constituted by 6 permanent representatives from SALWACO (1 member), WD (2 members), LGFD (1 member), Education (1 member), and Health and Sanitation (1 member). The PCC will be chaired by SALWACO who will also be the committee's secretariat.

4.1.3 Policy oversight will be provided by the existing Sector Policy Coordination Team (SPCT), an inter-ministerial committee which is part of the sector management structure provided by the Water and Sanitation Policy (2010). The SPCT will also lead organisation of the Annual Sector Reviews (ASRs). The current membership of the SPCT is drawn from seven (7) stakeholder agencies, namely: (i) Ministry of Water Resources (Chair), (ii) Ministry of Finance and Economic Development, (iii) Ministry of Health and Sanitation, (iv) Ministry of Education, (v) Ministry of Local Government and Rural Development, (vi) Private Sector and (vii) WaSH-Net Sierra Leone. For purposes of RWSSP oversight, the SPCT will co-opt representatives from (viii) Ministry of Social Welfare Gender and Children Affairs, (ix) Ministry of Lands Planning and Environment, and (x) Meteorological Department. The committee will convene on a quarterly basis and extraordinary meetings can be held to resolve urgent project related policy issues. The committee shall be the forum of approval of Annual Work Plans and Budgets and Quarterly Progress and other project reports.

4.1.4 The project will provide for Technical Assistance (TA) to all key agencies (i.e. SALWACO, WD, LGFD and DCs) involved in the implementation of the project to enable them to effectively and efficiently execute their project implementation responsibilities while building their capacity through coaching and mentoring. TA will be mapped as follows: SALWACO and LGFD five (5) TAs including Advisor/Team Leader, two Water and Sanitation Engineers, Hydro-geologist and Financial Management Specialist; WD – Water Resources Engineer and Monitoring and Evaluation Specialist; and TA to DCs to be administered by SALWACO two Accountants, Procurement Specialist, Community Development and Gender Specialist, Climate Change Adaptation Specialist, and Environmental Sanitation and Hygiene Specialist. The TAs will have local counterparts in the respective establishments. TAs will be required for periods ranging between one year and three years and are subject to bi-annual renewal of their contracts based on their performance and proven need. SALWACO will be responsible for administering the TA contract.

4.1.5 **Procurement:** The procurement of goods and works and acquisition of consulting services financed by the Bank, DFID and GEF under this project will be carried out in accordance with the Bank's Rules and Procedures for Procurement of Goods and Works (May 2008 Edition, Revised July 2012) or, as appropriate, Rules and Procedures for the Use of Consultants (May 2008 Edition, Revised July 2012), using the relevant Bank Standard Bidding Documents. The Sierra Leone Water Company (SALWACO) will carry out the procurement of Goods and Services whilst Local Councils will carry out procurement of Civil Works, excluding gravity flow schemes and borehole drilling. The resources, capacity, expertise and experience of SALWACO and Local Councils are described in Technical Annex B5, in addition to the detailed Procurement Arrangements and Procurement Plan. SALWACO will provide technical support and quality assurance during preparation of bidding documents, evaluation of bids and preparation of bid evaluation reports, preparation and award of contracts, besides communicating with the Bank in terms of seeking clearance for procurement requests. Procurement training will be conducted during project launching mission and both SALWACO and the District Councils supported with technical assistance to enable effective and efficient execution of the procurement activities.

4.1.6 **Financial Management:** The Implementing Agency is required to use an acceptable accounting system. To simplify its project management function, SALWACO will prepare a Project Accounting Manual to be used for all the projects that it manages. As per normal, the manual will define in detail the responsibilities of each key member of staff working on the projects. Other procedures will follow SALWACO's established rules and regulations. Given the fragility status in general and capacity constraints of SALWACO in particular, provision has been made for the necessary technical assistance and support, including a qualified Financial Management Specialist to be stationed at SALWACO.

4.1.7 The Financial Management (FM) capacity assessment of SALWACO concluded that the residual FM risk is moderate, and that subject to meeting the FM Actions listed in the FM Action Plan (Technical Annex B4), there is sufficient capacity to meet the accounting and reporting requirements of the proposed RWSS Project.

4.1.8 **Disbursement:** Three Disbursement Methods will be used by the proposed project namely: (i) Direct payment method. This will be used for the payment for the larger contracts; (ii) Reimbursement method. This will be applied with regards to eligible expenses in the cases where the recipient has pre-financed eligible contracts using own resources; and (iii) Special Account method (SA) will be used for recurrent costs and small contracts. The Special Accounts will be opened in an acceptable commercial bank and managed by SALWACO, which is currently managing the SA of the TTWSSP. Since the project has several funding sources, segregated USD Special Accounts will be opened for each funding

source that is required to contribute towards running costs, or is expected to cover a multiplicity of small contracts. SALWACO will also open a local currency account in a commercial bank to receive GoSL counterpart funding. All disbursements will follow the procedures outlined in the Bank's *Disbursement Handbook*. GEF and DFID co-financing will be managed by the Bank, and Bank rules and procedures will apply in accordance with the respective cooperation agreements.

4.1.9 The Audit Service of Sierra Leone (ASSL) has primary responsibility for the external audit of all GoSL funds. However, the ASSL normally outsources the audit of donor financed projects to approved independent audit firms in the country. Should an approved independent audit firm be utilized for the audit, then the auditor will be selected in accordance with procurement rules approved by the Bank, and conduct the audit in accordance with terms of reference approved by the Bank. The audit, together with the accompanying audit management letter, must be submitted to the Bank within six months of the end of the year audited.

4.2. Monitoring

4.2.1 Monitoring will be based on the results-based logical framework, including the key indicators for monitoring progress towards achievement of project outcomes. M&E activities will be undertaken at national and local levels as appropriate, with the Water Directorate (WD) of MWR shouldering the overall responsibility in line with its institutional mandate. WD will prepare and provide project activity and output monitoring tools to all relevant national and local level stakeholders, including SALWACO, and shall ensure consolidation and integration of the routine results monitoring reports in the Quarterly Progress Reports to be prepared by the PCC Secretariat (SALWACO). M&E for outcome and impact indicators will be undertaken in liaison with Statistics Sierra Leone (SSL) and Ministries of Health & Sanitation, and Education. SSL will revalidate the baseline indicators on the basis of existing data and surveys, in addition to undertaking outcome and impact surveys. An MOU be established between the Project and SSL. WD will ensure the timely collection of M & E data and preparation of Quarterly and Annual Monitoring Reports by the District Councils for eventual consolidation and submission to the Bank. M & E activities by the community, including civil society, will be carried out in synergy with the World Bank financed DSDP II which provides for measures that will enhance social accountability and quality of service delivery. Results will as much as possible be attributed to the ADF, DFID and GEF financing. Project resources will be provided to facilitate project M&E activities and strengthening WD for effective continuation of the M&E function beyond the project period.

4.2.2 The Bank will lead supervision missions that will be jointly undertaken with DFID and GEF. Two supervision missions will be undertaken every year. Annual Joint Sector Reviews (ASRs) will also be organised in liaison with the government, co-financiers and other development partners. Project Mid-Term Review will be undertaken during the third year of implementation. Impact and flagship technical studies will be carried out as required to inform Bank supervision missions including the JSRs MTR and PCR, as well as the Joint Sector Review.

4.3. Governance

4.3.1 Sierra Leone has made a steady progress in the area of governance. It is among the top three most improved states in the recently released 2012 Ibrahim Index of Governance. Sierra Leone has successfully conducted three successive general and presidential elections in 2005 and 2007 and November 2012. Doing business indicators have also improved, with ranking 143 out of 183 countries in 2011, higher than its Mano River Union neighbours. However, corruption remains relatively high as revealed by the country's low 2011

Corruption Perception Index (CPI) score of 2.5 and ranking of 134 out of 182 countries. In line with the government PFM reform program, the Bank is providing significant support to further improve transparency and accountability of the PFM system, including targeted support to strengthen the Parliament, Audit Service Sierra Leone (ASSL), Anti-Corruption Commission (ACC), Local Councils PFM capacity strengthening, and PFM reform through the multi-donor funded IPFMRP.

4.3.3 Water sector governance in Sierra Leone is also gradually improving following the enactment of a new Water and Sanitation Policy in 2010, and devolution of water and sanitation services delivery to the Local Councils through the Local Government's Act, which developments triggered the on-going regulatory and institutional reforms that are supported by DFID. The reforms include the strengthening of water sector monitoring and evaluation capacity at national and local levels. Central government financing for water and sanitation is through district conditional grant transfers to the local councils. The transfers are coordinated and monitored by the Local Government Finance Department (LGFD). Social accountability mechanisms to enhance effective and equitable service delivery are being promoted and institutionalised through the DSDP. The RWSSP will enhance sector governance through development of RWSS Programme, sub-sector wide planning and coordination, strengthened and coordinated civil society and supporting decentralised service delivery, including the sector-relevant training of professionals and community leaders, besides empowering rural water-user communities.

4.4. Sustainability

4.4.1 Government of Sierra Leone accords high priority to the water sector. Sierra Leone is a member of the Sanitation and Water for All (SWA) global partnership, and its commitment to the partnership was re-affirmed through a statement delivered by the President of Sierra Leone at the April 2012 SWA High Level Meeting. This commitment is demonstrated by the significant increase in government financing for the sector which has risen by 48% per year over the last three years up to October 2012⁸. The enactment of the new Water Policy and Water Resources Management Act, besides the current evidence of devolution of delivery of water and sanitation services to the local councils, facilitates beneficiary participation and social accountability, thereby enhancing ownership at the local level. The proposed project implementation arrangements are consistent with the decentralisation policy there is no PIU.

4.4.2 The spare parts supply chain study recommendations, including standardisation of pumps, training and equipping of artisans, and facilitating the setting-up of community maintenance funds to ensure availability of spare parts and maintenance services at community level, are included in the project design. The project shall facilitate the preparation and application of water user guidelines on cost recovery, and address the poor financial management at community level, which largely contributes to sustainability of facilities. Recurrent costs beyond community capacity, estimated at UA 397,000 per year commencing after the end of the project, will be financed by the Government through the already existing system of sector conditional grant transfers. The amount shall be reserved in the project special account two years prior to project closure. The measures are expected to improve functionality of water points in the project area from the current 64-68% to 75-80%.

⁸ (i) WB-WPP, Sierra Leone Public expenditure Review for Water and Sanitation 2002 to 2009; (ii) GoSL Actual Disbursements to the Water Sector from January 2010 to October 2012, Accountant General's Office.

4.5. Risk management

4.5.1 There are no major risks envisaged apart from the following which are low level risks.

Risk	Action Plan/Mitigation Measure
Failure to implement WSS reforms	Continuous dialogue between government and donors – Bank's strengthened local presence will facilitate active promotion of donor and policy dialogue in the water sector.
Weak sector coordination resulting in duplication and obscure accountability.	Bank to catalyse sector leadership and project resources to be provided for promoting regular stakeholder coordination forums.
Resistance to accountability for non-performance of DCs due to negative political interference, besides poor coordination of lower local government establishments and DCs, slowing down project implementation.	Project will facilitate coordination at local levels; in addition to coordination support provided under World Bank financed DSDP II. Project resources are provided to enable effective oversight by national level authorities, and facilitating sector coordination at national and local government levels. Incentives for good performance are provided.
Delayed implementation of organisational and HRD reforms & attendant limited capacity of the agencies which will be directly involved in implementation.	Technical assistance is provided to the key implementing agencies, i.e. the five DCs, SALWACO, WD and LGFD.
Co-financing	Joint financing of critical activities is completely avoided.

4.6. Knowledge building

4.6.1 The project represents Bank's first intervention in the country in the rural water sub-sector which is a unique opportunity for experience which would have wide ranging application. Partnership with DFID and GEF will further enhance the knowledge on cooperation in project financing, offering opportunities for up-scaling in other regional Member Countries. At Bank's level, knowledge will be generated through regular joint supervisions and sector reviews, Mid-Term Review and Project Completion Reports. Knowledge on interventions in post-conflict fragile states will be strengthened.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

5.1.1 The legal instruments for the project are an ADF Loan Agreement, ADF Grant Agreement, FSF Grant Agreement, and RWSSI-TF Grant Agreement, to be entered into with the Republic of Sierra Leone. The Bank will also establish the appropriate agreements for the management of DFID and GEF resources.

5.2. Conditions associated with Bank's intervention

5.2.1 Conditions Precedent to Entry into Force

The entry into force of the Loan Agreement shall be subject to the fulfilment of the provisions of Section 12.01 of the *General Conditions Applicable to African Development Fund Loan Agreements and Guarantee Agreements*; and of the Grant Agreements shall be subject to the fulfilment of the provisions of Section 10.01 of the *General Conditions Applicable to Protocols of Agreements for Grants of the African Development Fund*.

5.2.2 Conditions Precedent to First Disbursement of the Loan and Grants

The obligation of the Fund to make the first disbursement of the Loan and Grants shall be conditional upon the entry into force of the respective Agreements and the fulfilment by the GoSL of the following conditions:

- (i) evidence that GEF have committed to finance the Project and that the GoSL has made appropriate arrangements to cover any financing gap resulting from the failure to obtain GEF's commitment; and
- (ii) having opened a convertible United States Dollar foreign currency special account at a bank acceptable to the Fund for the Loan and each Grant and a local currency account for counterpart funds.

5.2.3 Other Conditions

The Borrower shall provide evidence:

- (i) by 30 June 2014, of approval of the revision of the SALWACO Act of 2001 by Parliament and the transfer of five (5) extension engineers, five (5) technical field officers and five (5) assistant executive engineers from the Water Directorate of the Ministry of Water Resources to SALWACO in accordance with the transfer of rural water supply services technical support and supervision mandate under the revised SALWACO Act.
- (ii) by 31 December 2016, of the approval of its Medium Term Budget Framework for 2017-2019, that confirms an amount of UA 397,000 (Three Hundred and Ninety Seven Thousand Units of Account) has been budgeted for the maintenance of project infrastructure beyond user community capacity.

5.2.4 Undertaking

The GoSL undertakes to implement and report on the implementation of the Environmental and Social Impact Assessment and the Environment and Social Management Plan on a quarterly basis in form acceptable to the Fund.

5.3. *Compliance with Bank Policies*

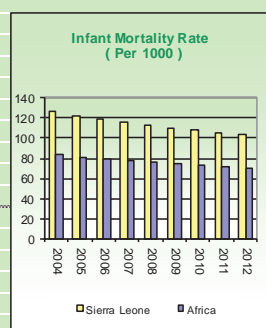
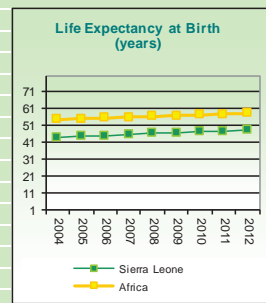
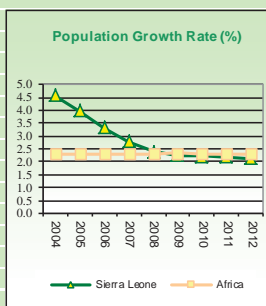
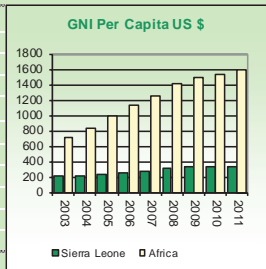
5.3.1. This project complies with all applicable Bank policies, which include: Bank's Ten Year Strategy; ADF-XII; Rural Water Supply and Sanitation Initiative and Business Plan; Fragile State Facility (FSF); IWRM Policy; Climate Risk Management and Adaptation Strategy; Policy on Eligible Expenditures for Bank Group Financing; and AfDB Country Strategy Paper. The GEF Grant has been approved by the chair of the GEF Council, subject to submission of the detailed project activities and their implementation. Therefore; in order to avoid submitting the same project twice to the Boards of Directors of the Bank and the Fund, the Boards are requested to approve the implementation by the Bank, of the GEF-financed activities subject to final receipt and approval of the requested project information by the GEF authorities.

VI – RECOMMENDATION

6.1 Management recommends that the Boards of Directors approve the proposed: (i) ADF Loan of UA 9.065 million; (ii) ADF Grant of UA 2.854 million; (iii) RWSSI-TF Grant of EUR 5.30 million; (iv) FSF Grant of UA 8.647 million which includes DFID-UK earmarked contribution of GBP 5.70 million, and in addition approve (v) the implementation of project activities funded by GEF amounting to USD 4.00 million, for the purpose and subject to the conditions stipulated in this report.

Appendix I. Country's comparative socio-economic indicators

	Year	Sierra Leone	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2011	72	30,323	98,458	35,811
Total Population (millions)	2012	6.1	1,070.1	5,807.6	1,244.6
Urban Population (% of Total)	2012	39.1	40.8	46.0	75.7
Population Density (per Km²)	2012	83.6	34.5	70.0	23.4
GNI per Capita (US \$)	2011	340	1 609	3 304	38 657
Labor Force Participation - Total (%)	2012	38.0	37.8	68.7	71.7
Labor Force Participation - Female (%)	2012	50.9	42.5	39.1	43.9
Gender -Related Development Index Value	2007-2011	0.354	0.502	0.694	0.911
Human Develop. Index (Rank among 186 countries)	2012	177
Popul. Living Below \$ 1.25 a Day (% of Population)	2003-2011	53.4	40.0	22.4	...
Demographic Indicators					
Population Growth Rate - Total (%)	2012	2.1	2.3	1.3	0.3
Population Growth Rate - Urban (%)	2012	3.1	3.4	2.3	0.7
Population < 15 years (%)	2012	42.8	40.0	28.5	16.6
Population >= 65 years (%)	2012	1.9	3.6	6.0	16.5
Dependency Ratio (%)	2012	80.8	77.3	52.5	49.3
Sex Ratio (per 100 female)	2012	95.7	100.0	103.4	94.7
Female Population 15-49 years (% of total population)	2012	24.8	49.8	53.2	45.5
Life Expectancy at Birth - Total (years)	2012	48.1	58.1	67.3	77.9
Life Expectancy at Birth - Female (years)	2012	48.8	59.1	69.2	81.2
Crude Birth Rate (per 1,000)	2012	37.0	33.3	20.9	11.4
Crude Death Rate (per 1,000)	2012	15.0	10.9	7.8	10.1
Infant Mortality Rate (per 1,000)	2012	104.0	71.4	46.4	6.0
Child Mortality Rate (per 1,000)	2012	157.9	111.3	66.7	7.8
Total Fertility Rate (per woman)	2012	4.8	4.2	2.6	1.7
Maternal Mortality Rate (per 100,000)	2010	890.0	417.8	230.0	13.7
Women Using Contraception (%)	2012	21.5	31.6	62.4	71.4
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2004-2010	1.6	49.2	112.2	276.2
Nurses (per 100,000 people)*	2004-2009	16.8	134.7	187.6	730.7
Births attended by Trained Health Personnel (%)	2008-2010	42.4	53.7	65.4	...
Access to Safe Water (% of Population)	2010	55.0	67.3	86.4	99.5
Access to Health Services (% of Population)	2000	38.0	65.2	80.0	100.0
Access to Sanitation (% of Population)	2010	13.0	39.8	56.2	99.9
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2011	1.6	4.6	0.9	0.4
Incidence of Tuberculosis (per 100,000)	2011	723.0	234.6	146.0	14.0
Child Immunization Against Tuberculosis (%)	2011	96.0	81.6	83.9	95.4
Child Immunization Against Measles (%)	2011	80.0	76.5	83.7	93.0
Underweight Children (% of children under 5 years)	2008-2011	21.3	19.8	17.4	1.7
Daily Calorie Supply per Capita	2009	2 162	2 481	2 675	3 285
Public Expenditure on Health (as % of GDP)	2010	13.1	5.9	2.9	8.2
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-2012	124.7	101.9	103.1	106.6
Primary School - Female	2010-2012	120.1	98.4	105.1	102.8
Secondary School - Total	2001-2012	27.6	42.3	66.3	101.5
Secondary School - Female	2001-2012	22.5	38.5	65.0	101.4
Primary School Female Teaching Staff (% of Total)	2011	25.1	43.2	58.6	80.0
Adult literacy Rate - Total (%)	2010	42.1	67.0	80.8	98.3
Adult literacy Rate - Male (%)	2010	53.6	75.8	86.4	98.7
Adult literacy Rate - Female (%)	2010	31.4	58.4	75.5	97.9
Percentage of GDP Spent on Education	2008-2011	3.6	5.3	3.9	5.2
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2011	15.4	7.6	10.7	10.8
Annual Rate of Deforestation (%)	2000-2009	2.9	0.6	0.4	-0.2
Forest (As % of Land Area)	2011	37.8	23.0	28.7	40.4
Per Capita CO2 Emissions (metric tons)	2009	0.2	1.2	3.1	11.4



Sources : AfDB Statistics Department Databases; World Bank: World Development Indicators;

last update :

May 2013

UNAIDS; UNSD; WHO, UNICEF, WRI, UNDP; Country Reports.

Note : n.a. : Not Applicable ; ... : Data Not Available.

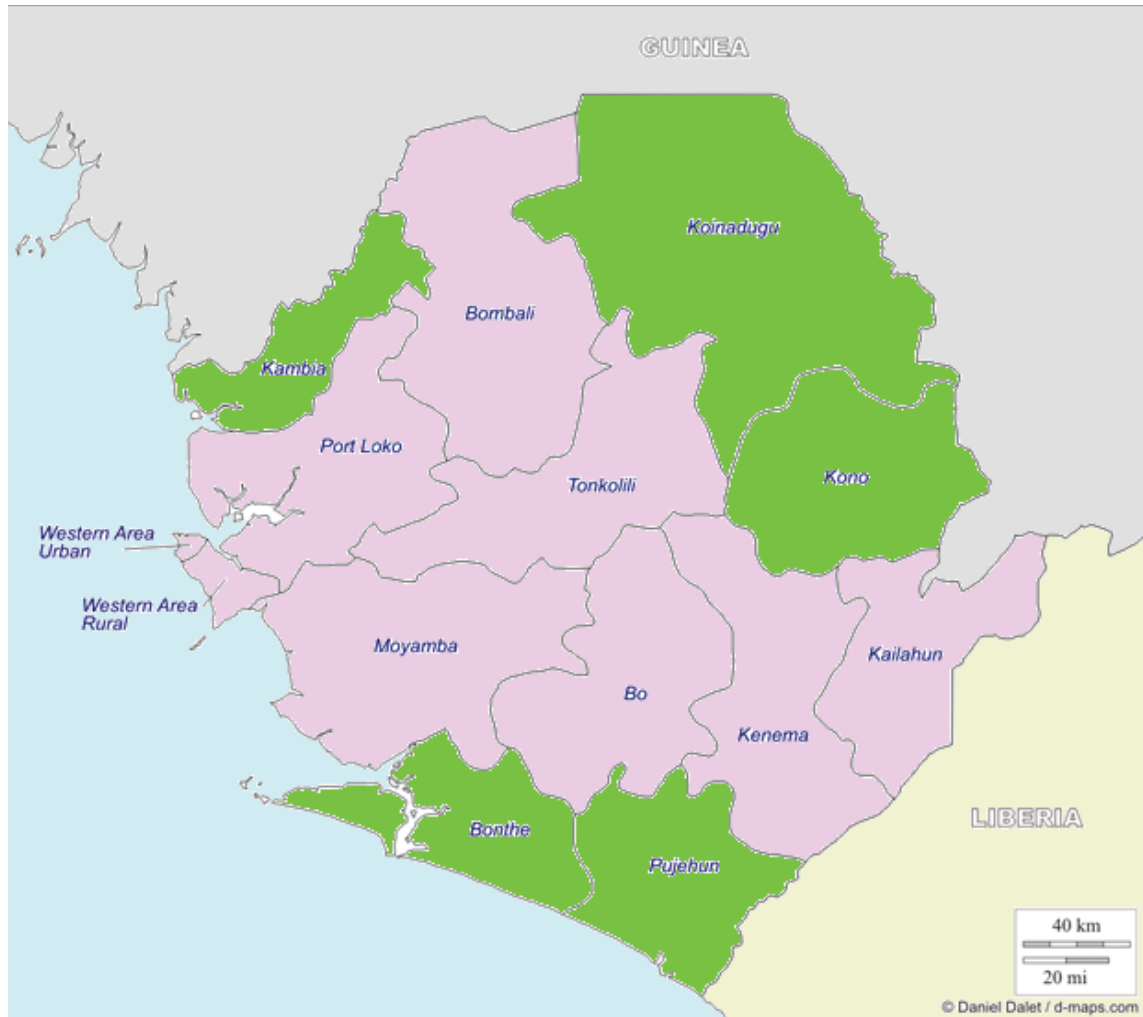
Appendix II. Table of ADB's portfolio in the country (signed projects)

No.	Project Name	Sector	Grant Type	Approval Date	Commitment Date	Into Force	First Disb.	Closing Date	Disb. Amount	Disb. Rate	Loan/Grant Amount (UAC)	IP	DO	Rating
1	PORT LOKO LUNGI ROAD	Transport	5900	17.06.2009	11.09.2009	11.09.2009	03.03.2011	31.12.2013	16,297,505	62.06	26,260,000	1.9	2.7	NON PP / NON PPP
2	CENTRAL BANK OF SIERRA LEONE	Finance	5900	30.11.2011	01.06.2012	01.06.2012	12.09.2012	31.12.2013	231,164	28.64	807,018	2.6	3.0	NO SUPERVISION
3	MATOTOKA SEFADU ROAD REHABILITATION	Transport	2100	05.04.2012	30.04.2012	03.07.2012		30.06.2016	0	0	3,180,000	1.07	2.2	NON PP / NON PPP
	MATOTOKA SEFADU ROAD REHABILITATION	Transport	2100	05.04.2012	30.04.2012	30.04.2012		30.06.2016	0	0	6,820,000	1.07	2.2	NON PP / NON PPP
	MATOTOKA SEFADU ROAD REHABILITATION	Transport	5900	05.04.2012	30.04.2012	30.04.2012		30.06.2016	0	0	12,000,000	1.07	2.2	NON PP / NON PPP
4	ADDAX BIOENERGY PROJECT	Agriculture	2000	08.04.2011	01.12.2011	01.12.2011	05.03.2012	31.12.2023	18,472,131	85.15	21,443,950	1.5	1.8	NON PP / NON PPP
5	AGRICULTURE SECTOR REHABILITATION	Agriculture	2100	02.02.2005	04.04.2005	02.08.2005	21.02.2006	31.12.2013	5,613,566	56.14	10,000,000	2.2	2.50	NON PP / PPP
	AGRICULTURE SECTOR REHABILITATION	Agriculture	2100	02.02.2005	04.04.2005	02.08.2005	09.11.2006	31.12.2013	1,365,999	68.3	2,000,000	2.2	2.50	NON PP / PPP
6	PFM AND BUSINESS ENABLING SUPPORT	Multi-Sector	5900	30.09.2011	15.11.2011	15.11.2011	31.01.2012	31.12.2014	1,022,689	25.57	4,000,000	3.0	3.0	NON PP / NON PPP
7	THREE TOWNS WATER SUPPLY & SANITATION	Water Supply & Sanitation	2100	26.10.2010	03.12.2010	18.08.2011	23.11.2011	31.12.2015	0	0	6,100,000	2.52	2.3	NON PP / NON PPP
	THREE TOWNS WATER SUPPLY & SANITATION	Water Supply & Sanitation	2100	26.10.2010	03.12.2010	03.12.2010	23.11.2011	31.12.2015	2,407,585	16.38	14,700,000	2.52	2.3	NON PP / NON PPP
	THREE TOWNS WATER SUPPLY & SANITATION	Water Supply & Sanitation	5900	26.10.2010	03.12.2010	03.12.2010	23.11.2011	31.12.2015	0	0	6,500,000	2.52	2.3	NON PP / NON PPP
	THREE TOWNS WATER SUPPLY & SANITATION	Water Supply & Sanitation	5900	26.10.2010	07.09.2012	07.09.2012	08.09.2012	31.12.2015	108,702	9.06	1,200,000	2.52	2.3	NON PP / NON PPP
8	EMERGENCY ASSISTANCE CHOLERA	Social	5000	11.10.2012	21.11.2012			31.10.2013	496,938	100.00	496,938	0.00	0.00	NO SUPERVISION
9	SUPPORT TO PPP UNIT OFFICE OF PRESIDENT (SL)	Multi-Sector		07.09.2012	24.10.2012		24.10.2012	31.12.2013	0	0	213,447	0.00	0.00	NO SUPERVISION
10	TECHNICAL ASSISTANCE FOR MCC CA DEVELOPMENT	Multi-Sector	5900	31.03.2013	17.04.2013	17.04.2013	08.05.2013	31.12.2013	0	0	137,467	0.00	0.00	NO SUPERVISION

Appendix III. Key related projects financed by the Bank and other development partners in the country

Donor	Project Title	Objective / Areas of Intervention	Location	Start date	End Date
EU Delegation	Improvement of rural communities local, and institutional actors' capacities to management and sustain their access to basic health services, sanitation and water supply - South Bombali district - Sierra Leone	improve family and child health through enhanced capacities of the rural communities and institutions to manage and sustain their access to health services, sanitation and safe water.	Southern Bombali District	Oct-10	Jan-14
DFID Sierra Leone	Supporting the Government of Sierra Leone to implement its National Water Supply and Sanitation Policy	Support the Ministries of Water and Health to implement the National Water and Sanitation Policy of 2010, which includes: <ul style="list-style-type: none"> • Legislation for a new Water Resources Act which will create a National Water Resources Agency and an independent water and energy regulatory commission • Legislation to strengthen the Guma Valley Water Company and the Sierra Leone Water Company • Restructuring and establishment of reform management structures within the Ministry including strengthened relations between MoEWS and the Ministry of Health on sanitation and waste management. • Capacity building in seven Districts to support planning and management of water including community based approaches for water resource management and water security. • The programme includes a £5m WASH Facility which is designed to support catalytic actions that will help implement the National Water & Sanitation Policy. 	National	Feb-11	Feb-14
DFID Sierra Leone	Water supply, sanitation and hygiene in Freetown, Sierra Leone	Support the Government of Sierra Leone (GoSL) in improving the health status of selected vulnerable Freetown urban communities. WASH service delivery improvements in 31 slum/poor areas in Freetown through support to an NGO Consortium, and working in cooperation with Guma Valley Water Company and Freetown City Council.	Freetown	Feb-10	Jan-13
DFID Sierra Leone	Water supply, sanitation and hygiene in Freetown, Sierra Leone Phase II	Phase II Support the Government of Sierra Leone (GoSL) in improving the health status of selected vulnerable Freetown urban communities. WASH service delivery improvements in slum/poor areas in Freetown through support to an NGO Consortium, and working in cooperation with Guma Valley Water Company and Freetown City Council.	Freetown/Western District	Jan-13	Mar-15
DFID Sierra Leone	Programme to support water supply, sanitation and hygiene in Sierra Leone	Community Led Total Sanitation including improved access to safe water to deliver 100% Open Defecation Free (ODF) environment in one District (Kenema) and 50% in five Districts (Moyamba, Port Loko, Bombali, Tonkolili, Pujehun).	Kenema, Moyamba, Port Loko, Bombali, Tonkolili, Pujehun	Mar-08	Jul-13
DFID Sierra Leone	Programme to support water supply, sanitation and hygiene in Sierra Leone	Community Led Total Sanitation including improved access to safe water Koya and TMS chiefdoms of Port Loko district and Kowa and Fakunya chiefdoms of Moyamba district.	Port Loko, Moyamba	Mar-09	Mar-13
DFID Sierra Leone	Water Supply, Sanitation and Hygiene Promotion in Schools, Clinics and Communities in Rural Sierra Leone	Community Led Total Sanitation including improved access to safe water to deliver 100% Open Defecation Free (ODF) environment in six Districts (Kenema, Moyamba, Port Loko, Bombali, Tonkolili, Pujehun).	Kenema, Moyamba, Port Loko, Bombali, Tonkolili, Pujehun	Mar-12	Mar-15
DUBAI Cares	Support WASH Education in Sierra Leone	10,000 children in Western Area District will benefit from improved WASH and 1,500,000 nationwide will receive the SSHE kit	Freetown, Pujehun	Jan-10	Dec-12
Polish Natcom	WASH in PHU	5 PHU in Kenema and 5 PHU in Bombali equipped with WASH facilities	Kenema, Bombali	Nov-11	Dec-14
Government of Netherlands - Ministry of Foreign Affairs DGIS	Water Supply, Sanitation and Hygiene Promotion in Schools and Communities in Rural Sierra Leone	Community Led Total Sanitation including improved access to safe water to deliver 100% Open Defecation Free (ODF) environment in six Chiefdoms in two Districts (Bonthe and Koinadugu).	Bonthe and Koinadugu Districts	Jan-13	Dec-17

Appendix V. Map of the Project Area



Rural Water Supply and Sanitation Project Districts

The map was obtained from a public source and has been provided for the exclusive needs of this appendix. The applications and demarcations on this map do not imply any judgment on the part of the ADB and its members concerning the legal status of territory or the approved acceptance of its boundaries.