

## The Replenish Africa Initiative Sierra Leone Project Brief

### Background

Sierra Leone is one of the wettest countries in Africa. This makes it one of the most water-endowed countries in the world. However, the abundance of rainfall has not ensured water security for the people of Sierra Leone; especially the urban population. Instead, those who dwell in Sierra Leone's cities, like Freetown, experience recurrent flooding and mudslide disasters which have been made even worse by encroachment into the flood plains, and deforestation upstream of these floodplains. Due to increased migration into Freetown, the city's waterways and rivers are facing increased environmental threats caused by increased and uncontrolled human activities. Continued destruction of forests and swathes of eco-systems in the city to make way for human settlements is slowly exposing more people to disaster risks of flooding, while water quality is lowering as a result of increased siltation and poor sanitation. Currently, less than half of the population have access to safe drinking water as a result of this situation.

### The RAIN Project



The Replenish Africa Initiative (RAIN) is a flagship program of the Coca-Cola Foundation with the aim of building sustainable communities, catalyzing investment in clean water access, improving water and sanitation access, replenishing more than two billion liters of water annually back to communities and nature, and empowering women through clean water access and entrepreneurship<sup>1</sup>. The RAIN project addresses locally-identified water needs through activities designed to achieve sustainable impacts.

### Freetown RAIN Project

In Freetown, 61 watersheds drain the hills of the peninsula. However, only four currently supply the city, which chronically suffers from water shortages. Freetown's water infrastructure was planned to serve 400,000 people; but with population swelling to over 1.2 million, resources are overstretched. Urban water security is threatened by human-induced factors, which also serve as key drivers of natural hazards such as floods, landslides, soil erosion and sea-level rise. These events, likewise, are occurring more frequently and intensely because of climate change. With the increasing urban population and limited availability of alternative living arrangements, expansion of unregulated, informal settlements in risk prone areas along coastal, riverbeds and mountain slopes are more prevalent.

This trend has led to severe deforestation, lessening water retention and increasing water and mud run-off in times of torrential rain, which, collectively, lead to flash floods. The floods that occur around and at the waterpoints prevent access by communities and causes surface contamination of ground water. Poor waste management is another driver for water insecurity; drains are often blocked with rubbish, dumpsites are infrequently cleared, and major landfill sites situated upstream from large informal settlements. There is currently limited and uneven resilience and capacity to cope with these watershed protection and water access challenges, which are tied to factors such as the strength of construction, location, and existing infrastructure in place to protect water sources.

<sup>1</sup> <https://www.coca-colacompany.com/stories/rain-the-replenish-africa-initiative>



The Sierra Leone RAIN Project is implemented through Catholic Relief Services (CRS) and funded through the Global Environment & Technology Foundation (GETF). The overall aim of the Sierra Leone RAIN Project is to improve water security in urban Freetown by supporting the development of a sustainable model for community based and nature based solutions to water resources protection and improvement of sanitation services, which in return will ensure clean water service delivery.

### Objectives of Freetown RAIN Project

- Watershed Protection and Restoration (wetlands restoration, watershed, catchment and source water protection).
- Water Access and Sanitation (construction of public water/sanitation facilities, water network rehabilitation/extension, household water connections, waste water treatment).
- With RAIN as the foundation, establish a Freetown Peninsula Water Fund as a financing mechanism for water catchment conservation and development.

No.	Activity
1	<b>Conduct baseline and end line surveys</b> using Geographic Information Systems (GIS) and community-based data collection, geomorphic assessment, water quality testing, sanitation surveys, focus group discussions (FGDs) and spatial mapping in the target catchment areas for establishment of a flood risk mitigation model.
2	<b>Establish a multi-stakeholder Catchment Area Platform (CAP)</b> in one urban Catchment Area (Tower Hill - covering 13 Wards) and one rural Catchment Area (Sussex - covering 5 Wards in the area around Guma Dam), with inclusion of private sector, government and community leaders.
3	<b>Work with community disaster management committees (CDMCs)</b> established by the Disaster Management Directorate of the Office of National Security (ONS), which forms a key component of the National Management platform to support <b>contingency planning and establish early warning systems</b> within the watershed.
4	<b>Reforestation of the upper catchments by planting 25,000 fast-growing trees</b> to reduce flood water run-off and slow the flow of water into the main natural channels and smaller tributaries.
5	<b>Conduct a catchment level assessment</b> in Tower Hill and Sussex that will inform the development of a strategy for floodplain restoration, based on the local context.
6	Select 30 water points for water quality testing and rehabilitation for protection of the groundwater against surface contamination to enhance service levels, adequate access, reliability and affordability.
7	<b>Conduct Feasibility Assessment and Develop a Business Case</b> for the establishment of a <b>Freetown Peninsula Water Fund</b> .

### Outputs

- Functional RCAPs • Geomorphic models • Flood disaster early warning systems • Hectares of reforested catchment areas • 30 rehabilitated and functional water points • Freetown Peninsular Water Fund •

### Project Partners

The Government of Sierra Leone, Coca Cola Company, Conservation Society, The Nature Conservancy (TNC), Federation of the Urban and Rural Poor (FEDURP), Centre of Dialogue on Human Settlement and Poverty Alleviation (CODOHSAPA) and Environment Foundation for Africa (EFA).

### Timeline Tender period:

Expected start date: 01 June 2019

Date of completion: 30 June 2020

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