



*Empowered lives.  
Resilient nations.*

**United Nations Development Programme  
Country: Sierra Leone  
PROJECT DOCUMENT<sup>1</sup>**

**Project Title:** Building Adaptive Capacity to Catalyze Active Public and Private Sector Participation to manage the Exposure and Sensitivity of Water Supply Services to Climate Change

**UNDAF Outcome(s):** 3. Natural resources are sustainably and equitably managed and threats and impacts from natural and man-made disasters are reduced

**Expected CP Outcome(s):** Policy framework and institutional arrangements for managing natural resources and addressing climate change, disaster, and environmental management strengthened

**Expected CPAP Output (s):**

- (i) Policies, legal and institutional framework for managing land tenure reform improved;
- (ii) Increased resilience and enhanced national and local capacities for disaster risk management, environmental governance, climate change adaptation and mitigation for effective early warning system
- (iii) Improved Waste Management in Bo and Makeni cities and relevant lessons learned shared with other Local Councils

**Executing Entity/Implementing Partner:** Ministry of Water Resources

**Responsible Party:** UNDP

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<sup>1</sup> For UNDP-supported GEF-funded projects as this includes GEF-specific requirements

**Brief Description**

The water sector in Sierra Leone is undergoing revisions and sustainable water supply, which remains a major challenge to national development, is one of the major national priorities. There are several climate related challenges that place significant constraints to sustainable water supply, both to Freetown as well as rural districts. The most significant is that during prolonged dry spells provision of drinking water is problematic. Although sufficient water is available in the rainy season, during the dry season water shortage are pertinent. Other climate related risks include that (i) water sources are tapped unsustainably, and water is mined beyond long-term capacities, and (ii) water infrastructure developments are planned without taking climate resilience into account.

The proposed project has several entry points and overall focuses on capacity building for climate resilient decision-making in the water sector. **Outcome 1** Critical public policies governing the management of water resources revised to incentivize climate smart investment by the private sector, will be achieved through specific technical capacity development activities and igniting informed public and private sector dialogues. Based on focused capacity needs assessments a suite of professional updating activities will be designed especially for staff of the newly formed Ministry of Water Resources, the Guma Valley Corporation and other specified key target groups. **Outcome 2** Water supply infrastructure in Freetown and Puhejun, Kambia and Kono districts made resilient against climate change induced risks focuses on pioneering innovations that particularly address the dry season water supply problems, which are likely worsened by anticipated climate change impacts. On request of the MWR rain water-harvesting (RWH) innovations will be established as learning experiments, capturing and storing drinking water quality rainwater during the rainy season and saving it for use in the dry season. In Freetown existing springs that are already being developed by Guma as supplementary sources will be protected from degradation and rainwater for supplementation of the sources will be attempted through construction of stand-alone RWH infrastructure. Innovative designs of collective "rooftops" for water capture in high density living areas will be tested. In Puhejun, Kono and Kambia districts – the focal areas for planned AfDB water supply investments – this project will build capacities of district level water professionals for climate resilient planning and decision-making. Additionally, low-cost and simple water supply and storage techniques promoted by the Welthungerhilfe and two associated community-training centres will be further developed to incorporate RWH innovations in their designs to help overcome dry season water supply shortages.

National institutions especially the MWR, who is the executing agency for this project, will directly absorb the adaptation learning emerging from the demonstrations. 2.94 Mio US\$ will be required from GEF funds, with cash and in-kind co-financing through UNDP and the Government of Sierra Leone.

|                             |               |                                |               |
|-----------------------------|---------------|--------------------------------|---------------|
| Programme Period:           | 2011 - 2015   | Total resources required       | \$ 13,090,000 |
| Atlas Award ID:             | 00074076      | Total allocated resources:     | \$ 13,090,000 |
| Project ID:                 | 00086632      | • GEF                          | \$ 2,940,000  |
| PIMS #                      | 4613          | • UNDP                         | \$ 150,000    |
| Start date:                 | May 2014      | • Other:                       |               |
| End Date                    | December 2018 | ○ Government (Grant & In-kind) | \$ 9,000,000  |
| Management Arrangements NIM |               | ○ UNDP (Grant & In-kind)       | \$ 1,000,000  |
| PAC Meeting Date            | 12 May 2014   |                                |               |

Agreed by (Government):

NAME Hon. Momodu E. Mahy SIGNATURE  Date/Month/Year 27/6/14

Agreed by (Executing Entity/Implementing Partner):

NAME CHARLES T. KAMANDA SIGNATURE  Date/Month/Year 24<sup>th</sup> JUNE 2014

Agreed by (UNDP):

NAME SMDIPTO MUKERJEE SIGNATURE  Date/Month/Year 13/06/14

## Table of Contents

|   |           |
|---|-----------|
| <b>I. Situation analysis .....</b>  | <b>6</b>  |
| 1.1 Context.....  | 6         |
| 1.1.1. Environment .....  | 7         |
| 1.1.2. Policy.....  | 9         |
| 1.1.3. Institutional Context.....   | 11        |
| 1.1.4. Decentralization, Local Government, and Forms of Social Capital..... | 12        |
| 1.2 Threats and root causes .....   | 13        |
| 1.2.1. Climate change context .....   | 13        |
| 1.2.2. Future climate projections.....                                      | 14        |
| 1.3 Long-term solutions and barriers.....                                   | 16        |
| 1.3.1. Key barriers .....   | 16        |
| 1.4 Stakeholder and baseline analysis.....                                  | 19        |
| 1.4.1 Stakeholder overview.....   | 19        |
| 1.4.2 An introduction to project sites.....                                 | 22        |
| <b>II. Strategy .....</b>   | <b>31</b> |
| 2.1 Project rationale and policy conformity .....                           | 31        |
| 2.2 Country ownership: country eligibility and country drivenness .....     | 32        |
| 2.3 Design principles and strategic considerations .....                    | 32        |
| 2.4 Project objective, outcomes and outputs/activities .....                | 33        |
| <b>III. Project Results Framework .....</b>                                 | <b>49</b> |
| <b>IV. Total budget and workplan .....</b>                                  | <b>51</b> |
| <b>V. Management Arrangements .....</b>                                     | <b>55</b> |
| <b>VI. Monitoring Framework and Evaluation.....</b>                         | <b>57</b> |
| <b>VII. Legal Context .....</b>   | <b>61</b> |
| <b>Annexes .....</b>  | <b>62</b> |

## List of acronyms

|         |  |
|---------|--|
| ACF     | Action Contre la Faim (Action Aid Sierra Leone)              |
| AfDB    | African Development Bank                                     |
| AMAT    | Adaptation Monitoring and Assessment Tool                    |
| ARR     | Annual Performance Report                                    |
| AWP     | Annual Work Plan   |
| BTOR    | Back To Office Report  |
| CC      | Climate Change   |
| CCA     | Climate Change Adaptation                                    |
| CCM     | Climate Change Management                                    |
| CCRM    | Climate Change Risk Management                               |
| CBO     | Community Based Organisation                                 |
| CDA     | County Development Agendas                                   |
| CHO     | Community Health Officer                                     |
| CO      | Country Office   |
| CP      | Country Program  |
| CPAP    | Country Programme Action Plan                                |
| CRM     | Climate Risk Management                                      |
| DFID    | Department for International Development                     |
| DEX     | Direct Execution   |
| EC      | European Commission  |
| EDF     | European Development Fund                                    |
| ENSO    | El Nino Southern Oscillation                                 |
| EPA     | Sierra Leone Environmental Protection Agency                 |
| ERC     | Evaluation Resource Center                                   |
| EWS     | Early Warning System   |
| FACE    | Fund Authorization and Certificate of Expenditures           |
| FAO     | Food Agriculture Organization                                |
| FAOSTAT | Food Agriculture Organization – Statistics                   |
| GB      | Great Britain  |
| GDP     | Gross Domestic Product                                       |
| GEF     | Global Environmental facility                                |
| GCM     | General Circulation Models                                   |
| GoSL    | Government of Sierra Leone                                   |
| GIZ     | German International Cooperation                             |
| GVWC    | Guma Valley Water Company                                    |
| ICRC    | International Committee of the Red Cross                     |
| IDPs    | Internally Displaced Persons                                 |
| IRC     | International Rescue Committee                               |
| IPCC    | Intergovernmental Panel on Climate Change                    |
| ITCZ    | Inter- Tropical Convergence Zone                             |
| JICA    | Japan International Cooperation Agency                       |
| LVIPs   | Kumasi Ventilated Improved Pit Latrines                      |
| LDC     | Least Developed Country                                      |
| LDCF    | Least Developed Countries Fund                               |
| M&E     | Monitoring and Evaluation                                    |
| MEAs    | Multilateral Environmental Agreements                        |
| MDGs    | Millennium Development Goals                                 |
| MOA     | Ministry of Agriculture                                      |
| MoWR    | Ministry of Water Resources                                  |
| MoFED   | Ministry of Finance and Economic Development                 |
| MoHS    | Ministry of Health and Sanitation                            |
| MLGRD   | Ministry of Local Government and Rural Development           |
| MSF     | Medicine San Frontiers                                       |
| NCCS    | National Climate Change Secretariat                          |
| NAPA    | National Adaptation Program of Action                        |
| NEWPPCU | National Energy, Water Policy Planning and Coordinating Unit |
| NDSAP   | National Sustainable Agriculture Development Plan            |
| NGO     | Non-Governmental Organisation                                |
| NWSP    | National Water Supply Policy                                 |
| NPRS    | National Poverty Reduction Strategy                          |
| PAC     | Project Appraisal Committee                                  |
| PC      | Project Coordinator  |
| PIU     | Peripheral Health Unit                                       |
| PIF     | Project Identification Form                                  |
| PIU     | Project Implementation Unit                                  |

|          |   |
|----------|---|
| PIR      | Project Implementation Review                                   |
| PPG      | Project Preparation Grants                                      |
| PPPs     | Public-Private Partnerships                                     |
| PROWACO  | Provincial Water Company (formerly called SALWACO)              |
| PRS      | Poverty Reduction Strategy                                      |
| PRSP     | Poverty Reduction Strategy Papers                               |
| PWJ      | Peace Winds Japan   |
| RBM      | Result Based Management   |
| RUF      | Revolutionary United Front                                      |
| SALWACO  | Sierra Leone Water Company (now PROWACO)                        |
| SBAA     | Standard Basic Assistance Agreement                             |
| SCCF     | Special Climate Change Fund                                     |
| SLBF     | Sierra Leone Business Forum                                     |
| TAR      | Third Assessment Report   |
| TBD      | To Be Done  |
| ToRs     | Terms of Reference  |
| UN       | United Nations  |
| UNHRC    | United Nations High Commissioner for Refugees                   |
| UNICEF   | United Nations Children's Fund                                  |
| UNDAF    | United Nations Development Assistance Framework                 |
| UNDP     | United Nations Development Program                              |
| UNDP CO  | United Nations Development Program Country Office               |
| UNDP EEG | United Nations Development Program Environment and Energy Group |
| UNDP RCU | United Nations Development Program Regional Coordination Unit   |
| UNDP RTA | United Nations Development Program Regional Technical Advisor   |
| UNFCCC   | United Nations Framework Convention on Climate Change           |
| USAID    | United States Agency for International Development              |
| USD      | United States Dollars   |
| WASH     | Water, Sanitation and Hygiene Policy                            |
| WD       | Water Department  |
| WPPCU    | Water Policy Planning and Coordination Unit                     |

## I. Situation analysis

### 1.1 Context

1. Sierra Leone is an Anglophone West African country, bordering the North Atlantic Ocean, between Liberia and Guinea. The country is richly endowed in natural resources, especially minerals such as diamonds, titanium bauxite, gold and rutile, on which the economy is largely based. However, despite this natural wealth, 70% of the total population, of 6 million people (FAO, 2012), live in poverty. Sierra Leone's 11-year civil war (1991-2002) was a large influencing factor in the deterioration of livelihoods, infrastructure, production capacity, and economy. In 2010, the country's GDP stood at approximately 2.2 billion USD (World Bank, 2010). Resilience and economic growth are priorities to the country.

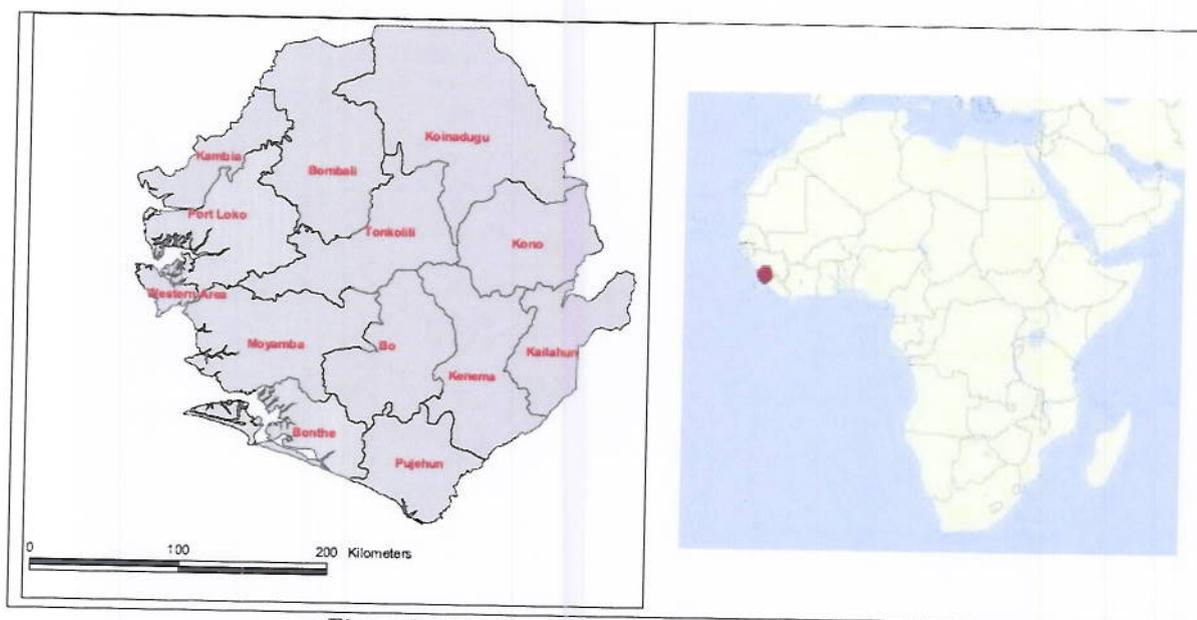


Figure 1. Map of Sierra Leone, and location in Africa

2. During the civil war, which took place between 1991 and 2002, more than 50 000 people were killed, much of the country's infrastructure was destroyed, and more than two million people were displaced to neighbouring countries. The presence of diamonds had a large influencing factor on the war, and was used to fund the acquisition of weapons and ammunition.
3. The end of the war was a result of Guinean cross-border bombing raids against villages believed to be bases used by RUF (Revolutionary United Front), as well as a UN resolution that demanded the Government of Liberia expel all RUF members and halt the illicit diamond trade, among others. Efforts by the Lome Accord, trust and reconciliation and the 2002 presidential and legislative democratic elections served well in establishing a context for increasing humanitarian interventions. The country is slowly emerging and showing signs of a successful transition. However, many challenges remain, among them one of the biggest has been the access to safe drinking water.
4. The civil war had devastating impacts on all facets of the economy, destroying Government's ability to adequately meet the needs of the nation. The water sector is probably the sector which has had most challenges in improvement. Despite efforts by Government and numerous NGOs, access to water has not improved much since the end of the civil war, stagnating at about 50% and even declining in rural areas. The percentage access of the population to safe drinking water is 34%.
5. One of the main challenges has been the lack of capacity in the water sector – and with the projections of climate change set to exacerbate the water issue – this is the main area which needs to be addressed for resilience and adaptation.

### 1.1.1. Environment

6. **Geography:** Sierra Leone is located in the southern in the south-western part of the bulge of West Africa, between 7 and 10°N and 10 and 13°E. The country covers a total area of 71,325 km<sup>2</sup> and is divided into four geographical regions: the Northern Province, Eastern Province, Southern Province and the Western Area. These regions are further subdivided into fourteen districts. Freetown, located in the Western Area of the country, is the capital.

7. **Drainage and Watersheds:** The country is well drained by numerous rivers and creeks. Of the main rivers, five of these have their sources from the neighbouring countries of the Republic of Guinea and Liberia (Figure 2). The Great Scarcies, Little Scarcies and Moa river basins have their sources from the Guinea whilst the Mano river basin has its source in the Republic of Liberia (Figure 2). The drainage system of Sierra Leone consists of a series of rivers from north to south, including the Great Scarcies, Little Scarcies, Rokel, Jong, Sewa, Moa, and Mano rivers (Figure 3). The country is considered to be endowed in abundant water resources, but water is known to be scarce in the dry season.

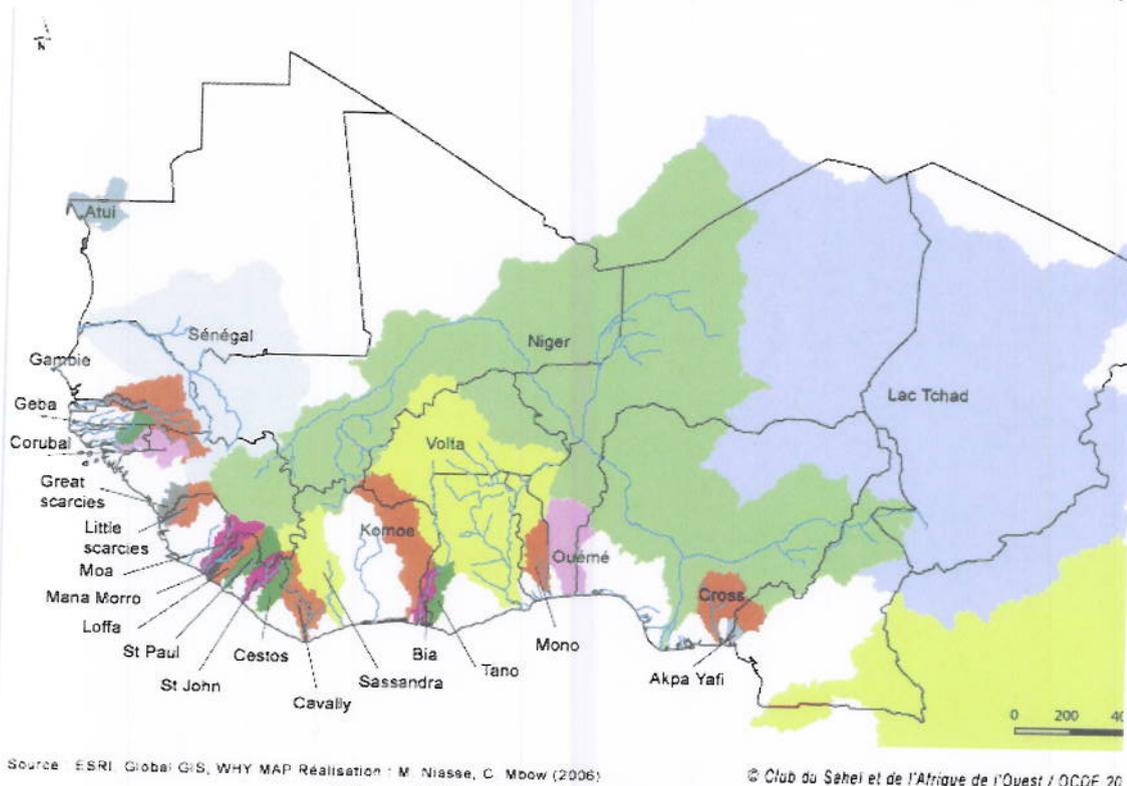


Figure 2 Transboundary Watersheds in West Africa