ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

FOR

THE RESILIENT URBAN SIERRA LEONE PROJECT

DRAFT

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ABBREVIATIONS AND ACRONYMS

ACM	Asbestos-Containing Material
ARAP	Abbreviated Resettlement Action Plan
CBD	United Nations Convention on Biological Diversity
CBO	Community-Based Organization
CERC	Contingent Emergency Response Component
CESMP	Contractor Environmental and Social Management Plan
COVID-19	Coronavirus Disease
CPIT	City Project Implementation Team
CRO	Community Relations Officer
DDMC	District Disaster Management Committee
DFID	Department for International Development (UK)
DRM	Disaster Risk Management
DRMA	Disaster Risk Management Agency
EDSA	Electricity Distribution and Supply Authority
EHS	Environmental, Health, and Safety
EIA	Environmental Impact Assessment
EOC	Emergency Operations Center
EPA	Environment Protection Agency
EPA-SL	Environment Protection Agency Sierra Leone
EPP	Environmental Protection Plan
ESA	Environmental and Social Assessment
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Review Summary
ESS	Environmental and Social Standards
FCC	Freetown City Council
FDD	Fiscal Decentralization Division
FERP	Freetown Emergency Recovery Project
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
GIIP	Good International Industry Practice
GIS	Geographic Information System
GoSL	Government of Sierra Leone
GRM	Grievance Redress Mechanism
GVWC	Guma Valley Water Company
HR	Human Resources
IBA	Important Birds Area
ILO	International Labour Organization
IPV	Intimate Partner Violence
LC	Local Council

LMP	Labor Management Procedures
M&E	Monitoring and Evaluation
MDAs	Ministries, Departments, and Agencies
MLHCP	Ministry of Lands, Housing and Country Planning
MOF	Ministry of Finance
MSDI	Municipal Spatial Data Infrastructure
MTNDP	Medium-Term National Development Plan
NASSIT	National Social Insurance Trust
NBSAP	National Biodiversity Strategy and Action Plan
NDMA	National Disaster Management Agency
NGO	Nongovernmental Organization
NPAA	National Protected Area Authority
OHS	Occupational Health and Safety
ONS	Office of National Security
PAP	Project-Affected Person
PCDP	Public Consultation and Disclosure Plan
PDO	Project Development Objective
PIC	Public Information Communications
PMU	Project Management Unit
POP	Persistent Organic Pollutant
PPE	Personal Protective Equipment
PSC	Project Steering Committee
RAP	Resettlement Action Plan
RET	
RPF	Resettlement Policy Framework
RUSLP	Resilient Urban Sierra Leone Project
SALWACO	Sierra Leone Water Company
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SGBV	Sexual and Gender-Based Violence
SH	Sexual Harassment
SLIHS	Sierra Leone Integrated Household Survey
SLRA	Sierra Leone Roads Authority
SLRE	Sierra Leone River Estuary
SLRSA	Sierra Leone Roads Safety Authority
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
SWM	Solid Waste Management
SWMP	Solid Waste Management Plan
TOR	Terms of Reference
TWG	Technical Working Group
UN	United Nations
UNDP	United Nations Development Programme
WARDC	Western Area Rural District Council
WHO	World Health Organization
WMP	Waste Management Plan

1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

Project Background

Urbanization in Sierra Leone has been rapidly growing in the last five decades, with the share of the population living in urban areas almost doubling between 1967 (21 percent) and 2015 (41 percent). Sierra Leone's National Development Plan (NDP) (2019–2023) recognizes the trend of rural-to-urban migration, which will characterize the economic development of Sierra Leone in the years to come. Despite this increasing urbanization trend across the country, the urban sector is ill-equipped to deal with rapid urbanization challenges and harness potential benefits. Sierra Leone's high vulnerability to natural catastrophes adds mounting pressure to its already strained urban infrastructure and limited fiscal space. Within this context, the Government has requested the World Bank's support to improve urban management and disaster resilience in Sierra Leone. The 'Resilient Urban Sierra Leone Project' (RUSLP) is designed to comprehensively address the multisectoral urban development challenges and disaster risks of the country, with the aim for livable, safe, financially sustainable, and productive urban centers. The RUSLP will directly benefit from the lessons learned, and build upon the gains made, under the World Bank-funded Freetown Emergency Recovery Project (FERP).

1.2 PROJECT DESCRIPTION AND OBJECTIVES

The RUSLP development objective is to improve integrated urban management, service delivery, and disaster resilience in the Western Area (Freetown and Western Rural District) and select cities in Sierra Leone, including the regional headquarter towns of Bo, Kenema, and Makeni, and the cities of Koidu, Bonthe, and Port Loko (Figure 1). The project is structured into four components as follows:

Component 1: Institutional and Capacity Development in Integrated Urban Management (US$4 million equivalent, of which IDA US$3.4 million and Global Environment Facility [GEF]-7 US$0.6 million)

This component will support city councils in institutionalizing and strengthening their urban management capabilities that are critical for efficient revenue generation, planning, and delivery and sustainable management of resilient infrastructure and services. It has two subcomponents: (a) Subcomponent 1a. Strengthening Integrated Urban Planning and Spatial Data Infrastructure and (b) Subcomponent 1b. Upgrading Urban Property Tax Administration and System.

Component 2: Resilient Municipal Infrastructure Investment and Urban Greening (US$46 million equivalent, of which IDA US$40 million and GEF-7 US$6 million)

This component will finance priority resilient municipal infrastructure and services at neighborhood and city levels, including the preparation of technical designs, as needed. The focus will be on investments identified as having positive social and economic impacts as well as contributing to disaster risk reduction and prevention. There are three subcomponents: (a) Subcomponent 2a. Neighbourhood Upgrading and Greening in Freetown, (b) Subcomponent 2b. Solid Waste Management Upgrading in Freetown and Secondary Cities, and (c) *S*ubcomponent 2c. Market Upgrading in Select Secondary Cities.

Component 3: Emergency Management Institutional and Capacity Development (IDA US$3.6 million equivalent)

This component will build the capacity of the national and local governments in emergency preparedness and response to better prepare them to respond to and recover from disasters. It will (a) support technical and operational capacity building and (b) provide access to financing for immediate response through a contingent emergency response component (CERC). It has two subcomponents: (a) Subcomponent 3a. Strengthening Early Warning Emergency Preparedness and Response Systems and (b) Subcomponent 3b. Contingent Emergency Response Component (CERC).

Component 4: Project Management (US$3.13 million equivalent, of which IDA US$3.00 million and GEF-7 US$0.13 million)

This component will finance project management costs of the Project Management Unit (PMU) for staffing, monitoring, and evaluation, including project technical audits (as needed) and midterm and end-project evaluations, safeguards, financial management, procurement, and training as well as cover any costs related to the setup of a grievance redress mechanism (GRM).

1.3 SUBPROJECT ACTIVITIES COVERED IN THE ESMF

While most activities may trigger a number of World Bank Environmental and Social Standards (ESS), the project activities discussed in this Environmental and Social Management Framework (ESMF) are those that are considered of significant risks under the ESS and that have been identified under the Environment Protection Agency (EPA) Acts with potentially significant environmental and social (E&S) footprints. These fall under Components 1, 2, and 4.,

1.4 RATIONALE FOR PREPARATION OF AN ESMF

This ESMF is prepared because the risks and impacts of the RUSLP cannot be determined until the specific locations and intervention of the activities that are likely to have adverse E&S impacts are known. The ESMF sets out the principles, rules, guidelines, and procedures that implementing agencies (Freetown City Council [FCC] Local Government, Finance Department in the Ministry of Finance [MOF], Office of National Security [ONS], and Western Area Rural District Council [WARDC]) would follow when assessing the E&S risks and impacts of subprojects' activities.

1.5 LEGISLATIVE, REGULATORY, AND INSTITUTIONAL FRAMEWORK

It is important that the activities planned under the RUSLP meet the requirements of the World Bank's Environmental and Social Framework (ESF), under which the project is processed, and the legal and regulatory framework of Sierra Leone and relevant international conventions and protocols, of which the country is a member and those it recognizes.

World Bank Environmental and Social Framework (ESF)

The World Bank ESF sets out the World Bank's commitment to sustainable development, through a World Bank Policy and a set of ESS that are designed to support borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity. The planning and implementation of the RUSLP should be aligned with the three components of the framework: (a) a vision for sustainable development that

sets out the World Bank's aspirations on E&S sustainability; (b) World Bank E&S policy for Investment Project Financing, which are mandatory requirements applicable to the World Bank; and (c) the 10 ESS, which set out the mandatory requirements for the Government of Sierra Leone (GoSL) and RUSLP. Only 7 of the 10 standards have been triggered by the project: ESS1: on assessment and management of E&S impacts; ESS2: labor and working conditions; ESS3: resource efficiency and pollution prevention and management; ESS4: community health and safety; ESS 5: land acquisition, restriction on land use, and involuntary resettlement; ESS6: biodiversity conservation and sustainable management of living natural resources; and ESS 10: stakeholder engagement. ESS8 on cultural heritage has not been triggered as there is no known tangible or intangible cultural heritage in the project area. It is recommended that while the chance finds procedure may be appropriate for Neighbourhood Upgrading and Greening of Freetown Subcomponents 2(a)-1 and 2(a)-2, respectively, and Market Upgrading in select Secondary Cities Subcomponent 2(c), a more detailed cultural heritage assessment should be carried out on the proposed landfill sites and access roads as part of the landfill selection process and if necessary, on the borrow sites approved for providing soil cover for day-to-day operation of the landfill. However, a chance finds procedure will be put in place in the unlikely event that such heritage would be encountered during project implementation. Neither ESS7 on Indigenous Persons/Sub Saharan African Historically Underserved Traditional Local Communities nor ESS9 on Financial intermediaries applies to the project. In adherence to the ESF, the project will also follow applicable Environmental, Health, and Safety (EHS) Guidelines; the EHS Guidelines for Waste Management Facilities; the EHS Guidelines for Water and Sanitation; and World Bank coronavirus disease (COVID-19) guidelines.

National Policies and Legislation

The project will strictly adhere to the national policies, laws, and regulations that relate to all aspects of the project. The principal environmental instrument applicable to all aspects of the project, which is being enforced for all projects with an environmental footprint, is the EPA Act, 2008, and its supplementary act 2010. This act established and empowered the EPA, lists projects that are eligible for obtaining an Environmental Impact Assessment (EIA) license, and describes the process of obtaining the license. There are no major legal instruments to directly cover social risks of the project; however, there is a recently formulated resettlement policy (2017). The Ministry of Gender and Children's affairs and the Ministry of Social Welfare do handle social matters but not as part of an environmental assessment. For occupational health and safety (OHS), there is the Factories Act (1974), which falls under the purview of the Factories Inspectorate in the Ministry of Works, but its enforcement is weak and limited to private sector investments. This leaves all aspects of environmental assessment with the EPA, which even though it has not developed regulations following the 2008/2010 Act, it has over the past decade ensured that such assessments include OHS and social- and resettlement-related risks as well. There are no specific laws or regulations on solid waste management (SWM) nor are there any standards on effluents in general. The EPA does therefore urge high-risk projects to satisfy World Bank and International Finance Corporation's environmental and performance standards and EHS guidelines to qualify for the license and for monitoring purposes. The EPA Board constitutes representatives from the line ministries to ensure that all environment-related laws, regulations, and policies are adhered to by potential investments. These instruments include the National Lands Policy on Land Tenure and Ownership (2015); the recently adopted and much anticipated Disaster Risk Management Policy (2018); Water and Sanitation Policy (2010); and forestry acts and regulations, specifically the National Protected Area Authority (NPAA) and Conservation Trust Fund Act (2015) which establishes an institution that oversees and manages all

protected wetlands and forests. In the event that the Western Area landfill site is located in a section of the Western Area Forest Reserve, when all options have been explored, the project would need to obtain an approval from NPAA. Other applicable instruments are the Sierra Leone Roads Authority (Amendment) Act (2010), National Electricity Act (2011); Road Transport Authority Act (1996) (Amended to the Roads Safety Authority Act, 2016); Local Government Act, 2004; Persons with Disability Act, 2011; laws related to gender-based violence (GBV) and sexual exploitation and abuse (SEA); Sierra Leone Local Content Agency Act, 2016; Guma Valley Water Company Act, 2017; Sierra Leone Meteorological Agency Act 2017; and National Adaptation Plan 2020. The country has also developed framework and action plans that are being implemented. These include the National Biodiversity Strategy and Action Plan (NBSAP) and the National Adaptation Plan for Climate Change.

International Conventions, Policies, and Protocols

The project will observe relevant international conventions and protocols ratified, acceded to, or recognized by the GoSL. These include the RAMSAR Convention for the Internationally Important Wetlands Especially as Waterfowl Habitats, which applies to a key RAMSAR site in the country, the Sierra Leone River Estuary (SLRE), Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Stockholm Convention on Persistent Organic Pollutants, Sendai Framework for Disaster Risk Reduction, United Nations Convention on Biological Diversity (CBD); United Nations Framework Convention on Climate Change, United Nations Convention on the Rights of the Child, International Labour Organization Convention, Convention Concerning Forced or Compulsory Labor, Convention on the Rights of Persons with Disabilities, and Convention on the Elimination of All Forms of Discrimination against Women.

Assessment and Bridging of Gaps between World Bank's ESF and Local Legislation

The ESF emphasizes the need to meet the World Bank's ESS while also satisfying national laws and regulations. A comparison of the Sierra Leone legal framework/regulation with the World Bank's ESS identified policy gaps between the two. The GoSL will therefore take supplementary measures to ensure that the project complies with the World Bank's ESF set in all applicable ESS.

Institutional Framework

The project will be managed by the MOF's Fiscal Decentralization Division (FDD), which will establish an internal Project Management Unit (PMU-FDD). A PMU has been established under the supervision of the FDD and will be responsible for project management, including social and environmental safeguards, monitoring and evaluation (M&E), overall project communications, grievance redress, in coordination with and supported by the City Project Implementation Teams (CPITs) and/or Technical Lead Agencies. These teams would be responsible for the coordination of project activities in their respective cities. The CPITs would be composed of officials from the following departments: development planning, SWM, engineering, valuation, and finance and will oversee project activities in the field in support of the PMU-FDD. The project will augment the CPITs with consultants, as needed. The project manager and safeguards specialists have been recruited and have commenced work. The community liaison and communication specialist and the gender and GBV specialist will be onboarded in February 2021. The PMU is expected to be fully staffed with consultants within the first three months of project implementation, including (a) a civil engineer, (b) an M&E officer, and (c) a procurement and contract management specialist. The PMU-

FDD will work with several Technical Lead Agencies to execute the project. Ward-level structures will help project implementation in communities. Ward committees would be the main mechanism through which the project interfaces with the community.

1.6 ENVIRONMENTAL AND SOCIAL BASELINE

National Biophysical Environment

Climate

Sierra Leone has a tropical savannah climate, with two distinct seasons. The climate is tropical rainforest with wet and dry seasons, the former from May to October and the latter from November to April. Sierra Leone has a predominantly hot and humid tropical climate that shows a distinct coast-interior gradient, a function of the country's varied topography. This distinction between the two seasons does affect the planning of project implementation and hence safeguards risks. Major construction works are done in the dry season, six months in a year to increase success rate and mitigate E&S impacts, leading to delays and safeguards issues, specifically, pollution and other environmental impacts, if project is poorly planned.

Geology and Geomorphology

Sierra Leone is situated on the Main Craton of the Southern West African Shield. Over half of Sierra Leone is underlain by early Archaean migmatites and gneisses which constitute the Precambrian Basement that forms part of the West African Craton. The geology is stable, with only a few incidents of seismicity recorded in history. Hence, the geological formation of the underlying rocks would not compromise the project infrastructure. About two-thirds of Sierra Leone comprise a series of highly dissected plains and plateau out of which rise a number of mountain ranges and massifs. The peninsula hills south of Freetown rise steeply to heights of between 1,000 and 1,500 m above mean sea level and continue southward as a once-protected forest highland and are now threatened by encroachment of uncontrolled urban developments.

Hydrology

Flooding in Freetown is generally caused by three factors (Usamah 2017). Urban flooding is caused by torrential rain in urban areas with poor drainage system. Inland stream flood is caused by human activities, resulting in narrowing or blocking the natural and man-made drainage channels. Coastal flooding is caused by storm and high tide, typically affecting settlements along the coast. The high rainfall coupled with the steep topography in the Western Area accounts for the annual flooding events. Massive urbanization and deforestation have exacerbated the situation. The presence of wetlands and low-lying lands in secondary cities and the construction of homes and buildings in floodplains are partly responsible for flooding events in those cities.

Ecology

Sierra Leone is globally recognized as a biodiversity hotspot, being part of the Upper Guinea Rainforest.[1]

The current vegetation map of Sierra Leone shows that about 50 percent is covered in bush fallows and farm vegetation and about 3–5 percent is closed forest, most forest estates being secondary forests. The Gola Forest National Park and the Outamba-Kilimi National Park account for the largest tract of closed forest and savanna ecosystems, respectively, under protection. Sierra Leone's wetlands cover a land area of about 4,838 km^2.

The wildlife of Sierra Leone is diverse due to the variety of habitats within the country. There are approximately 147 known species of wild mammals, 172 known breeding bird species, 67 known reptile species, 35 known amphibian species, 750 species of butterflies, including one of the largest butterflies(the giant African swallowtail),and 99 known species of fish within Sierra Leone.

The Sierra Leone River Estuary, a RAMSAR Site and IBA

According to data collected during an important birds area (IBA) and other surveys, 10 species of Palaearctic migrants have been observed to visit the country with 1 percent of their biogeographic population. This is one of the criteria (IBA Criterion A4i) used in assessing wetlands for IBA designation, which qualified the SLRE as IBAs. This coastal wetland supports seven and nine such species, respectively. The sites also support 20,000 or more individual waterbirds on a regular basis (IBA Criterion A4iii). The SLRE is the only designated RAMSAR Site in Sierra Leone, the 1014th RAMSAR site in the world, after Sierra Leone became the 108th member of the RAMSAR Convention in 1999. RAMSAR designations are given to wetland sites that hold significant proportions of the biogeographic population of migratory waterbirds, among other ecological reasons. It should be noted; however, that the proposed landfill options are located more than 10 km from the RAMSAR site.

National Socioeconomic Baseline

Population and Demography

According to the 2015 Housing and Population Census result, Sierra Leone has a population of 7,075,641. The average household size for Sierra Leone is 6 (5.8 in urban areas and 6.2 in rural areas) according to the Sierra Leone Integrated Household Survey (SLIHS) report, 2018, but this could be as high as 10 in the slum communities from the ESMF studies. The data also show that females constituted 52.1 percent of the population compared to males with 47.9 percent. Around 59 percent of the population reside in rural areas and 41 percent reside in urban areas.

General Economy and Poverty Trends

Sierra Leone's economy is small and undiversified. Gross domestic product (GDP) growth in Sierra Leone has been conspicuously inconsistent. This instability could be associated with the uneven economic growth across sectors and largely driven by the export-led mining sector. The postwar economic recovery was first driven by agriculture and from 2010 onward was propelled by the mining industry. Freetown dominates Sierra Leone's urban landscape with 14 percent of the country's population and generates 18.7 percent of the national economy.

The poverty rate is high at 57.9 percent. Poverty is higher in the rural areas. It is the lowest in Freetown, at 18.4 percent, compared with 41.0 percent in other urban areas and 72.2 percent in rural areas. The

country scored 0.452 in the 2019 United Nations Development Programme (UNDP) Human Development Index, ranking 182 out of 189 countries with GDP per capita of US$527.5 .

Water, Sanitation, Electricity, and Health

The Human Development Index rank for Sierra Leone is 182 out of 189 countries (UNDP 2020). The country's health indicators are still among the worst in the world. Under-five mortality and maternal mortality remain intractably high at 122/1,000 (DHS 2019) and 717/100,000 live births (DHS 2019), respectively. Communicable diseases contribute to 65 percent of the total disease burden, though noncommunicable diseases (29 percent) and injuries (6 percent) are on the rise. The leading causes of death are malaria, lower respiratory infections, cardiovascular disease, and diarrheal disease. Although there are many medical facilities, they lack medical professionals and equipment and infrastructure services. The electricity sector suffers from significant underinvestment, technical inefficiency, and lack of coverage. Average electrification is low at about 30 percent, and even if it is higher in Freetown (80 percent), the installed capacity is low such that only about half of the demand in Freetown can be met. About 74 percent of the population relies on point sources, such as protected hand-dug wells for water which are considered unsuitable for dense urban environments, where water points are very close to on-site sanitation facilities. Only 67 percent of people have access to improved water (92 percent) in urban areas and 49 percent in rural areas. The percentage of the population that has access to improved sanitation facilities is 55 percent (urban 84 percent and rural 33 percent). Around 19 percent of people practice open defecation (4 percent in urban areas and 30 percent in rural areas). Freetown has no central sewage treatment plant. At the household level, 60 percent of the city's total population use pit latrines, and over 30 percent rely on septic tanks. Untreated sewage flows into the sea and other water bodies across the city to the sea. Poor access to water and sanitation and the use of streams and rivers as outlets for sewage and solid waste disposal are aggravated by overcrowded living conditions in informal settlements.

Gender and GBV

More men have access to paid jobs, while women tend to occupy less well-remunerated enterprises within the informal sector. Around 12.4 percent of parliamentary seats are held by women, and 19.2 percent of adult women have reached at least a secondary level of education compared to 32.3 percent of their male counterparts. These disparities result from cultural and social barriers that discriminate against women's full socioeconomic participation (African Development Bank 2016). GBV in Sierra Leone is a persistent problem. According to the Sierra Leone Demographic and Health Survey 2019, 61 percent of women ages 15–49 years have experienced physical violence since age 15, and 7 percent have experienced sexual violence. When it comes to intimate partner violence (IPV), 62 percent of ever married women have, at least once in their lifetime, experienced physical, sexual, or emotional violence (SSL and ICF International 2020).

Urbanization and Informal Settlement

Over the last 10 years, the rapid rate of urbanization, which is currently at 3 percent, along with limited housing development and relatively high poverty levels, has led to an increased number of slums and informal settlements, particularly in the capital city, Freetown, where 15 percent of the country's population resides. At present, over 72 slums and informal settlements have been identified in Freetown.

Improving the quality of life for those living in informal settlements must be complementary to efforts to enhance the land management system.

Project Site-Related Environmental and Baseline Situation

Socioeconomic Status of Project Cities

The population data of the cities under consideration for this project according to the 2015 census are as follows: Freetown 1,055,964, WARDC 437,036, Kenema 200,443, Bo 174,369, Koidu 124,662, Makeni 124,634, Port Loko 33,541, and Bonthe 200,730.

Specific to the cities under consideration for this project, Freetown, the capital and largest city of Sierra Leone, dominates the urban landscape with 14 percent of the country's population and generates 18.7 percent of the national economy. It is the commercial and administrative capital of Sierra Leone. Freetown has a relatively low poverty rate of 16.7 percent. WA Urban, in which Freetown is located, has a literacy rate of 79 percent and a disability percentage of 7.7 percent. About 81.6 percent of people in WA Urban have access to electricity. About 64.6 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 61.8 percent of people in WA Urban have access to safe drinking water (piped water, tube wells, and protected dug wells) and 1.4 percent have no access to toilets.

WA Rural District has a poverty rate of 38.8 percent. Apart from Freetown, it is relatively more affluent than the other cities. It has most of the scenic beaches in Sierra Leone and many areas thrive on fishing. WA Rural District has a literacy rate of 46.4 percent and a disability percentage of 3.9 percent. About 24.9 percent of people in the district have access to electricity. About 34 percent of residents have their household refuse collected by private individuals or disposed of into government bins. Around 76.6 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells) and 10 percent have no access to toilets.

Bo city is the capital of Bo District in the south of the country. In the center of Sierra Leone, Bo is a big commercial center and is populated by several ethnic groups. Bo District has a poverty rate of 60.2 percent. The sex ratio (ratio of men to women) in Bo, at 87 percent, is low when compared to 92 percent nationally. Bo has a literacy rate of 47.1 percent and a disability percentage of 6.6 percent. Only 17.5 percent of people in the district have access to electricity. About 20.7 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 59.9 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells) and 33.9 percent have no access to toilets.

Kenema city is the capital of the Eastern Kenema District. It is a major commercial center and is easily accessible to Liberia. Kenema District has a poverty rate of 77.9 percent. The sex ratio (ratio of men to women) in Kenema, at 89 percent, is low when compared to 92 percent nationally. Kenema has a literacy rate of 46.4 percent and a disability percentage of 7 percent. Only 15 percent of people in the district have access to electricity. Only 10 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 88.2 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells) and 17.3 percent have no access to toilets.

Koidu city is the capital of the diamond rich Eastern Kono District. It is a major commercial center, but it carries the E&S scars of several decades of unbridled artisanal mining. Kono District has a poverty rate of 55.2 percent, the situation probably helped by the prevalence of diamonds. Kono has a literacy rate of 42.5 percent and a disability percentage of 6.5 percent. Only 7.8 percent of people in the district have access to electricity. Only 6.3 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 49.4 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells) and 11.6 percent have no access to toilets.

Makeni city is the capital of the Northern Bombali District. It is also the capital city of the Northern Province. Bombali District has a poverty rate of 63.7 percent. Bombali has a literacy rate of 51.3 percent and a disability percentage of 5.6 percent. About 25.6 percent of people in the district have access to electricity. Only 25.7 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 20.2 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells) and 6.1 percent have no access to toilets.

Port Loko city is the capital of the Port Loko District, a major mining District. Port Loko District has a literacy rate of 51 percent and a disability percentage of 9.2 percent. Only 11.6 percent of people in the district have access to electricity. Only 0.7 percent of residents have their household refuse collected by private individuals or disposed of into government bins. Only 47.7 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells) and 15.8 percent have no access to toilets.

Bonthe City, an island, is the capital of the Southern Bonthe District. It is relatively inaccessible. Bonthe District has a poverty rate of 51.9 percent. Bonthe has a literacy rate of 65.8 percent and a disability percentage of 1.6 percent. Only 2.7 percent of people in the district have access to electricity. Only 16.6 percent of residents have their household refuse collected by private individuals or disposed of into government bins. Only 35.8 percent of people have access to safe drinking water (piped water, wells, and protected dug wells) and 59.5 percent have no access to toilets.

Component 1: Institutional and Capacity Development in Integrated Urban Management

There is no spatial planning in most councils and there is a need for training and equipment. Most councils have no geographic information system (GIS) capability. It is difficult to know the exact numbers of houses/properties within most cities. The payment rate for property taxes is very poor. Staffing is low and capacity is limited. There is a need for capacity building and training for upgrading of the municipal property tax systems to enhance own source revenues through better mapping, classifying, and valuation of properties; building data infrastructure; managing relevant data; and enhancing collection procedures in all the city councils.

Component 2: Resilient Municipal Infrastructure Investment and Urban Greening

Baseline information has been collected from the three slum communities (Rokupa, Moyiba, and Coconut) and on the urban greening subcomponent during the ESMF preparation. The socioeconomic indexes in these settlements are low, the settlements have several problems with electricity and water and severe problems with infrastructure, including roads and drainage systems. These settlements are prone to major hazards. The objective of this subcomponent is to upgrade and mitigate the risk of flooding in underserved neighborhoods. This subcomponent will finance the provision of basic services to areas of extreme poverty and reduce flooding in these areas. Comprehensive neighborhood upgrading will provide access

to basic services and infrastructure, reduce flood/landslide/fire risks, and further bring economic and social benefits. The objective of the greening of Freetown subcomponents is to contribute to the FCC's goal of increasing tree and vegetation cover by 50 percent of the 2018 levels by 2022. The context for reforestation under the FCC Tree Planting and Growing Strategy is based on recommendations noted in the Multi-city Hazards Assessment Report funded by the World Bank.

Solid Waste Management (Subcomponent 2b. Solid Waste Management Upgrading in Freetown and Secondary Cities)

Freetown is overpopulated and unplanned with several inaccessible areas. Waste management is a major concern and despite some valiant attempts by the FCC to redress the situation, waste management is still problematic. Presently, only 46 percent of Freetown's households are serviced by waste collection providers, and only 25 percent of the waste is transported to dumpsites, while the remaining (in excess of 300 tons per day) is being burnt or dumped in waterways or in the drainage and clogging the already insufficient storm water drainage system, exacerbating flood risks and the prevalence of vector-borne diseases, and widely contributing to marine pollution. Disposal has also become a major concern. With the long-term plan, it is expected that increased recycling and materials recovery will reduce the volume of waste going to landfill.

Freetown's two landfill sites are poorly managed, have immense environmental problems, and are almost full. The GoSL is conducting a wide search for a 100-acre piece of land in the Western Area for use as a site for constructing a new landfill under the RUSLP. The main criteria taken into consideration for appraising four potential sites are

- Hydrology and hydrogeology;
- Topography and soils;
- Adjacent land use;
- Flora and fauna;
- Site capacity considerations;
- Vehicle access; and
- Other subsidiary issues.

More work needs to be done to determine the best site, but pertinent advice is provided in this report.

Waste management problems also abound in the other cities, with inadequate landfill sites, dearth of equipment, and poor management in general.

Subcomponent 2c: Market Upgrading in Select Secondary Cities

The major markets in Bo, Kenema, and Makeni are in a poor state. Leaking roofs, poor toilets, waste disposal problems, and inadequacy of space in the markets characterize the markets. They also lack water and electricity. There is need to modernize these markets, which have the potential of being a major source of revenue for the councils.

Subcomponent 3.1: Strengthening Emergency Preparedness and Response Systems

Sierra Leone faces many natural hazards, the main ones being flooding, landslides, and coastal erosion. These are described in a major hazards study commissioned by the World Bank. With over 13 percent of the country's area and more than 35 percent of its population presently at risk to multiple hazards, Sierra Leone needs to start addressing disaster risk management DRM in a holistic manner by establishing an adequate institutional framework for DRM, proactively managing and reducing existing disaster risks, and preventing the creation of new ones through disaster risk-informed planning and investments while at the same time enhancing its capacity for disaster preparedness and response. Disaster management at the national and local level needs to be better managed and coordinated.

Component 4: Project Management

The FDD of the MOF is responsible for overall management of RUSLP and has already started recruitment of members for the project management team. The PMU will plan training programs to build up the capacity of national and city project teams, consultants, and contractors. This project, with several subcomponents and requirements for environmental compliance, needs to be managed and coordinated well at the national and project-specific levels.

1.7 ENVIRONMENTAL AND SOCIAL RISK ASSESSMENT AND MANAGEMENT PROCESS

The Environmental and Social Risk Assessment and Management process is guided by the ESF. According to this framework, the GoSL will carry out an Environmental and Social Assessment (ESA) of the RUSLP activities to determine their E&S risks and impacts before commencement of civil works and throughout the project life cycle at each subproject impact location. The assessment will be informed by available data on biophysical and socioeconomic baseline relating to the project activities. Project alternatives or options as they relate to location planning, design, implementation, and technology will be reviewed and revised accordingly. The choice of alternatives will follow a mitigation hierarchy to address adverse E&S impacts and seek opportunities to enhance project benefits. This will be followed by the preparation of E&S studies and proposed mitigation measures for each risk identified by the E&S assessment and respective studies and each relevant ESS. The assessment processes, screening exercises, and E&S classifications of subprojects shall follow guidelines provided in ESS1 and best international practices. The GoSL has and shall continue to hire the services of competent and highly qualified experts to adequately and accurately conduct the studies leading to the evaluation of E&S risks.

Stakeholder consultation. Stakeholder engagement at all stages of the ESA process will be emphatically followed by the project team, starting at the project preparation stage. A Stakeholder Engagement Plan (SEP) for the project has been prepared and is being implemented as per ESS10. A number of meetings and workshops have already been held with community representatives at various levels of society and their inputs on i), ii) are incorporated into project planning and design (see project SEP).

1.8 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS/RISKS AND PROPOSED MITIGATION MEASURES

Positive Impacts of Project

The project will directly benefit an estimated 1.7 million people, including residents and businesses in the seven targeted cities including Greater Freetown (including Western Area Rural District), Makeni, Koidu New Sembehun, Kenema, Bo, Port Loko, and Bonthe. Job opportunities will be created for local labor in infrastructure construction or rehabilitation to the extent possible. Beneficiaries will be empowered and given voices through citizen engagement that will be advanced by the project and will be at the core of the project, with communities engaged at all stages of implementation. The project aims to ensure that women and other vulnerable groups benefit fully from the project activities. Infrastructure investments will incorporate gender aspects to complement government efforts to reduce inequalities between women and men and ensure universal design access to accommodate the needs of persons with disabilities, the elderly, and so on.

All seven cities will benefit from sanitation and SWM support, which will alleviate the current constraints faced by municipalities. The Western Area will have a much-awaited new landfill site, which will reduce the burden on the existing ones or lead to their closure. The densely populated communities selected under the neighborhood upgrade may, upon completion of construction works, experience reduced vulnerability to the effect of annual flooding events experienced in Freetown, while reforestation through urban greening would help stabilize slopes and address recurring flooding, landslide susceptibility, and coastal erosion and protect critical infrastructure, such as the city's water supply system.

Negative Impacts of Subcomponents with Environmental and Social Footprint

There will also be potential adverse E&S impacts/risks at the design, construction, operation, and decommissioning stages in the implementation of activities under Component 2. The project is likely to generate a wide range of significant adverse E&S risks and impacts. Risks and impacts could range from large to very large. Some of the project locations are densely populated and are sensitive. Within these contexts the potential risks and impacts at each stage of each subproject will be evaluated, and the magnitude and type of impacts and proportional impact mitigation measures will be adapted. The Environmental and Social Management Plan (ESMP) will contain all impact mitigation measures for all stages of the project. Component 1 presents the risk exclusion of certain groups when selecting candidates for training opportunities. Component 4 will include the recruitment of direct staff and consultants with labor and working conditions implications.

1.9 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS

The Western Area landfill site, neighborhood upgrade, and market project subcomponents will involve major construction works, and in some cases near or in densely populated areas or a forest reserve. Depending on the scale of the activity and the outcome of screening, an Environmental and Social Impact Assessment (ESIA) and an ESMP, or an ESMP alone, will be required. Where applicable, specific management plans will be prepared to address certain risks, for example, a solid waste management plan (SWMP) for the landfill and SWM in the Western Area. All construction works will require the preparation and implementation of ESMPs to mitigate anticipated impacts. The content of the ESMP will be guided by

the nature of risks. Typically, though, ESMPs will cover pollution risks and inefficient resource use, OHS, social issues such as ESH/sexual harassment (SH), labor and working conditions, community health and safety (including COVID-19 health and safety protocols), and so on.

Subproject safeguards instruments will be prepared by consultants and reviewed by the environmental and social officers in the PMU, and for high and substantial risk projects the World Bank will need to approve the ESIAs.

The SEP may need to be updated with project implementation when more details are available. A Resettlement Policy Framework (RPF), Labor Management Procedures (LMP), and Public Consultation and Disclosure Plan are included in the report.

1.10 PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT

Consistent with the project SEP, consultations with various stakeholders, including potential beneficiaries and project-affected persons (PAPs), were undertaken as part of preparation for this ESMF. The list of people met is included in Appendix 5. A total of 14 stakeholder sessions where held, spanning engagement with market women, opinion leaders in the proposed slum communities, project proponents and staff, disability and gender groups, local councils (LCs), nongovernmental organizations (NGOs) and civil society organizations, and so on. Consultations with the slum communities showed support for the project with strong views to invest in access roads, water, electricity, vocational training centers, and so on. There were also many discussions in term of access to project employment and benefits during constructions. Several major stakeholders were intimated of the contents of the ESMF document and useful discussions were held with them, especially about how the project will proceed from this stage onward. The report has also anticipated what will be involved with stakeholder engagement at the ESIA stage consistent to the provisions of the project Stakeholder Engagement Plan (SEP).

The procedures for handling grievances are comprehensively handled in the SEP for the project produced in 2020. Grievances will be handled at the Project Steering Committee (PSC) level through a multi-channel grievance uptake process, through which project-related grievances will be resolved. The GRM process will be coordinated by the PSC through the PMU to ensure transparency and accountability in the financial flow and distribution of relief items/supplies/consumables to PAPs. The GRM for the RUSLP will be available for use by all project stakeholders, including those directly and indirectly affected, positively or negatively, and those with interest in or who could influence the project. This will offer an opportunity for PAPs to submit questions, concerns/complaints, comments, or suggestions and obtain resolution or feedback. The project should use the existing grievance redress pathways, insofar as they are in agreement with the World Bank's principles.

1.11 IMPLEMENTATION OF THE ESMF AND INSTITUTIONAL ARRANGEMENTS

The FDD of the MOF, which has the mandate of coordinating LCs and monitoring their fiscal management, is responsible for overall management of the RUSLP. Under the overall leadership of the Director, FDD, the FDD has established an internal PMU and supervision of the PMU. The PMU has employed environmental and social safeguard specialists and will be required to recruit an ISO 45001:2018 certified OHS specialist. Specifically, the FDD shall be responsible for recruiting project staff and consultants before the project appraisal date. The FDD in collaboration with the PMU; implementing councils; and ministries, departments, and agencies (MDAs) shall establish various Technical Working Groups (TWGs) for key

thematic areas or components. The TWG will include the PMU staff, representatives of implementing councils, and any other relevant professionals.

1.12 ESMF BUDGET

The estimated budget for ESMF implementation is provided in Table 1.

Table 1: Estimated Budget for ESMF Implementation

Number	Activities	Cost (US$)
1	Environmental monitoring	112,000
2	Capacity building	260,000
3	Preparation of specific ESIAs	250,000
4	Midterm audit of E&S performance	100,000
Total		**722,000**

1.13 MONITORING AND REPORTING

In the context of a project, environmental monitoring is required to verify implementation of the measures necessary to minimize or offset adverse impacts and enhance beneficial impacts and regulatory, institutional framework and systems identified in this ESMF. Thus, monitoring will check if the predicted impacts have actually occurred and check whether the recommended management plans have been implemented and are effective. The contractors and operation and maintenance contractors will be responsible for the preparation and adequate implementation of the Contractor Environmental and Social Management Plans (CESMPs) and OHS Plans, while the supervising engineers will be responsible for supervising the adequate preparation and implementation of the CESMPs and OHS Plans by the contractors. The E&S and OHS specialists will be responsible for overall supervision. Monitoring will also identify any unforeseen impacts that might arise from project implementation. To be effective, environmental monitoring must be fully integrated with the overall project management effort at all levels, which itself should be aimed at providing a high level of quality control, leading to a project which has been properly designed and constructed and functions efficiently throughout its life. The ESMF monitoring program should provide the basis for rational management decisions regarding impact control. The monitoring program has been undertaken to meet the following objectives.

2 INTRODUCTION

2.1 Project Background

Urbanization in Sierra Leone has been rapidly growing in the last five decades, with the share of the population living in urban areas almost doubling between 1967 (21 percent) and 2015 (41 percent). Freetown dominates the urban landscape which hosts 15 percent of the population in only 0.02 percent of the total area of Sierra Leone but makes up 30 percent of national gross domestic product (GDP). Sierra Leone's National Development Plan (NDP) (2019–2023) recognizes the trend of rural-to-urban migration, which will characterize the economic development of Sierra Leone in years to come.

Despite this increasing urbanization trend across the country, the urban sector is ill-equipped to deal with rapid urbanization challenges and harness potential benefits. City councils in Sierra Leone face several challenges related to their fiscal sustainability and investment capacity, constraining their ability to deliver services to their residents and undermining their ability to tap into their economic growth potential. The lack of planning and development controls has exacerbated precarious living conditions and the depletion of biodiversity and natural forest areas. Basic infrastructure and service delivery in urban areas are also inadequate, with significant adverse impacts on the well-being of households and productivity of firms.

Sierra Leone's high vulnerability to natural catastrophes adds mounting pressure to its already strained urban infrastructure and limited fiscal space. Owing to its topography, location, high annual mean rainfall,[2] and socioeconomic conditions, Sierra Leone is highly exposed to a range of natural hazards. Recurrent flooding and landslides pose the greatest risks, significantly disrupting economic and social functions and imposing high public and private costs for rehabilitation. Approximately 35 percent of the population and 15 percent of the territory are vulnerable to multiple natural hazards. The country is ranked 24th in the world for overall natural hazard risk, 8th in disaster vulnerability, and 6th on lack of adaptive capacities to natural shocks.[3] In the past four decades, Sierra Leone was hit by 30 adverse natural events that affected over 300,000 people. On average, the country suffers annual losses of about US$7.72 million (0.2 percent of 2019 GDP) due to flooding alone.[4] The most recent major event took place in August 2017, when excess rainfall led to localized landslides and widespread flooding in Freetown, causing over 1,000 casualties and total damages of US$35 million. With the rapid urbanization that is increasing the base of assets exposed to disaster and climate risks, there is a significant rise in losses, particularly if investments in new assets are not accompanied by measures to mitigate vulnerabilities. Much like in other countries, poor households in Sierra Leone have been and remain particularly vulnerable to, and disproportionally affected by natural disasters due to overexposure, higher vulnerability and a lower ability to cope and recover. While many people have moved out of poverty in postwar Sierra Leone, they remain at risk of slipping back if affected by shocks against which they cannot protect or insure themselves.

Municipalities in Sierra Leone are integral actors for service delivery, planning, local development, and disaster risk management (DRM). Local councils (LCs) have the mandate to improve service delivery

(public transportation, solid waste collection and management, local or secondary roads, public spaces, and housing); nurture local economic development; conduct and promote development planning; manage and mitigate disaster risks; and provide better engagement with citizens to enhance local accountability.

Despite their mandate LCs face tremendous pressure to being fiscally sustainable and need to improve their public financial management and own source revenue mobilization. The technical capacity of city councils needs to be improved to adequately plan and manage their cities. Cities also need to provide and improve flood-resilient municipal services and infrastructure to improve the living conditions of citizens and enhance the business climate for private investment, strengthen the technical capacity to manage disaster risks and reduce climate change vulnerability at the local level, and enhance the DRM institutional framework as well as preparedness and response capacities.

Markets in cities contribute, on average, about 33.5 percent of total own-source revenue in councils. They are however in a deplorable state and need upgrading to improve working conditions for traders, stimulate local economies, and provide city councils with increased revenues through increased collection of market dues. Many of the central markets lack water, electricity, proper toilets, ablution and storage facilities, pavements, and adequate roofing and are not disability accessible.

Freetown, in particular, has a considerable number of unplanned settlements many of which lack access to basic services and infrastructure. Urban upgrading is required in many of these communities for flood and landslide reduction and interventions are required to improve the living conditions in existing informal urban settlements. Forward planning is essential to prevent new disaster risks caused by settlements in high risk areas and without adequate infrastructure. The Multi-city Hazards Assessment Report[5] has recommended expanding tree and vegetation cover in targeted upper catchment and high slope areas in various areas that it has identified as a means of further addressing the issue of natural hazards.

Solid waste management (SWM) practices in the cities pose severe challenges for the city councils. Rapid urbanization and lack of planning have meant that city councils with their limited budgets have been overwhelmed in the management of solid waste. Consequently, health issues abound, and many areas of various cities are not livable and investment friendly.

Within this context, the Government has requested the World Bank's support to improve urban management and disaster resilience in Sierra Leone. The 'Resilient Urban Sierra Leone Project' (RUSLP) is designed to address comprehensively, the multisectoral urban development challenges and disasters risks of the country, with the aim for livable, safe, financially sustainable, and productive urban centers. The project is linked to at least three Clusters (3, 4 ,and 7) the Medium-Term National Development Plan (MTNDP) and is also aligned with the strategy of the Freetown City Council (FCC) to 'Transform Freetown'.

The RUSLP will directly benefit from the lessons learned, and build upon the gains made, under the World Bank funded Freetown Emergency Recovery Project (FERP). The FERP supports safeguarding of the disaster zone of the August 2017 mudslide at Mortormeh, rebuilding of critical public infrastructure in the affected area, and strengthening of the country's institutional capacity for DRM and emergency response. It will also work in synergy with another active World Bank-funded project, the Sierra Leone Resilient Urban Mobility Project, which is anchored in the Ministry of Transport and Aviation.

2.2 Project Description and Objectives

The project will support all seven city councils in Sierra Leone and the Western Area Rural District Council (WARDC). It will address the needs of Freetown as the economic engine of Sierra Leone while catering to the unique opportunities and challenges in the secondary cities of Sierra Leone.

The RUSLP development objective is to improve integrated urban management, service delivery, and disaster resilience in the Western Area (Freetown and Western Rural District) and select cities in Sierra Leone, including the regional headquarter towns of Bo, Kenema, and Makeni, and the cities of Koidu, Bonthe, and Port Loko (Figure 1). The project is structured into four components as follows:

Component 1: Institutional and Capacity Development in Integrated Urban Management(US$4 million equivalent, of which IDA US$3.4 million and Global Environment Facility (GEF)-7 US$0.6 million)

This component will support city councils in institutionalizing and strengthening their urban management capabilities that are critical for efficient revenue generation, planning, as well as delivery and sustainable management of resilient infrastructure and services. It has two subcomponents.

Subcomponent 1a. Strengthening Integrated Urban Planning and Spatial Data Infrastructure (US$2 million, of which IDA US$1.4 million and GEF-7 US$0.6 million)

This subcomponent will support all project cities in (a) spatial planning, (b) municipal investment planning, (c) local economic development, (d) monitoring and regulating the built environment, and (e) use and management of spatial data necessary for decision-making. Proposed activities include (a) preparation and implementation of spatial plans (master, local plans, and planning schemes) and training in urban planning; (b) support to set up a building control unit at the FCC; (c) support for reviewing or developing planning laws, strategies, and codes; and (d) support for implementing a robust municipal spatial data infrastructure (MSDI), including training in geospatial infrastructure and applications and data management.[6]

This subcomponent will also finance the creation and implementation of a digital platform for citizen engagement for city councils, with the dual purpose of (a) providing updates to communities on the status of public projects (including those funded under this project) and (b) receiving feedback from the community on the quality of service delivery to enable the cities to address the reported issues in a timely and systematic manner.

Subcomponent 1b. Upgrading Urban Property Tax Administration and System (IDA US$2 million)

This subcomponent will provide capacity building and training for comprehensive upgrading of the municipal property tax systems to enhance own-source revenues through better mapping, classifying, and valuation of properties; building data infrastructure; managing relevant data; and enhancing collection procedures in all seven city councils. The system will be based on the development of an MSDI supported by spatial framework. The proposed package of activities for each city includes (a) carrying out property surveys to update the property tax database; (b) developing and upgrading an information technology system to house the property tax database and providing related training and capacity building; (c) conducting structured training in geographic information system (GIS), property valuation, development

control, and surveying; (d) developing systems to facilitate taxpayer billing and payments; and (e) carrying out taxpayer sensitization and outreach activities.

Component 2: Resilient Municipal Infrastructure Investment and Urban Greening (US$46 million equivalent, of which IDA US$40 million and GEF-7 US$6 million)

This component will finance priority resilient municipal infrastructure and services at neighborhood-and city levels, including the preparation of technical designs, as needed. The focus will be on investments identified as having positive social and economic impacts as well as contributing to disaster risk reduction and prevention. There are three subcomponents.

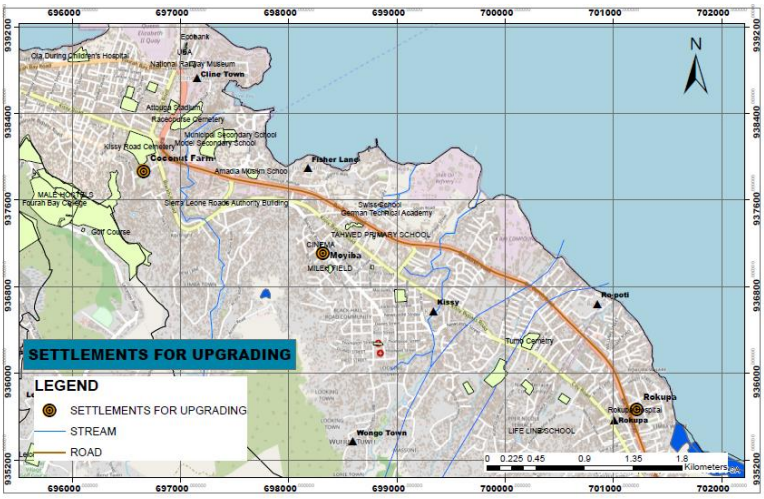
Subcomponent 2a. Neighbourhood Upgrading and Greening in Freetown (US$19 million, of which IDA US$15 million and GEF-7 US$4 million)

This subcomponent will support the comprehensive upgrading and flood risk mitigation in underserved neighborhoods (these could include Coconut Farm, Moyiba, and Rokupa) ensuring better integration of these neighborhoods into the urban fabric and that all the infrastructure investments improve mobility and access to basic services to excluded groups such as persons with disabilities, the elderly, children, and women. The investment menu includes drains, access roads, walkways, footbridges, water supply and sanitation, public spaces, local markets, and light-emitting diode street lighting.

A catchment-based approach would be applied for integrated flood risk reduction of drainage catchment areas where the selected communities are located.[7] The selection of the short-listed three settlements was based on the following criteria: (a) settlement size and population density, (b) level of hazard risk, (c) contribution to a drainage catchment area improvement, (d) minimal demolition and resettlement, and (e) alignment with other government infrastructure programs. The interventions will be designed and implemented in a participatory manner, leveraging existing programs and services and maximizing local livelihood opportunities through labor-intensive works for job creation and economic recovery in the wake of coronavirus disease (COVID-19). The project will finance the detailed designs, construction supervision, and safeguards instruments to support the preparation and implementation of the upgrading investment. These infrastructure investments will be designed to climate- and disaster-resilient standards. Further, low-impact investments (such as energy-efficient street lighting and use of locally sourced materials) and low-carbon construction designs will be prioritized to reduce greenhouse gas (GHG) emissions

This subcomponent will also finance urban greening initiatives through large-scale tree planting that will be implemented by communities. This activity will contribute to the FCC's goal to increase tree and vegetation cover by 50 percent from 2018 levels by 2022, as a core component of the Resilience Pillar in the "Transform Freetown" agenda for 2019–2022. It will support canopy monitoring and asset management of the tree planting campaign to ensure sustainability and adequate maintenance of trees.

Figure 1: Settlements to Be Upgraded



Subcomponent 2b. Solid Waste Management Upgrading in Freetown and secondary cities (US$20 million, of which IDA US$18 million and GEF-7 US$2 million)

Activities under this subcomponent are varied. In Freetown, a comprehensive SWM system investment across waste collection, transfer, and disposal for Greater Freetown will be carried out. The project will also finance the construction of a modern landfill that will service the residents of Freetown and its neighboring Western Area Rural District and other subsidiary projects.

The three cities of Bo, Kenema, and Makeni require further capacity building to ensure both technical and financial sustainability of their SWM systems. The proposed support builds upon the system in place and includes a comprehensive training program, support to operations under the form of mobile equipment, as well as support to the professionalization of youth groups in charge of collection.

For Bo, targeted interventions under this phase of the project are the following:

(a) Renovation of site ancillaries such as access road, perimeter fence and weighbridge at the existing landfill

(b) Upgrading of the current vehicle maintenance facility

(c) Procure transport and disposal equipment, such as dozers and trucks

(d) An Environmental and Social Impact Assessment (ESIA) feasibility and design for the future upgrading of the existing landfill to restore clear access to the site and create additional disposal capacity

(e) A comprehensive training and institutional strengthening program to establish a robust financial model and develop cost recovery strategies and implement data-driven planning and rigorous performance management.

For Makeni and Kenema, the proposed support consists of the following:

(a) Procure equipment and vehicles for improvement of collection along with adequate provisions for maintenance to ensure high availability of the fleet while keeping maintenance costs under control.

(b) Support a comprehensive training and institutional strengthening program to establish a comprehensive financial model and develop cost recovery strategies and implement data-driven planning and rigorous performance management. Training regarding H&S will also be provided to formal and informal workers.

Subcomponent 2c. Market Upgrading in Select Secondary Cities (IDA US$7 million)

This subcomponent will finance the comprehensive upgrading of central markets in select cities to improve working conditions for traders, stimulate local economies, and provide city councils with increased revenues through increased collection of market dues. The selection of markets to be upgraded will be informed by feasibility studies for each central market (financed by the project). The selection will be based on the following criteria: (a) contribution to local economic development, (b) cost-effectiveness, (c) state of existing services and connections, and (d) site suitability. Potential upgrading investments will integrate universal access designs and include market stalls, roofing, water and sanitation facilities, drains, electricity, and childcare centers.

Component 3: Emergency Management Institutional and Capacity Development (IDA US$3.6 million equivalent)

This component will build the capacity of the national and local governments in emergency preparedness and response, to better prepare them to respond to and recover from disasters. It will (a) support technical and operational capacity building and (b) provide access to financing for immediate response through a contingent emergency component. It has two subcomponents.

Subcomponent 3a. Strengthening Early Warning Emergency Preparedness and Response Systems

This subcomponent will finance investment in, among others, organizational structures (district committees, emergency operations centers [EOCs], command posts, and incident command teams); equipment; training; operational plans and procedures; critical infrastructure; and facilities. The project will support activities aimed at strengthening the new DRM Agency (DRMA), including equipping the EOCs, and institutional and technical capacity of Sierra Leone Meteorological Agency and National Water Resources Management Agency to provide hydromet and early warning services

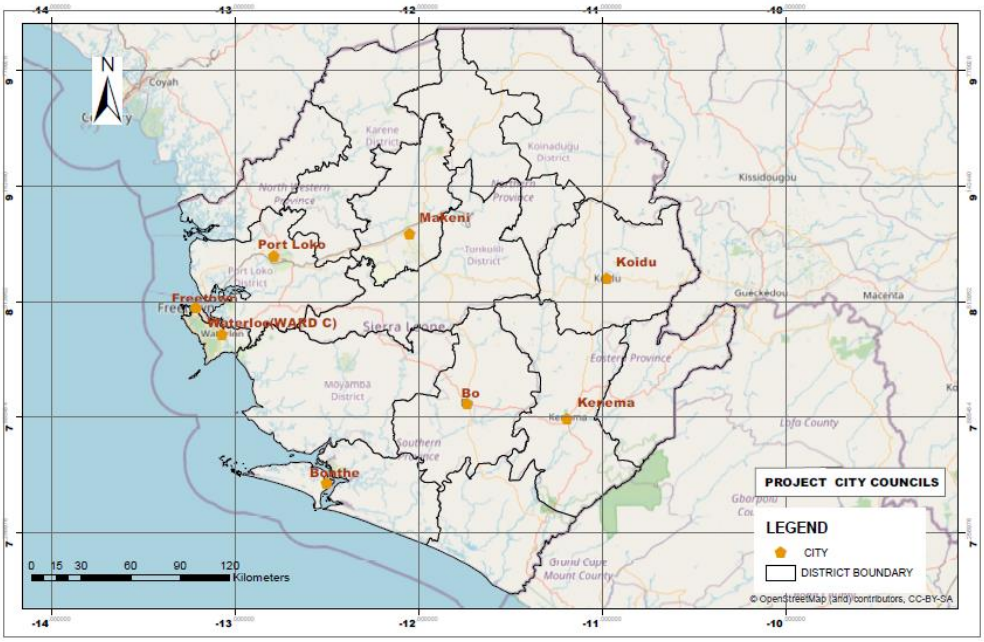
Subcomponent 3b. Contingent Emergency Response Component

The Contingent Emergency Response Component (CERC) will enable rapid reallocation of project funds in the event of a natural crisis during implementation of the project to address eligible emergency needs under the conditions established in the CERC Operational Manual.

Component 4: Project Management (US$3.13 million equivalent, of which IDA US$3.00 million and GEF-7 US$0.13 million)

This component will finance project management costs of the Project Management Unit (PMU) for staffing, monitoring and evaluation (M&E), including project technical audits (as needed) and midterm and end-project evaluations, safeguards, financial management, procurement, and training as well as cover any costs related to the setup of a grievance redress mechanism (GRM).

Figure 2: Project City Council Locations



2.3 Rationale for the Preparation of an ESMF

This Environmental and Social Management Framework (ESMF) is prepared to examine the risks and impacts of the RUSLP as its subprojects risks and impacts cannot be determined until the subproject details are determined and specific locations are identified. This ESMF sets out the principles, rules, guidelines, and procedures to assess the environmental and social (E&S) risks and impacts of subprojects to be financed by the RUSLP. It contains measures and plans to reduce, mitigate, and/or offset adverse E&S risks and impacts; provisions to estimate and budget the costs of such measures; and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage E&S risks and impacts. It includes adequate information on the area where subprojects are expected to be sited, including any potential E&S vulnerabilities of the area, and about the potential impacts that may occur and mitigation measures that might be expected to be used. It provides (a) measures and plans to reduce, mitigate, and/or offset subprojects' adverse risks and impacts; (b) bases for estimating and budgeting the costs of mitigation measures; (c) information on the implementing agencies' roles and responsibilities for addressing E&S risks and impacts, including on their capacity to manage E&S risks and impacts; (d) adequate information on subprojects intervention areas where civil works are expected to be sited and any potential E&S vulnerabilities of the area; and (e) information on the potential impacts likely to occur and mitigation measures expected to be used.

2.4 Objectives and Scope of Work for the Preparation of the ESMF and Project Financing

The purpose of an ESMF is to provide a process to assess and manage the potential E&S risks and impacts of the project. The process will identify, through a screening procedure, potential negative impacts of Component 2 and Subcomponents 2a and 2b. It proposes relevant mitigation measures and strategies. The general framework for the assessment and management of E&S risks and impacts under the project is provided in the World Bank's Environmental and Social Framework (ESF) (ESS1 and the Environmental

Assessment Regulations of Sierra Leone. The ESF requires that an ESMF be prepared as in a project with a series of subprojects, the risks and impacts cannot be determined until the details of the subprojects have been identified,. The ESMF provides a general impact identification framework to assist project implementers to screen the projects for E&S risks and impacts and institute measures to address adverse E&S impacts. It sets out the principles and processes within which the subprojects would be implemented agreeable to all parties. Specifically, the ESMF will

(a) Assess the potential adverse E&S risks and impacts commonly associated with the subprojects and the way to avoid, minimize, or mitigate them;

(b) Establish clear procedures and methodologies for E&S planning, review, approval, and implementation of subprojects and the management of the risks;

(c) Develop an E&S risk screening process; and

(d) Specify the roles and responsibilities and the necessary reporting procedures for managing and monitoring subproject E&S concerns.

Specific tasks involved in the ESMF preparation include, but are not limited to, the following:

(a) Legislative, regulative, and administrative regime

(b) Environmental and social baseline

(c) Determination of potential environmental and social risks and mitigation measures

(d) Procedures for E&S screening of project sites/activities

(e) Environmental and social checklist

(f) Citizen Engagement Plan including grievance mechanism for the project

(g) Public consultations to formulate the ESMF and its implementation

(h) Environmental and Social Management Plan (ESMP) and M&E plan

(i) ESMP implementation arrangements and capacity-building plan

(j) Implementation schedule and cost estimates

(k) Provision of mechanisms for ESMF disclosure/dissemination

(l) Preparation and inclusion of a template ESMP

(m) Preparation and inclusion of a terms of reference (TOR) and framework for developing a Gender-Based Violence (GBV) Action Plan, as annex of the ESMF

(n) Labor Management Procedures (LMP) as annex.

The distribution of project activities across various city councils as indicated in Table 2.

Table 2: Project Activities Distribution

City/Area	Urban planning	Cadastral system and property valuation	Neighborhood upgrading	SWM	Market upgrade	Disaster preparedness
FCC	X		X	X		
WARDC	X	X		X		
Kenema	X	X		X	X	X

City/Area	Urban planning	Cadastral system and property valuation	Neighborhood upgrading	SWM	Market upgrade	Disaster preparedness
Makeni	X	X		X	X	X
Bo	X	X		X	X	X
Koidu	X	X		X		X
Port Loko	X	X		X		X
Bonthe	X	X		X		X
National	X	X				X

Project Financing

The project cost by component and subcomponents are presented in Table 3. The table also indicates funding sources (IDA and GEF, respectively). The project will most likely involve the preparation and implementation of a Resettlement Action Plan (RAP), which will be financed by project funds. The cost cannot be estimated at this stage, but the project will go through a level 3 restructuring to make funding available for the RAP.

Table 3: Project Component/Subcomponent Budget and Source of Finance

Component or Subcomponent	IDA Financing (US$)	GEF Co-Financing (US$)	Project Cost (US$)
Component 1: Institutional & Capacity Development in Urban Management	3.90	0.60	**4.50**
Subcomponent 1.1: Strengthening Integrated Urban Planning and Spatial Data Infrastructure	1.90	0.60	2.50
Subcomponent 1.2: Upgrading Urban Property Tax Administration and System.	2.00	0.00	2.00
Component 2: Resilient Municipal Infrastructure Investment & Urban Greening.	29.50	6.00	**35.50**
Subcomponent 2.1: Neighbourhood upgrading and Greening in Freetown	12.50	4.00	16.50
Sub-component 2.2: Solid Waste Management Upgrading in Freetown and Secondary Cities	10.00	2.00	12.00
Subcomponent 2.3: Market Upgrading in select Secondary Cities	7.00	0.00	7.00
Component 3: Emergency Management Institutional Capacity Development	3.40	0.00	**3.40**
Sub-component 3.1: Strengthening emergency preparedness and response systems	3.40	0.00	3.40
Subcomponent 3.2: Contingency emergency response component	0.00	0.00	0.00
Component 4: Project management	3.00	0.33	**3.33**
Total costs	40.00	6.73	46.73

2.5 Methodology

The preparation of the ESMF consisted of a combination of desk reviews of available literature, background experience, field surveys, consultative meetings, and report writing. Available World Bank information on the project was augmented by getting information directly from ministries, departments,

and agencies (MDAs), city councils, sector-related organizations, nongovernmental organizations (NGOs), and donors. This was followed by interviews, data collation, and administering questionnaires with various parties. The information collected was analyzed and options to address issues in the TOR developed.

The work consisted of various phases:

- Phase 1-Production of inception report after initial review stage
- Phase 2- Analysis and options development/Addressing ESMP issues
- Phase 3-Continuation of field visits
- Phase 4- Stakeholder workshops
- Phase 5- Production of draft report and incorporation of comments into final report
- Phase 6-Production of final report

2.6 Key Issues Considered for This Project

Issue 1: Uncertainties about project scope and location

The project design and finalization of selections of activities are under way. There are several options for the locations of certain project components. Some of these will therefore involve an analysis of options. This assignment is to prepare an ESMF outlining the general principles as well as the regulatory and institutional arrangements for identifying and addressing any potential E&S impacts arising from the proposed project, and where the locations are not specific reference will be made to options. The ESMF will be specific on the nature of mitigation measures but for certain components will be generic on the location and scope of interventions.

The selection of markets to be upgraded will be informed by feasibility studies for each central market (financed by the project) and will be based on the following criteria: (a) contribution to local economic development, (b) cost-effectiveness, (c) state of existing services and connections, and (d) site suitability. Potential upgrading investments will integrate universal access designs and include market stalls, roofing, water and sanitation facilities, drains, electricity, and childcare centers. Preliminary visits to major markets in the various cities indicated that the major central markets are generally the largest and serve the greatest number of residents. The study has therefore concentrated on the major central markets in each city.

Issue 2: Inconsistencies, conflicts or gaps between World Bank ESF and national laws

The ESMF must be consistent with the World Bank's ESF; Sierra Leonean laws, such as the Environmental Protection Agency (EPA) Act 2008 (and as amended in 2010); and international conventions ratified or recognized by the Government of Sierra Leone (GoSL). This could however be a challenge due to inadequate national laws and their implementation or inconsistencies between the national laws, and the ESF provisions in the World Bank's ESF are usually more rigorous than national laws. Where there are conflicts the more stringent law/convention/framework will prevail.

The World Bank's ESF sets out the World Bank's commitment to sustainable development, through a World Bank Policy and a set of Environmental and Social Standards (ESS) that are designed to support

borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity. This framework comprises

- A Vision for Sustainable Development, which sets out the World Bank's aspirations regarding E&S sustainability;
- The World Bank Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the World Bank; and
- The ESS, together with their annexes, which set out the mandatory requirements that apply to the borrower and projects, as well as the applicable Environmental, Health, and Safety (EHS) Guidelines.

Issue 3: The COVID-19 pandemic restrictions

This pandemic will impose severe restrictions on the execution of the project. Some sites may be inaccessible, and it may not be possible to meet stakeholders in large groupings. COVID-19 guidelines will be taken into consideration in all interactions with stakeholders. COVID-19 considerations will apply to actual project implementation. Emergency protocols and procedures may include social distancing measures, personal protective equipment, and hygiene protocols for the responders and population attended.

Issue 4: Robust GBV Action Plan required

The project will include a robust GBV Action Plan and work with men and boys through communications dialogue/materials to reduce these GBV risks, working in collaboration with a local NGO in the fight to prevent and respond to GBV.

Issue 5: Citizen engagement and grievance redress mechanisms

Citizen engagement in the project will be carried out by (a) ensuring an intensive program of engagement with project stakeholders throughout implementation, (b) deepening the consultation process that began during project preparation, and (c) monitoring social impact through annual stakeholder surveys. Committees in each settlement and market, local leaders, women representatives, disability groups, and other relevant community associations will work with the city officials at important review and decision-making points along the planning and implementation process. It is also important for proper GRMs to be put in place.

Issue 6: Gender

The project aims to ensure that women benefit fully from the project activities. Infrastructure investments will incorporate gender aspects to complement government efforts to reduce inequalities between women and men. Women and men have different needs, priorities, and uses for infrastructure and systems, and they are differently exposed to risk and disaster impacts. The project will address gender gaps in community-level decision-making to ensure that urban infrastructure investments respond to the specific needs and priorities of women as well as men.

2.7 Analysis of Alternatives

It is appropriate to review alternatives considered during planning of the project and to explain why the proposed project activities have been selected, including any environmental, social, and health considerations. The aim is to establish whether there are reasonable alternatives which could be pursued which meet the project's objectives with less impact on the environment and, if there are, to explain what other factors determined the choice of proposal.

Choice of Project Interventions

The project attempts to address some of the main problems in major cities in Sierra Leone caused by rapid urbanization. Despite the increasing urbanization trend across the country, the urban sector is ill-equipped to deal with rapid urbanization challenges and harness potential benefits. City councils in Sierra Leone however face several challenges related to their fiscal sustainability and investment capacity, constraining their ability to deliver services to their residents and undermining their ability to tap into their economic growth potential. The GoSL, in its MTNDP, committed to build institutional capacity to respond to natural disasters and strengthen the resilience of urban communities, sustain decentralization, and improve service delivery. This project funded by the World Bank is in response to this commitment by the government and is supporting the effort to improve DRM, urban resilience, and service delivery. Based on the project objectives, there are several alternative projects in various cities that could have been addressed. Development plans by city councils and other plans, like FCC's strategy to 'Transform Freetown', have prioritized the subcomponents within the various city council localities. Even within each project subcomponent, there were competing priorities but the decision on which activities to prioritize was based on a host of factors including feasibility studies, impact on the sustainability of the councils, and many other factors including limitations of the budget.

Subcomponent 1a. Strengthening Integrated Urban Planning and Spatial Data Infrastructure

Supporting cities in various aspects of planning as described in this subcomponent will greatly help alleviate the unregulated building and planning problems in the cities. The success of many other initiatives undertaken to meet project objectives depend on proper planning.

Subcomponent 1b. Upgrading Urban Property Tax Administration and System-

Providing capacity building and training for a comprehensive upgrading of the municipal property tax systems will enhance own-source revenues through better mapping, classifying, and valuation of properties; building of data infrastructure; management of relevant data; and enhancement of collection procedures in all seven city councils.

Subcomponent 2a. Neighbourhood upgrading and greening in Freetown

The neighborhood upgrading project supports the comprehensive upgrading and flood risk mitigation in underserved neighborhoods. The three settlements have been chosen based on a sound technical rationale. Projects will be further refined based on a feasibility analysis.

Financing the urban greening initiatives through a large-scale tree planting implemented by communities will respond to requirements of the Multi-city Hazards Assessment Report. This will strengthen the city's

ability to manage natural resources and mitigate critical recurring hazards through scaling up spatial planning capacity.

Subcomponent 2b. Solid waste management upgrading in Freetown and secondary cities

A comprehensive SWM system investment across waste collection, transfer, and disposal in the cities will ensure both technical and financial sustainability of the SWM systems. This is a very wide area and investment options have been prioritized. A new landfill in Freetown is an absolute necessity based on the current and anticipated constraints with existing dumpsites.

Subcomponent 2c. Market Upgrading in Select Secondary Cities-

Financing the comprehensive upgrading of central markets in select cities will improve working conditions for traders, stimulate local economies, and provide city councils with increased revenues through increased collection of market dues.

Component 3: Emergency Management Institutional and Capacity Development

There is need to build the capacity of the national and local governments in emergency preparedness and response to better prepare them to respond to and recover from disasters. This requires capacity building and financing various aspects of disaster preparedness and response.

The 'No Project Option'

Without implementing these projects, DRM problems will be exacerbated in Sierra Leone and urban resilience and service delivery will continue to be problematic. These projects will help build social and physical resilience through sustainable livelihoods and affordable housing and upgrading vulnerable neighborhoods; fiscal resilience through increased capacity for revenue mobilization and strengthen DRM; improve service delivery for waste management; and promote urban planning and compliance to building regulations in the selected cities. Without addressing these issues, Sierra Leone will continue down the slippery path of having poorly resilient cities with their governing councils ill equipped to cope with problems faced.

3 LEGISLATIVE, REGULATORY, AND INSTITUTIONAL FRAMEWORK

It is important that the planned components and subcomponents are in concert with the legal and regulatory framework of Sierra Leone as well as the World Bank's ESF. This section reviews the existing legislative, policy, and institutional frameworks that will guide the implementation and operation of the project.

3.1 World Bank Environmental and Social Standards

The World Bank launched the ESF in 2018 to be applied to all investment projects commencing on or after October 2018. The ESF reenforces the vision of the World Bank to pursue sustainable development and poverty reduction. It also sets out the policy of the World Bank to support borrowers to develop and implement environmentally and socially sustainable projects as well as build capacity in the assessment and management of E&S impacts and risks associated with the implementation and operation of projects. The World Bank, as part of the new framework, also has environmental and social standards that borrowers must comply with for projects to be sustainable, nondiscriminatory, transparent, participatory, and environmentally and socially accountable as well as conform to good international practices. There are 10 ESS under the new World Bank ESF that all projects/investments that are supported with World Bank financing must conform to. These are alluded to in this chapter. Table 4 indicates how these are applicable to this project.

Table 4: World Bank ESS

ESS	Relevance	Applicable Subcomponents/Components and Comments
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant	**Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** Involves considerable amount of construction activities related to roads, drainages, civil engineering structures, electricity systems, and so on. Significant E&S impacts during all phases of the project. Construction activities have occupational health and safety (OHS) risks; community health and safety (incidents, accidents, and fatalities); water, air, and soil pollution; threat to ecosystems and biodiversity; resettlement and involuntary displacement; and the unlikely risk of destruction of cultural heritage. • A comprehensive ESIA and ESMP with several subcomponents may be required. Such subcomponents of the ESMP may include, but will not be limited to, an OHS Plan, a Waste Management Plan (WMP), and a GBV Action Plan. **Subcomponent 2a-2. Greening in Freetown** Tree planting involves fairly significant E&S impacts. Community engagement activities are also key for project implementation. • An ESMP with several subcomponents may be required. **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** Construction of a new sanitary landfill site in Freetown is a major construction activity with significant E&S impacts, as well as OHS impacts. Impacts will also be significant during the operational phase. Significant E&S impacts ensue from all stages of SWM operations in all cities including secondary cities. Transportation impacts will also be significant. • A comprehensive ESIA and ESMP with several subcomponents may be required. Such subcomponents of the ESMP may include, but will not be limited to, an OHS, WMP, and GBV Action Plan. **Subcomponent 2c. Market Upgrading in Select Secondary Cities** This involves extension of market structures, possible construction of new ones, provision of water and sanitation facilities, construction of drainage, and provision of electricity, all of which have significant E&S impacts. The risks listed under the neighborhood upgrade could apply to this activity too. • A comprehensive ESIA and ESMP with several subcomponents may be required. Such subcomponents of the ESMP may include but will not be limited to an OHS, WMP, and GBV Action Plan. The preparation of full ESIAs and ESMPs for these project subcomponents is contemplated because of their significant impacts. ESMPs will be very varied depending on the particular project subcomponent, with resettlement considerations a possibility for the urban upgrading and SWM projects. **Component 4: Project Management** Staffing of the PMU must be adequate and competent to carry out M&E, project technical audits and safeguards, measures.
ESS2: Labor and Working Conditions	Relevant	**Subcomponent 1a. Strengthening Integrated Urban Planning and Spatial Data Infrastructure** **Subcomponent 1b. Upgrading Urban Property Tax Administration and System** **Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** **Subcomponent 2a-2 Greening in Freetown** **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities**

ESS	Relevance	Applicable Subcomponents/Components and Comments
		Subcomponent 2c. Market Upgrading in Select Secondary Cities **Subcomponent 3a. Strengthening Emergency Preparedness and Response Systems** **Subcomponent 3b. Contingent Emergency Response Component** • Labor requirements as espoused in this ESS are triggered in all these subcomponents. Subcomponents 2a-1, 2a-2, 2b, and 2c in particular are projects that require the recruitment of a considerable number of workers. Unemployment is a major problem in Sierra Leone, and it is expected that with these projects, there will be an influx of labor into these project areas for employment. These will include direct, contracted, and community labor. The LMP prepared for this project place considerable premium on ensuring that competent community labor are employed without discrimination, child and/or forced labor is prohibited, the health and safety of workers are protected, good working conditions are maintained with these projects, labor laws are adhered to and vulnerable groups are protected even to the extent of providing training for them to assure employability.
ESS3: Resource Efficiency and Pollution Prevention and Management;	Relevant	**Subcomponent 2a-1. Neighbourhood Upgrading in Freetown and Subcomponent 2c. Market Upgrading in Select Secondary Cities** The neighborhood upgrading project and market project will require a considerable amount of cement, sand, aggregate, and water for the construction of the various infrastructure facilities. Energy usage by the various stationary and mobile equipment will be considerable. There will be the possibility of pollution of streams and other water bodies. Through a comprehensive WMP, the various types of wastes will be segregated and appropriately disposed of. These same comments will apply to the market project. Water must be appropriately sourced and care taken to ensure that abstraction does not affect community water supply. **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** Creating access to landfill sites may involve road construction. Construction of landfill sites involved machinery to do the earthmoving work. Cement, sand aggregate, and water may be required as raw materials. These construction materials could be sourced in or around the Western Area, over a distance of no more than 60 km. Other SWM components would have to take on board careful waste management practices to segregate and store waste. There are also other most common risks associated with landfill sites such as pollution of groundwater and surface water by leachate, methane emission and its contribution to climate change, and the risk of fire. Please point these out. All infrastructure investments shall be designed to climate- and disaster-resilient standards, while low-impact investments (such as energy-efficient street lighting and use of locally sourced materials) and low-carbon construction designs will be given priority. **Subcomponent 2a-2. Greening in Freetown** Given the scale of the project, a significant volume of water would be required for irrigation. To circumvent this, planting is done in the rainy season, which lasts for six months. According to the plan, FCC would then hand the trees over to communities that would abstract water from various sources including surface and well water for irrigation. Recycling of waste is a major issue with this subcomponent which actively encourages the work of recycling associations.

ESS	Relevance	Applicable Subcomponents/Components and Comments
		For all of these subcomponents, it must be ensured there is efficient use of energy, water, and other raw materials and that air pollution, hazardous and non-hazardous waste, chemicals, and hazardous materials are properly managed in line with Good International Industry Practices (GIIPs). **Subcomponent 4: Project Management** Proper project management will ensure proper resource efficiency and pollution prevention and management.
ESS4: Community Health and Safety	Relevant	**Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** Communities may be significantly affected by construction activities. Safety should be a big concern, and there may be plans made to ensure traffic safety. The safety of school children in schools in the community and the disabled should be considered. Labor influx into the community may create housing problems, and large congregations of people may exacerbate the COVID-19 infection situation. The large number of moving equipment used during the construction phase will create safety problems for communities. Even after construction, community safety must be ensured against speeding. After construction, it is anticipated that there will be several benefits that will augur well for the safety of the communities. **Subcomponent 2a-2. Greening in Freetown** Addressing flooding and other hazards will augur well for community safety. **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** During the construction phase, SWM interventions would affect negatively on communities, but during the operational phase, there will be enhanced health benefits with the much better sanitation situation. Construction activities will also involve use of machinery and storage of fuel. Fuel storage and possible theft might be of concern. **Subcomponent 2c. Market Upgrading in Select Secondary Cities** Community safety may be affected adversely during construction, but during operations, a much better market environment will be created resulting in benefits to users of the market services. Construction activities will also involve use of machinery and storage of fuel. Fuel storage and possible theft might be of concern. **Subcomponent 3a. Strengthening Emergency Preparedness and Response Systems and** **Subcomponent 3b. Contingent Emergency Response Component** Emergency preparedness and response will be enhanced resulting in a much healthier and safer community environment.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant	**Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** **Subcomponent 2a-2 Greening in Freetown** **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** **Subcomponent 2c. Market Upgrading in Select Secondary Cities** Though not considered significant, the neighborhood upgrading and greening may involve minor resettlement issues, especially from squatters. Market expansion may involve acquiring private land, especially in Kenema. The SWM aspects in cities might involve slight resettlement issues with siting of facilities. The Freetown landfill may involve major resettlement. All of these will also include economic displacement; this needs to be factored into any resettlement. With the market project, it may be necessary to find some temporary alternative site for people selling in the markets until construction is

ESS	Relevance	Applicable Subcomponents/Components and Comments
		completed; this will inevitably involve loss of earnings for some period. The project RPF provides the procedure for the preparation, implementation, and funding of these potential resettlement issues through the preparation of RAPs. **Component 4: Project Management** Any involuntary resettlement needs to be properly managed.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant	**Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** **Subcomponent 2a-2. Greening in Freetown** These subcomponents help conserve and protect biodiversity and habitats as well as support livelihoods of local communities by adopting practices that integrate conservation and development priorities of the local communities into projects. **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** Biodiversity is a major issue with greening and may apply to a lesser extent to the SWM landfill project, especially in areas where new landfill sites are constructed. It may or may not apply to the neighborhood upgrading. **Component 4: Project Management** Biodiversity issues must be properly managed.
ESS7: Indigenous Persons/Sub-Saharan African Historically Underserved Traditional Local Communities;	Not relevant	—
ESS8: Cultural Heritage	Relevant	**Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** **Subcomponent 2a-2. Greening in Freetown** **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** **Subcomponent 2c. Market Upgrading in Select Secondary Cities** No major cultural heritage may be affected, but the possibility of shrines and 'society bushes' exists. Although chance finds are not expected for any of the projects, it is legally covered in all construction contracts under this project in case of such an eventuality.
ESS9: Financial Intermediaries	Not relevant	
ESS10: Stakeholder Engagement and Information Disclosure	Relevant	**Subcomponent 1a. Strengthening Integrated Urban Planning and Spatial Data Infrastructure** **Subcomponent 1b. Upgrading Urban Property Tax Administration and System** **Subcomponent 2a-1. Neighbourhood Upgrading in Freetown** **Subcomponent 2a-2. Greening in Freetown** **Subcomponent 2b. Solid Waste Management Upgrading in Western Area and Select Cities** **Subcomponent 2c. Market Upgrading in Select Secondary Cities**

ESS	Relevance	Applicable Subcomponents/Components and Comments
		Subcomponent 3a. Strengthening Emergency Preparedness and Response Systems **Subcomponent 3b. Contingent Emergency Response Component** Stakeholders must be consulted to a certain extent for all of these subcomponents. The neighborhood upgrading project and the market upgrading project would involve consulting with stakeholders especially at the planning and design stages. Consultation is also key with the SWM landfill aspects of the project at all stages-from land acquisition to planning to operation. The stakeholder consultation will be carried out following the methods and processes outlined in the Stakeholder Engagement Plan (SEP). The SEP has used a variety of engagement techniques to build relationships with stakeholders, consult and gather information from them, as well as disseminate project information to all stakeholders. Stakeholder engagement will be affected by the COVID-19 pandemic. Therefore, the methods of stakeholder engagement will consider all the recommended social distancing protocols. The techniques to be used for the different stakeholder groups include • Correspondence (phone and emails); • One-on-one meetings (via Zoom, Skype, teleconference, and so on); • Formal and informal meetings; • Public meetings; • Focus group meetings, • Website/national newspapers; and • Direct communication with project-affected persons (PAPs). **Component 4: Project Management** The safeguards team and other structures in the project management team are an integral part of the stakeholder engagement process.

Relevant World Bank Group Guidelines

EHS Guidelines

The EHS Guidelines are technical reference documents with general and industry-specific examples of GIIPs, as defined in ESS3. The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank and that are generally considered achievable in new facilities at reasonable costs by existing technology. For World Bank-funded projects, application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets with an appropriate timetable for achieving them. The environmental assessment process may recommend alternative (higher or lower) levels or measures, which, if acceptable to World Bank, become project- or site-specific requirements. The World Bank Group EHS Guidelines considered are as follows:

- World Bank Environmental, Health, and Safety (EHS) Guidelines GENERAL EHS GUIDELINES: CONSTRUCTION AND DECOMMISSIONING APRIL 30, 2007
- World Bank Environmental, Health, and Safety (EHS) Guidelines GENERAL EHS GUIDELINES: COMMUNITY HEALTH AND SAFETY
- World Bank Environmental, Health, and Safety (EHS) Guidelines GENERAL EHS GUIDELINES: ENVIRONMENTAL WASTEWATER AND AMBIENT WATER QUALITY
- World Bank Environmental, Health, and Safety (EHS) Guidelines GENERAL EHS GUIDELINES: ENVIRONMENTAL NOISE MANAGEMENT
- World Bank Environmental, Health, and Safety (EHS) Guidelines GENERAL EHS GUIDELINES: ENVIRONMENTAL AIR EMISSIONS AND AMBIENT AIR QUALITY
- World Bank Environmental, Health, and Safety (EHS) Guidelines WASTE MANAGEMENT FACILITIES DECEMBER 10, 2007
- World Bank Environmental, Health, and Safety (EHS) Guidelines GENERAL EHS GUIDELINES: ENVIRONMENTAL WASTE MANAGEMENT
- World Bank Group, Environmental, Health, and Safety (EHS) Guidelines WATER AND SANITATION DECEMBER 10, 2007
- The WORLD BANK Environmental and Social Framework, 2017. International Bank for Reconstruction and Development/The World Bank 1818 H Street NW, Washington, DC 20433 Telephone: 202-473-1000; Internet: www.worldbank.org.

World Bank COVID-19 Guidelines

The World Bank guidelines recommend assessing the current situation of projects, putting in place mitigation measures to avoid or minimize the chances of infection (coronavirus) and planning what to do if either project workers become infected or the work force including workers from proximate communities are affected by COVID-19.
(https://worldbankgroup.sharepoint.com/sites/wbunits/opcs/Knowledge%20Base/ESF%20Safeguards%20Interim%20Note%20Construction%20Civil%20Works%20COVID.pdf).

The guidelines acknowledge that national and local laws may impose social distancing and restriction on movement and large gatherings as measures to minimize the spread of COVID-19 together with the fact

that the general public may be averse to large gatherings as they protect themselves from COVID-19. It further acknowledges that these realities can adversely affect the extent to which borrowers can meet the requirements of ESS10. The guidelines go ahead to proffer strategies on how to manage stakeholder engagement and consultation amid these challenges. The guideline stipulates that public gatherings such as workshops should be avoided but small group meetings like focus group meetings can be carried out, if permitted by national and local laws. For details, see https://worldbankgroup.sharepoint.com/sites/wbunits/opcs/Pages/pc/Operations-COVID19-Coronavirus-Information-03092020-081859/Environmental-a-04202020-163137.aspx.

3.2 International Conventions, Policies, and Protocols

Sierra Leone is a party to many international agreements, conventions, and protocols that seek to protect the environment and ensure sustainable development. The project will be implemented with recognition of the following conventions:

RAMSAR Convention for the Internationally Important Wetlands Especially as Waterfowl Habitats (1971) - Signed in 1999

Sierra Leone identified and listed one wetland site located along the Sierra Leone River Estuary (SLRE) near Freetown. This noncontiguous wetland is located along the SLRE near Freetown. The site is known to hold on a regular basis at least 1 percent of the biogeography population of at least eight water bird species. The site is also known to hold on a regular basis more than 20,000 water birds.

This estuary flanks Freetown to the North and parts of Port Loko District, receiving effluents from factories, offices, and settlements. It is unlikely that the project activities may result in pollution of the estuary, as most of the project sites for Freetown are far away from this site.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal Adopted in 1989 and Came into Force in 1992

This international treaty was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less-developed countries. The convention is also intended to minimize the amount and toxicity of wastes generated, to ensure their environmentally sound management. The contractors would strictly adhere to the stipulations of the ESMP, which will cover waste management and the handling of hazardous wastes, such as used oil and batteries from machines, generators, and vehicles. The contractor would be required to prepare a site-specific ESMP tailored to the specific requirement of the selected sites. The contractor shall ensure that used oil and batteries are handled by a certified firm or supplier.

Stockholm Convention on Persistent Organic Pollutants (May 22, 2001)

This is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment. Exposure to persistent organic pollutants (POPs) can lead to serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease, and damages to the central and peripheral nervous systems.

In response to this global problem, the Stockholm Convention requires its parties to take measures to eliminate or reduce the release of POPs into the environment. The project will clearly follow a WMP to be incorporated into the ESMP. There will be minimal use of plastics bottles and bags and a no-litter policy. The ESMP to be developed will address POPs. It must be ensured that combustion conditions, where applicable, are sufficient to completely oxidize all forms of carbon. The release of variants of biphenyls into the air should be discouraged. No open burning should be conducted in this project.

The Sendai Framework for Disaster Risk Reduction 2015–2030

The Sendai Framework places a strong emphasis on disaster risk management as opposed to disaster management. There is a need for focused action within and across sectors by states at local, national, regional, and global levels in the following four priority areas:

- Priority 1: Understanding disaster risk
- Priority 2: Strengthening disaster risk governance to manage disaster risk
- Priority 3: Investing in disaster risk reduction for resilience
- Priority 4: Enhancing disaster preparedness for effective response and to 'Build Back Better' in recovery, rehabilitation, and reconstruction.

States, regional and international organizations, and other relevant stakeholders should consider the key activities listed under each of these four priorities and should implement them, as appropriate.

The emphasis on disaster risk management as opposed to disaster management must be taken on board when making plans for the new Disaster Management Agency under this project.

The United Nations Convention on Biological Diversity (CBD) (1992)

The convention requires countries to prepare a national biodiversity strategy (or equivalent instrument) and to ensure that this strategy is mainstreamed into the planning and activities of all those sectors whose activities can have an impact (positive and negative) on biodiversity.

The revised National Biodiversity Strategy and Action Plan (NBSAP 2017–2026) for Sierra Leone has been developed based on national needs and priorities for the implementation of the CBD objectives and Aichi Targets.

This is particularly important for the urban greening project.

The United Nations Framework Convention on Climate Change (New York, 1992)

Preventing 'dangerous' human interference with the climate system is the ultimate aim of the United Nations Framework Convention on Climate Change. Sierra Leone is a vulnerable nation to adverse effects of climate change. The project recognizes the cumulative contribution of CO_2 emissions from various sources on climate change. Trees planted in the urban greening project are important for climate change mitigation considering their ability to remove CO_2 from the atmosphere and act as carbon sinks. There will be net gains from specific project activities that could lead to carbon sequestration. This is a major goal of the urban greening project. The ESMP to be developed will address climate change mitigation and adaptation strategies to be adopted and implemented by all parties involved in the project.

UN Convention on the Rights of the Child (1990) and ILO Convention 182 (1999)

The conventions define a child as anyone under 18. “Harmful Child Labor consists of the employment of children that is economically exploitative or is likely to be hazardous to, or interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral or social development.” Sierra Leone’s Child Rights Act, passed in 2007, sets the minimum age for employment at. The act also states that children must either be age 15 or have completed basic education (whichever is later) before entering into an apprenticeship in either the formal or informal sector. The cutoff age for child labor according to the International Labour Organization (ILO) is 18. The contractor shall therefore not employ any persons below the age of 18. The contractors will be required to develop a company policy in line with national and local laws, which prohibits child labor in the workplace and the workplaces of any suppliers doing business with the contractor. The contractors shall include a clause in their agreement and procurement protocols with their suppliers prohibiting child labor.

Convention Concerning Forced or Compulsory Labour, 1930 (No. 29)

This convention is one of eight fundamental conventions of the ILO. Its objective and purpose are to suppress the use of forced labor in all its forms irrespective of the nature of the work or the sector of activity in which it may be performed. The project has been developed to meet World Bank ESS, which in turn recognize the ILO as the international establishment dealing with forced labor. The contractors will be required to develop a company policy in line with national and local laws, which prohibits forced labor in the workplace and the workplaces of any suppliers doing business with the contractor. The contractors shall include a clause in their agreement and procurement protocols with their suppliers prohibiting forced labor.

Convention on the Rights of Persons with Disabilities (2012)

Parties undertake to ensure and promote the full realization of all human rights and fundamental freedoms for all persons with disabilities without discrimination of any kind on the basis of disability. The contractor will be required to develop a company policy in line with national and local laws, which prohibits discrimination against the disabled. The concerns of disabled and physically challenged persons have been identified through stakeholder meetings for incorporation into the project design. Best practices or GIIPs require that engineering designs make provision for the disabled.

The Convention on the Elimination of All Forms of Discrimination against Women (1984)

The convention is often described as an international bill of rights for women. The convention defines discrimination against women as “...any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field.” The contractor shall adopt an equal-opportunities policy, starting with employment and subcontracts. The contractor will be required to develop a company policy in line with national and local laws, which prohibits discrimination, of any form, against women.

3.3 National Policies and Legislation

There are several policies, plans, legislations, and regulations applicable to the various project subcomponents, the most important of which are outlined in this section.

Policies and Plans

National Energy Policy (2009) and Electricity Sector Reform Road Map 2017

The Energy Policy seeks to ensure the provision of modern energy services for increased productivity, wealth creation, and improved quality of life for all Sierra Leoneans. In addition to the main energy sub-sectors, the policy addresses the cross-cutting issues like energy and gender, research and development, human resources (HR) capacity building and development, information and awareness creation, energy efficiency, and rural energy.

Some important policy statements in this document, particularly applicable to this project, include ensuring that environmental considerations are included in all renewable energy planning and implementation; removing barriers hampering the effective development, implementation, and dissemination of RETs, including reduction of taxes and levies on RETs; setting up mechanisms to exploit climate initiatives; involving women in decision-making in the energy sector; encouraging local authorities to provide and distribute power; and establishing administrative institutions to preside over all aspects of RETs.

The Electricity Sector Reform Road Map provides a summary of the reform path to be undertaken and key actions necessary. The objective is to provide a national, coordinated, long-term, least-cost power sector development plan that delivers on policy objectives (security of supply, social goals including universal access to electricity, economic goals including energizing the economic growth, and technology and industrial policy goals including renewable energy and energy efficiency.

Applicability

The neighborhood upgrading project and market projects will likely involve the provision of electricity. The potential exists for extraction of methane or biogas from the landfill site for energy use which could be considered, even if the project does not explicitly say so.

National Lands Policy, 2015/Land Tenure and Ownership

The Land Policy of Sierra Leone aims at the judicious use of the nation's land and all its natural resources by all sections of the Sierra Leone society in support of various socioeconomic activities undertaken in accordance with sustainable resource management principles and in maintaining viable ecosystems.

Among other objectives, it aims to instill order and discipline into the land market to curb the incidence of land encroachment, unauthorized development schemes, multiple or illegal land sales, falsification and multiple registration of land documents, land speculation, and other forms of land racketeering.

The National Lands Policy introduces a Lands Commission and committees, which would be established at the national, district, chiefdom, and village levels to ensure the proper management of land titles. A Land Commission Bill 2020 is being finalized. The cadaster systems in the country are outdated and

inaccurate. Surveying quality is inadequate due to lack of trained surveyors in modern electronic surveying and mapping techniques and a shortage of equipment.

Land administration in Sierra Leone is governed by a dual system of law, dispersed in about 20 statutes and regulations; in the Western Area of Sierra Leone, land tenure is governed by property statutes. Land is either state (publicly) owned or privately owned. In the provinces, customary law co-exists with statutes. The recognition of the force of customary law in the provinces is established by Section 76 (1) of the Courts Act (1965). Through customary law, ownership of land is vested in the chiefdoms and communities and can never be owned freehold.

Applicability

Several subcomponents may involve acquisition of land. The landfill aspects of the SWM in the Western Area may involve land acquisition and to a certain extent even the market project. This may also be true of the urban infrastructure project. The Western Area and the provinces have two different land tenure systems—freehold in the former and communal in the latter. Some land in the Western Area, even though owned individually, might need the approval of community leaders for purchasing. Whatever the complexities, the government has always found ways of acquiring land for national projects with proper procedures for acquiring and paying for such lands.

Development-Induced Resettlement Policy

This policy applies to any project, development, or business activity undertaken by either the government or private sector entities that results in, or is likely to result in, the physical or economic displacement of people. The policy establishes the rationale, objectives, guiding principles, and strategies for the undertaken involuntary resettlement.

In the policy, involuntary resettlement should always be considered as the last resort, conceived, planned, and implemented in a manner that minimizes the adverse impacts on PAPs and improve or at least maintain the standard of PAPs pre-impact through informed consultation of all stakeholders including vulnerable PAPs. The policy, which indicates that compensation must be at full replacement value, takes the position that compensation should be completed before physical movement and/or land take.

Applicability

Several subcomponents may involve resettlement. Depending on the location of landfill sites, there may be some physical displacement of PAPs. This may also be true of the urban infrastructure project and for the market project to a certain extent. The landfill project in the Western Area would present the greatest challenges. The physical displacement may be accompanied by the payment of compensation and the need to consider livelihood restoration programs. The RPF for this project provides ample guidance of how such issues will be addressed. This will include the preparation of site-specific RAPs or Livelihood Restoration Plans proportionate to the scale of impact. Project funds are expected to be used for compensation payment. The differences between the World Bank policies of resettlement and national policies have reduced considerably with the recent adoption of a new National Resettlement Policy. This is alluded to in the section of this report that addresses gaps in legislation.

National Biodiversity Strategy and Action Plan 2017–2026

The revised NBSAP (2017–2026) for Sierra Leone has been developed based on national needs and priorities for the implementation of the CBD objectives and Aichi Targets.

Key lessons learned from the development of the NBSAP 2004–2010 were fed into the review and development of the NBSAP 2017–2026. Additional priority thematic areas were identified and addressed, such as intellectual property rights and climate change, collaboration between stakeholders, the problem of overlapping mandates, and conflict of interest among government agencies.

The updated NBSAP has five strategic objectives consistent with the five strategic goals of the CBD, followed by a total of 23 strategic outputs.

Applicability

Sierra Leoneans are becoming increasingly aware of the inextricable relationship between their survival and way of life on the one hand, and biodiversity and the environment on the other. It is necessary to conserve species, genes, habitats, and ecosystems; ensure the wise use of biological resources; and ensure access to benefit sharing of genetic resources. Biodiversity, ecosystem, and wildlife-related risks may apply to all projects with a physical footprint, depending on the nature of the activity and its method of execution. Degraded land and brownfield locations may have species biodiversity that is protected under ESS6. Biodiversity aspects may be particularly serious with the urban greening project.

National Disaster Risk Management Policy, 2018

The policy vision is to have "A safer and resilient nation in which communities, the economy and the environment are better protected from the negative impacts of hazards, through appropriate comprehensive disaster risk management."

Sierra Leone is increasingly vulnerable to natural and man-made hazards. The DRM policy aims to establish processes, procedures, and structures for the coordination and effective integration of disaster reduction into development planning and sector policies, delivery of required assistance, and addressing of the consequences of disasters declared in Sierra Leone under the appropriate national legislation. The DRM policy includes clear roles and responsibilities for national and local governments and development partners to implement a timely response to disasters while also integrating local-level communities into effective disaster management systems.

Applicability

This will apply in particular to the disaster-related components.

The National Water and Sanitation Policy 2010

Safe drinking water and good sanitation practices are basic requirements for human health. This policy covers only issues directly related to the environmental sustainability of sanitation systems and not all environmental issues in Sierra Leone.

Specific strategies are stated to implement the policy covering, among others, environmental impacts, water quality, requirements for sanitation services, and the role of LCs.

Applicability

This could apply in particular to the market projects and urban greening projects.

Public Disclosure

There is no national policy as such on public disclosure. However, the EPA Act, 2008 (sections 27(1) and (2)) states that the agency shall circulate an Environmental Impact Assessment (EIA) to various bodies and also open it for public inspection and comments in the National Gazette and newspapers for a specified period. Specific regulations developed by the Environmental Department are currently in force.

Applicability

Applicable to all subcomponents.

Cultural Heritage

The National Environmental Policy provides for the collection of relevant data on biological diversity and cultural heritage. It seeks to promote socioeconomic and cultural development through the preservation of biological diversity for a sustainable utilization of natural resources. There are references to the preservation and/or respectful removal (considering cultural sensitivities) of 'society bushes' for mining and other purposes in various regulations.

The Monuments and Relics Commission was established in 1948 following the passing by Parliament of the Monuments and Relics Ordinance in 1946. The mandate of the commission is to provide for "the preservation of ancient, historical and natural monuments, relics and other objects of archaeological, ethnographical, historical or other scientific interest." In 1962, this ordinance was upgraded into an act. The commission has the responsibility of ensuring the preservation, protection, and promotion of Sierra Leone's cultural heritage assets.

Applicability

Several restrictions may be placed on projects because of cultural considerations. ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present, and future. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. Chance finds may occur during construction. A chance find is any unanticipated discovery or recognition of cultural heritage. If they occur, they will be reported to the Monuments and Relics Commission.

Legislations

Constitution of Sierra Leone

The Constitution states that the state shall, among other things, within the context of the ideals and objectives for which provisions are made in the Constitution, harness all the natural resources of the nation to promote national prosperity, manage and control the national economy well, and be governed through the Executive, Legislative, and Judicial branches of Government.

Section 106(1) of the Constitution of Sierra Leone gives Parliament the power to make laws which shall be exercised by bills passed by Parliament and signed by the President. Subject to certain provisions, a bill shall not become law unless it has been duly passed and signed in accordance with the Constitution. An act signed by the President shall come into operation on the date of its publication in the Gazette or such other date as may be prescribed therein or in any other enactment.

Applicability

Applies to all subcomponents.

Environment Protection Agency Act, 2008/2010

The EPA Act, 2008, is the GoSL's overarching legislation that deals with the protection of the environment.

Part IV of the EPA Act, 2008, exclusively deals with the activities and requirements of an EIA. This part of the act emphasizes the processes and procedures leading to the acquisition of an environmental license with respect to the conduct of fully acceptable EIA studies.

Projects requiring an EIA are as given in the first schedule (Section 24) of the act.

The second schedule (Section 25) of the EPA Act, 2008, gives several factors which determine whether a potential project necessarily has to prepare an EIA, for approval to implement its activities on the environment. The third schedule (Section 26) of the act indicates the contents to be considered in preparing the EIA.

Applicability

Pervasively applicable for all subcomponents. There is a need to be aware of EPA requirements for licensing and so on. The project will also satisfy requirement of the Environment Protection Agency Sierra Leone (EPA-SL) for the issuance of an EIA license.

The Sierra Leone Roads Authority (Amendment) Act (2010)

This act amends the Sierra Leone Roads Authority (SLRA) Act (1992) and governs the development, maintenance, efficient planning, and reliable management of the national road network to provide the entire country with a safe, reliable, and sustainable means of transport. To attain set objectives, the authority will, among other things, develop strategies, technical instructions and standards, and programs for roads and provide technical guidance and support to LCs in roads maintenance.

Applicability

Many of the projects involve road construction and/or repairs. This is particularly true of the urban infrastructure project and the SWM projects. Any road design and construction would have to be sanctioned by the SLRA, which also does the monitoring.

The National Electricity Act (2011)

This act divides the National Power Authority into two entities: the Electricity Generation and Transmission Company and the Electricity Distribution and Supply Authority (EDSA).

The main functions of management of EDSA include, among others, the supply, distribution, and retail sale of electricity for the entire country and promotion and encouragement of the economic and efficient use of electricity, especially for domestic, commercial, agricultural, industrial, and manufacturing purposes.

Applicability

Applies to electricity provision for several subcomponents.

The Road Transport Authority Act (1996) (Amended to the Roads Safety Authority Act, 2016)

This is an act to provide for the establishment of an authority for the regulation and development of the road transport industry, including the registration and licensing of vehicles, the licensing of drivers, the prescription of routes for passenger and goods transportation, and for other related matters.

The objective for which the authority is established is to regulate, coordinate, and promote efficiency in all activities within the road transport sector, with a view to enhancing or improving the contribution of the sector to the economic development of Sierra Leone.

Applicability

Road safety pertains to most of the projects during the construction and operational phases. The Sierra Leone Roads Safety Authority (SLRSA) is in charge of vehicle registration and licensing and road safety rules.

The National Protected Area Authority and Conservation Trust Fund Act (2012)

The act provides for the establishment of the National Protected Area Authority and Conservation Trust Fund, to promote biodiversity conservation, wildlife management, and research, as well as to provide for the sale of ecosystems services in the National Protected Areas.

The authority, as established, exercises oversight of national parks and protected areas designated for conservation purposes, to protect the fauna and flora in their natural state and promote sustainable land use practices and environmental management.

Applicability

The National Protected Area Authority (NPAA) controls all national parks, and this is its parent act. It is important that the project activities do not adversely affect national parks. There is the possibility that the urban upgrading project and the landfill aspects of the SWM project may take place close to protected areas. While they may not directly affect such protected areas, it may be necessary in certain circumstances to create buffers and guard against any possible encroachments.

Local Government Act, 2004

This act deals with the establishment and operation of LCs around the country to enable meaningful decentralization and devolution of government functions. It stipulates that an LC shall be responsible generally for promoting the development of the locality and the welfare of the people in the locality with the resources at its disposal and with such resources and capacity as it can mobilize from the central government and its agencies, national and international organizations, and the private sector. The LC should initiate and maintain programs for the development of basic infrastructure and provide works and services in the locality. An LC shall cause to be prepared a development plan which shall guide the development of the locality. The schedules to the Local Government Act outline the activities of various MDAs that have been devolved to LCs.

Applicability

Applies to all subcomponents. LCs will be playing a significant role in the development and implementation of the project. Their environmental officers will be involved in monitoring and supervision.

Persons with Disability Act, 2011

According to Section 24(2) of this act, public buildings/facilities that are accessed by the general public are to be disability friendly, while Section 14 (2) enjoins the government to adapt existing structures to enhance access for persons with disability. In Sections 20 and 21 of the act, it is an offence to deny a person contracts and employment opportunities on the basis of disability.

Applicability

Applicable for disability issues.

Laws related to GBV and Sexual Exploitation and Abuse (SEA)

A number of legislative and policy frameworks have been established to provide supportive and conducive environment to stem and reduce incidents of sexual and gender-based violence (SGBV) and punish perpetrators. The passage of the three gender acts in 2007—the Domestic Violence Act (2007), the Devolution of Estates Act (2007), and the Registration of Customary Marriage and Divorce Act (2007)—provided concrete legal pronouncements on the rights of women and children which could be drawn on to prevent SGBV and seek redress in the event of occurrence. The Domestic Violence Act "situates domestic violence as a criminal act in and of itself and uses a broad definition of domestic abuse which includes physical and sexual abuses, economic abuses, verbal, emotion and psychological abuse" (Swaine

2012, 8) perpetrated against an individual in a domestic setting. The Devolution of Estates Act aims to address issues of women's inheritance rights by allowing men and women to inherit equally and abolishing customary practices whereby widows were often required to marry a member of their deceased husband's family. A child rights act was also passed in 2007.

In 2012, these gender acts were complemented by the Sexual Offences Act, which criminalizes indecent assault and harassment and imposes a maximum 15-year sentence for cases of rape.

Applicability

Applicable for GBV issues.

The Sierra Leone Local Content Agency Act, 2016

The act establishes the Sierra Leone Local Content Agency to provide for the development of Sierra Leone local content to promote the ownership and control of productive sectors in the economy by citizens of Sierra Leone. The primary objective of the agency is to promote Sierra Leone local content development by effectively and efficiently managing the administration and regulation of Sierra Leone local content development. Some requirements stated in the act include those mandating the use of a minimum percentage of Sierra Leonean labor in professional cadres in all contracts awarded above a threshold value as stipulated by the minister and assisting local contractors and Sierra Leonean companies to develop their capabilities to attain the goal of developing Sierra Leone local content in the sectors covered by this act.

Applicability

Applicable for labor issues.

The Sierra Leone Water Company Act, 2017

The act establishes provisions for the continuance in existence and effective management of the Sierra Leone Water Company to provide more efficient and effective management of community and rural water supply systems in specified areas and to provide for the facilitation of water-related sanitation and water delivery in Sierra Leone.

Some of the responsibilities of the company include the following:

- Provide technical support to District Councils in the design, planning, construction, backup services, and community management of projects related to safe water supply and related sanitation services.
- Assist and coordinate with NGOs, the private sector, and other relevant providers in the development and provision of water supply and related sanitation services in the country.

Applicability

Applicable for water issues in provincial cities. Access to potable water is a challenge in all the provincial cities. This act ensures that the Sierra Leone Water Company (SALWACO) is run more efficiently by clearly defining its functions and the management structure.

The Guma Valley Water Company Act, 2017

The act has provisions for the Guma Valley Water Company (GVWC) to continue to exist, for the sustainable supply of water for public and private use. The objective for which the company is established is to produce, distribute, and conserve water within the limits of supply and other areas as may be determined by the commission.

The company, among other things, exercises responsibility for the control, development, and management of Guma works and water supply services within the limits of supply, which is mainly in Freetown; construct, reconstruct, rehabilitate, repair, and maintain waterworks, buildings, and other infrastructure of the company; and lay main and service pipes in any street or other public place within the limits of supply.

Applicability

Applicable for water issues in Freetown.

Access to fresh water in Freetown is mostly challenging, especially for poor households. However, with the provisions of the act and its full execution, there is a likelihood that Guma would be able to make potable water accessible to all persons/households. This act ensures that the GVWC is run more efficiently by clearly defining its functions and the management structure. Most communities in Freetown now have community pumps that provide potable water for poor households within close proximity.

The Sierra Leone Meteorological Agency Act 2017

The act is aimed at establishing the Sierra Leone Meteorological Agency. The agency will be responsible for informing the public about weather patterns based on the recordings of credible and reliable weather data for agriculture, marine, and disaster preparedness relating to early warning signs. The act also emphasizes some functions of the agency as follows:

- Promote the use of meteorology in agriculture; food monitoring; and the monitoring of flood, drought, desertification, and other related activities.
- Establish, organize, and manage both surface and upper air observational station networks throughout Sierra Leone as approved by the board.
- Collect, process, store, and disseminate meteorological and climatological information both nationally and internationally in accordance with rules and practices and procedures established under various conventions.

Applicability

Applicable for meteorological issues, early warning systems, and so on. Crucial data and information are gathered in areas such as climate change, agriculture/food security, aviation and travelling, disaster management and early warning. Collecting, processing, disseminating, and acting on precise meteorological data can enhance and inform proactive decision-making in preparedness for travelling, climate change, and disaster resilience. Meteorological data are significant in predicting weather variation and climate changes which are issues of concern at the local, national, regional, and global levels.

National Adaptation Plan 2020

Climate change has adversely affected the environment, agriculture, food security, and livelihoods of entire communities in Sierra Leone. The country faces a number of environmental stressors across various sectors, such as land degradation, deforestation, loss of biological diversity, pollution of freshwater resources, and coastal area degradation. The National Adaptation Plan ensures Sierra Leone integrates climate change adaptation into medium- and long-term national planning and financing to build better resilience toward environmental stressors that are exacerbated from changing climate.

Various sectors in Sierra Leone will work to harmonize climate-relevant policies and regulations while improving coordination and cross-links between the sectors.

Applicability

Climate change issues must be integrated into all relevant project aspects.

3.4 Assessment of Gaps between International Finance Corporation's Environmental and Social Framework and Local legislation

The ESMF must be consistent with the World Bank's ESF; the Sierra Leonean laws, such as the EPA Act, 2008 (and as amended in 2010); and international conventions ratified or recognized by the GoSL.

The ESS of the ESF are compared to local legislation, and gaps are identified in Table 5.

Table 5: Gap Analysis between World Bank ESS and Sierra Leonean Legislation

ESF	Applicable Local Legislation	Addressing Gaps
Assessment and Management of Environmental and Social Risks and Impacts ESS1 requires that borrowers identify and manage E&S risks associated with a project, including through conducting an Environmental and Social Assessment (ESA) during the project preparation stage. It establishes a mitigation hierarchy which instructs borrowers first to anticipate and avoid risks and impacts; then to minimize or reduce risks and impacts to acceptable levels; then once risks and impacts have been minimized or reduced, mitigate; and finally, where significant residual impacts remain, compensate for or offset them. It instructs borrowers to ensure that project negative impacts do not fall disproportionately on those who might be disadvantaged or vulnerable, and to ensure that all groups have access to project benefits.	**EPA Act, 2008** The act provides for the effective protection of the environment and for other related matters. The act alludes to ambient air; water and soil quality; the pollution of air, water, and land; and other forms of environmental pollution including the discharge of wastes and the control of toxic substances. The act requires certain categories of operations to carry out ESIA studies to obtain an EIA license. Such studies cover but are not limited to identifying E&S impacts of the project, mitigation measures and the preparation of E&S management and monitoring plans. Community consultations and GRMs are part of the process. A required management plan is the Public Consultation and Disclosure Plan.	The EPA Act broadly and adequately caters to identifying and managing E&S risks. Where there are gaps relating to standards and guidelines, those relating to ESS1 will be adopted. EPA's EIA process allows for adopting higher standards.
Labor and Working Conditions ESS2 requires that borrowers ensure safe labor and working conditions in World Bank-financed projects. It prohibits the use of forced or child labor in World Bank-financed projects. Borrowers must provide a grievance mechanism for project workers, including sub-contracted workers. The requirements are guided in part by a number of international conventions negotiated through the ILO and the United Nations (UN). The specific objectives are • To promote the fair treatment, nondiscrimination, and equal opportunity of workers; • To establish, maintain, and improve the worker-management relationship; • To promote compliance with national employment and labor laws;	**Draft Employment and Employed Act, 2014** Only few new labor-related legislations were approved in recent years. This included that a reform of the Employment and Employed Act was debated during the last two decades, but an approval of the most recent draft act from 2014 remained pending. In the formal sector, collective bargaining is relatively widespread, and many institutions operate with collective bargaining agreements on wages and working conditions. The Joint National Negotiation Board recommends the adjustment of the minimum wage to the government from time to time. **The Constitution of Sierra Leone, 1991** The Constitution of Sierra Leone seeks to protect freedom of association, health, and safety of all citizens including workers. It also guarantees fair working conditions, equal pay for equal work, and fair compensation. Section 26 of the Constitution states that "no person shall be hindered in the enjoyment of his freedom of assembly and association. This implies that citizens, including workers, have the	Although some of the Sierra Leone labor laws are old and outdated, labor laws have been drawn up for the project that are in line with requirements for ESS2. These will be acceptable to the GoSL as the country also subscribes in principle to many of the labor laws of the ILO and the UN and many of the international Huma Rights Laws. Contractors will also be required to adopt many of the practical aspects of ESS2 implementation through stipulated requirements specified in the ESMPs and Contractor Labor Management Plans.

ESF	Applicable Local Legislation	Addressing Gaps
• To protect workers, including vulnerable categories of workers such as children, migrant workers, workers engaged by third parties, and to promote safe and healthy working conditions, and the health of workers; and • To avoid the use of forced labor.	right to assemble freely and associate with other persons, form or belong to any political party, trade union or other economic, social or professional associations, national or international, for the protection of their interests." Section 19 of the Constitution also frowns on forced labor as it states "no person shall be held in slavery or servitude or be required to perform forced labor or traffic or deal in human beings." **The Factories Act, 1974** The act basically deals with health and safety measures as they concern the factory worker. Every care must be taken by the factory holder to secure the health, safety, and welfare of all employees. The act imposes obligations for the better safeguarding of persons against accidents from dangerous parts of any machinery. It gives considerable power to the Factories Inspectorate to monitor operations and prescribes stiff penalties for defaulters. The inspector can prohibit the use of any machinery, if he/she is reasonably of the opinion after examination that it is not in good and safe condition.	
Resource Efficiency and Pollution Prevention and Management ESS3 requires borrowers to promote the sustainable use of resources, including energy, water, and raw materials, while avoiding or minimizing adverse impacts on human health and the environment caused by pollution from project activities, project-related emissions of short- and long-lived climate pollutants, generation of hazardous and non-hazardous waste, and risks and impacts associated with pesticide use. It requires borrowers to estimate gross GHG emissions, where feasible and to apply World Bank Group's Environmental Health and Safety Guidelines and other GIIPs.	**EPA Act, 2008** The act provides for the effective protection of the environment and for other related matters. The act prescribes standards and guidelines relating to ambient air; water and soil quality; the pollution of air, water, and land; and other forms of environmental pollution including the discharge of wastes and the control of toxic substances. The act empowers the agency to issue environmental permits and pollution abatement notices for controlling the volume, types, constituents, and effects of waste discharges, emissions, deposits, or other sources of pollutants and of substances which are hazardous or potentially dangerous to the environment or any segment of the environment. Part V deals with ozone-depleting substances. It states that no person can import or export a controlled substance or controlled product without the permission of the agency.	Relevant World Bank EHS guidelines and other GIIPs will be adopted. These will be specified in ESMPs, and contractors will be required to adopt provisions in their site-specific environmental plans.

ESF	Applicable Local Legislation	Addressing Gaps
Community Health and Safety ESS4 requires borrowers to anticipate or avoid adverse impacts on the health and safety of project-affected communities; promote quality, safety, and climate change considerations in infrastructure design and construction, including dams; avoid or minimize community exposure to project-related traffic and road safety risks, diseases, and hazardous materials; and have in place effective measures to address emergency events and ensure that safeguarding of personnel and property avoids or minimizes risks to the project-affected communities. It requires borrowers to address water-related, communicable, and noncommunicable diseases that can result from project activities. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration and/or intensification of impacts due to project activities. Specific objectives include the following: • To anticipate and avoid adverse impacts on the health and safety of the affected community during the project life from both routine and non-routine circumstances • To ensure that the safeguarding of personnel and property is carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the affected communities.	**Public health Ordnance 1960 and The Public Health (Amendment) Act, 2004** These allude to several aspects of public health including control of notifiable diseases, health and sanitation issues, control of slaughterhouses, and so on. The amendment of 2004 does not add any new issues but merely alludes to denominating fines in leones.	For projects for which impacts on communities are anticipated, the preparation of a Community Health and Safety Plan will be required as an essential component of the ESMP. Contractors will also be required to adopt requirements stated for COVID-19 and other health-related issues. Through the ESMPs and site-specific Environmental Health and Safety Plans, steps will be taken to anticipate and avoid adverse impacts on the health and safety of the affected community during the project life from both routine and non-routine circumstances. Safeguarding of personnel and property will be carried out in accordance with relevant human rights principles and in a manner that avoids or minimizes risks to the affected communities.
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement ESS5 defines the types of involuntary displacement (including economic displacement) that can result from development projects. It defines who borrowers must consider as people affected by involuntary resettlement (including those who do not have formal claim to the land that they use or live on). It lays out a process for	**Constitution of Sierra Leone, 1991** The Constitution includes some provisions to protect the right of individuals to private property, but Section 21 of the Constitution also sets principles under which citizens may be deprived of their property in the public interest. Consequently, the Constitution upholds the fundamental rights of citizens to own property and receive support from the state when that property is compulsorily acquired by the state. Furthermore, it makes provision for the prompt payment of	1. Although there is now a new Resettlement Policy which mirrors most of the World Bank provisions, compensation provisions are weak and Compensation payments are in many instances inadequate the new National Resettlement Policy is a considerable improvement. As the new policy adopts most aspects of World Bank policy, a

ESF	Applicable Local Legislation	Addressing Gaps
developing a Resettlement Action Plan (RAP) for mitigating adverse impacts in projects where there are potential involuntary resettlement impacts. Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. Specific objectives include the following: • To avoid and, when avoidance is not possible, minimize displacement by exploring alternative project designs • To avoid forced eviction • To anticipate and avoid, or where avoidance is not possible minimize, adverse social and economic impacts from land acquisition or restrictions on land use by (a) Providing compensation for loss of assets at replacement cost and (b) Ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected • To improve, or restore, the livelihoods and standards of living of displaced persons • To improve living conditions among physically displaced persons through the provision of adequate housing with security of tenure at resettlement sites.	adequate compensation and access to the court or other impartial and independent authority for determination of landowners' rights to the amount of any compensation to which he/she is entitled and for obtaining prompt payment of that compensation. **National Lands Policy (2015)** The National Lands Policy addresses, among other things, issues of security of tenure and protection of land rights and pursues such actions as required to resolve or minimize land tenure disputes and their associated conflicts. All these are intended to ensure the coordinated and orderly use of land as a vital resource by present and future generations. It provides for the compulsory acquisition of land in the public interest. The principles of the land policy include, among others, the principle of land as a common national or communal property resource held in trust for the people and which must be used in the long-term interest of the people of Sierra Leone. Such principle only holds where it does not violate existing rights of private ownership. Compensation to be paid for lands acquired through compulsory acquisition will be fair and adequate and will be determined, among other things, through negotiations. No interest in or right over any land belonging to an individual or family can be disposed of without consultation with the owner or occupier of the land. No interest in or right over any land belonging to an individual or family can be compulsorily acquired without payment, in reasonable time, of fair and adequate compensation. **National Resettlement Policy 2019** The policy is cognizant of Sierra Leone's commitments under international law to respect and protect the rights of its citizens to property; adequate housing; protection against arbitrary or unlawful interference with privacy, family, and home; and legal security of tenure. In the same respect, the policy proceeds from a recognition that all persons, groups, and communities have the right to resettlement, which includes the right to alternative land of better or equal quality and housing that must satisfy the following criteria for adequacy: accessibility, affordability, habitability, security of tenure,	Resettlement Framework based on World Bank guidelines has been formulated for the project and will be adopted. Compensation will be based on replacement costs. Involuntary resettlement will refer to both physical displacement (relocation or loss of shelter) and economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use and will cover those who do not have formal claim to the land that they use or live on. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

ESF	Applicable Local Legislation	Addressing Gaps
	cultural adequacy, suitability of location, and access to essential services such as health and education.	
Biodiversity Conservation and Sustainable Management of Living Natural Resources ESS6 requires borrowers to protect and conserve biodiversity and habitats, apply the mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity, and support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities. It includes requirements for legally protected, designated, or regionally/internationally recognized areas of high biodiversity value. It also includes provisions to prevent invasive alien species and requirements on animal husbandry and large-scale commercial farming. Primary suppliers of natural resource commodities are also required to meet sustainability requirements. Specific objectives include • To protect and conserve biodiversity, • To maintain the benefits from ecosystem services, and • To promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.	**The National Protected Area Authority and Conservation Trust Fund Act, 2012.** This is an act that provides for the establishment of the NPAA and Conservation Trust Fund to promote biodiversity conservation, wildlife management, and research and to provide for the sale of ecosystems services in the National Protected Area. It states that the objective for which the authority is established is to exercise oversight of national parks and protected areas for conservation purposes so as to protect the fauna and flora in their natural state and promote sustainable land use practices and environmental management. **The Forestry Act, 1988** This act seeks to preserve the forest environment in the Practice of forestry as well as address the issue of sustainability of forest products. The Chief Conservator of Forests, under the direction of the Minister, is responsible for the implementation of its regulations. He has the role of preserving the forest environment, promoting the practice of forestry in all use of forestland, ensuring sustainability of forest products, and protecting soil and water resources that constitute the environment. It stipulates that no protected forest may be cut, burned, uprooted, damaged, or destroyed, except with a written permission from the Chief Conservator of the Forests. **The Wildlife Conservation Act, 1972** The Act provides for the establishment, conservation, and management of national parks, game reserves, and other forms of natural reserves and clearly defines the roles and responsibilities of various personnel administering the act. Minor amendments were made in 1990 (known as the Wildlife Conservation Amendment Act), which included redefinition of terms, and other modifications and qualifications.	Even though laws related to biodiversity conservation and sustainable management of living natural resources are diffused into several pieces of legislation, there are overlapping mandates for some of the governing institutions. Biodiversity will be protected and conserved and sustainable management of living natural resources promoted through the adoption of practices that integrate conservation needs and development priorities. This will be done mainly through including requirements imposed by ESS6 in the various ESMP components.

ESF	Applicable Local Legislation	Addressing Gaps
Cultural Heritage ESS8 requires borrowers to protect cultural heritage from the adverse impacts of project activities and support its preservation, address cultural heritage as an integral aspect of sustainable development, promote meaningful consultations with stakeholders regarding cultural heritage, and promote the equitable sharing of benefits from the use of cultural heritage. It recognizes the importance of cultural heritage for current and future generations. Consistent with the Convention Concerning the Protection of the World Cultural and Natural Heritage, this Performance Standard aims to ensure that clients protect cultural heritage in the course of their project activities. In addition, the requirements are based in part on standards set by the CBD. Specific objectives are • To protect cultural heritage from the adverse impacts of project activities and support its preservation and • To promote the equitable sharing of benefits from the use of cultural heritage.	**Environmental Policy (1994**) This provides for the collection of relevant data on biological diversity and cultural heritage. There are references to the preservation and/or respectful removal (considering cultural sensitivities) of society bushes for mining and other purposes in various regulations. **Monuments and Relics Act, 1962** The act provides for the preservation of ancient, historical, and natural monuments; relics; and other objects of archaeological, ethnographical, historical, or other scientific interest. The Monuments and Relics Commission was set up as a semiautonomous corporate body, with its members appointed by the government. An amendment to the act in 1967 gave the power to the Monuments and Relics Commission to have the responsibility of ensuring the preservation of cultural heritage assets. This is achieved by identifying important aspects of heritage and culture that can be preserved, shared, enjoyed, and studied by present and future generations. The commission has declared 18 designated monuments, relics, and historical objects as proclaimed assets.	It will be a requirement to include the adverse impacts of cultural heritage issues of project activities in the ESIA studies and support its preservation. Stipulations in ESS8 will be strictly adhered to. All contracts will include a chance find procedure.
Stakeholder Engagement and Information disclosure ESS10 requires that borrowers identify all stakeholders of a project, including those who stand to benefit or are at risk of facing negative impacts as a result of the project, with particular attention to vulnerable and disadvantaged groups. It requires borrowers to publicly disclose information about project risks and benefits in a language and manner understandable and accessible to project stakeholders. It instructs borrowers to develop a plan (laid out and made public in the SEP) to ensure that all stakeholders are informed and consulted on project risks and impacts throughout the project life cycle and to establish an independent, accessible	**EPA Act, 2008** There is no national policy as such on public disclosure. However, the EPA Act, 2008 (sections 27(1) and (2)) states that the agency shall circulate an EIA to various bodies and also open it for public inspection and comments in the National Gazette and newspapers for a specified period.	Although stakeholder consultation laws are hazy and national laws are not very clear and appeals processes not very suitable for use by poor community groupings, the comprehensive SEP formulated for this project will be strictly adhered to. This plan also includes a comprehensive GRM and covers all stages of the project cycle.

ESF	Applicable Local Legislation	Addressing Gaps
grievance mechanism and process for stakeholders to submit project-related complaints.		

Comparison of the Sierra Leone legal framework/regulation with the World Bank's ESS revealed that there are policy gaps between the two. Where there are gaps between the Sierra Leone legal framework and the World Bank's ESS, the gap-filling measures provided in Table 5 shall be applied. While preparing and implementing subsequent ESS instruments, the GoSL will be required to fully comply and implement each gap-filling measure stated in Table 5, where it is applicable. Furthermore, the World Bank requires that where there are gaps between the legal frameworks of Sierra Leone and that of the ESS, the GoSL will take supplementary measures to ensure that the project complies with the standards set in all applicable ESS.

3.5 National Environmental Standards

Sierra Leone has no official national environmental standards regulated by EPA-SL. Instead, EPA-SL leaves it to the project proponent to define the standards used. These are often standards stated in the World Bank Guidelines or World Health Organization (WHO) standards or other standards that the EPA approves-without stated approval procedures, but these have not been officially approved and gazetted.

There have been attempts more recently to have standards drawn up jointly by EPA-SL and Sierra Leone Standards Bureau for potable water and effluents, but these have not been approved and gazetted.

Notwithstanding this, there are official standards for the mining sector, which are stated in the Environmental and Social Regulations for the Minerals Sector, 2012. This has effluent standards and gaseous emissions and particulate matter quality standards.

3.6 Challenges in Implementation of Policies and Legislation

There are a number of challenges in implementing policies and legislations outlined. Some of these are as follows:

(a) The poor capacity of MDAs is a major concern. Even with policies and legislations present, the EPA-SL and other MDAs may not necessarily have the relevant enforcement capacity.

(b) Legal compliance could also be a problem. The slow legal system in the country could encourage people to flout laws, and fines may not be a sufficient deterrent.

(c) LCs also have insufficient capacity. The environmental units of most LCs are poorly and inappropriately staffed with unqualified people. They lack funds and are poorly equipped.

(d) The devolution of functions by ministries to LCs is often not matched with providing enough funds and seconding qualified personnel. Capacity therefore in most LCs is poor. Besides, LCs do not have enough self-generated funds and funds from the Central Government are small and not received on time.

(e) One of the impediments to the promotion of policy and legislative action is the lack of clear-cut understanding of the responsibility of the various agencies of government, exacerbated by conflicting roles and overlapping mandates.

(f) Interviews with various staff have highlighted the need for a considerable amount of further training in environmental matters.

(g) The capacity of the EPA laboratory is severely limited. EPA currently has a laboratory to carry out analyses for various field samples. A recent performance audit report by ASSL confirms this: "None of the laboratories were 100% capacitated to undertake air, water and noise

quality samples testing in terms of trained and qualified laboratory technicians, calibration of equipment and trained and documentation and noted that there was no laboratory capable of analysis of noise quality."

(h) EPA has a low level of expertise in the socioeconomic analysis arena. It has very few high-level staff with expertise in socioeconomic issues. Considering that a significant part of ESIAs is the social assessment part, this is surprising. This could affect how community development and resettlement issues are handled.

(i) The capacity of EPA's regional offices is poor. EPA has regional offices in only three areas—Kono, Makeni, and Bo. The regional offices are within the purview of the Field Operations Directorate, but staffing is a problem.

(j) Considering that they should be in a position to carry out perennial monitoring in their areas and that field monitoring trips by teams from the main office in Freetown, EPA has grossly limited monitoring equipment and software for an environmental agency.

(k) EPA faces budgetary constraints in meeting certain vital needs

(l) EPA needs to prepare a comprehensive manual on standards, guidelines, and procedures for various sectors.

Addressing Challenges

Despite these challenges, donor-funded projects have found ways of circumventing many of these problems. Some of them are as follows:

(a) High commitment is demonstrated from international partners and multilateral donors to provide full or matching funds for various important issues like the conservation of the biodiversity in the country, including funding to ministries and agencies.

(b) Greater cooperation exists between MDAs by having interagency cooperation. This is especially true where there is a likelihood of overlapping mandates and conflict of interest. Most projects now incorporate an Interagency forum in their oversight structure to engender cooperation among agencies and resolve issues on time.

(c) Alongside reforming policies, legislation, and regulations, the government has also embarked upon reforming institutions. There are reforms within the ministries and agencies and also within LCs.

(d) With the introduction of a new Ministry of the Environment, coordination between the EPA, NPAA, and Forestry Department, which are now part of this new ministry, will get better.

(e) Many donor-funded projects now have dedicated PMUs that are well staffed with qualified and experienced people in many areas of managing the project. These include E&S safeguard specialists.

(f) Most donor-funded projects also have a component of capacity building, which is funded. Capacity building can be extended to contractors, members of the PMU, local oversight bodies, and regulatory agencies.

(g) In the environmental area there are a couple of experienced environmental consultancies which either work by themselves or work with well-established overseas consultancies. Local

consultancies gain by knowledge transfer. Sometimes, local consultancies are asked to join training sessions.

(h) For this project, the PMU is well staffed with several technical experts, a project manager, and E&S safeguard specialists. Interagency cooperation is also encouraged. The management structure also encapsulates roles for various city councils. The project itself has a capacity-building component. Training suggested includes EPA, NPAA, LCs, and the private sector.

(i) Even though it has its own standards, EPA has welcomed the use of World Bank safeguard instruments.

3.7 Institutional Framework

Many institutions would have various roles to play in the implementation of the ESMF. The major ones are listed in Table 6.

Table 6: Institutional Roles and Responsibilities

Institution	Roles
Financial institutions and borrowers The World Bank GEF	 The World Bank is the main sponsor of the project. Its roles and responsibilities are as follows: • Provide the funding (IDA grant and GEF co-funding) for the RUSLP implementation. • Lead the biannual implementation review missions. • Prepare and share biannual progress report with the Ministry of Finance (MOF). • Coordinate timing of missions with the project manager, MOF. GEF is a financing program within the International Bank for Reconstruction and Development (IBRD or World Bank) which finances projects that assist in the protection of the global environment and promote environmentally sound and sustainable economic development. GEF operates on the basis of collaboration and partnership among the implementing agencies.
Ministry of Works and Public Assets	Charged with several statutory responsibilities, among which are (a) Road construction, supervision, monitoring, and maintenance of the main road system through the SLRA as well as public buildings; (b) The improvement of road networks by securing bilateral and multilateral agreements with donors for funding; and (c) Provision of engineering infrastructure to roads.
Ministry of Lands, Housing and Country Planning (MLHCP)	Responsible for land valuation and compensation related to this project. The ministry provides advisory services to the public on land matters and is also responsible for physical planning. The Town and Country Planning Department is responsible, among others, for planning, controlling, and ensuring the harmonious, sustainable, and cost-effective development of human settlements in accordance with sound environmental and planning principles.

Institution	Roles
Ministry of the Environment	This is a new ministry with the mandate of handling environmental matters in the country. It is the parent ministry of EPA, and there are plans for having the NPAA and the Forestry Division of the Ministry of Agriculture report to this ministry.
Ministry of Local Government and Rural Development (MLGRD)	Local government in Sierra Leone is a subnational structure to which some functions have been delegated from the Central Government to plan, administer, and manage with accompanying resources.
Ministry of Social Welfare, Gender and Children's Affairs	Mandated to promote and protect the rights of women, children, the aged, persons with disability, and other vulnerable groups through the development and review of policies, advocacy of coordination with stakeholders, building of capacity, and effective M&E to enhance equity for all. The ministry coordinates child welfare committees and Gender-Based Violence (GBV) committees.
EPA	EPA is a statutory agency for the protection of the environment and for other related matters. With reference to the road project, EPA has the overall responsibility of permitting and monitoring the project's compliance in line with the approval conditions as well as other standards relating to environment. Its responsibilities include managing the EIA process, making decisions, and ensuring that management occurs in accordance with the decisions.
SLRA	A semiautonomous government entity responsible for the administrative control, planning, development, and maintenance of all national road network and related structures including bridges, street furniture, and government-owned ferries.
MOF	Through the Minister of Finance, the MOF represents the GoSL to the World Bank on high-level strategic matters relating to the project according to the Financing Agreement and Project Appraisal Document. The specific roles and responsibilities of the MOF include • Providing the overall administrative authority of the project under the leadership of the Financial Secretary, • Providing financial management and procurement functions through the Project Fiduciary Management Unit which serves as the Principal Accounting Officer of the project, • Recruiting and supervising staff of the PMU and housing them, and • Requesting and receiving funds from the World Bank for the RUSLP implementation.

Institution	Roles
Beneficiary Local Government Councils	This category includes the FCC, WARDC, and the councils of the secondary cities—Bo, Bonthe, Kenema, Koidu, Makeni, and Port Loko. Their roles include • Providing project implementation on the ground; • Supporting the Project Fiduciary Management Unit in procurement of consultants and works, • Monitoring project implementation—including the quality of engineering works, • Enforcing agreements and by-laws relating to the project, • Ensuring safeguards compliance instruments at the council level, • Representing community members at key decision-making forums on the project, and • Facilitating stakeholder engagements—community mobilization and participating initiatives.
Ministry of Water Resources	This ministry has the mandate for the development of policies and programs for the provision of safe drinking water on a constant and sustainable basis to the entire population of Sierra Leone by carrying out activities under the following major headings: • GVWC • SALWACO • Sierra Leone Water Management Agency • Development of dams and other water supply schemes • Protection and management of water resources.
Project-related MDAs and others: • NPAA • Sierra Leone Police • Ministry of Internal Affairs • SLRSA • Office of National Security (ONS) • Ministry of Health and Sanitation • Parliament • Ministry of Justice and Attorney-General's Office • Ministry of Youth Affairs • National Disability Commission • National Children's Commission • GVWC • Electricity Distribution and Supply Agency • National Disaster Management Agency (NDMA)	There are several other MDAs that will be involved in the project providing advisory roles and policy support, supporting project activities at community levels, providing data and information, and so on.

4 ENVIRONMENTAL AND SOCIAL BASELINE

4.1 National Biophysical Environment

Climate

Sierra Leone has a tropical savannah climate, with two distinct seasons. The climate is tropical rainforest with wet and dry seasons, the former from May to October and the latter from November to April. Sierra Leone has a predominantly hot and humid tropical climate that shows a distinct coast-interior gradient, a function of the country's varied topography. The wet season has an average rainfall of 3,000 mm, with coastal and southern areas receiving up to 5,000 mm annually and inland areas between 2,000 mm and 2,500 mm. The national average annual rainfall varies across the country: 3,659 mm in Bonthe in the south, 2,979 mm in Lungi in the west, and 2,618 mm in Kabala and Bo (UNDP 2012). Temperatures are high and humidity is fairly low in the dry season. The lowest temperatures are from July to September, in the middle of the rainy season, and the highest temperatures are in February and March, near the end of the dry season. Historically, the normal temperature range for Freetown is between 22.1^{o}C and 32^{o}C, with temperatures known to drop during the Harmattan season to as low as 10^{o}C. Relative humidity level in the mornings is typically between 78.1 and 91.1 percent and in the afternoons between 62.4 and 82.8 percent, with low values occurring between January and March. The most frequent wind directions are from northwest and southwest with speeds of 0.1–2.3 m/s on average.

Geology

Sierra Leone is situated on the Main Craton of the Southern West African Shield. The Archaean granitic shield contains elements of early sedimentary and mafic formations and a group of super crustal greenstone belts with banded ironstone and detrital sediments. Resting apparently unconformably on the basement complex are three groups of supercrustal rocks which constitute the Kasila Group, the Marampa Group, and the younger Kambui Group. These have been deformed and metamorphosed together with the underlying gneisses and intruded by late and post orogenic granites. The Freetown Layered Complex is a 65 km long, 14 km wide, and 7 km thick tholeiitic intrusion, which intruded the West African Craton during the Early Jurassic ~190 Ma (Chalokwu et al. 1995; Chalokwu 2001). The intrusion has an arcuate outcrop toward the west and extends out under the Atlantic Ocean.

Geomorphology

About two-thirds of Sierra Leone consists of a series of highly dissected plains and plateau out of which rise a number of mountain ranges and massifs. The plains and plateau are aged erosion surfaces with generally accordant summits. The peninsula hills south of Freetown rise steeply to heights of 1,000–1,500 m above mean sea level and continue southward as a once-protected forest highland and are now threatened by encroachment of uncontrolled urban developments.

Hydrology

Five main rivers (Little Scarcies, Rokel, Jong, Sewa, and Moa) flowing from northeast to southwest drain most of Sierra Leone's land surface. In addition, six smaller basins and drainage areas (Great Scarcies, Lokko, Rokel Estuary, Western, Robbi/Thauka, and Sherbro Water Resources Areas) complete the picture.

The Food and Agriculture Organization (FAO) of the UN (Aquastat) estimates Sierra Leone's total renewable water resources as 160 km^3 per year (out of 182.6 km^3 per year which is estimated as rain). Runoff is highly seasonal, reflecting the seasonal distribution of rainfall. Discharge increases from May, peaking in September and decreasing to near zero by March. Sierra Leone has been experiencing the effects of climate change through the recurrence of floods and landslides. Flooding in Freetown occurs regularly and causes frequent damage and casualties. In the last 15 years, four major floods have affected over 220,000 people and caused severe economic damage (World Bank Group 2017).

Soils, Vegetation, and Land Use

Soils in Sierra Leone are Terrigenous (lateritic) and hydromorphic and have developed from the composite processes of mobilization, displacement, and accumulation of iron on surface horizons. Upland lateritic soils occur on 60 percent of the total land area. It has been estimated that 70 percent of the country was at one time forested. Currently, just under 5 percent of the country is under mature forests. Human impact on the vegetation has been the most severe, largely due to logging and slash-and-burn agriculture. Broadly classified, there are seven vegetation types, and these include moist rain forest, semi-deciduous, montane, mangrove, savannah, farm bush, and swamp forests. The Sierra Leone economy has always been based on the exploitation of natural resources, notably agricultural, marine, and mineral resources. Agriculture was the single most important component of Sierra Leone's economy between 2003 and 2011. The sector's contribution to GDP was larger than any other sector, over 40 percent during this period, and agricultural production comprised over 25 percent of the export earnings. Food crops accounted for the majority of land use, particularly among poor farmers. Rice continued to be the main crop, produced by 93 percent of crop-growing households. The country is richly endowed with mineral resources, and the economy has relied on mining, especially of diamonds.

Freetown has a total land area of 357 km^2 with a coastline of about 40 km. Yet, within this space, there exist two distinctive topographic zones that have considerably influenced growth and vulnerability which climate change will accentuate. The lack of adequate planning and development control over the years in Freetown, as well as constraints to development posed by conflict (1991–2002) has led to rather inefficient land use. The residential settlements are expanding on the coastal lowlands with increasing encroachment on the hill slopes. Livestock play an integral role in the livelihood of both rural and urban communities in Sierra Leone. The major traditional livestock found in Sierra Leone are cattle, sheep, and goats and to some extent, pigs, and poultry. Fish and fish products constitute a major source of income, food, and recreation in the economy of Sierra Leone. This subsector plays a significant role in the economy and food security of the country. It contributes about 10.2 percent to GDP of the country (Awoko 2017) and provides about 80 percent of total animal protein consumption for the majority of Sierra Leoneans.

Ecology

Sierra Leone is globally recognized as a biodiversity hot spot being part of the Upper Guinea Rainforest.[8]

There are rich indigenous flora and fauna including important endemic species and internationally rare and threatened species. The Gola Forest National Park and the Outamba-Kilimi National Park account for the largest tract of closed forest and savanna ecosystems, respectively, under protection. Sierra Leone's wetlands cover a land area of about 4,838 km^2, categorized into two main types—the inland wetlands

(floodplains, lakes, and rivers) with vegetation typical of freshwater swamp forests, riparian zones and bolilands; and the coastal/marine wetlands, mainly associated with mangroves, sand flats, and mud flats.

The wildlife of Sierra Leone is very diverse due to the variety of different habitats within the country. There are approximately 147 known species of wild mammals, 172 known breeding bird species, 67 known reptile species, 35 known amphibian species, 750 species of butterflies including one of the largest butterflies, the giant African swallowtail, and 99 known species of fish within Sierra Leone. Members of 14 orders of placental mammals inhabit Sierra Leone. The country has 15 identified species of primates that include bush baby, monkeys, and the great ape, the common chimpanzee which is Sierra Leone's largest primate. Chimpanzees are found across the country with the 2010 chimpanzee census estimating a wild population in excess of 5,500—more than double the number previously thought to live in the country. Sierra Leone has over 630 known species of birds, 10 of which are considered endangered including rufous fishing owl and Gola malimbe. There are 67 known species of reptiles, 3 of which are endangered, including several large reptiles. There are 3 species of crocodiles—the Nile crocodile, the slender-snouted crocodile which lives in forest streams, and the dwarf crocodile found in mangrove swamps. The government has identified the urgent need to establish effective systems for conservation management of wetland ecosystems in Sierra Leone. Seven areas have been proposed for conservation.

4.2 National Socioeconomic Baseline

Population and Demography

Sierra Leone covers a total area of 71,740 km^2 and has a population of 7,075,641 according to the 2015 Housing and Population Census result. The average household size for Sierra Leone is 6 (5.8 in urban areas and 6.2 in rural areas) according to the Sierra Leone Integrated Household Survey (SLIHS) report, 2018, but this could be as high as 10 in the slum communities from the ESMF studies. The data also show that females constituted 52.1 percent of the population compared to males with 47.9 percent. Sierra Leone has a population with 59 percent residing in rural areas and 41 percent residing in urban areas. The population continues to grow exponentially at an average annual rate of 3.2 percent. Sierra Leone is experiencing a demographic transition, characterized by a high birth rate, a declining death rate, and a rapidly expanding population. These dynamics have resulted in a young population, with 42 percent of the population below 15 years of age.

Some information on national social indicators is provided in Table 7.

Table 7: Information on National Social Indicators

Key Social Indicators	Rate	Source
National Population	7,076,641	Statistic Sierra Leone, 2015 Census
GDP per capita	US$527.5 in 2019	https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=SL
Economic growth rate	−21.5% in 2015 (was 15.2% in 2012 but dropped due to the Ebola crisis) 4.8% in 2019	African Development Bank Group (2017). Sierra Leone Economic Outlook. [online] Available at https://www.afdb.org/en/countries/west-africa/sierra-leone/sierra-leone-economic-outlook/ and https://www.worldbank.org/en/country/sierraleone/overview

Key Social Indicators	Rate	Source
Human Development Index	0.452 in 2019. Ranked 182 out of 189 countries	UN Human Development Report, 2020 - The next frontier - Human development and the Anthropocene
Population in multidimensiona poverty, headcount (%)	57.9	UN Human Development Report, 2020 - The next frontier - Human development and the Anthropocene
Infant mortality rate	56 deaths per 1,000 live births in 2017	Government of Sierra Leone (2019). Sierra Leone Medium Term National Development Plan, 2019–2023. Available at http://www.moped.gov.sl/wp-content/uploads/2019/03/Medium-Term-National-Development-Plan-Volume-I.pdf
Life expectancy at birth	54.7 years	UN Human Development Report, 2020 - The next frontier - Human development and the Anthropocene
Maternal mortality ratio	1,100/100,000 in 2013	WHO (2014). Sierra Leone. Available at http://www.who.int/maternal_child_adolescent/epidemiology/profiles/maternal/sle.pdf
Teenage pregnancy (15–19 years)-	Total 21% (Urban 14%, Rural 29%)	Sierra Leone Demographic and Health Survey, 2019
HIV prevalence-	1.7% (Urban 2.3%, Rural 1.2%)	Sierra Leone Demographic and Health Survey, 2019
Adult literacy rate	51.4 %	Statistic Sierra Leone, 2015 Population and Housing Census Final Results Available at https://www.statistics.sl/images/StatisticsSL/Documents/final-results_-2015_population_and_housing_census.pdf
Expected years of schooling (years)	10.2	UN Human Development Report, 2020 - The next frontier - Human development and the Anthropocene
GDI	0.884	UN Human Development Report, 2020 - The next frontier - Human development and the Anthropocene
Prevalence of stunting (height/age) among children 6–59 months (2SD)	26.4%	Government of Sierra Leone (2019). Sierra Leone Medium Term National Development Plan, 2019–2023. Available at http://www.moped.gov.sl/wp-content/uploads/2019/03/Medium-Term-National-Development-Plan-Volume-I.pdf
Individuals using the internet (%)	11.8	Government of Sierra Leone (2019). Sierra Leone Medium Term National Development Plan, 2019–2023. Available at http://www.moped.gov.sl/wp-content/uploads/2019/03/Medium-Term-National-Development-Plan-Volume-I.pdf
Roads	Estimated 11,555 km of road including 1,031 km (9%) of paved road. Average of 18 percent in Africa.	Government of Sierra Leone (2019). Sierra Leone Medium Term National Development Plan, 2019–2023. Available at http://www.moped.gov.sl/wp-content/uploads/2019/03/Medium-Term-National-Development-Plan-Volume-I.pdf.
% of population with access to improved water	67% (Urban 92%, Rural 49%)	Sierra Leone Demographic and Health Survey, 2019
% of population with access to improved sanitation facility	55% (Urban 84%, Rural 33%)	Sierra Leone Demographic and Health Survey, 2019

General Economy and Poverty Trends

Sierra Leone's economy is small and undiversified. GDP growth rate was 3.4 percent in 2018 (World Bank 2018) but has been conspicuously inconsistent. In recent years, economic growth has been driven by mining-particularly iron ore. The country's principal exports are iron ore, diamonds, and rutile, and the economy is vulnerable to fluctuations in international prices. The main household economic activity in Sierra Leone is agriculture comprising crop product livestock, forestry, and fishing activities. These are followed by services including wholesale and retail trade, accommodation and restaurant services, public administration services, education, health, and social work. Industry comprises mining, manufacturing, utilities, and construction.

Water, Sanitation, Electricity, and Health

Sierra Leone has roughly 1,200 public health facilities, although the number of facilities and their designated levels of care frequently change as new facilities open and existing facilities close (Ministry of Health and Sanitation 2017). There are 24 hospitals in the country, 9 of which are located in the Western Area, including the three primary tertiary hospitals.

According to the SLIHS report, 2018, 72 percent of households use firewood while 27.7 percent use charcoal.

Gender and GBV

In the urban areas of Sierra Leone, about 70 percent of the population is self-employed and largely engaged in petty trading in the informal sector. Many of the women, and men, involved in informal trading do so on a survival consumption basis, to sustain the welfare and basic consumption of their households.

More men have access to paid jobs, while women tend to occupy less well-remunerated enterprises within the informal sector. In Sierra Leone, 12.4 percent of parliamentary seats are held by women, and 19.2 percent of adult women have reached at least a secondary level of education compared to 32.3 percent of their male counterparts. In the urban slum setting in Freetown, mostly along the coastline, cross-border trade is an important source of livelihood support, with 63 percent of urban women engaged in informal economic activities, mostly petty trading and farming (Howard 2016). These disparities result from cultural and social barriers that discriminate against women's full socioeconomic participation (African Development Bank 2016). GBV in Sierra Leone is a persistent problem which studies have shown affect nearly all Sierra Leonean women who experience it in some form or other during their lifetime. According to the Sierra Leone Demographic and Health Survey 2019, 61 percent of women ages 15–49 have experienced physical violence since age 15, and 7 percent have experienced sexual violence. When it comes to intimate partner violence (IPV), 62 percent of ever married women have, at least once in their lifetime, experienced physical, sexual, or emotional violence (SSL and ICF International 2020). GBV takes various forms including domestic violence (physical, economic, and emotional/psychological), communal/cultural violence, sexual violence, and structural violence (equal rights discrimination), with domestic violence being the most common.

Sierra Leone is also a highly patriarchal society, and institutionalized gender inequalities are exacerbated by discriminatory behaviors, particularly with relation to marriage, property rights, and sexual offences. The high levels of illiteracy and poverty among Sierra Leonean women prevent them from upholding many

of their internationally recognized rights. Similarly, economic insecurity contributes to women's vulnerability to GBV, and their marginalization from local and national decision-making processes further limits their ability to redress these gender inequalities.

Other Vulnerable Groups

There are 310,973 persons with disability in Sierra Leone, accounting for 4.3 percent of the total population, according to the SLIHS report 2018. Among the population with disability, 162,208 are within the working ages of 15–64 years. Among the population with disability, a total of 93,843 (57.8 percent) persons were employed the last week preceding the survey. Of the 57.8 percent of persons with disability employed, 74.4 percent are self-employed, and 15 percent are engaged in help without pay in households or businesses. Only 6.7 percent are regular employees. Child labor is common in Sierra Leone. Children living in the poorest households in Freetown and other major cities are most often involved in child labor. Many children living in Freetown are used as hawkers, spending long hours selling various items and pulling wheelbarrows, instead of being at school. This is in contravention of the ILO Convention 182 which prohibits the use of child labor. Street trading in the city of Freetown is a very serious problem.

According to the UNDP, approximately 2.7 million of Sierra Leone's population are youth ages 15−35 years. The unemployment rate is higher among youth than those ages 35 and above. A lack of skills and experience is cited as one of the main reasons for the high youth unemployment rate. An ILO survey (SWTS Country brief, Sierra Leone. ILO, January 2017) registered a high youth labor underutilization rate, particularly among young women: it was 72.8 percent for young women and 59.9 percent for young men. The share of underutilized labor potential consisted of 48.5 percent of the youth population in irregular employment (either in self-employment or paid employment with contract duration less than 12 months), 11.8 percent unemployed, and 5.9 percent inactive non-students.

More than three in four (78.5 percent) employed youth remained in vulnerable employment as own-account workers (34.6 percent) or unpaid family workers (43.7 percent).

4.3 Project Site-Related Environmental and Baseline Situation

4.3.1 Socioeconomic Status of Project Cities

The population data of the cities under consideration for this project according to the 2015 census are as follows: Freetown 1,055,964, WARDC 437,036, Kenema 200,443, Bo 174,369, Koidu 124,662, Makeni 124,634, Port Loko 33,541, and Bonthe 200,730. In assessing the socioeconomic status of the various cities, reference is made to statistics in the SLIHS 2018. Most of the statistics provided are for the entire district in which the city is located. Although this can be used to get a general sense of the situation in the city, it should be borne in mind that the situation in the city with regard to most indexes is likely to be better than for the district because of the big disparity between urban and rural statistics. As an example, poverty in rural areas at 73.9 percent is twice as much as for urban areas at 34.8 percent. Also, the poverty level in Freetown of 22.8 percent is considerably less than other urban areas whose poverty rate averages 49.3 percent.

Specific to the cities under consideration for this project, Freetown, the capital and the largest city of Sierra Leone, dominates the urban landscape with 14 percent of the country's population and generates 18.7 percent of the national economy. It is a major port city on the Atlantic Ocean and is located in the

Western Area of the country. The city is Sierra Leone's major urban, economic, financial, cultural, educational, and political center, as it is the seat of the GoSL. The city's economy revolves largely around its harbor, which occupies a part of the SLRE in one of the world's largest natural deep-water harbors. Freetown shares borders with the Atlantic Ocean and the WA Rural District. It is the economic and financial center of Sierra Leone. Industries include food and beverage processing; fish packing; rice milling; petroleum refining; and the manufacture of paint, plastic products, and beer. Freetown is a touristic area and has many hotels and entertainment centers. It has a relatively low poverty rate of 16.7 percent. WA Urban has a literacy rate of 79 percent and a disability percentage of 7.7 percent. About 81.6 percent of people in WA Urban have access to electricity. About 64.6 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 61.8 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 1.4 percent have no access to toilets.

The WA Rural District, once rural, is now considerably urbanized and many areas in it are now regarded as an extension of Freetown. The WARDC touristic areas have many scenic beaches. Fishing is a major business along the coastal areas. Sand mining has become an environmental problem in many of the scenic beach areas. Major centers like Waterloo have become important commercial centers. The WA Rural District has a poverty rate of 38.8 percent. It has a literacy rate of 46.4 percent and a disability percentage of 3.9 percent. About 24.9 percent of people in the district have access to electricity. About 34 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 76.6 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 10 percent have no access to toilets.

Bo is the second largest city in Sierra Leone by landscape/geographical location (after Freetown) and the largest city in the Southern Province. It lies approximately 160 miles (250 km) South East of Freetown and about 40 miles (71 km) from Kenema. Bo is a leading financial, educational, and economic center of southern Sierra Leone. It is a major trading center, being right in the middle of the country. The shops along the major roads are mainly owned by Lebanese traders. Bo is renowned for being a major educational center and houses several historic schools and a campus of Njala University College. Bo has no major industries but has several small cottage industries, a major one of which is the production of garri (dried and granulated cassava). Bo District has a poverty rate of 60.2 percent. The sex ratio in Bo at 87 percent (ratio of men to women) is low when compared to 92 percent nationally. Bo has a literacy rate of 47.1 percent and a disability percentage of 6.6 percent. Only 17.5 percent of people in the district have access to electricity. About 20.7 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 59.9 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 33.9 percent have no access to toilets.

Kenema is the third largest city in Sierra Leone (after Freetown and Bo) and the largest city in the country's Eastern Province. It is the capital of Kenema District and a major economic center of the Eastern Province. Kenema's growth was originally promoted by the logging and carpentry industries. It is now a major trading center mainly because of the easier access to Liberia and the diamond trade. Alluvial diamonds are mined in many areas of the district, including the major diamond town of Tongo Field. The shops along the major roads are mainly owned by Lebanese traders. Kenema has no major industries but has a few agricultural trading establishments for cash crops. Kenema District is renowned for cash crops—cocoa and coffee. Kenema District has a poverty rate of 77.9 percent. The sex ratio (ratio of men to women) in Kenema at 89 percent is low when compared to 92 percent nationally. Kenema has a literacy rate of 46.4

percent and a disability percentage of 7 percent. Only 15 percent of people in the district have access to electricity. Only 10 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 88.2 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 17.3 percent have no access to toilets.

Koidu City is the capital of the diamond-rich Kono District in the Eastern Province of Sierra Leone. Koidu lies approximately 280 miles east of Freetown, and about 60 miles north of Kenema. Koidu is one of the most ethnically and religiously diverse cities in Sierra Leone. Though it is the major diamond center in the country, scars from the environmental effects of mining are still apparent on the outskirts of this commercial city. Kono District has a poverty rate of 55.2 percent, the situation probably helped by the prevalence of diamonds. Kono has a literacy rate of 42.5 percent and a disability percentage of 6.5 percent. Only 7.8 percent of people in the district have access to electricity. Only 6.3 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 49.4 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 11.6 percent have no access to toilets.

Makeni is the largest city in the Northern Province of Sierra Leone. The city is the capital of Bombali District and is the economic center of the Northern Province. Makeni lies approximately 110 miles east of Freetown. It has a number of commercial shops along the main roads. It is a major educational center with a university and a number of schools. Bombali District has a poverty rate of 63.7 percent. Bombali has a literacy rate of 51.3 percent and a disability percentage of 5.6 percent. About 25.6 percent of people in the district have access to electricity. About 25.7 percent of residents have their household refuse collected by private individuals or disposed of into government bins. Only 20.2 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 6.1 percent have no access to toilets.

Port Loko is the capital of Port Loko District and since 2017 the North West Province of Sierra Leone. The city lies approximately 36 miles northeast of Freetown. The town lies on the main highway linking Freetown to Guinea's capital Conakry. It also lies on the overland highway between Freetown and its major airport, Lungi International Airport, although most travelers complete this journey via the much shorter ferry or helicopter transit. Port Loko is a relatively small city and has a few commercial shops along the main roads. The district is well known for mining activities and houses a major iron ore mine. Port Loko District has a poverty rate of 64.6 percent. Port Loko has a literacy rate of 51 percent and a disability percentage of 9.2 percent. Only 11.6 percent of the people in the district have access to electricity. Only 0.7 percent of residents have their household refuse collected by private individuals or disposed of into government bins. About 47.7 percent of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 15.8 percent have no access to toilets.

Bonthe is a coastal city located on Sherbro Island in Bonthe District in the Southern Province of Sierra Leone. The city lies on the eastern shore of Sherbro Island, on the Sherbro River estuary. Bonthe is about 60 miles southwest of Bo and 187 miles southeast of Freetown. It is by far the smallest of Sierra Leone's six municipalities. The major industry in Bonthe is fishing. During colonial times, the town used to be a major trading center for cassava and other agricultural products. Bonthe District has a poverty rate of 51.9 percent. Bonthe has a literacy rate of 65.8 percent and a disability percentage of 1.6 percent. Only 2.7 percent of people in the district have access to electricity. Only 16.6 percent of residents have their household refuse collected by private individuals or disposed of into government bins. Only 35.8 percent

of people have access to safe drinking water (piped water, tube wells, and protected dug wells), and 59.5 percent have no access to toilets.

4.3.2 Effects of Noise, Air Quality, and Water Quality

Baseline noise and air quality measurements were not taken at the possible project sites. However, they would be expected to mirror the situation in the major commercial areas in Freetown. Table 8 captures some environmental measurements undertaken around Lumley market in Freetown.

Noise Levels

Noise levels countrywide depend on the area of the country and time of the day. Noise levels are higher in urban areas because of the higher population density, industrialization, and commercial activities. Sierra Leone however is not a highly industrialized country, and apart from the mining companies, most of the industries are located in the east end of Freetown. Noise levels are high within these industrial establishments but do not affect residents much. Noise levels are high in the commercial areas of Freetown.

Dust and Air Quality

Dust and air quality also vary considerably around the country. Although dust levels may be minimal in rural areas, air quality may be poor at certain times of the year because of fumes from the slash and burn agricultural activities practiced. Dust and air quality in urban areas may also be affected by industrial and commercial activities.

Table 8: In situ Environmental Measurements at the Existing Lumley Market

Project Area	Recommended Threshold (WHO)	Recorded Value
Temperature (°C)	—	32.4
Humidity (%)	—	72.8
Wind speed (m/s)	—	1.0
Noise Level (dB)	70 (daytime; industrial/commercial locations)	70–87
		69–84
		73–94
$PM_{2.5}$ (µg/m^3)	10 µg/m^3 (annual mean) and 25 µg/m^3 (24-hour mean)	14
		30
		10
PM_{10} (µg/m^3)	20 µg/m^3 (annual mean) and 50 µg/m^3 (24-hour mean)	19
		45
		14
CO (ppm)	28	14

The most significant source of air pollution in the urban areas includes gas emissions from vehicles and machinery, nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM_{10} and $PM_{2.5}$), generated from transportation. Carbon monoxide measurements at the Lumley Road intersection were notably high and can be attributed to high vehicular traffic in this area.

Groundwater Resources and Quality

HydroNova[9] produced a Hydrogeologic Atlas of Sierra Leone in 2017. The project showed that the majority of nearly 29,000 wells, from the national survey, are located in unconfined aquifers of limited extent and are of three different types. The water table flows from northeast to southwest following the main water courses and is generally correlated to the topography. In summary, the key points regarding water-table fluctuations in Sierra Leone are that water tables

- Respond rapidly to the first rains in May;
- Rise to a peak around mid- to end-August, coinciding with the peak of the rains;
- Recede rapidly after the peak rainfall month, despite the subsequent months having significant rainfall; and
- Continue to recede through the dry season, reaching their lowest levels in April.

Relatively little information was available on the groundwater quality of Sierra Leone. Most of the analyses were performed for Freetown, Tonkolili, Port Loko, and Moyamba Districts. Some investigations (Massally et al. 2015) show that two-thirds of the samples are within WHO limits for turbidity. A low percentage (5–10 percent) of samples exceeded WHO guidelines for electrical conductivity, while 12–25 percent had iron and manganese values in excess of WHO standards. Bacteriological contamination was a very serious problem especially in Freetown where fecal and non-fecal coliforms were retrieved in 30 percent of the wells. Generally speaking, groundwater quality is fairly good and drinkable all over the country with rather higher values for iron and manganese or specific metals close to mining sites. Bacteria are however quite prevalent near populated areas where a greater number of hand-dug wells are present, facilitating the infiltration of polluted water from the surface.

Potable water must conform to WHO standards (Table 9)

Table 9: WHO Standards for Potable Water[10]

Attribute	Threshold Value	Comments
Turbidity	No guideline	Desirable: Less than 5 NTU
pH	No guideline	Desirable: 6.5–8.5
Color	No guideline	Desirable: 15 mg/L Pt-Co
Dissolved oxygen	No guideline	Desirable: less than 75% of the saturation concentration
Hardness	No guideline	Desirable: 150–500 mg/L
Aluminum (Al)	No guideline value	
Arsenic (As)	0.01 mg/L	
Cadmium (Cd)	0.003 mg/L	
Chlorine	5 mg/L	
Chromium (Cr)	0.05 mg/L	
Copper (Cu)	2 mg/L	
Fluoride	1.5 mg/L	

[10] Guidelines for Drinking-water Quality FOURTH EDITION INCORPORATING THE FIRST ADDENDUM. World Health Organization, 2017.

Attribute	Threshold Value	Comments
Iron (Fe)	No guideline	Desirable: 0.3 mg/L
Lead (Pb)	0.01 mg/L	
Manganese (Mn)	0.4 mg/L	
Mercury (Hg)	0.006 mg/L	
Nickel (Ni)	0.07 mg/L	
Nitrate	50 mg/L-nitrate ion	
Nitrite	3 mg/L-nitrite ion	
Fluoride (F)	1.5 mg/L	
Total coliforms	Absent immediately after disinfection	

4.3.3 Component 1: Institutional and Capacity Development in Integrated Urban Management

It has two subcomponents: Subcomponent 1a. Strengthening Integrated Urban Planning and Spatial Data Infrastructure and Subcomponent 1b. Upgrading Urban Property Tax Administration and System. This component will also support the creation of an open platform in which citizens can interact and engage with the authorities.

In Sierra Leone, this accelerated urbanization has not been accompanied by sufficient resources to plan and manage this fast growth; cities have lacked the financing to make the necessary investments to cope with the accelerated demand for infrastructure and services. The Local Government Act, 2004, outlines that town planning, land surveying, land registration, preparation of building plans, and issuance of building permits should all be delegated to LCs. These functions however are yet to be transferred. There is a dire need to improve spatial planning in all cities. Councils lack qualified staff and equipment. There is a need for training. Communication is very traditional and ad hoc and needs to be modernized and made digital. FCC is working toward implementation of the issuing of building permits and land use planning. FCC experts have designed an end-to-end workflow system for managing the issuance of building permits which integrates that process with other services the city already provides. Planning laws exist for Freetown and the other cities but are outdated and lack clear enforcement provisions for effective application. Unplanned and uncontrolled urban expansion has generated low-density development and urban growth onto unsuitable land.

The City Learning Platform is a space for learning and sharing, in which different actors can gather to discuss experiences and current urban issues and identify solutions, coordinate, and develop development proposals. FCC has created a digital platform for Ward 422, which is operating very well. Communities are constantly engaged in decision-making on the digital platform. FCC plans on rolling out this scheme to 30 other wards.

There is no spatial planning in most councils. There is a need for training and equipment. Most councils have no GIS capability. It is difficult to know the exact numbers of houses/properties within most cities. Payment rate for property taxes is poor. Staffing is low and capacity limited. There is a need for capacity building and training for upgrading of the municipal property tax systems to enhance own-source revenues through better mapping, classifying, and valuation of properties; building data infrastructure; managing relevant data; and enhancing collection procedures in all the city councils.

4.3.4 Subcomponent 2: Resilient Municipal Infrastructure Investment and Urban Greening

Over the last 10 years, the rapid rate of urbanization, which is currently at 3 percent, along with limited housing development and relatively high poverty levels, has led to an increased number of slums and informal settlements, particularly in the capital city, Freetown, where 15 percent of the country's population resides. At present, over 72 slums and informal settlements have been identified in Freetown. Improving the quality of life for those living in informal settlements must be complementary to the efforts to enhance the land management system. Access to water is one of the major challenges faced by residents of Freetown, and informal settlements are no exception to this problem. Communities' sources and access to water vary by location. The rapid urbanization and overpopulation are part of the reasons for the water crisis in the city as the estimated beneficiaries far outweigh the capacity of the national GVWC that is responsible for water supply in the city. The topography of the lands occupied by informal settlements makes their situations even worse to get access to safe drinking water. Access to toilets in Freetown's informal settlements remains a huge challenge. This is as a result of difficulty in either digging the toilets (topography) or lack of space within the communities for toilets. There is often an unhealthy disposal of human excreta due to lack of toilets in most informal settlements in Freetown. Therefore, because of this shortage, people mostly share the available toilets in these settlements which makes it difficult for proper sanitation to be maintained. Most common water sources were found to be water wells, running streams, underground sources, and taps which are sometimes found to be contaminated. The primary way in which people deal with ill health in Freetown's informal settlements is through self-administered treatments, only later seeking care from hospitals or health centers when conditions get worse or when self-treatment fails. These decisions are largely based on price—it can be expensive to both travel to and obtain health care from formal facilities. Additionally, many are put off seeking formal care due to their own bad experiences or the experiences of other people in their communities. Traditional healers tend to be consulted for specific conditions. The biggest barrier to people accessing formal health care when sick or injured is high charges for treatment. In general, there is no formally known waste collection site in all the communities. Therefore, waste is usually deposited almost anywhere. Nevertheless, waste can be dumped in the sea/stream, buried, or burned.

The main sources of lighting in informal settlements include electricity, Chinese lamps, candles, charcoal, and wood. Whereas electricity, Chinese lamps, and candles are mainly used for lighting, charcoal and wood are the main energy sources for cooking. A few people also use candles, shade lamps, or generators. While similar illnesses were reported across settlements, it was observed that malaria and typhoid were the main ailments that affect both men and women. On the other hand, women reported more for pain and hypertension.

Baseline information has been collected from the three slum communities (Rokupa, Moyiba, and Coconut Farm) and on the Urban greening subcomponent during the ESMF preparation.

The objective of this subcomponent is to upgrade and mitigate the risk of flooding in underserved neighborhoods. This subcomponent will finance the provision of basic services to areas of extreme poverty and to reduce flooding in these areas. Comprehensive neighborhood upgrading will provide access to basic services and infrastructure, reduce flood/landslide/fire risks, and further bring economic and social benefits. Subprojects may include drainage upgrade (tertiary and secondary/primary drainage) and retaining of walls, walkways, streetlights, access roads, footbridges, water supply, sanitation, and community facilities, which will bring climate change adaptation co-benefits. Additionally, subprojects

such as the construction of walkways to support pedestrian traffic and solar street lighting to reduce carbon footprint will have some climate change mitigation benefits.

Portee-Rokupa

Portee-Rokupa does not have piped water within the settlement which means the community either accesses water wells which are salty or go out of the community to buy water over long distances. The residents use hanging toilets built with sticks and sacks over the sea, which are mostly shared by residents,; these toilets are poorly built, managed, and uncared for by users. A few people who do not have toilets simply use the sea. This is especially the case of some houses which do not have sufficient space to build toilets. The common practice is to deposit waste in some demarcated areas at the sea edge. This may be near houses where specific sites have been identified for 'banking' specifically to reclaim land for housing construction. Mud and panbody houses are the most common. Houses are overcrowded with up to 10 people residing in one room. Portee-Rokupa is located near a beach in a small bay surrounded by a cliff in the eastern part of Freetown, 10 km from the city center. The fishery sector in Portee-Rokupa includes fishing, the processing of fish through smoking, and the sale of both raw and smoked fish. Access to fishing areas is good as the fishers have direct access to the more sheltered bay area, as well as being able to indirectly access the open sea. There are no data on the number of people involved in the sector, but interviewees estimated that there are more than 100 boat owners and over 50 fish agents. Field visits indicated that the Rokupa-Wharf community is generally poor with lots of inadequacies and challenges; poor road network and the low income level among the households means that they can hardly afford to pay for waste disposal and rather dispose of most of their waste into the sea. Tricycles provided by the city council are also available for waste collection within the community at SLL 2,000 per rice bag volume. Most of the solid waste dumped along the coast is used by seaside dwellers for land reclamation from the sea.

The roads are unpaved and have a very bad drainage system. There is no reliable electricity supply. The community is prone to natural disasters such as flooding along the coastal communities. The poor drainage system usually causes flooding along Vandy street, Cinna Lane, Bongo Lane, and Sanko Street during the rainy season. There have been incidences of rockfalls and landslides resulting in death and property destruction in cliff side settlements within the community. The waste from populations living in high ground areas usually ends up in these low-lying coastal areas. Residents are disproportionately affected by disaster events such as seasonal flooding—the 2012 floods displaced over 3,000 people. There was also a big outbreak of cholera in the settlement in 2012.

Moyiba

The only source of water in the Moyiba community for domestic purposes is the Kissy Brook which is highly polluted by communities, like the Leicester community, that live upstream. Before the high population, water from the Kissy Brook used to be a lot cleaner and safer. ACF constructed a dam along the Kissy Brook which used to be very effective in supplying water to the community, but over the years, the dam area has been exposed, polluted, and damaged; the dam is no longer properly functioning and needs upgrade. The community people get drinking water either from several stream side wells along the Kissy Brook or they buy packet water; the community was also provided with Milla water tanks by Concern Worldwide through the FCC, but water supply to these tanks is difficult because of the road network and financial challenges.

Many of the trees in the settlement have been felled to make room for construction with resulting denuded steep and dangerous slopes. The community consists mainly of poorly constructed unplanned housing units often located on steep slopes and on water ways with no adequate drainage facility. The majority of the existing embankments are weak and poorly constructed and can be significantly susceptible to flooding and landslide risk which could result in severe damage to housing and other properties. Moyiba community does not have adequate electricity supply. Electricity is rationed, and it was learned that the community is running on a single transformer. Cables that run from the main supply line to the houses are of low quality and often result in fire.

Waste management is a major issue in the community. Households generally do not segregate their waste. They collect their waste in isolated trash cans or in open spaces around their compound and give it out to community waste collectors using tricycles, or they end up dumping it in the Kissy Brook or its associated channels. During the dry season, some households burn the collected waste in open spaces around the community. Many households generally dump their waste directly into the channel water during the rainy season or dump on waterways during the dry season, which subsequently ends up in the water channel during the rainy season. The main sources of income for people within this community are stone breaking (quarrying), bike riding, petty trading, vegetable gardening, and car washing. Telecommunication services are relatively good within the community as the two major telecommunications companies (Africell and Orange) have good coverage in the community. The drainage network is very poor, and this usually cannot contain runoff from rainwater resulting in road damages and flooding in the low-lying areas of the community.

Road and water are the most pressing needs of the Moyiba community; the roads are unpaved, rugged, and dusty and with no proper drainage system. This denies vehicular access and makes services such as garbage collection and water supply by tankers very difficult. The drainage network is poor, and this usually cannot contain runoff from rainwater, resulting in road damages and flooding in the low-lying areas of the community.

Many of the trees in the settlement have been felled to make room for construction with resulting denuded steep and dangerous slopes. The erosion resulting from this, as well as from building interventions, results in unstable conditions, increasing the risk of landslides, rock falls, road accidents, and mudslides, particularly during the rainy season. Severe erosion causes high silt loads to occur during heavy rains, contaminating the stream and blocking the downstream channels.

Coconut Farm

The Coconut Farm community has very poor infrastructure; road network is a serious challenge, and the roads are unpaved and very narrow. Access to the community is very difficult even with bikes and tricycles. The only motorable road to the community is narrow and dusty. A narrow bridge links the community to the Ashobi Corner community; the bridge was a quick fix done hastily, and the road is mainly used by pedestrians, bikes, and tricycles.

The main source of water in this community is the Bando stream which runs through the community and creates several movement barriers from one cluster to another. Wells are dug along the Bando stream as source of water for domestic use, and the other source of water in the community is from mobile Milla tanks that were provided by the World Bank through Concern Worldwide. These are hardly filled because the road network and the low income among households make it difficult for Guma to supply them water.

Some people in the community have water pipes, but the supply to these taps is also not reliable. Most of the toilet facilities are pit latrines which are hardly kept properly. It was reported that one section of the community lacks both private and public toilet and proper sewage disposal system. The residents empty their sewage in the main drainage at night which creates community health hazard. Considerable flooding occurs during the rainy season, sometimes resulting in loss of life.

Urban Greening

The objective of the greening of Freetown subcomponents is to contribute to the FCC's goal of increasing tree and vegetation cover by 50 percent of the 2018 levels by 2022. The context for reforestation under the FCC Tree Planting and Growing Strategy is based on recommendations noted in the Multi-City Hazards Assessment Report funded by the World Bank. Catchment areas were assessed for reforestation in high-slope and upper-catchment areas to address recurring flooding, landslide susceptibility, and coastal erosion and to protect critical infrastructure, for example, the water supply to Freetown and the WA Rural District. Tree planting is done around rivers to increase the floodplains as these are the areas especially susceptible to erosion because of the flowing water. Additionally, planting and growing trees on steep slopes help stabilize sediments and slopes.

FCC consults and cooperates with private landholders to embrace city-wide tree and vegetation cover goals and objectives, with local nurseries, arborists, landscapers, and so on (urban greening services) to embrace city-wide urban tree and vegetation cover goals and objectives; with citizens at the neighborhood level to embrace city-wide household and neighborhood planting; and with the business community to embrace city-wide tree and vegetation cover goals and objectives. FCC structures at the ward level are used to engage community-based organizations (CBOs) to facilitate public understanding of urban forest management. FCC also closely links up with the wards on the Western Area regional forest management issues. FCC also enhances and enforces municipal policies and works with the Ministry of Environment and NPAA to engage local communities in local enforcement activities targeting youth participation. FCC plans to work with partners, specifically the World Bank, in coordination with data collection processes conducted by EPA and others to collect and analyze data through remote sensing using drones and satellite imagery for tracking of trees. This will allow FCC to establish baseline tree cover, establish space for new planting and growing, and enhance geo-coding of individual trees.

4.3.5 Solid Waste Management (Subcomponent 2b. Solid Waste Management Upgrading in Freetown and Secondary Cities)

4.3.5.1 Freetown

Waste Production Situation in Freetown

Freetown's 1.2 million inhabitants live along the coast of the peninsula, surrounded by steep hills in densely packed areas. A total lack of urban planning for the last 40 years has led to a situation in which many properties are built in high-flood-risk or landslide-risk areas (steep slopes, near watercourses or the coast), and there are 72 slum communities in the city: many communities are not accessible by paved (or any) road. It is difficult for collection services to access these hard-to-reach areas.

Freetown produced approximately 413,412 tons of solid waste in 2019. Of that, about 64 percent of domestic waste is organic and about 8.5 percent is plastic. Presently, only 46 percent of Freetown's households are serviced by waste collection providers, and only 25 percent of the waste is transported to dumpsites, while the remaining (in excess of 300 tons per day) is being burned or dumped in waterways or in the drainage and clogging the already insufficient stormwater drainage system, exacerbating flood risks and the prevalence of vector-borne diseases, and widely contributing to marine pollution. Disposal has also become a major concern.

If not handled well, solid waste can cause a considerable number of environmental and health effects. Blockage of channels with waste causes severe flooding and there could be health hazards caused due to poor sanitary conditions and sewage overflows.

Collection and Disposal Process

There is a Solid and Liquid Waste Collection Bylaw, 2019. All persons and organizations collecting solid or liquid waste must register with the council, pay the registration fee, and comply with the good practice standards. All residents of Freetown are required to have a contract for the collection of their solid waste at minimum once per week. For waste collection and disposal, Freetown's 48 wards are structured in 8 geographic blocks reflecting the socioeconomic diversity of the city. FCC has deployed street bins using donor funds and uses its limited vehicle resources as efficiently as possible. Collection is done by microenterprises using tricycles. Tricycles and business support were provided to 80 waste collection microenterprises in 2019; FCC with funding from the European Union and International Organization for Migration, procured and distributed 80 tricycles and ancillary support materials to 80 microenterprise groups to collect household waste across Freetown. Inadequate solid waste collection and disposal is a significant challenge in Freetown. Presently, only 46 percent of Freetown's households are serviced by waste collection providers, and 25 percent of the city's waste is transported to dump sites. There are a number of illegal dumping sites. All waste collectors in Freetown are registered and issued with a certificate and badge. Points are awarded in three categories: cleanliness, beautification, and innovation/sustainability, each including aspects of solid and liquid waste and planting to reduce erosion.

Transfer stations were established in each block that can be utilized by tricycle and omolanke[11] operators. With funding from the Department for International Development (DFID), United Kingdom, and with CRS as the implementing partner, FCC is rolling out seven solid waste transfer stations to support the financial viability of the waste collection microenterprises by reducing their travel distances. These transfer stations will be operated by private sector operatives and include a walled area, adequate security, and perennial lighting. Collection by commercial waste management companies through a tendering process to assign each block to one company/connected group of companies to ensure accountability and transparency, including service-level agreement covering dumpsites, is being contemplated. Currently, there are three dumpsites servicing the Western Area: Kingtom, Kissy-by-pass (also known as Granville Brook), and Waterloo (Figure 3). All sites receive all types of wastes, ranging from regular household waste to medical waste, fecal sludge, and hazardous and toxic waste. Several risks have been identified in direct relation with these sites: constant burning and release of large amount of leachate is spreading contamination far beyond site boundaries, heavily affecting vulnerable communities. Immediate physical risks such as

stability issues and hydraulic blockages have also been identified. Lastly, the quantities of solid waste and leachate washed into the ocean have resulted in massive coastal and marine plastic pollution. These materials end up in the SLRE, which is a RAMSAR site. There is a risk of contamination and bioaccumulation of these toxic chemicals and heavy metals in fish and marine life. The local population is heavily reliant on fish for protein and livelihood. The construction of a new sanitary landfill/waste park that can safely dispose the waste in the city is of the highest priority. The sites are poorly managed with regard to environmental considerations and functionality such as a lack of control over waste burning; poor control over scavengers, illegal dumping and encroachment; inappropriate tipping and stockpiling; and lack of space for expansion, among other problems. Burning is a perennial occurrence, leading to huge plumes of smoke containing toxic organic pollutants that may put the community at the risk of cancer and respiratory diseases.

The FCC's Integrated Solid and Liquid Waste Management Strategy[12] calls for short- and long-term plans for these landfill sites. The short-term plan recognizes that the Kissy dumpsite is dangerous. Once the new landfill is constructed and operational, dumpsite closure will be necessary because the three existing sites are overflowing, dangerous, and continue to harm the health of nearby communities and the environment. The existing project envelope does not have sufficient resources to accommodate this, but it could be considered as the second phase of the project, potentially through additional financing or other donors. The project will support feasibility and safeguards studies for closure of Waterloo and Kissy dumpsites. The FCC expects donor funding to implement this and provide assistance to waste pickers to ensure livelihood provision. Kingtom will receive most solid waste under the new transfer system, a weighbridge and gatehouse installed, and a wall built around the fecal sludge area for safety reasons. The short-term plan requires improved management of all dumpsites in the immediate term.

With the long-term plan, it is expected that increased recycling and materials recovery will reduce the volume of waste going to landfill. The FCC expects donor funding to be obtained to improve Kingtom to an engineered landfill in 2020, extending its life by some seven years and to support the identification of a site for a new sanitary landfill, followed by design and construction with potential for waste management park including fecal sludge treatment and recycling facilities. The FCC will work closely with WARDC on this as the landfill site has to be outside Freetown due to space constraints. Economic models will be developed with assistance of donor funding to ensure that a private sector partner can operate new sanitary landfill. There is also a longer-term plan to outsource the management of dumpsites. Any closure of dumpsites will have to be done considering assessment and plans related to E&S implications.

Recycling Opportunities

With limited employment opportunities, waste is a valuable source of livelihood for many. From scavenging through toxic material in landfills for plastics, cans, and metal objects for housing construction, low-income groups are subjected to high insecurity on a daily basis. A proper recognition and organization of waste recovery and recycling is clearly lacking in Freetown. Furthermore, the open burning of waste on formal and informal dumpsites is a common practice that increases the exposure to respiratory infections, especially in children and women who sort through reusable waste. Leachates from landfills often contain heavy metals which contaminate soils, groundwater, and drinking and food supplies.

Figure 3: Formal Waste Dumpsite Locations in the Western Area of Sierra Leone

Source:

Plastic is collected as a valuable resource and transformed into new products. In Cockle Bay, women go door to door to buy plastic waste and weave it into useful accessories such as bags and hats (Roussos 2015). Plastics recycling equally represents a valuable opportunity for local businesses. Le Plastics, a waste management company with a plastic recycling plant in Kingtom, sorts, cleans, and recycles all types of waste plastic to sell in baled, baked, and pelletized form or as a biodegradable compost. The company also uses plastic to cover roads which it argues is critical to improve accessibility. It is working on establishing distribution of bins to homes or companies for only plastic waste collection as it is more efficient to sort at the source and reduces the number of people picking waste as a livelihood (which comes with extensive risks). In Freetown, the Sogi Scrap Yard, a group with headquarters in Hong Kong, regularly purchases iron to sell abroad. Other scrap dealers ship brass, iron, and copper to Asian countries (such as China and India) while aluminum stays in Sierra Leone to be repurposed. Plastic bottles are shipped to China, slippers and plastic sachets sent to Guinea, and textiles are collected by waste pickers and kept for personal use. While the informal activities of waste pickers on the two official dumpsites is well documented, information on organized CBOs is lacking, despite their importance in coordinating waste management practices in Freetown, for example, the practices with the help of the Dumpsite Scavenger Association, a group of 25 waste pickers on Granville Brooke. FCC plans to ensure that 40 percent of all plastic waste in Freetown is recycled by 2022. Other plans for recycling include working with the central government to support creation of market for recycled products and plastic bag ban, have solid waste to energy projects where technically feasible, and provide support with donor funds for a market for recycled products and plastic bag ban. Youths are used in the recycling process. There are currently four recycling projects recognized by FCC.

Longer-Term Plans

Studies conducted at the Kingtom dumpsite by DFID-funded engineering consultants, IMC Worldwide, recommend the conversion of the Kingtom dumpsite into an engineered landfill.[13]

The city council's plan is to manage and safely dispose of 60 percent of Freetown's solid and liquid waste by 2022.

Waste Collection by Microenterprises Using Tricycles

Tricycles are able to reach most of the hard-to-reach areas. Transfer stations are operated by the private sector. Kissy dumpsite is dangerous and should be closed as soon as practically possible. Kingtom receives most solid waste under a new transfer system. There are plans for the construction of a modern landfill that will service the residents of Freetown and its neighboring WA Rural District. After the survey is completed, the PMU will work with EPA, NPAA, MLHCP, RSLAF, and the police to use the information from the survey to identify which sites encroached into forest reserves or military/police lands.

4.3.5.2 New Landfill for the Western Area

The GoSL is conducting a wide search for a 100 acre piece of land in the Western Area for use as a site for constructing a new landfill under the RUSLP.

Geographic Setting

Freetown is located on a mountainous peninsular, which is approximately 38 km long and 16 km wide, with topographic relief of over 700 m.a.s.l. The peninsula is surrounded by the Atlantic Ocean. Dense forest covers the highest areas while many of the lower slopes have been deforested leaving a cover of sparse forest, grasslands, and urbanized built-up areas. The country experiences a rainy season between May and November, with the maximum average annual precipitation in August. Historical rainfall averages for August in Freetown indicate that 530 mm can fall within August. Sierra Leone has a humid, tropical climate and a highly seasonal rainfall pattern that peaks between July and September. Temperatures are relatively uniform throughout the year, ranging from 24°C to 28°C. The lowest temperatures are from July to September, in the middle of the rainy season, and the highest temperatures are in February and March, near the end of the dry season. The national average annual rainfall is 2,746 mm but varies across the country.

Geology of Freetown

The Freetown geology is characterized by repeated sequences of igneous rocks described as a lopolith. The mountain valleys have significant topographic relief (hundreds of meters) and are steep-sided and densely forested (where intense deforestation has not occurred). Small landslides occur frequently in the rainy season, and it is normal for the valley floors to become blocked with boulders.

Flooding

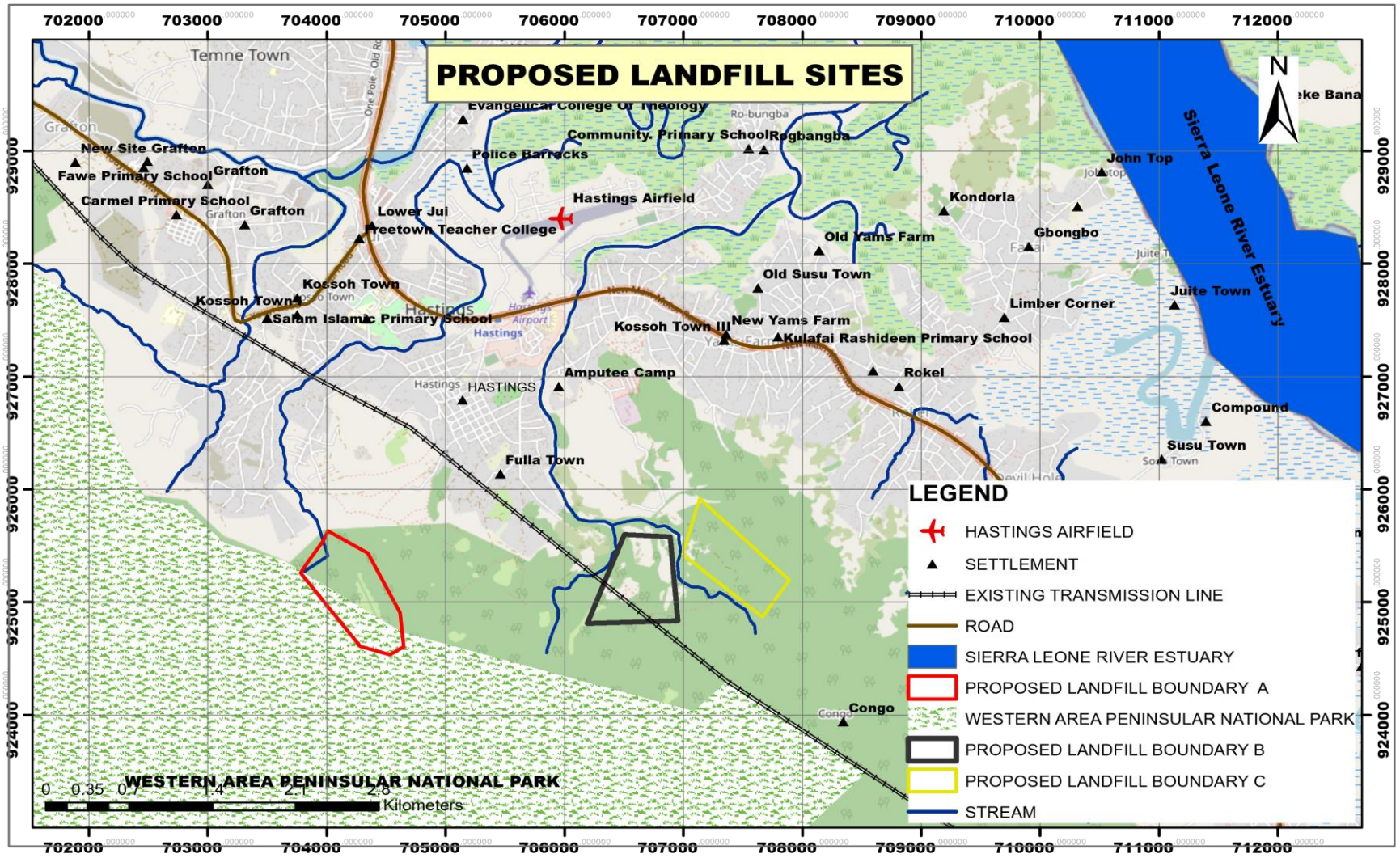
While flooding occurs across Sierra Leone, flood events in Freetown can be particularly damaging due to the steep terrain that characterizes the Freetown peninsula, which can cause rapid 'flash' flood events in the natural river channels. These high-energy rapid flows can cause substantial destruction and pose a significant threat.

Landslides

Landslide hazards across the mountainous and steep terrain of Freetown peninsular is not a new phenomenon. The hazards in the Freetown area are frequent and widely recognized by the government and the residential population in Freetown. The proposed landfill areas are however not in this category.

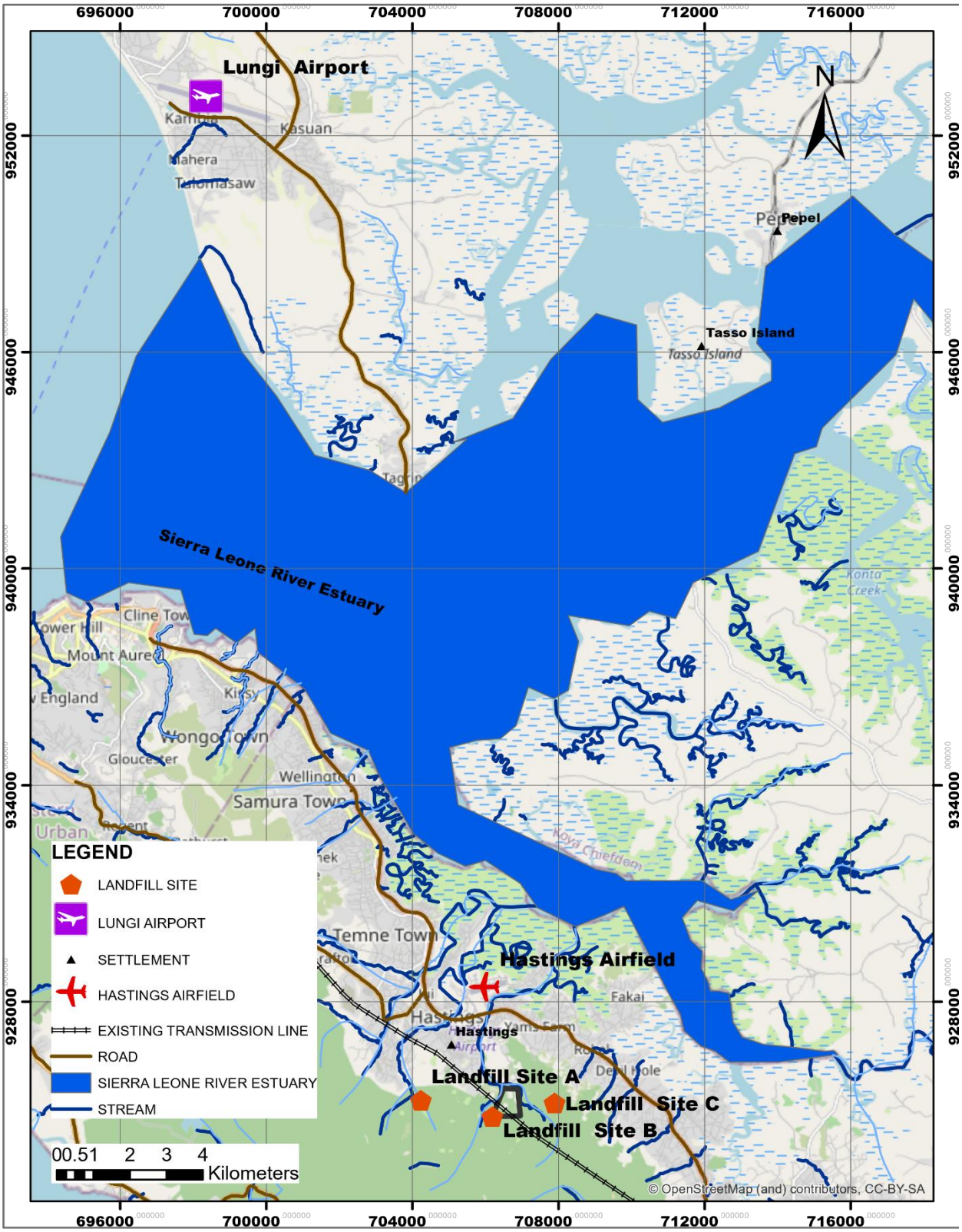
After an initial screening conducted with the support of the World Bank, three locations have been identified. These are shown in Figure 4. Figure 5 shows these locations in relation to the RAMSAR site in the SLRE and the main Lungi International Airport. The criteria used to assess the various sites are discussed in Annex 2. Table 10 compares the attributes of the various sites for any assessment of suitability. Although five sites were previously considered, two were ruled out of this study as the land belonged to the military and therefore unavailable. The remaining three sites considered are on the slopes overlooking the stretch from Hastings to Rokel.

Figure 4: Location of Optional Landfill Sites



Source:

Figure 5: Location of Optional Landfill Sites in Relation to RAMSAR Site and Lungi International Airport



Source:

Criteria for Selection of Landfill Site

Annex 2 provides details of the criteria used in selecting a landfill site. It also provides information on the methodology used to carry out the study in the limited time available. The main criteria considered are

- Hydrology and hydrogeology,
- Topography and soils,
- Adjacent land use,
- Flora and fauna,
- Site capacity considerations,
- Vehicle access, and
- Other subsidiary issues.

Biodiversity Considerations

The project activities in the proposed landfill site will be conducted in accordance with ESS6 to assess and avoid expected impacts on biodiversity and habitats. No project activity will be conducted in the forest reserve or its buffer; however, in an unlikely event that avoidance is impossible and the risk levels are Substantial or High, a separate Biodiversity Management Plan will be prepared to offset loss to biodiversity and ecosystem. This action can only be considered when all options have been exhausted in accordance with the hierarchy of mitigation that favors avoidance over minimization and ultimately biodiversity offset. The decision to do so will be informed by the ESIA. The Biodiversity Management Plan will be guided by the sensitivity of the ecosystem or habitat, and the presence of species of conservation significance (International Union for Conservation of Nature-listed species). The project will be designed in accordance with the hierarchy of mitigation. To this end, E&S considerations have already been factored into the landfill site pre-screening and selection criteria that are being applied by the interministerial site identification and selection working group. The working group will not finalize its selection by project appraisal.

Criteria for Selection of Landfill Sites

- **Land ownership.** Preferably state-owned land, but private land can be considered if accessible.
- **Landfill site** should be within 10–20 km of the waste catchment area.
- **Road access.** The proposed site should be within 2,500 m of main highway network.
- The proposed site should not be within 300 m of land susceptible to coastal erosion.
- **Environmentally sensitive land (biodiversity).** The proposed site should not be within 50 m of environmentally sensitive land.
- **Mangrove/RAMSAR.** The proposed site is not within 250 m of mangrove and RAMSAR sites.
- Selection will be guided by the principle of minimized resettlement as much as possible—resettlement can only occur if alternative sites cannot be found.

- **Buffer zones between built settlements and population**. The proposed site should not be within 250 m of residential development including schools, hospitals, and so on.
- **Topography.** Areas with slope greater than 15 degrees will fail the selection criteria.
- **River resource and flood hazard.** The proposed site should not be within 250 m of flood hazard zone or river/surface fresh water supply.
- **Hydrogeology.** The proposed site is not above a major/principal aquifer or within a groundwater source protection zone and not within 250 m of any well, spring, or borehole used for the supply of water for human consumption (this includes private water supplies).
- The proposed site should not fall within 250 m of flood hazard zone or river/surface fresh water supply. The river network plus the 250 m buffer approximated the 100-year flood extent well as presented in the World Bank (2018) report. In the flatter terrain of the WA Rural District, the 100-year flood hazard is well approximated by the 6 m topographic contour, which also approximates sea level rise hazard. Therefore, in flatter areas, the 6 m contour line is used and in steeper terrain, the 250 m buffer zone is used to protect against sea level rise and 100-year floods.
- **Geology.** The proposed site is not within 250 m of a natural low-permeability geological barrier (for example, sands and alluvial gravels); such geology has high porosity that must be engineered for a landfill site(s). Most of the lower-lying flat land of the Freetown peninsula is 'porous' aquifer.
- The site should be located at least 10 km from any airport or airstrip or based on International Air Transport Association regulations.

Table 10 compares various features of the optional landfill sites using these criteria.

Table 10: Comparison of Landfill Sites

Criteria	Comments/Observations		
	Optional Landfill A - Two Wata	**Option Landfill B - Congo Wata**	**Optional Landfill C**
Hydrology and Hydrogeology	**Natural features:** • Water ways/streams. Two waterways (526 m and 137.38 m running in south–north direction) feed into a larger waterway 1,044.81 m, running in a south-southeast–north-northwest direction that joins the maroon stream and eventually empties into the SLRE.	• The landfill is bounded on the north (approximately 120 m), east (approximately 36 m), and west by streams. These feed into a stream that empties out into the SLRE. A buffer zone of 500 m around drinking water sources is recommended to minimize their possible pollution by life-threatening landfill leachate. • One of the streams is used as a dam for the Hastings community, and the stream passes through densely populated Hasting community. • There was no evidence of ground water sources close to the landfill.	• The landfill is bounded on the northwest by a stream approximately 12 m and flows southward at approximately 70 m from the landfill. A buffer zone of 500 m around drinking water sources is recommended to minimize their possible pollution by life-threatening landfill leachate. • There was no evidence of groundwater sources close to the landfill.
Topography and Soils	• Rock outcrops - 0.9 acres. • Gravelly ferralitic soils with shallow soils and bedrock with pockets of deeper loams to clays on moderate to high relief hills formed from basic and ultrabasic rocks. Soils are suitable for landfills because they contain relatively impervious layers of loam and clay, which hold both solid and liquid waste well when compacted by heavy machinery during the construction of landfills as well as during transportation of waste to the sites and have bedrock types consisting of Precambrian basic and ultrabasic igneous intrusions, which are essentially sound and durable, with adequate strength for any engineering requirement such as the construction of landfills.	• Relatively flat (elevation range 50—100 m). A slope of less than 12% is ideal for the prevention of runoff that leads to contamination of nearby water bodies. The recommended slope range of 0–15% is used because the area is generally hilly and mountainous. • Gravelly ferralitic soils with shallow soils and bedrock with pockets of deeper loams to clays on moderate to high relief hills formed from basic and ultrabasic rocks. Soils are suitable for landfills because they contain relatively impervious layers of loam and clay, which hold both solid and liquid waste well when compacted by heavy machinery during the construction of landfills as well as during transportation of waste to the sites and have bedrock types consisting of Precambrian basic and	• Proposed land fill is closer to mountainous range. • Land is gently sloped. A slope of less than 12% is ideal for the prevention of runoff that leads to contamination of nearby water bodies. The recommended slope range of 0–15% is used because the area is generally hilly and mountainous. • Gravelly ferralitic soils with shallow soils and bedrock with pockets of deeper loams to clays on moderate to high relief hills formed from basic and ultrabasic rocks. Soils are suitable for landfills because they contain relatively impervious layers of loam and clay, which hold both solid and liquid waste well when compacted by heavy machinery during the construction of

Criteria	Comments/Observations		
	Optional Landfill A - Two Wata	Option Landfill B - Congo Wata	Optional Landfill C
		ultrabasic igneous intrusions, which are essentially sound and durable, with adequate strength for any engineering requirement such as the construction of landfills.	landfills as well as during transportation of waste to the sites and have bedrock types consisting of Precambrian basic and ultrabasic igneous intrusions, which are essentially sound and durable, with adequate strength for any engineering requirement such as the construction of landfills.
Adjacent Land Use	• Part of the land is the Western Area peninsular forest.	• The adjacent valley is used for small-scale gardening purposes by community people. • A transmission line passes through the adjacent land.	• A transmission line passes through the adjacent land.
Current Land Use	Six categories of land use activities were identified: • Agricultural land - 0.57 acre • Built-up land - 6.60 acre • Dry open land with special vegetation cover - 0.40 acre • Forest and wooded land - 52.08 acre • Open land without or with insignificant vegetation cover - 54.04 acre • Water - 3.65 acre	A drone survey by Integems indicates that the following categories of land are present at the site: • Agricultural land - 1.33 acre • Built-up land - 0.06 acre • Dry open land with special vegetation cover - 0.14 acre • Forest and wooded land - 29.84 acre • Open land without or with insignificant vegetation cover - 74.68 acre • Water - 1.51 acre • Wet open land - 1.42 acre	• Agricultural land • Built-up land
Flora and Fauna	• Vegetation cover. The predominant vegetation type is shrubs (bushes) with mature trees in the southwest. The site has clusters of dense vegetation covering a total area of approximately 43.65 acre (about 35.7% of the total area of the site).	• Vegetation is upland grassland. • Vegetation cover. The predominant vegetation type is shrubs (bushes) with few palm trees scattered around. The site has clusters of dense vegetation covering a total area of approximately 29 acre (about 27% of the total area of the site).	• Vegetation is upland grassland and forest regrowth
Site Capacity Considerations		• The approximate land size is 109.4 acre. • There will be challenges in constructing access roads.	• The approximate land size is 101 acre. • There will be challenges in constructing access roads.

Criteria	Comments/Observations		
	Optional Landfill A - Two Wata	**Option Landfill B - Congo Wata**	**Optional Landfill C**
Vehicle Access	• Inaccessible from the main road • Access road within the site	• The proposed land site is inaccessible from the main road. The main road stops at Savage Avenue, Hastings (1.3 km to proposed landfill). • The land is adjacent to a valley.	• The proposed land site is inaccessible from the main road. The main road stops approximately 1.2 km southward from Yams farm and approximately 2 km from the main Savage Avenue road in Hastings. However, access to the site from Hastings would require crossing streams.
Other Subsidiary Issues	• Footpaths • 13 concrete buildings (11 foundation/first floor) 2 roofed • Makeshift buildings • Farms/gardens.	• The proposed landfill is approximately 741 m from the Hastings settlement. A sanitary landfill cannot be located within 500 m of a residential area. This buffer zone was utilized in this study. • There was no evidence of cultural heritage sites. • The land adjacent to the site is said to be private land but ownership could not be ascertained.	• The proposed landfill is approximately 601 m from a settlement. A sanitary landfill cannot be located within 500 m of a residential area. This buffer zone was utilized in this study. • Land is said to be privately owned but ownership could not be ascertained. • Land is not utilized as a cultural heritage site.
Potential Risks on Biodiversity, Ecosystem, and Other Critical Habitats (Protected Areas)	• Half of the area is in the Western Area peninsular forest reserve.	• The area is closest to the Western Area peninsular forest which is an area of biodiversity interest but does not intersect it. No critical habitats known for this area.	• The area is at a considerable distance from the Western Area peninsular forest which is an area of biodiversity interest but does not intersect it. No critical habitats known for this area.

Findings and Conclusion

The investigations of the optional landfill sites were carried out over a short period. Comments are mainly based on observations and not on any invasive test work. However, considerable use was made of GIS information and literature review. Interviews were limited because of sensitivity issues. Some more topographic drone survey work is being conducted financed by the project to ascertain ownership of the lands and confirm topographic characteristics of the sites as observed during the course of the ESMF preparation. The following general observations could be made from this work:

(a) Half of site A is in the Western Area peninsular forest reserve and is therefore unsuitable for use as a landfill site. Therefore, the World Bank should not support the selection of Site A.

(b) Site B presents the greatest access difficulties as it is hemmed in on two sides by streams. Both Site B and Site C are also close to streams used for water impoundment dams by the Hastings and Benguema communities for water supply. Site C also presents access problems. Site development relating to access will be expensive. Landfill sites should be located at a safe distance from any surface water body including rivers and streams. This not only reduces their pollution but also protects the aquatic life in these water bodies and reduces the likely human health impacts of leachate from a landfill. Particular attention should be paid to having suitable buffers for Site B and Site C.

(c) Comments on groundwater are not definitive as no test work was done.

(d) All the sites are largely devoid of houses, although some have a few houses and crops. It is reckoned that resettlement will not be inordinately difficult.

(e) Site B and Site C are close to overhead transmission lines. They may not however present any insurmountable problems with the sites.

(f) Site C is used as a shooting range by the SL Armed Forces. Negotiations for alternative shooting sites might have to be undertaken if this site is found to be suitable.

(g) Site B is private land. Issues of private ownership were however not delved into in great detail. Usually, private lands in these areas, even though owned by individuals, may be subject to some control by village headmen. These issues are being investigated further by the PMU.

(h) There are no discernible cultural heritage and archaeological properties at any of these sites.

(i) The sites are located at a considerable distance from Freetown, which is the main source of waste. Given the high costs of transporting waste from generation points to transfer stations and on to landfills, distance will be a significant cost consideration.

(j) A more detailed cultural heritage assessment should be carried out on the proposed landfill sites and access roads as part of the landfill selection process and if necessary, on the borrow sites approved for providing soil cover for day-to-day operation of the landfill.

Because of the unavailability of other important data sets to this study, it is recommended that the selected candidate sites be subjected to more detailed investigations including fieldwork, hydrogeological analysis, soil boring experiments, and other geoscientific studies.

4.3.5.3 WARDC

The council has an Environmental and Sanitation Office. The council has 30 daily wage collectors that carry out the waste collection, transfer, and dumping of rubbish within the district. They have 1 dumper truck and 1 skip truck for use. Personal protective equipment (PPE) and other tools are provided for the work by the council. Collections are mostly carried out in public areas such as markets, parks, and street cleaning. The administrative monitoring and supervision is done by one staff; there is no door-to-door collection at the moment. There is only one dumping site at Waterloo. There are three transfer points. Waste collection is only concentrated in Waterloo, leaving all the other locations to make private arrangements. Waste collection has funding, staffing, and equipment problems.

4.3.5.4 Kenema, Makeni, and Bo

In Kenema, the Environmental Sanitation Officer is in charge of all waste management within the city. People are sensitized on the importance of waste management in all the wards within the city.

Activities. Mapping out of the city into satellite stations, placement of litter bins in identified places/outlets within the city for waste collection, and employment of 50 youths for the KLIN KENEMA Project. The previous intervention of WHH has been phased out. Door-to-door collection is not currently active in waste management due to lack of financial/logistic support to sustain the activities.

In Makeni, Welthunger helps with SWM but collection is poor. It has 4 vehicles for SWM and 1 vehicle for sludge. Compliance is low. The city is divided into four zones for waste collection. Youth groups were encouraged to come on board for the management of waste within the city, but financial problems hamper participation. The council fenced the entire Makama-Pate Bana dumpsite in 2016 to stop poachers and children nearby from entering it illegally.

Bo has 5 official dumpsites but many illegal ones. Welthunger which used to manage the SWM system has now left. There are challenges faced with equipment. There is a landfill site, but a new one is being considered. A private sector company called Klimbo is involved in waste collection. There are many illegal dumpsites, and there is door-to-door waste collection but this is ineffective. Bo has 87 illegal dumpsites. There is a waste reuse and recycling association supported by the Bo City Council/Welthunger SWM project. A semiautonomous waste management department has been created. The dumpsite has been relocated 5 miles out of the city. Bo has increased the use of tricycles and carts to collect waste where inaccessible to vehicles, increased the number of skips especially in market areas, and increased the number of public toilets within the city. Equipment owned includes front-end loaders, compactors, skip loaders, push carts, trucks, tippers, skip containers, tricycles, tractors, and shredders. However, the number of equipment is grossly inadequate for the total task at hand. Problems faced by Bo City Council include meeting labor costs, logistics—fuel for vehicle, illegal dump site within the city, community attitudes toward waste disposal, and non-separation of wastes at the household level. In Bo City and Makeni, youths are tasked with collecting organic waste, which they turn into small balls of combustible material to replace coal. Not only is it cheaper and more environmentally friendly, it helps clean up their communities. Similarly, ‘Alice and Charles Organic Compost’ is a small enterprise that pays local youths to collect household waste which is then turned into organic fertilizer to sell to local enterprises. These developments improve living standards through the reduction of waste, pollution, and health hazards and by creating employment and revenue.

DFID funded the development of a basic integrated SWM system in Bo, Makeni, and Kenema. Activities were completed between 2018 and 2019 and led to establish collection, transfer, and disposal capacity, including a landfill in each city. Among the three cities, Bo landfill receives significantly higher quantities of waste as the facility is used by the entire district for disposing of waste (Table 11). This situation has resulted in relatively more demanding conditions at the site. Bo also displays a high level of appropriation, having implemented a tariff structure and cost recovery strategy generating revenues up to 75 percent of the overall waste management budget.

Makeni and Kenema experience a relatively more simple situation due to the more recent project completion and lower quantities of waste to be collected and landfilled. Consequently, infrastructure in Kenema and Makeni provides adequate capacity and does not call for urgent improvements.

Table 11: Waste Information - Bo, Kenema, and Makeni

City	Bo	Kenema	Makeni
Population (2019)	179,725	206,889	129,611
Waste generation per capita	0.35 kg per day	0.35 kg per day	0.35 kg per day
Waste generation for city council	23,000 tons per year	26,000 tons per year	16,500 tons per year
Actual quantity going to landfill	Up to 120,000 tons per year from entire district	21,000 tons per year	13,000 tons per year
Waste composition	• Household waste • Market waste • Industrial waste: no • Medical waste: no	• Market waste • Household waste • Industrial waste: no • Medical waste: no	• Market waste • Household waste • Industrial waste: no • Medical waste: no

4.3.5.5 Other Cities

In Koidu, Welthunger is helping out but leaving by March 2021. It has a dump site. It has 2 Dyna trucks bought by Welthunger and a cesspit emptier. Two youth groups work in concert with the Council. Waste is deposited on 10 acre land. The council has an environmental officer working with a staff of 6 paid by Welthunger. The rest of the SWM staff are paid by the council.

Port Loko has a waste management department. The council obtains minimal funding from the government. It also has an environmental officer. The health superintendent in the hospital helps out with waste management. Skips and vehicles are not in good working order. Only two tricycles are available for waste collection. There is no private sector participation. The landfill is 7 miles outside the city. The environmental officer is in charge of all waste management activities within the Port Loko City Council. There is no staff at the dump to supervise waste management activities. Only volunteers are engaged to ensure the collection of waste within the city. There are 4 tricycles and 2 skip trucks available and in good working condition. Six volunteer drivers are available. No private companies have shown interest in waste management. The waste management site is not suitable. People have home dumps. Some waste is dumped in water and there is no suitable site for landfill.

4.3.5.6 National

SWM problems abound in all cities. Freetown/Western Area needs a new landfill to be constructed. Welthunger has been helping out with SWM in most cities but is phasing out in some. Sustainability is a

real problem. Shortage of equipment and funding of workers are problems identified. Private sector participation is working relative well in Freetown but not in many other cities. Whatever schemes are implemented, sustainability will be of concern unless it is well conceived and planned.

4.3.5.7 Key Risks

Some resettlement issues may arise depending on the location of the landfill sites chosen. The wrong choice of a landfill site might cause a number of difficulties during operation. Land ownership must be clearly ascertained as this may delay the project. Care must also be taken to ensure the landfill projects are properly costed. Safety of neighboring communities and making sure the adjacent land use does not adversely impinge on the project are serious considerations—if they do, like having a firing range, they must be mitigated against. These issues are amply addressed in mitigation and management measures. The ESMP drawn up by the contractors would handle some of these issues. Overall, the key risks are not insurmountable.

Evaluation of SWM Including Landfill Construction and Management Risks

There are a number of issues surrounding the construction of new landfills and SWM operational and management issues whose risks to such a project need to be evaluated. Several issues related to leachate management in particular and buffer zones for landfill sites are also addressed. The issue of leachates from existing landfill sites possibly finding their way into the SLRE which houses the RAMSAR site is also discussed.

Leachates Entering the RAMSAR Site

There is a possibility that with the unplanned drainage systems around the dump sites, some leachates may find their way into the estuary. Although the site for the new landfill site has not yet been chosen, there may be a remote possibility that this may also extend to the new site.

No studies have been conducted to assess the extent of this problem with both the Kingtom and Kissy sites, but observations at the Port of Freetown indicate that the major problems with contamination of the coastal waters at the estuary could be attributable to other factors. Evidence however does exist that though this problem needs to be addressed, the effect on water quality has not affected the biodiversity in the area in a substantial way. The Port of Freetown is located on the eastern part of Freetown, some 9–10 km from the mouth of the estuary, where the Sierra Leone River empties into the Atlantic Ocean. Work carried out by Cemmats[14] indicates that the potential sources of contamination of the marine water at the port include

- Jetty operations
- Berthing ships
- Industrial contamination
    - The petroleum companies which deal with oily products at the existing KOJ are located within the new jetty project vicinity, and the operation of their facilities results in pollutants being released into the water.

- Storm drainage
    - There are storm drains around the administrative building and several other buildings at the port.
- Other sources
    - These contamination sources include the coastal communities, city drains, rivers and streams, landfill sites, the shipyards around the fishing depot, oil refinery, power plant, and storage tanks. Heavy siltation from the eroding hillsides also leads to contamination.

Another study by Cemmats and Alatec[15] also indicates that the direct discharge of sewage into nearby sea water and erosion from surrounding waste dumps and agricultural fields are the most likely causes of high turbidity, ammonia, fluoride, and bacterial count readings.

A 1995 survey (Rehabilitation Study, Freetown Port – Sierra Leone, Assessment of Quay Wall) indicates that the quality of water along the port was generally good despite the high values of Biological Oxygen Demand and fecal coliform from the central parts of Freetown. The result showed that the water had been contaminated with organic matter and human waste (sewage and solid waste).

A fisheries monitoring program carried out by Cemmats in 2014[16] indicated a number of fish species still exist around the estuary around coastal villages, which are affected more by overfishing by foreign trawlers than by water quality issues.

A threat categorization of the SLRE carried out by NPAA[17] categorizes coastal erosion and mangrove deforestation in the highest level category of threats facing the SLRE.

Steps must however be taken to limit the effect of leachates in infiltrating the estuary. These may include but will not be limited to

(a) Full or partial isolation—additional lining to reduce contamination of groundwater and surrounding soil;

(b) Formal engineering preparations—proper design;

(c) Permanent control—trained staff to supervise site preparation and construction and depositing of waste;

(d) Planned waste emplacement and covering—waste spread in layers and compacted. Covering waste helps make waste less accessible to pests and vermin;

(e) Limiting amount of water to site to reduce the amount of leachate—managing surface water reduces flooding which could destabilize slopes;

(f) Landfill sites should be located at a safe distance from any surface water body including rivers and streams. This not only reduces their pollution but also protects the aquatic life in these water bodies and reduces the likely human health impacts of leachate from a landfill.

Buffering

The issue of creating buffers has also been evaluated.

For the Freetown Resilient Urban Project, NPAA[18] was consulted to make recommendations relating to a buffer between the wetlands around the project site and the RAMSAR site. They suggested the following:

"NPAA is proposing a buffer distance of 6 metres (20 feet) of the nearest installation. This buffer distance conforms with international practices (that range from 6 to 20 feet for water courses with width ranging from 1m to 20m) and varies depending on local conditions. Thus in the case of this project, the decision on the buffer distance was reached because the width of the stream less than 6 meters and lies within built-up residential areas. Trees shall be planted to establish 'living fence' to deter squatters along the buffer corridors. This measure will also reduce the high risk of pollution into the streams and protect nearby infrastructures from flooding especially during the rainy season when there is increased water flow and rise in water tables. Therefore, pithicellobium dulce plant and shrub species are proposed to be planted to define the boundary and establish a living fence. This species will naturally create an interlocked hedge or fence that can serve the same purpose of a concrete fence. In addition, the pithicellobium dulce is proven to be a good coloniser of poor soil, flourishes throughout the year and requires no tending or care throughout all seasons."

There are stipulations in EHS Guidelines[19] on proximity and use of groundwater and surface water resources.

- Private or public drinking, irrigation, or livestock water supply wells located down gradient of the landfill boundaries should be further than 500 m from the site perimeter, unless alternative water supply sources are readily and economically available and their development is acceptable to regulatory authorities and local communities.
- Perennial stream should not be located within 300 m down gradient of the proposed landfill cell development, unless diversion, culverting, or channeling is economically and environmentally feasible to protect the stream from potential contamination.

Consideration of Some Impacts, Mitigation Measures, and Good Practices for Landfills for the Project

Impact - dust, bioaerosols, and odors. Dust can include nuisance dust, hazardous dust (for example, containing asbestos or silica), and bioaerosols (that is, particles in the air consisting wholly or partially of microorganisms). Bioaerosols are of particular concern to the health of waste workers as they cause or are a source of reduced pulmonary function and increased respiratory disease.

Mitigation. Recommended management strategies to minimize dust, bi-aerosols, and odors include establishing frequent waste collection schedules, instituting a washing program for waste collection vehicles and so on; enclosing leachate drains to reduce the emission of odors; and minimizing the amount of water added to compost (for example, by covering compost material) to avoid anaerobic conditions that can cause hydrogen sulfide odors.

Impact - contaminated runoff leachate from waste piles. Residual liquids in the waste may contain organic matter, nutrients, metals, salts, pathogens, and hazardous chemicals. If allowed to migrate, leachate can contaminate soil, surface water, and groundwater, potentially causing additional impacts such as eutrophication and acidification of surface water and contamination of water supplies.

Mitigation. Recommended contaminated runoff management strategies include not siting waste handling and storage areas close to water supply wells for people and animals, irrigation canals, and surface water bodies; preventing contaminated leachate and drainage from entering surface water and groundwater; and treating runoff to meet applicable environmental standards.

Impact - litter. Prevent, minimize, and control litter and solid waste during waste receipt, unloading, processing, and storage.

Mitigation. Provide adequate storage for waste not immediately treated or disposed of; implement good housekeeping procedures; consider use of enclosed/covered areas for waste tipping, shredding, compacting, and so on; and install catch fences and netting to trap windblown litter.

Impact - noise and vibration. Principal sources of noise and vibration include truck traffic, loading equipment (for example,, cranes and wheeled loaders), stationary compactors, balers, grinders, and other treatment and conveyance systems.

Mitigation. Construct a buffer zone between the facility and the external environment or locate facilities away from sensitive receptors, include noise and vibration considerations during design, maintain site roads in good condition to reduce noise and vibration from vehicle movements, select equipment that has low noise emission levels, ·and fit silencing equipment to plant, for example, baffles/mufflers.

Impact - leachate generation from biological treatment and other operations. Municipal waste may contain human and animal fecal matter and blood which have a wide range of disease microorganisms. Some household chemicals can possess hazardous properties; examples include pesticides, solvents, paints, batteries, used oils, pharmaceuticals, and so on.

Mitigation. Several measures are recommended to prevent, minimize, and control leachate generation and discharge from biological treatment operations.

Impact - fire. Biodegradable wastes can be combustible, and aerobic degradation can produce sufficient heat to cause spontaneous combustion in certain circumstances. Wastes can, in some instances, also contain ashes and other readily ignitable materials that burst into flame under wind conditions or when contacting flammables. In landfills, methane is generated by anaerobic digestion and can potentially ignite if it encounters an ignition source within or external to the landfill.

Mitigation. Avoid conditions that can lead to spontaneous combustion (for example, moisture between 25 and 45 percent and temperatures above 93°C), collect biogas for use or treatment (for example, energy recovery or flaring), provide a fire alarm system including temperature sensors in the waste being treated, and design the facility for access by firefighting equipment.

Landfill siting. The location of the landfill should consider potential impacts associated with releases of polluting substances. Proximity to residential, recreation, agricultural, natural protected areas, or wildlife habitat and areas prone to scavenging wildlife, as well as other potentially incompatible land uses, could be problematic. Residential development should be typically be further than 250 m from the perimeter

of the proposed landfill cell development to minimize the potential for migration of underground gaseous emissions. Potential threats to landfill site integrity from natural hazards such as floods, landslides, and earthquakes should be considered.

Other Good Practices

- Suitable soil cover material should be available on-site to meet the needs for intermediate (minimum of 30 cm depth) and final cover (minimum of 60 cm depth), as well as bund construction (for the cell method of landfill operation). Preferably, the site would have adequate soil to also meet required cover needs (usually a minimum of 15 cm depth of soil).
- Groundwater monitoring wells should be installed outside the landfill perimeter at locations and depths sufficient to evaluate whether leachate is migrating from the landfill into the uppermost groundwater unit. This groundwater monitoring network should usually include, at a minimum, one monitoring well located in the upgradient groundwater flow direction from the landfill and two monitoring wells located in the downgradient direction. The groundwater monitoring system should be consistent with applicable national regulations and internationally recognized standards. The monitoring wells should be regularly sampled and analyzed for constituents.

Closure and Post Closure

Landfill facility operators should plan for the closure and post-closure care of the facility. Closure and post-closure planning activities should include the following elements:

- A closure plan should be developed which specifies the necessary environmental objectives and controls (including technical specifications), future land use (as defined in consultation with local communities and government agencies), closure schedule, financial resources, and monitoring arrangements.
- Application of final cover components that are consistent with post-closure use and local climatic conditions. The final cover should provide long-term environmental protection by preventing direct or indirect contact of living organisms with the waste materials and their constituents, minimize infiltration of precipitation into the waste and the subsequent generation of leachate, control landfill gas migration, and minimize long-term maintenance needs.
- Financial instruments should be in place to cover the costs of closure and post-closure care and monitoring.

Conclusion

With proper planning and resolve, these key risks can be mitigated against.

4.3.6 Subcomponent 2b. Neighborhood Upgrade and Greening in Freetown

Freetown dominates Sierra Leone's urban landscape with 14 percent of the country's population and generates 18.7 percent of the national economy. Freetown's population has been growing at 3.01 percent

since 1985 and is expected to be 2 million people in less than a decade.[20] Over the last 10 years, the rapid rate of urbanization has led to an increased number of slums and informal settlements, particularly in the capital city, Freetown, where 15 percent of the country's population resides. At present, over 72 slums and informal settlements have been identified in Freetown. Baseline information has been collected from the three slum communities (Rokupa, Moyiba, and Coconut Farm) and detailed in Annex 6.

The ESMF assessment describes the communities in question as characteristically densely populated, located 5 km–10 km from the city center. 'Banking' (where waste is deposited at the sea edge) is used to reclaim the land for housing construction. Major economic activities include fishing, stone mining, and petty trading. The communities have poor access to infrastructure and social amenities and are prone to flooding, mudslide, and fire accidents. There are several GBV service providers, including the Family Support Unit, Male Engage (MAGE Salone), Save the Children, Defense for Children International, and so on, who have been working on issues of GBV (physical assault, rape, and child labor). Community stakeholders have signed memorandums of understanding to no longer cover perpetrators of rape and physical assault and other human rights violators. Notwithstanding, sexual exploitation and prostitution are present with slogans such as 'fish for fish' or 'water for water' to describe the practice of fishermen offering fish for sex while water owners offer water for sex. Consultation with disability groups in the communities confirms their risk of being excluded from employment opportunities, decision-making, and disability-unfriendly infrastructure designs. The communities have organized youth groups and development committees which are able to undertake community project monitoring and supervision. Women can express their views freely and are included in community committees. However, low literacy, low skills, and lack of opportunities limit their ability to participate in higher-quality jobs and earnings.

The project intervention will finance the provision of basic services to areas of extreme poverty and to reduce flooding in these areas. Comprehensive neighborhood upgrade will provide access to basic services and infrastructure, reduce flood/landslide/fire risks, and further bring economic and social benefits. Subprojects may include drainage upgrade (tertiary and secondary/primary drainage), retaining walls, walkways, streetlights, access roads, footbridges, water supply, sanitation, and community facilities, which will bring climate change adaptation co-benefits. Additionally, subprojects such as the construction of walkways to support pedestrian traffic and solar street lighting to reduce carbon footprint will have some climate change mitigation benefits. The project will present a positive outcome in the long run; however, the interventions here will be undertaken in densely populated urban areas in low-income communities. There are significant risks of community and OHS issues, noise and dust generation, construction wastes disposal, sediment transport, and pollution of adjacent surface water and wetland, with downstream impact of aquatic ecosystems and species diversity, the extent of which could depend on the scale of the intervention, SEA/sexual harassment (SH), labor influx, accidents from equipment movement, unattended pits and trenches, and so on. Although in situ slum upgrade is proposed to minimize resettlement to the extent feasible, considering the congested nature of the slums, some residual physical and economic displacement, both temporary and permanent, are anticipated. The cumulative resettlement impacts from the three proposed neighborhood upgrade sites although not estimated now could potentially be significant. With limited land availability in Freetown, resettlement options will require careful considerations to ensure productive resources and incomes of potential PAPs are restored.

[20] The World Bank-Sierra Leone Rapid Damage and Loss Assessment of August 14, 2017.

Greening of Freetown

The objective of this subcomponent is to contribute to FCC's goal of increasing tree and vegetation cover by 50 percent of the 2018 levels by 2022. GEF resources will be used to finance activities under this subcomponent such as conducting of sustainable spatial planning for expanding tree and vegetation cover, tree planting and management, setting up and implementation of a remote (satellite imagery based) canopy monitoring system, field-based asset management tracking system for tree planting progress, recruitment of local stewards for providing regular monitoring updates, community engagement activities, preparation of a comprehensive forest inventory of the Freetown Peninsula 13 catchment area, research activities toward improving forest performance, activities to encourage adaptive community-based management, and communication and advocacy.

The pressures of the rapidly expanding city are taking an increasing toll on the forest expanse, with the fringes of the city rapidly pushing up into the mountains of the forested peninsula—leading to a tree cover loss of 12 percent or 555 ha per year between 2011 and 2018. Such an expansion fueled by intense deforestation is a cause for concern, as the forested area lost and under threat provides vital functions for the city, such as a catchment for water reserves (water supply to the City of Freetown) and as a protector against natural hazards including landslides, flooding, and coastal erosion. Compounded by the impact of climate change, tree and vegetation cover loss in Freetown and the Western Area peninsula has created loss of biodiversity and habitat in the forest and woodlands system along the Freetown peninsula, has created systemic vulnerability to natural hazards, and threatens critical infrastructure such as water and sanitation delivery systems.

The context for reforestation under the FCC Tree Planting and Growing Strategy is based on recommendations noted in the Multi-City Hazards Assessment Report funded by the World Bank. Catchment areas were assessed for reforestation in high-slope and upper catchment areas to address recurring flooding, landslide susceptibility, and coastal erosion and to protect critical infrastructure, for example, the water supply to Freetown and the WA Rural District. FCC consults and cooperates with private landholders, business communities, local communities, CBOs, youth conservation corps, key ministries such as Ministry of Environment, and NPAA to operationalize community-based planting and growing in private, as well as, public spaces. FCC plans to provide Community Planting and Stewardship Grant to CBOs to enable tree planting and stewardship targeting the upper catchment and high-slope areas in Freetown. Through ward committees FCC supports the transplanting of seedlings. FCC plans to work with partners, specifically the World Bank, in coordination with data collection processes conducted by EPA and others to collect and analyze data through remote sensing using drones and satellite imagery for tracking of trees. This will allow FCC to establish baseline tree cover and available space for new planting and growing and enhance geocoding of individual trees.

Other Key Risks

Land issues are problematic in the Western Area, and there may be resistance to planting trees in certain key areas occupied by 'squatters'. Inter-agency rivalry may also be a concern. There are other government agencies like EPA involved in tree planting. Care must also be exercised to ensure there is no political outfall from the project with the council being of a different political stripe from that of the government. In some minor instances, voluntary lands may be required. The SEP must be adhered to. These issues are amply addressed in mitigation and management measures. Overall, the key risks are not insurmountable.

4.3.7 Subcomponent 2c: Market Upgrading in Select Secondary Cities

4.3.7.1 Bo

The major market in Bo is the Bo Big Market. The market has one main structure and two substructures. The size of the main structure measures 115 ft × 65 ft. Subsidiary structures measure 63 ft × 130 ft and 40 ft × 120 ft. The Bo Big Market has both a closed and an open component. The close component has three main structures, while the open component comprises several makeshift structures occupying the empty space around the main structures. The three main structures are ancient structures with concrete walls, floor, and zinc roof. The steel structures are rusty, and the roof is old with lots of holes. The conditions are horrible during the rainy season.

There is a large amount of space within the market area for possible expansion, but this can affect the livelihood of the people because smaller structures have been erected all around the market area and removing the traders for possible expansion can create problems for the traders.

Major items sold in the market are food items - 55 percent (rice, salt, onion, Maggi, oil, fish, gari, ogiri, palm oil, seasoning) and non-food items - 45 percent (clothes, shoes, rubber, flask, bucket, spoon, soap, cream, other cosmetic items, and so on).

The market has only one toilet located around its center. The toilet is currently full and produces an odor. The proximity of the toilet to the market people is not ideal for the health of the people around the market area. People pay SLL 1,000 per toilet use. The Bo Big market has no water facility: there is no tap and well. Waste disposal is handled by the city council, but it is not efficient as the market area produces more waste than the council can safely handle.

There was a tap inside the market which was the only source of water for the whole market, but this facility wore out many years ago, and there is currently no water facility in the market.

Other issues to be addressed within the market are the drainage system, sanitation practices, and waste collection within the market.

The people who make decisions in the market include

- The market chairman or market chairlady,
- Traders union, and
- City council.

Women are involved at all decision-making stages of the market. Financial problems experienced in running business in Bo Big market are

- Credit facilities,
- Dependents: A large family size depends on the business for livelihood,
- Micro-credit and other loan facilities with high interest rate, and
- Availability of space.

4.3.7.2 Makeni

The Campbell Street market is the major market in the city. The size of the main structure measures 237 ft × 60 ft. The size of the substructure measures 100 ft × 37 ft. The main market building is a semi-closed permanent structure built with concrete, paved floor and a metal sheet or zinc roof top. The market structures are relatively in good condition, but they do not have enough space to house the many traders that come to the market daily. This is particularly strenuous during the rainy season as many traders end up selling under the rain. The roof is old. The market extension/substructure though smaller in size is built with the same materials and style as the main market structure, and it is almost at the same state and condition as the main structure. The available space at the Campbell town market measures about 44 ft × 37 ft. This space is temporarily occupied with tiny and irregular makeshift structures and mobile traders or residents

- Major items sold in the market and percentages are food (80 percent) and clothes (20 percent). There are mixed items sold, food 85 percent, for example, fish, meat, fruit and vegetables, cooking oil, and so on, and non-food items 15 percent, for example, clothes, shoes, electrical appliances, furniture, decorations, and so on, and other services are offered, for example, grinding, hair dressing, and so on.
- Observations on state of toilets, waste disposal, water provision, and so on are as follows:
    - There is toilet facility (a latrine) but not good enough to service the ever-growing population.
    - The toilet is overutilized and lacks running water.
    - Its service is not sensitive to gender considerations and usage.
    - There is a garbage collection site, not spacious enough and not well kept. There is improper collection and disposal of garbage; it needs improvement.
    - There is a faulty hand pump that serves as the only medium of water supply for a very large market population and its environs. It needs to be improved.

Compliance on the Payment of Market Dues

- Compliance rate is almost 99 percent, because it is affordable at SLL 500 per person per day.
- **Key social issues in the markets.** There are reported incidents of child labor as some children leave school to help their parents, relatives, or others for the benefits that come along. There is little knowledge about occurrences of GBV and prostitution; however, there are isolated disputes among traders due to competition. Persons with disabilities, for example, persons with hearing, visual, and physical impairment, are among the population that interact in the markets as traders and customers. However, they struggle to compete with other traders due to physical inaccessibility of the markets and stigma.

Areas Clients Come from Most

- Most of the clients/customers come from various areas from within the municipality of Makeni and its immediate surroundings.

Other Issues to Be Addressed

- Capital to start business
- Better or improved water, toilet, electricity, and storage facilities
- Improved roads and drainages and proper garbage collection and disposal
- Expansion and partitioning of markets for easy access and ease of doing business
- Care and regard for the plight and constraints of the disabled and child laborers
- Loan or microcredit facilities for vulnerable traders

Women are very involved and are well represented in the decision-making processes in the affairs of the union and the welfare of its members. There are executive positions exclusively for women, for example, chairlady and organizing secretary, and they are given opportunities to participate in all the processes of making decisions.

Financial problems experienced include

- Lack of capital to do business,
- No price control,
- High interest for loans,
- Costly transport fare, and
- Microcredit and other loan facilities with high interest rate.

4.3.7.3 Kenema

The Fisheries City Market, Kenema is the major market. The markets are surrounded by private buildings and private land. In view of the above reasons, the Kenema Traders Union, in collaboration with the chairladies from the various markets, has acquired five town lots at the Matto Kapuwa Park (Zogoda Area) for the construction of a new market building. The building measures 100 ft × 39 ft.

The Fisheries City Market is an open market. The building is dilapidated with unpaved floors (the floors are very deplorable as every floated floor has been removed. The roofs leak during the rains. No rehabilitation has been done on the floors and building since 2014. The entire building is congested. Market women are scattered all over the available land for possible expansion and construction of a new market and have preferred to use small 'BAFFAS' or stalls instead of the real market building. The Fisheries City Market has enough land for possible expansion and the construction of a new market measuring eight town Lots (80 ft × 80 ft). The Fisheries City Market is divided into several components/areas where women sell their items according to the following:

- Raw fish sellers
- Dried fish seller
- Palm oil sellers
- Vegetable sellers

- Rice sellers
- Cassava sellers
- Vegetable oil sellers
- Meat sellers, with a very poor butcher market
- Second-hand clothing sellers
    - This group of women are scattered all over the space identified for the possible expansion/construction of a market. Other commodities like textiles and shoes are scattered along the two major streets (Kai-Samba Terrace and Maxwell Khobe Street) close to the Fisheries City Market, Kenema.
    - 80 percent of all items sold at the Fisheries City Market, Kenema, are food stuff.
    - The Fisheries City Market has no toilet or water facilities. Market women use nearby toilets constructed by other families and paid for before use.
    - The Kenema City Council provides one skip bin for waste collection on a daily basis which gets filled quickly and the waste has to be collected every morning for the dump site.
    - The Fisheries City Market is so congested that one finds it difficult to take clear snapshots of the facility.

4.3.7.4 Key Risks

Some minor resettlement issues may arise, especially for the Kenema market. Provision must also be made for temporary market areas during construction of market facilities. The upkeep of the markets and claims from non-entitled people to market facilities must also be considered seriously. The construction work may pose danger to market people and clients.

The contractors will take on board community safety measures in their ESMPs. The RPF and SEP provisions must be followed carefully. These issues are amply addressed in mitigation and management measures. Overall, the key risks are not insurmountable.

4.3.8 Subcomponent 3a. Strengthening Emergency Preparedness and Response Systems

4.3.8.1 Natural Hazards in Sierra Leone

Sierra Leone faces many natural hazards, the main ones being flooding, landslides, and coastal erosion. These are described in a major hazards study commissioned by the World Bank.[21]

Flooding

- Of the total number of people affected by disasters in Sierra Leone in the last 30 years, 90 percent were affected by flooding.

- Floods are usually the result of heavy rainfall combined with high tides; ocean surges; blocked, diverted, or narrowed drains; and increasing river volumes.
- The population of Sierra Leone is particularly vulnerable due to land reclamation from the sea and swamps and buildings constructed on floodplains and in the bottoms of valleys.
- In the last few years, the areas worst affected by flooding included Kroo Bay, Susan's Bay, Granville Brook, Lumley in the Western Area, Regent, Port Loko and Kambia Districts, the Newton catchment area, Pujehun and Bo areas, Kenema and Moyamba Districts, and coastal beaches of the Western Area peninsular.
- The most common consequences of flooding are loss of life; disease outbreak; and damage to crops, livestock, infrastructure, and housing.
- Flood water depth can cause damage to newly planted rice crops in both the valley bottoms and the nurseries upslope.
- In the future, rising sea levels will contribute to increased flood frequency probabilities and inundation of coastal lands and wetlands. Flooding is a regular occurrence in Sierra Leone.

Landslides

- Most of the landslide hazard is concentrated around the steep hills of the Freetown peninsular and to the far east of the country where the topography rises into Guinea. Landslide hazards in Freetown area are frequent.
- Rainfall is the main trigger factor for landslides in Sierra Leone, with human activities the second most common cause. In reality, these conditioning and triggering factors often combine, resulting in landslides.
- The rapid population increase and expansion of Freetown, during and after the civil war, applied pressure on the landscape around the Freetown settlements, resulting in unregulated deforestation.
- The high rate of forest degradation on the mountains of Freetown has been linked to recent environmental disasters, and several natural hazards are prevalent including increased gully erosion, landslides, mudflow, rockfall, and flooding.

Coastal Erosion and Sea Level Rise

- The coastline of Sierra Leone measures some 460 km of which 150 km is significantly developed (including Freetown) and 190 km is relatively sheltered by extensive mangrove systems and mudflats. Sea level rise and coastal erosion is a major concern for Sierra Leone both due to natural and man-made causes. The following should be noted:
    - Natural causes of sea level rise include storms (wave and swell actions) with mechanical and chemical weathering to cliffs.
    - Man-made pressures including alluvial mining, sand mining, haphazard use of individual coastal defenses, poor coastal management, and deforestation have also contributed to the susceptibility to coastal hazards.

- Coastal erosion has resulted in loss of private and public property along the northern sector of the coastline as well as posing threat to beaches, settlements, and other shoreline facilities such as hotels, clubs, and resorts along the coastline of the Freetown peninsula.
- Erosion of the sandy beaches is accelerated by sand extraction activities for construction and building purposes.
- Efforts made in the past to halt shoreline retreat along certain portions of the Freetown peninsula have proved unsuccessful.

4.3.8.2 Disaster and Hazard Risks in Sierra Leone

With over 13 percent of the country's area and more than 35 percent of its population presently at risk to multiple hazards, Sierra Leone needs to start addressing DRM in a holistic manner by establishing an adequate institutional framework for DRM, proactively managing and reducing existing disaster risks as well as preventing the creation of new ones through disaster risk-informed planning and investments while at the same time enhancing its capacity for disaster preparedness and response. The collection and sharing of hazard data and information is a crucial input to that end, contributing to the understanding of the country's disaster risks as well as enabling the incorporation of disaster risk information in development and policy decision-making.

Sierra Leone faces many natural hazards, including meteorological hazards which cover drought, tropical storm, thunder, and lightning, and hydrological hazards which include flooding and erosion. In addition to this, there are many man-made disasters caused by deforestation, coastal sand mining, artisanal aggregate mining, and other factors as already indicated. The majority of the hazards are climate related—climate change can cause severe adverse impacts to all terrestrial, wetland, and coastal ecosystems. Climate change also increases the severity and frequency of weather-related natural hazards such as storms, intense rainfall, flooding, drought, and heat waves. Despite the potentially important role that several groups can play in the phases of disaster mitigation, prevention, preparedness, response, and recovery, this happens more by happenstance in Sierra Leone. The following stipulations shed light on policy and institutional issues related to disaster management:

- **Collaboration.** As disaster management and risk reduction are considered to be multi-sectoral, multi-faceted, and multidisciplinary, the government would collaborate with the public sector, the private sector, UN agencies, NGOs, local government councils, and local communities in identifying risk, vulnerability, and hazards.
- **Coordination.** The government, through the National Disaster Management Department in the ONS (now the NDMA), should be the lead government institution to coordinate and facilitate all issues pertaining to DRM.
- **Disasters and development.** The government shall encourage all line ministries to incorporate disaster risk reduction into development strategies. Guidelines for civil construction, land use, and planning specification must be stated.
- **Institutional Disaster Management Policy.** The government shall ensure that every institution or department under its purview should develop a disaster management policy. This policy shall make provision for a focal person who shall report at coordination meetings the progress and activities of the department/institution he/she represents.

- **Early warning systems.** To be able to effectively address DRM, the GoSL shall in collaboration with other institutions establish an early warning mechanism.

The strategic priority for the Security Sector in the Sierra Leone Agenda for Prosperity (2013–2018) is the strengthening of the capacity of key institutions primarily involved in preventing/reducing existing high-potential manmade disaster risks at all levels. Key institutions mentioned whose functions in this respect are engineering based include the

- Ministry of Land and Country Planning and Environment (land use planning and management,
- Ministry of Works and Housing and Infrastructure (housing construction permit delivery),
- Ministry in Charge of Minerals Resource (mining industry threats management),
- Ministry of Health (prevention of disease/sanitation - waste management), and
- Ministry of Energy and Water Resources (safe drinking water supply management).

Response mechanisms are still inefficient partly due to lack of proper response equipment to facilitate key response processes such as transportation, communications, firefighting, information and planning, mass care, health and medical services, search and rescue, hazardous materials, food and water safety, military support, and public information management.

A national Disaster Management Unit should have access to

- Urban firefighting and technical rescue capacity,
- Emergency social services equipment needs
- Emergency communications capacity, and
- Emergency response transportation and logistics needs.

At the strategic level, the country has drafted a National Disaster Management Policy and National Disaster Preparedness and Response Plan. However, these instruments are not fully operational, and DRM has not been fully integrated in the development plans and strategic MDAs. The absorption capacity of the DRM structures should be considered.

The DDM in collaboration with all 14 district councils and with support from the UNDP has established District Disaster Management Committees (DDMCs) whose role is to identify, prevent, and mitigate disasters at the local level, as well as to communicate risks and issues to the national level.

The DDMC is a multi-organizational grouping, which exists within each district, bringing together district council leaders, security representatives, key local representatives, the health organizations, and any active international partners within the area. It meets on a regular basis to support disaster management preparations and risk assessments and will stand up on a 24-hour basis during an emergency (NSSG 2016). At the operational level, response is led by the District EOC.

Roles of DDMC members include the following:

Pre-Disaster

- Conduct fortnightly meetings.
- Conduct hazard mapping and risk assessment.
- Undertake risk reduction activities - prevention and mitigation.
- Communicate early warning and provide response mechanism.
- Conduct community sensitization activities - radio talk show programs.
- Build community volunteer corps.
- Conduct environmental sanitation.
- Conduct rapid disease surveillance
- Ensure resource mobilization.
- Conduct stakeholder training.
- Test and simulate plans.
- Support law enforcement-bylaw.

Post Disaster (Recovery)

- Ensure de-escalation of the security threat level
- Ensure stand-down of the EOC.
- Give out food in-kind items.
- Ensure humanitarian cash transfers to establish life.
- Support construction of houses.
- Engage the GoSL and partners for building back better.
- Conduct relocation of people in disaster-prone community.
- Assist demolition of houses in disaster-prone communities.

A typical Chiefdom Disaster Management Committee would consist of the following members:

- Paramount Chief
- ONS Coordinator
- Sierra Leone Police/Chiefdom Police
- RSLAF
- Community Health Officer
- Religious Leader
- Youth Leader

4.3.8.3 Gender Considerations

Disasters affect women, men, girls, and boys differently. Identifying the different needs, capacities, and contributions of different groups is necessary to consider gender issues. The availability of sex and age disaggregated data is imperative to ensure vulnerable populations (including women, children, pregnant women, the elderly, and people with disabilities) and their specific needs and capacity can be identified. In the recent Freetown mudslide disaster, women lost homes and family members, including husbands, parents, siblings, and their own children. Many women were not at home at the time of the landslide, because they had gotten up at around 4 a.m. or 5 a.m. to go to the market. When they returned home, they found that their loved ones and everything they owned was gone. The DMD mandate has not kept pace with changes in national, regional, and international laws and the increasing frequency and intensity of disasters that require increased and comprehensive DRM capacity. There is a need to strengthen the institutional framework and manage disaster risks across different sectors. There is a need to invest in organizational structures (district committees, EOCs, command posts, and incident command teams), equipment, training, operational plans and procedures, critical infrastructure, and facilities. Designing and operationalizing an integrated emergency management system will enable the country to plan and respond to both common, everyday emergencies and major disasters in an organized and effective manner. The new DRMA needs to be supported in terms of training and tools.

4.3.8.4 Freetown

In Freetown most of the urban development is on the flat land adjacent to the coast, but increasingly, urban developments are spreading up the hillsides due to a lack of land. A large number of households—both rich and poor—have built houses on the steep hillsides on the edge of the city, thus increasing their vulnerability to landslides caused by deforestation and soil erosion. The highest population densities are in the slums and informal settlements. The annual displacement of people by floods is now a normal event—the 2015 flood was particularly devastating. Coastal erosion is another powerful damaging socio-natural hazard that Sierra Leone is facing, mainly due to unsavory human activities along the coast. Mining on the hill slopes creates frequent landslides, and rockfalls are reported during the rainy season, sometimes with fatal consequences. Extraction locations include ridges, hills, rocky beaches, and riverbeds. The clearing of the vegetation cover for aggregate mining has a high degrading effect. These areas prone to natural disasters also have severe health and sanitation problems.

4.3.8.5 Other City Councils

The WARDC experiences more or less the same problems as in Freetown. FCC and the WARDC have signed a memorandum of understanding to collaborate on many issues including disaster management. Meetings between their respective technical staff take place fortnightly.

In Kenema, there is a Disaster Management Committee in place headed by the ONS. The DDMC meets on a monthly basis. The Sierra Leone Red Cross Society, World Food Programme, and other humanitarian organizations have always assisted to alleviate the suffering of disaster victims.

For Makeni, flooding is a major problem. ONS, in collaboration with the Makeni City Council, coordinates all problems connected with disasters. There is an existing Disaster Management Committee which meets on a monthly basis.

Bo has a DDMC and the city council is a member.

In Koidu, the council is part of the Disaster Management Committee with ONS. Fire and flooding are major problems.

In Port Loko, there is very little disaster planning. There is no fire engine although the city has a fire force. The North West Region has no fire force presence; all are stationed in Makeni.

For Bonthe, disasters are mainly storming and fires. Only SLL 20 million is allocated for fire prevention annually.

4.3.8.6 Key Risks

The new Disaster Management Agency may face considerable problems with coordination and cooperation with existing institutions. These relate particularly with ONS and disaster management units at the local level.

Some of these are addressed in the SEP. The government must also lend its unalloyed support for the project. These issues are amply addressed in the mitigation and management measures. Overall, the key risks are not insurmountable.

4.3.9 Subcomponent 3b. Contingency Emergency Response Component

This subcomponent will enable the rapid reallocation of financial resources in the event of a natural crisis during project implementation to fund eligible emergency needs. The conditions and eligible emergency needs are provided in a separate CERC Operational Manual.

4.3.10 Component 4: Project Management

Activities to be financed under this component will relate to

- Project management costs of the PMU,
- Costs related to Steering Committee meetings,
- Staffing,
- M&E,
- Project technical audits,
- Midterm and project-end evaluations,
- Safeguards,
- Financial management,
- Procurement,
- Training,
- Advocacy,
- Knowledge exchange and partnerships,

- Support to city leaders and urban development experts to attend SCIP forums and regional city academics, and
- Organization of peer-to-peer exchanges and visits within SCIP cities.

The Fiscal Decentralization Division (FDD) of the MOF responsible for the overall management of RUSLP has already started recruitment of members of the project management team. The PMU will plan training programs to build up the capacity of national and city project teams, consultants, and contractors.

5 ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCESS

5.1 Introduction

The Environmental and Social Risk Assessment and Management process is guided by the ESS1 paragraph 28 provision. The ESA shall be informed by issues identified during the scoping exercises. The assessment will consider all relevant E&S risks and impacts of each subproject when more information is made available and the locations of each subproject are known, including the following:

- **Assessment of E&S risks and impacts**, including
  - (a) Those defined by the EHS Guidelines;
  - (b) Those related to community safety;
  - (c) Those related to climate change risks and impacts;
  - (d) Any material threat to the protection, conservation, maintenance, and restoration of natural habitats and biodiversity; and
  - (e) Those related to ecosystem services and the use of living natural resources, such as fisheries and forests
- **Assessment of social risks and impacts,** including
  - (a) Threats to human security through the escalation of personal and communal conflict, crime, or violence;
  - (b) Risks that the project impacts fall disproportionately on individuals and groups who, because of their particular circumstances, may be disadvantaged or vulnerable;
  - (c) Any prejudice or discrimination toward individuals or groups in providing access to development resources and SLURP benefits, particularly in the case of those who may be disadvantaged or vulnerable;
  - (d) Negative economic and social impacts relating to the involuntary taking of land or restrictions on land use;
  - (e) Risks or impacts associated with land and natural resource tenure and use including (as relevant) potential project impacts on local land use patterns and tenurial arrangements, land access and availability, food security and land values, and any corresponding risks related to conflict or contestation over land and natural resources;
  - (f) Impacts on the health, safety, and well-being of workers and project-affected communities; and
  - (g) Risks to cultural heritage.

According to this framework, the GoSL will carry out an ESA of RUSLP activities to determine their E&S risks and impacts throughout the project life cycle. The assessment will be informed by available data on biophysical and socioeconomic baseline relating to the project activities. Project alternatives or options as they relate to location planning, design, implementation, and technology will be reviewed and revised accordingly in line with the flexible nature of the ESF. Choice of alternatives will follow a mitigation hierarchy to address adverse E&S impacts and seek opportunities to enhance project benefits. Stakeholder

engagement at all stages of the ESA process will be emphatically followed by the project team, starting at the project preparation stage. An SEP for the project has been prepared and is being implemented according to ESS10. A number of meetings and workshops have already been held with community representatives at various levels of society and their inputs incorporated into project planning and design (see project SEP). The GoSL has hired and shall continue to hire the services of competent and highly qualified experts to adequately and accurately conduct the studies leading to the evaluation of E&S risks.

The assessment of risks will be based on the following considerations:

- Sierra Leone's political, legal, regulatory, and institutional frameworks on E&S issues relevant to the project
    - This shall include country conditions and context, available E&S literature, national E&S strategies and action plans, and international conventions or protocols signed by or recognized by the GoSL;
- ESS triggered by the project activities
- World Bank Group EHS Guidelines, and other relevant GIIPs.

The ESA of RUSLP shall comprise the following stages:

(a) Screening

(b) Scoping

(c) ESA

(d) Risk management tools.

The nature and scope of assessment shall be proportionate to the potential risks and impacts of the project. The results of the screening are therefore fundamental to ensuring that the project is subject to the most appropriate type of ESA. ESA will be a flexible process using different assessment and management tools and methods to address the risks associated with each activity implemented in each specific location.

5.2 Identification and Selection of Project Sites

The location and details of some of the planned physical works and other interventions are not known at the time of project appraisal. The selection of beneficiary facilities under the project will be undertaken by the PMU in consultation with the beneficiary councils after undertaking a needs assessment exercise. This will involve site visits to the various subcomponent sites, conditional surveys to verify the physical state and integrity of the facilities and gap analyses of relevant HR capacity and equipment. During the visits to the intervention areas and their environs, observations and recordings will be made on E&S baseline conditions, initial consultations will be undertaken with stakeholders and anticipated project impacts/risks and broad mitigation measures together identified, and other relevant information will be sought on the subprojects to facilitate project categorization by the World Bank and EPA-SL. The final list of subprojects and detailed scope of works/interventions will be determined after this exercise.

The PMU will assess the E&S risks of each subcomponent. Initial screening for E&S impacts/risks shall be undertaken using an E&S screening checklist/screening form. The outcome of the screening exercise will determine the type of safeguards instrument that will be prepared. In line with the ESF mitigation hierarchy, the initial screening will evaluate the site-specific potential E&S impacts, examine project

alternatives, re-route or re-site project interventions to avoid any adverse impact on built-up areas, protected areas, cultural heritage, and so on. In case it is impossible to avoid, the project ESIAs and designs will evaluate design options that will minimize or reduce the risk levels. Any remedial risks following these measures will be adequately compensated for.

5.3 Environmental Screening Process

Screening is a key step for an initial identification of project-related E&S risks and impacts and is one of the first steps of the ESA process, with the objectives of (a) making a preliminary determination of the expected risks and impacts of the proposed project on people and the environment and their relative significance and (b) determining the type of EIA instruments necessary for an adequate evaluation based on the nature and scale of the project.

Screening for E&S impacts/risks will be undertaken using an E&S screening checklist/screening form (Annex 1). The outcome of the screening exercise will inform the type of safeguards instrument that will be prepared. The screening will consider all relevant E&S risks and impacts of the subproject/subcomponent activities. This will include the E&S risks and impacts specifically identified under ESS2–8 and any other E&S risks and impacts arising as a consequence of the specific nature and context of the subprojects/subcomponents activities—including the risks and impacts identified in ESS1, paragraph 28.

Risk Rating at the Concept and Appraisal Stages

The initial screening of the project risks was done at the project concept stage, and the outcome of the assessment is available in the Concept Note Environmental and Social Review Summary (ESRS). Based on initial screening at the concept stage, RUSLP is rated high risk for overall E&S safeguards. This rating has remained unchanged as project information has not significantly changed. This rating is subject to revision as project details continue to unfold. For the environmental safeguards risks, the solid waste disposal interventions are of particularly high risk due to the lack of appropriate alternative disposal sites, and the intervention could increase the risk of pollution from leachate and gas emissions as well as the possibility of outbreak of waterborne diseases and the general legacy of failure or reluctance by the government to manage safeguards issues. The risk in the preparation of both the ESIA and ESMP for Subcomponent 2(c). Market Upgrading in Select Secondary Cities could range from moderate to substantial. This subcomponent includes expansion of markets; provision of roofing, water, and sanitation facilities; provision of drains (and drainage), child care centers, parking, toilets, electricity, roads, solid wastes and traffic management; and so on. Hence, the final decision on the choice of safeguards instrument to be applied (ESMP or ESIA) will be informed by a risk assessment as project details unfold.

The E&S risk of the intervention in the secondary cities is Substantial as it could contribute to an improvement of poorly managed facilities and operations.

The social risk rating for the project according to the ESRS is High as the project will construct significant infrastructure associated with the neighborhood upgrade, construction of a new landfill site, rehabilitation of existing transfer stations in the Western Area of Freetown, upgrade of SWM ancillary facilities in Bo, and market upgrade. The market upgrade works will likely create a fair amount of traffic congestion as a result of market expansion, provision of services (water, sanitation, solid waste management, and so on), parking issues, potential health and safety issues, air pollution (dust), noise,

flooding during rainy season, impacts on PAPs, impact on women and livelihood, and so on. Some of these interventions will be undertaken in densely populated urban areas in low-income communities. The social risk, according to the ESRS, considers the scale of impacts from these interventions as well as the government's current experience and capacity to mitigate the impact in accordance with the requirements of the new ESS.

Risk Rating according to the ESMF

The outcome of the screening in Tables 12–14 appears to be consistent with the preliminary screening done by the World Bank at the concept and appraisal stages. It is based on professional judgment and the information available at the time of data collection for the preparation of the ESMF.

Table 12: Risk Level at Construction Stage

Activity	Nature and Scale of Activity[a]	Sensitivity of E&S Recipient[b]	Capacity of the GoSL to Manage the Risks[c]	Contextual Event[d]	Risk Level
Construction of landfill site and support to SWM in the Western Area	High	High (community, pollution of surface water and proximity to forest reserve)	High	High (climate and natural disasters)	High
Urban greening	Low	Low	Low	Moderate	Low
Neighborhood upgrade	Substantial	High (health and safety and gender-related issues)	Substantial	High	Substantial
Market upgrade in select secondary cities	Moderate	High (health and safety and gender-related issues)	Substantial	Moderate	Moderate
Upgrade in SWM ancillary facilities in Bo	Moderate	Moderate	Moderate	Low	Moderate
Support to SWM in other select secondary cities	Low	Moderate	Moderate	Low	Moderate

Table 13: Risk Level at Operational Stage

Activity	Nature and Scale of Activity[a]	Sensitivity of E&S Recipient[b]	Capacity of the GoSL to Manage the Risks[c]	Contextual Event[d]	Risk Level
Construction of landfill site and support to SWM in the Western Area	High	High (community, pollution of surface water and proximity to forest reserve)	High	High (climate and natural disasters)	High
Urban greening	Low	Low	Low	Moderate	Low

Activity	Nature and Scale of Activity[a]	Sensitivity of E&S Recipient[b]	Capacity of the GoSL to Manage the Risks[c]	Contextual Event[d]	Risk Level
Neighborhood upgrade	Low	Moderate (health and safety and gender-related issues)	Moderate	Moderate	Moderate
Market upgrade in select secondary cities	Low	Moderate (health and safety and gender-related issues)	Moderate	Moderate	Moderate
Upgrade in SWM ancillary facilities in Bo	Low	Moderate	Moderate	Low	Moderate
Support to SWM in other select secondary cities	Low	Moderate	Moderate	Low	Moderate

Table 14: Risk Level at Decommissioning Stage (depends on the nature of activity, for example, demolition, change in topography, land use, susceptibility to natural disasters, resettlements)

Activity	Nature and Scale of Activity[a]	Sensitivity of E&S Recipient[b]	Capacity of the GoSL to Manage the Risks[c]	Contextual Event[d]	E&S Risk Level
Decommissioning of landfill site and support to SWM in the Western Area	High	High (community, pollution of surface water and proximity to forest reserve)	High	High (climate and natural disasters)	High
Urban greening	Low	Low	Low	Moderate	Low
Neighborhood upgrade	Substantial	High (health and safety and gender-related issues)	Substantial	Substantial	Substantial
Market upgrade in select secondary cities	Moderate	High (health and safety and gender-related issues)	Substantial	Moderate	Moderate
Upgrade in SWM ancillary facilities in Bo	Moderate	Moderate	Moderate	Low	Moderate
Support to SWM in other select secondary cities	Low	Moderate	Moderate	Low	Moderate

Note (for Tables 12–14):

a. Type of project, scale, activities, complexity of possible risks and impacts, and proposed technology;

b. Project location, the prevailing E&S baseline conditions, and the receptors likely to be affected;

c. This depends on the following:

(i) The policy, legislative, and regulatory requirements, processes, and procedures that exist for the assessment and management of E&S risks and impacts

(ii) Institutional framework: identifying which entities are responsible for implementing and enforcing the legislative framework

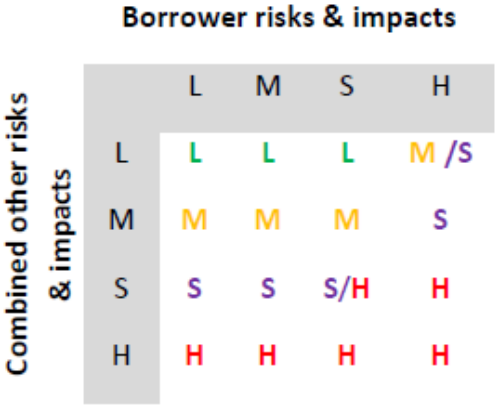
(iii) Technical and institutional capacity of the different institutions to carry out their responsibilities and the capacity and commitment to enforcement obligations

(iv) Track record: experience in the implementation of both domestic projects and projects supported by the World Bank or other multilateral or bilateral financing agencies. This examines the performance of the borrower and the national and local government and district institutions in addressing specific issues.

d. This includes (i) political instability, (ii) area of high crime, and (iii) climate and natural disaster-prone areas.

The risk categorization in Tables 12–14 follows the matrix in Figure 6.

Figure 6: Determining the Overall Environmental and Social Risk Classification



Source: Technical Notes Screening and Risk Classification under the ESF, Environmental and Social Framework for IPF Operations.
Note: H = High; L = Low; M = Moderate; S = Substantial.

These risk assessments are preliminary in nature. It is recommended that the E&S screening be revisited and expanded as part of the ESA, when more information about the nature and scope of the project becomes available or when project definition and circumstances change in line with the ESF's adaptive risk management strategy. These instances include (a) screening of any subprojects that may be identified during project implementation, (b) project restructuring, and (c) activation of CERCs.

5.4 Environmental and Social Instruments

ESS1 provides structured processes or procedures for project categorization, assessing and evaluating project E&S risks and impacts as well as management of same (mitigation hierarchy). This standard also sets out borrower's requirements including the preparation of various instruments such as ESMFs, ESIAs, ESMPs, Environmental and Social Commitment Plans, RPF, and RAP, as well as information disclosure. The standard also lays out project E&S monitoring and reporting requirements. ESS1 establishes the applicability of the other ESS. It establishes the basis for categorizing projects based on the borrower's capacity to manage and monitor E&S risks/impacts as well as the implementation of mitigation measures, sociopolitical context, scale of the undertaken as well as spatial extent, and significance of anticipated impacts/risks.

The GoSL shall carry out an appropriate ESA to assess the E&S risks and impacts of the project activities throughout the project life cycle. The ESA shall be proportionate to the nature and significance of such risks and impacts. It will be conducted pursuant to EPA Acts 2008/2010 and applicable national requirements and shall meet the ESS requirements as stated in the ESF. The anticipated tools and methods to be used for each activity are listed in Table 15Table 15::

Table 15:

Activity	ESA Tools	Tools Common to All Activities
Construction of Landfill site and support to SWM in the Western Area	ESIA, ESMP, Solid Waste Management Plan (SWMP), RPF, and RAP	Project-level ESMF, SEP (adapted to specific activities), and institutional capacity needs assessments[a]
Urban greening	Screening ESMF and Checklist/ESMP	
Neighborhood upgrade	ESIA, ESMP, and RAP	
Market upgrade in select secondary cities	ESMP or ESIA	
Upgrade in SWM ancillary facilities in Bo	ESMP, SWMP, and RAP	
Support to SWM in other select secondary cities	ESMP and SWMP	

Note: a. A project-level institutional and capacity needs assessment has already been done, complemented by those conducted during the preparation of the ESMF.

The necessary steps in conducting a full ESIA are described below:

Step 1: Scoping - Scoping Stage for the Substantial to High Risk Project Activities

Following the approval and clearance of the ESMF and immediately before project implementation, the GoSL shall move on to determining the extent and approach of the ESA through a scoping exercise. Whether or not to carry out a scoping study will be informed by the level of significance of the E&S impacts. Scoping shall result in a proportionate approach to ESA, reducing wastage in terms of resources and time and accords emphasis on activities with high E&S risks. For efficiency, only activities with substantial or high E&S risks shall be subjected to scoping, as they are the ones for which an ESIA is required. The focus or emphasis of the approach can be refined as knowledge of the project activity, and hence risks, become clearer or when project activities are modified. In the RUSLP, scoping will be limited to

(a) The construction of the landfill site in the Western Area where a number of details are still unknown, such as the location of the landfill site, the complexity of land access and ownership, the sensitivity of adjacent forest reserve for all potential sites under review, and the novelty in the construction and operation of the landfill site and associated technologies and

(b) Neighborhood upgrade, where the specific type of intervention/activity and the engineering design and layout of the project infrastructure have not been decided; the sensitivity of the communities; and the risk of gender-related issues.

The scoping stage will involve determining the extent and approach of the ESA and establishing or reviewing the TOR.

Step 2: Baseline Data Collection

It is essential that the current E&S condition in the project site be characterized before any works. To do this, subproject-specific baseline data, both primary and secondary (physical, biological, socioeconomic, and so on), should be collected following an agreed methodology and time frame. There are standard methodologies available and survey specialists for the various environment assessment parameters, such as for air, water, soil, noise, biodiversity, and socioeconomics.

Step 3: Identify E&S Impacts

The ESIA exercise will identify potential impacts and assess their significance. To do this, the data gathered should first be processed, analyzed, and interpreted. The identified impacts, direct or indirect, are assessed based on their permanence, magnitude, reversibility, and occurrence. Categories of impacts, direct, indirect, or cumulative, should be indicated.

Step 4: Design Mitigation Measures

Efforts should be taken to avoid or minimize adverse environmental impacts whenever possible. Appropriate mitigation measures need to be proposed to address these impacts, and a monitoring plan needs to be in place to check on the performance of these measures. Social impacts such as physical, economic, or even cultural displacement will be addressed by other instruments such as RAP/Abbreviated Resettlement Action Plan (ARAP), Gender Action Plan, and so on. While negative impacts need to be mitigated, positive ones do need to be enhanced. These enhancement measures should also be considered in the planning process.

Step 5: Public Consultation and Stakeholder Participation

Consistent with the World Bank's transparency policy in all of its projects, it is essential that meaningful public participation is observed in the ESIA process. The most popular way of obtaining public participation is through public consultation meetings. Early in the project planning process, local stakeholders need to be informed of the project and consulted on the ESIA TOR, and their support and cooperation solicited. This concern (participation) is even more relevant in the event of physical, economic, and cultural displacement of local people. It is essential that affected households and their leaders participate in planning for their future such as compensation for affected assets, suitable relocation site, livelihood and income restoration, employment opportunities in the construction project, and so on.

Step 6: Develop ESMP

It is anticipated that an ESMP will be developed. The mitigation and enhancement measures to address the anticipated adverse and positive impacts will need to be properly organized into a workable plan. The ESMP should contain (a) the significant E&S impacts likely to arise from project implementation, (b) proposed mitigation and enhancement measures needed to address these issues, (c) the location where these impacts will be felt and addressed, (d) responsible persons/parties, (e) schedule of implementation, and (d) budget. The entries in the ESMP can be further arranged based on the project phase (that is, pre-construction, construction, and operations and decommissioning), as well as the affected environment (that is, physical environment, biological or natural environment,. and socioeconomic environment). This plan is subject to the review and approval by the project owner and the World Bank as part of the ESIA or as a stand-along document, before its inclusion into the bidding documents and implementation.

Step 7: Prepare ESIA Report

The ESIA report is to be prepared following the standard report format prescribed by the World Bank and contains the elements that had been described in the first six steps above. The ESIA will also be posted on the client website and the World Bank's website in accordance with its transparency policy, after it has undergone review and approval by the World Bank.

Step 8: Clearance

All ESIAs/ESMPs should be submitted to the World Bank for review and approval in compliance with relevant policies, procedures, and guidelines. However, before the report is submitted to the World Bank, it will first be reviewed by the project owner. The ESMP will be posted on the client's and World Bank's websites for several days, before the document is finally considered approved and ready for inclusion into the bidding documents.

EPA currently requires quarterly and annual monitoring plans to be presented by the project owner. EPA carries out annual audits and occasional audits as required.

6 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS/RISKS AND PROPOSED MITIGATION MEASURES

The choice of instruments is informed by the nature and level of risks. Some of the proposed interventions include construction of badly needed infrastructure facilities. Others involve supply of equipment and capacity building.

6.1 Positive Impacts of the Project

The project is expected to generate the following beneficial E&S impacts:

General

(a) **Employment opportunities.** During the construction phase, employment opportunities will be directly available for unskilled, semiskilled, and skilled workers such as drivers, laborers, and technicians as well as engineers to be engaged by contractors and subcontractors on subprojects such as construction of structures and landfill facilities.

(b) Technical training programs delivered under the project will also improve capacity of these workers.

(c) There will be many job opportunities for skilled and unskilled members of the communities.

(d) There will be business opportunities to provide goods and services to workers (for example, food and drink).

(e) Some of the project subcomponents involve improvement of infrastructure services. These will lead to improved quality of life for the populace and improved health outcomes. They will also help improve the performance of businesses in those areas.

(f) With the implementation of some of the projects like the urban infrastructure and market projects, the economic condition of communities will improve and there will be greater safety especially for women. Incidences of GBV will also be reduced.

(g) Training staff and providing badly needed equipment and software to councils will enhance job performance in the councils, translating to increased revenue. This applies especially to the spatial planning and property tax-related subcomponents.

(h) Improving communications in councils will lead to better feedback from communities on council projects, resulting in overall better performance by councils to the satisfaction of residents.

(i) People will be provided with increased access to municipal services.

(j) There will be better response to the prevention and handling of national disasters.

(k) City councils will have a greater opportunity of earning more revenue, thus leading to greater sustainability.

Impacts from Neighborhood Upgrades

(a) Improved roads as for the urban infrastructure project will ease the transportation problem of residents in those areas.

(b) Access to modern infrastructure services improves the quality of life and the performance of businesses. Employment opportunities may be created.

Impacts from Greening Developments

(a) The urban greening project will lead to a reduction in hazardous conditions and improvements in water catchment area leading to improved provision of water.

Impacts from Landfill Developments

(a) This will result in better sanitation and health outcomes.

(b) This will enable closure of existing landfills that may be causing E&S problems.

Impact from Market Upgrades

(a) Clean and sanitary environment affecting on traders' health and food hygiene

(b) Increased income for councils

(c) Increased profit for traders.

6.2 Negative Impacts of Subcomponents with Environmental and Social Footprint

There will also be some potential adverse E&S impacts/risks associated with some of the interventions. These are discussed in Tables 16–19 together with their corresponding broad mitigation measures.

General

(a) Excavation and land clearance during construction may pose danger to workers and communities. There will be considerable excavation associated with the urban infrastructure, market, and SWM landfill subcomponents.

(b) There may be a need for resettlement in certain instances, depriving people of their homes, businesses, and/or livelihoods. The landfill project and urban infrastructure projects may require resettlement of people. The market projects will involve temporary displacement of traders.

(c) Likely ESH/SH, sexually transmitted diseases (STDs), and community health and safety concerns.

(d) Non-adherence to labor and working conditions requirements.

(e) Chances of disturbance to cultural heritage.

(f) Dust and emissions and noise during the construction phase may cause health problems to workers and communities. Both the landfill project in Freetown and the urban infrastructure project will entail the use of a considerable number of equipment during construction.

(g) Construction projects involving machinery may pose danger to workers and communities during construction.

Impacts from Neighborhood Upgrades

(a) Miscellaneous risks to the public in relation to vehicular traffic and unfamiliarity with traffic systems (for example, traffic lights), which could result in injury and death.

(b) Improved conditions may lead to an influx of people into the area with a possible increase in crime and GBV.

Impacts from Greening Developments

(a) There may be valuable loss of fauna and flora during land clearing.

(b) They could lead to land conflicts if not handled well.

Impacts from Landfill Developments

(a) Improper siting of landfill sites may pose danger to neighboring communities. The operation of current and new landfill sites causes a number of EHS problems to communities.

(b) Operation of landfill could affect people in the vicinity if not managed well. Possible leakage of leachates may affect groundwater, and odor and other effects could be unpleasant.

(c) There may be valuable loss of fauna and flora during land clearing.

Impact from Market Upgrades

(a) There may be increased traffic around market area.

(b) Improved conditions may lead to an influx of people into market with the possible increase in crime and GBV.

(c) The demolition of sections of the market structure during rehabilitation could expose contractor workers, petty traders, and customers to asbestos dust if the structure is made up of asbestos-containing materials (ACMs). ACMs were used in roofs, pipes, and building installations up until the 1990s.

6.3 Mitigation Measures

Mitigation and management measures are outlined for various impacts in Tables 16–19 for the following phases of the project:

- Design/planning
- Construction
- Operation
- Decommissioning

Table 16: Planning Stage E&S Impacts and Mitigation Measures

E&S Aspects	Impact Description	Mitigation/Enhancement Measures
Construction Planning and Design	Improper planning at this stage will result in serious consequences which may result in injury and loss of property and/or life.	• Feasibility Study and ESIA prepared in parallel. Proper planning toward the construction phase including choice of construction standards, materials, equipment, contractor, and so on will greatly minimize this risk. Landfill facility design will include adequate buffer zones from settlements and provisions for capturing the leachate and GHG emissions. Construction planning should also consider the temporary relocation of traders for the market subcomponents.
Hydrogeology	Excavation, land clearance, and development of roads could give rise to interruption of hydrogeological conditions and groundwater flows.	• Design structures to avoid intrusion below the water table where possible, maintain groundwater flows, and avoid significant impacts on hydrogeological conditions.
Compliance with Local and International Engineering Standards and Guidelines	Failure to comply with stipulated standards and guidelines will amount to noncompliance with detrimental environmental, occupational, and social effects.	• Designers should be guided by local and international design standards.
SWM Issues	Improper planning especially related to poor siting may affect the operation of a landfill.	• A sanitary landfill is a carefully engineered, structurally stable formation of segregated waste cells separated by soil cover material, with base and side slopes designed to minimize infiltration and facilitate collection of leachates. Landfills are sited, designed, and operated to isolate the wastes from the surrounding environment, particularly groundwater and nearby communities. • **Landfill siting.** The location of the landfill should consider potential impacts associated with releases of polluting substances, odors, proximity to groundwater and surface water, topography, access, and a host of other factors. • Recommended contaminated runoff management strategies include the following: ·when siting, consider the proximity of waste handling and storage areas to water supply wells for people and animals, irrigation canals, and surface water bodies that support aquatic life and the ability to prevent contaminated leachate and drainage from entering surface water and groundwater.

E&S Aspects	Impact Description	Mitigation/Enhancement Measures
Urban Greening Issues	Improper planning at this stage will result in non-sustainability of trees planted. Planning must include several factors such as planting sites, species to be planted, monitoring, community issues, and so on.	• Greening measures, particularly in the upper catchment areas, are considered the best way to mitigate the effects of severe landslides and flooding • Implementing measures in the upper catchment
Land Acquisition, Physical and Economic Displacement	Loss of property and livelihoods will occur as a result of the planned interventions.	• A comprehensive RAP and Livelihood Restoration Plan will be implemented to compensate for lost property and livelihoods, as well as relocation where required.
COVID-19 Considerations	• Designing should consider WHO standards on ventilation and other engineering controls as well as social distancing standards and hand hygiene/sanitary facilities to avoid the spread of COVID-19. • Poorly designed facilities without ramps and separate toilets facilities for females and males may exclude physically challenged and women and other vulnerable groups from accessing the facilities.	• The design will be guided by the WHO Guidelines on Water, Sanitation, Hygiene, and Waste Management for COVID-19; Consideration for Quarantine of Individuals in the Context of Containment for COVID-19; and other relevant guidelines. • All design drawings will be vetted by the appropriate professional and town planning authorities (Ministry of Public Works and Assets) as well as the Ministry of Children and Gender and Ministry of Social Welfare and Disability and Women Groups. • Building permits will be obtained before the commencement of works from the relevant councils.
Incorporation of Gender, Disability and Children Considerations in Design	There may be a tendency to ignore the special needs of women, the disabled, and children in the design.	• The design should incorporate separate sanitary facilities for women, need for ease of access by the disabled, and convenience of children brought to the facilities.

Table 17: Construction Stage E&S Impacts and Mitigation Measures

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
Air Quality	Dust generated from construction machinery can cause considerable nuisance to nearby communities and can cause health problems including respiratory complaints/diseases.	• Dust minimization measures shall be implemented including watering of the construction areas and the road surfaces under construction. • Soil stockpiles and stores of friable material will be covered to reduce the potential for fugitive emissions of dust where possible. • Vehicles carrying friable materials will be enclosed or sheeted. • Loading, unloading, and handling of dusty materials will only be carried out in designated areas. • Workers would be provided with dust protection PPE. • The project will adopt the relevant World Bank Environmental Health and Safety Guidelines for air quality.
	Emissions from construction activities like fuel combustion, power generators, concrete batching plant, and operational vehicles could cause adverse impacts on air quality affecting the health and welfare of people, crops, and sensitive natural fauna and flora.	• Effective preventative maintenance will be established to ensure all construction equipment and electricity generators are maintained in good working order and do not adversely impact air quality due to inadequate maintenance or damage. • Concrete batching, crushing, and screening plants will be fitted with dust extraction and/or suppression systems where necessary. • Use of ozone-depleting substances such as chlorofluorocarbons, halons, carbon tetrachloride, trichloroethane, and halogenated hydrobromofluorocarbons will not be permitted.
	Exposure of workers, petty traders, and customers to asbestos dust from ACM from the demolition of sections of market structures constructed up until 1990s. The fibers, when inhaled, can lodge in the lungs for prolonged periods, posing serious respiratory health risks, the symptoms of which may be chronic. In extreme cases, the resulting conditions such as asbestosis, mesothelioma, and lung cancer can be fatal.	• There are no national regulations on handling asbestos or managing its risks. EPA does insist on clients following best practice. Before construction work, the contractor, with the help of a specialist, shall conduct an assessment of market structures to determine the presence of ACM. The handling of ACM if encountered in the market shall follow a hierarchy of mitigation that favors avoidance over mitigation. The client shall revise the engineering design to avoid ACM sections. Where avoidance is impossible or where the intervention is absolutely necessary, an asbestos management plan shall be included in the site-specific or contractor ESMP. The ACM section will be removed in such a manner as to minimize the release of asbestos fibers, through bagging or adequate wetting. The workers carrying out the task must wear appropriate PPE and must shower before leaving the workplace. The transportation and disposal of the ACM must be done in consultation with EPA. The contractor shall minimize the extent of transportation to prevent exposure of the community to the hazard.

<table>
<tr><th>E&S Aspect</th><th>Impact Description</th><th>Mitigation/Enhancement Measures</th></tr>
<tr><td>Noise and Vibration</td><td>

Noise and vibration result from construction activities such as the operation of heavy machinery, concrete mixing plants, stone crushing, and so on.
Noise and vibrations will be a source of disturbance to communities, schools, and churches within the project areas; workers will also be at risk of exposure to elevated noise levels posing health risks.

</td><td>

Activities producing excessive noise levels will be restricted to the daytime, and equipment normally producing high levels of noise should be suppressed or screened when working within a distance of some 200 m from any sensitive noise receptors.
Near places of worship, construction producing nuisance-level noise be minimized or rescheduled to not occur on locally recognized religious days.
Work areas will be organized, and operators shall strive to restrict noise levels to not exceed World Bank thresholds at the nearest sensitive receptor during normal activities. If existing noise levels exceed these threshold values, the project will not cause more than a 3 dB increase in measured ambient levels during normal activities.

<table>
<tr><th rowspan="2">Receptor</th><th colspan="2">Noise level
One Hour L_{Aeq} (dBA)</th></tr>
<tr><th>Daytime
07:00 – 22:00</th><th>Night-time
22:00 – 07:00</th></tr>
<tr><td>(Type of district)</td><td></td><td></td></tr>
<tr><td>(a) Residential; institutional; educational</td><td>55</td><td>45</td></tr>
<tr><td>(b) Industrial; commercial</td><td>70</td><td>70</td></tr>
</table>

Advance notice will be given to communities if short-term noisy construction activities are to take place, which could cause these levels to be exceeded.
Measures to minimize noise during construction will include

Locating and orientating equipment to maximize the distance and to direct noise emissions away from sensitive areas;
Using buildings, earthworks, and material stockpiles as noise barriers where possible; and
Turning off equipment when not in use.

A preventative maintenance program will be established for equipment and vehicles to not emit excessive noise or vibration due to inadequate maintenance or damage.
Personnel will be made aware of the importance of minimizing noise and the measures that are required in this regard.

</td></tr>
</table>

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
Soil Erosion	• Soil erosion is likely to occur as a result of earthworks including the exposure of loose soil. • Eroded material can block drains and also end up in watercourses, affecting water quality.	• Slope stability measures will be incorporated such as benching and installation of erosion protection features such as silt barriers and sedimentation ponds. • Area to be cleared will be kept to the minimum necessary to prevent disturbance of soils outside the boundary. • Where possible, drainage outlets will discharge into vegetated areas and not to exposed soil. • Vegetation along drainage lines and gullies will be protected where practicable to provide natural attenuation of flows. • In areas of ground clearance, topsoil will be stripped and salvaged as much as possible.
Water Quantity	Water abstraction from local water sources may result in reduced water availability to local communities. The neighborhood infrastructure upgrading project, market project, and landfill project may require abstraction of water from various sources.	• As much as possible, water for the project will be supplied by the GVWC or SALWACO water bowsers, depending on the location of the construction activities. Dependence on community water (for example, standpipes) will be kept to a minimum. • Water use will be monitored and recorded to maximize efficiency of water use and minimize waste. • Reuse of water will be undertaken where practical and safe. • The project will adopt the relevant World Bank Environmental Health and Safety Guidelines for water quality.
Water Quality	Pollution of water resources may arise as a result of accidental spillage or leakage of construction or waste materials. Pollution may also arise from leakage of oil and fuel.	• Refueling, maintenance, and wash-down of construction vehicles and equipment will only occur in designated areas and away from surface water bodies and provided with secondary impermeable containment measures. • The construction contractor will be contractually required to take all reasonable precautions to prevent and clean up all spills/leaks and take necessary measures to prevent materials from falling into the river or pollute soils or groundwater. • The ESMPs, including spills and waste management measures, will be implemented. • For work to be undertaken close to surface water bodies, measures will be taken to ensure that pollution of water resources does not occur.
Aquatic Ecology	Aquatic flora and fauna may be affected as a result of pollution from soil and other contaminants being carried into waterways by surface runoff. Organisms may die or have their mating, migration, and other activities interrupted.	• The construction contractor will implement waste management and EHS plans to limit water pollution.

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
	Loss of wetland habitat will include loss of some plant and animal biological diversity.	• No species of global conservation significance exist at the project sites, and so, it is expected that such species will not be affected. Aquatic bird species only exist a considerable distance away from the project sites.
Terrestrial Fauna	Mammals, small reptiles, and birds will be affected by construction activities.	• No species of global conservation significance exist at the project sites, and so, it is not expected that such species will be affected. • Workers would be advised that in the unlikely event animals are seen, they are not to be killed but instead caught and released into a similar environment.
Vegetation	A major unavoidable impact of roadworks is the effect on the terrestrial vegetation in the vicinity of the construction works.	• Vegetation clearing in the proposed intervention areas will be minimal as these are already built-up areas. • Vegetation clearing, where unavoidable, will be confined to the immediate construction site. • Specific spaces should be set aside for addressing some environmental and beautification needs of the project areas, such as planting of trees and ornamental vegetation. • Care will be taken to protect trees.
Contractor's Camp	Contractors' facilities adversely affect the health and welfare of workers.	• Good standards in living facilities will be ensured to avoid safety hazards and to protect workers from diseases and/or illness. • Access will be provided to an adequate amount of free potable water for drinking and personal hygiene uses. • Wastewater, sewage water, and other waste materials will be disposed of according to national legislation. Septic tanks will be used to collect sewage water. • Workers' accommodation has to be unaffected by the environmental or operational impacts of the worksite (for example, noise and emissions of dust). • Number of workers per room will comply with international standards. • Workers must be able to maintain a good standard of personal hygiene, and contamination or spread of disease must be prevented. • Good standards of hygiene will be maintained in canteen/dining and cooking facilities. • Security will be guaranteed to workers and their property (personal belongings) on site. • Grievance mechanism for workers will be in place.

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
Movement of Construction Materials	Movement of construction materials causes/poses health and safety concerns.	• The Transport Management Plan will be part of the Contractor Environmental and Social Management Plan (CESMP) and will limit vehicle speeds at the construction sites and when passing through communities. • Follow good OHS practices for workers in compliance with the OHS Plan. • Put measures in place to ensure health and safety of the public. • Put measures in place to ensure smooth and safe transportation of materials.
Traffic and Safety on Roads	Traffic problems are caused by restrictions in road access because of construction activities. This may be the case for the urban upgrading project, market project, and landfill project.	• Have adequate signage in place. • Consider establishing detours. • Use flagmen to control traffic and construction machine movements. • Traffic congestion can be mitigated by traffic diversion and development and implementation of the Traffic Management Plan, delivery of equipment and supply during off-peak hours, banning of unnecessary contractor's equipment from the site, and so on.
Smell/Odor	Soil and water pollution, poor sanitary conditions, and many other factors may result in bad odor, which can affect health.	• Industrial hydrogen peroxide may be used to deodorize, disinfect, and neutralize hazardous pollutants. • Maintain good sanitary conditions. • Remove the source of the odor.
Spoils Disposal	Disposal of spoils in unsuitable areas such as hilly terrain could result in environmental impacts including erosion, water pollution, obstruction of drainage patterns, and so on. Spoils disposal will be particularly pertinent for the urban upgrading project and the landfill construction project.	• As far as practicable, spoils will be backfilled into the borrow pits as part of the rehabilitation of these borrow pits, which is a condition for the contractor. • Side tipping of spoils in any hilly locations will be strictly prohibited. • Roads will be designed to achieve a balance between the amount of spoil produced from cuttings and that required for fill to minimize the need for disposal of surplus.
Waste Management	Improper management of waste may result in environmental and human health hazards such as pollution and disease.	• Waste bins will be provided at all construction sites for the disposal of the various types of wastes generated by the project. These bins will be clearly marked to facilitate segregation of waste for collection, transportation, and disposal. • Separation of domestic and hazardous waste at the source shall be strictly enforced. • Where possible, wastes will be reused or recycled. This is a requirement for waste oils, other hydrocarbons, and tires and other hazardous and non-hazardous wastes. • Burning of waste will not be permitted. • All personnel will be trained in the appropriate management of waste according to the WMP.
Waste Oil Management	Improper management of waste oils could result in soil contamination as well as contamination of	• Waste oils generated by the project (vehicles and machinery) are to be collected and stored in sealed containers for use in the roadworks or until arrangements can

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
	ground and surface water sources (through seepage and surface runoff).	be made with companies that can use them in their operations or manage their disposal or recycle them. • Soils contaminated by waste oils encountered during the project will be scraped away and bagged, for disposal in a designated section of a landfill (in the absence of locally available recommended disposal methods).
Emergency Response and Disaster Management	Loss of life, injury, damage to equipment, and so on	• Implementation of Emergency Response Plan • Preparation and adequate implementation of the OHS Plan • Awareness raising among workers • Presence of a medical clinic, basic medicines, certified medical practitioner, and ambulance at the project sites and camp • Monitoring of potential situations leading to disaster and taking action to improve the situations.
Safety	The project may expose the public to roadworks-related hazards.	• Community consultations and meetings on the ongoing works and related hazards will be held. • Active sites will be sealed off from the public using reflective tapes and cones; where necessary, road diversions will be created. • Safety initiatives will be developed and implemented, including ○ Ensuring that only qualified (licensed) drivers operate machinery; ○ Implementing speed limits and traffic control measures in appropriate locations; ○ Implementing safety signage; ○ Installing speed control devices such as governors on trucks; and ○ Ensuring movement of large construction machinery will be guided by a flagwoman/flagman.
OHS	Injuries at construction worksites, falling objects, as well as from the use of equipment and tools, cuts from stepping on sharp objects such as nails, and other metal off-cuts are likely to occur.	• The contractor will be required to submit an OHS management plan in compliance with ISO 45001:2018, OHSAS 18001:2007, or similar standards and recruit an ISO 45001:2018-certified OHS specialist. • Workers will be provided with all the required PPE. • Toolbox talks will be carried out daily on safe work practices and other OHS issues.
Loss of Livelihoods/Resettlement	Loss of property and livelihoods can occur as a result of construction activities.	• A separate consultation, valuation, and compensation payment will be undertaken at the subproject level.

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
STDs, HIV/AIDS, COVID-19, and Teenage Pregnancy Issues	The risk of the prevalence of STDs, HIV/AIDS, COVID-19, and teenage pregnancy in nearby communities is increased with the interaction of construction workers with community youth.	• Sensitization and awareness raising will be provided among workers and communities. • All project personnel will be provided with appropriate induction training communicating health hazards, including HIV/AIDS, STDs, and malaria along with the prevention and mitigation measures required. The World Bank and WHO and national COVID-19 protocols will be followed. • Inappropriate sexual behavior by project personnel will be carefully managed through the implementation of the GBV Management Plan and enforcement of the Code of Conduct.
Community Health	Pollution of air, water, or soils and the release of hazardous substances or inappropriate management of waste could adversely affect the health and welfare of the community or lead to increased occurrence of pest species (vermin, flies, and mosquitoes).	• Community health and safety will form an integral part of the construction and operation OHS Plan. • A high standard of housekeeping will be maintained at all times in all construction work areas as will be detailed in the CESMP. • Pools of standing water will be avoided to minimize the availability of breeding grounds for mosquitoes.
Security	Security risks to construction workers arising from attempted theft of construction materials, tensions arising over grievances, and unrealistic expectations	• Regular consultations with communities will be held to provide clarity and promote transparency on the project. These meetings will prevent build-up of animosity from grievances or unfulfilled expectations which could result in violence. • Construction materials will be stored securely.
Visual Impact	Adverse visual impact connected with construction works and traffic	• No direct mitigation measure
Community Benefits from Project	• Job opportunities for skilled and unskilled members of the community • Business opportunities to provide goods and services to workers (for example, food and drink)	• Although labor recruitment is a matter for the contractor, who has the right to determine whom to employ, he/she will be formally encouraged to hire locally wherever possible, to maximize the benefit distribution and social acceptability of the project. • Opportunities for sustainable local procurement of goods and services to support road construction will be identified wherever possible, and measures will be devised to maximize the potential for these opportunities.

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
Labor Issues/Risks	• The contractors and subcontractors are likely to practice unfair/discriminatory recruitment practices (for example, against women) and recruit unqualified persons to work on site. • Consultants, contractors, and subcontractors may attempt to subvert the national labor laws. • There is a tendency for contractors and subcontractors to engage children and youth 18 years and below, exposing them to hazards associated with civil works.	• Labor Management Plans shall be prepared by project contractor(s) based on the project LMP for approval by the World Bank/PMU to guide labor relations. • Contractors and subcontractors will be required to hire labor through a structured HR process and not 'at the gate'. • All workers will be given contracts specifying the type of work they are to undertake and their remuneration package as well as their conditions of service. • All contracts will be vetted by the Ministry of Labor and Social Security before they are signed by workers. • Contractors shall be required to consider alternative work schedules or shifts to accommodate the hiring of more female workers. • Certain employment opportunities on site should be preserved for vulnerable persons such as persons living with disability and women, for example, wardens. • A grievance mechanism system will be made available to all workers to report any issues associated with OHS and/or labor and working conditions. • All workers will sign a Code of Conduct before start of work. • Contractual clauses will be inserted in contract documents prohibiting the contractors/consultants and their employees from forced labor and child labor, which also makes reporting all child labor cases to law enforcement agencies, the Grievance Redress Committee, and project consultant mandatory.

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
Incidence of GBV and SEA/SH among Site Workers	• Employees of project contractors and subcontractors may be involved in SH and rape as well as defilement of young boys and girls. • Employers and supervisors may request for sexual favors as a prerequisite for employment opportunities and opportunities at the workplace. • Workers may also be engaged in issuing threats, insults, assault, and other forms of abuse on girls, women, children, and other vulnerable groups within subproject communities. • Social and cultural restrictions on women's mobility and participation in public life and community consultations and SEA may occur.	• Clearly define the GBV requirements and expectations in the bid documents for a GBV Action Plan, Code of Conduct for workers, and adequate costing for implementing the GBV Plan. • The CESMP should, among others, set out the mechanism for receiving, reviewing, and addressing GBV complaints in a confidential manner, workers' SEA/SH Code of Conduct and the accountability framework, mapping of GBV response actors within the project areas and working with them to provide quality survivor-centered services including case management, referral services, link to others services not provided by them, and so on. • The supervising consultants' team should include a GBV specialist to supervise implementation of the contractor GBV Plan. • Contractual clauses on mandatory and regular training for workers on required lawful conduct and legal consequences for failure to comply with laws on nondiscrimination and GBV will be inserted in the contractors and consultants' contracts as well as those of PMU staff. • Contractual clauses with a commitment to cooperate with law enforcement agencies investigating cases of GBV will be inserted into the contract documents of the contractors, subcontractors, and supervising consultant. • Workers of project consultants, contractors, and subcontractors will be made to sign the Code of Conduct with acceptable behavior and sanction against GBV. • Sensitization workshops/training on GBV/SEA/SH shall be undertaken for all employees of the contractor/supervising consultant and subcontractors. • Contractors shall provide contact numbers of the nearest law enforcement agency office, the Grievance Redress Committee members, and GBV/SEA service providers/Family Support Unit to workers and paste the same at vantage points within the project zones/sites/communities. • Prohibition posters on sexual exploitation and harassment will be posted in and around the sites as well as in the project communities. • A helpline will be provided and disseminated in all the project communities and facilities by the ACC/EOC to deal with GBV/SEA/SH complaints.

E&S Aspect	Impact Description	Mitigation/Enhancement Measures
Community Exposure to COVID-19 (see also above)	Site workers working within health facilities and laboratories may also pick up infections including COVID-19 and spread it among the general population.	• Communities in which subprojects will be undertaken will be sensitized on the COVID-19 symptoms and preventive measures and against stigmatization of persons with COVID-19 and other infectious diseases using the mass media. • Contact numbers (hot lines) of the nearest health facility will be pasted at vantage points in the communities, where the subprojects will be implemented. • Workers will not be allowed to receive visitors in project/camp sites without the express permission of the site supervisor.

Table 18: Operational Stage E&S Impacts and Mitigation Measures

Environmental Aspect	Impact Description	Mitigation/Enhancement Measures
Road Safety	Improved traffic signalization, availability of pedestrian footways, and improved road features (roundabouts, and so on) will reduce the risk of road user hazards.	• Effective maintenance of roads and related features to ensure that they are kept in proper working condition.
Traffic Flow	Traffic flow may be fast and result in accidents.	• Effective maintenance of roads and related features to ensure that they are kept in proper working condition.
Hydrology and Drainage	Blocked drainages may result in overflowing gutters and flooding in some areas.	• Gutters to be regularly desilted • Communities to be sensitized against throwing garbage into gutters or other waterways (particularly in the market area).
Water Quality	• Pollution of surface water and groundwater sources may occur through poor waste management, resulting in wastes being carried away by surface water. • Deliberate dumping of wastes in waterways is also a source of pollution.	• Communities to be sensitized on waste management issues and against throwing garbage into gutters and waterways • Adequate numbers and sizes of waste bins to be made available • Provision of adequate (size and number of) sanitation facilities • The residents in the surroundings should be compelled to construct proper toilet facilities. Otherwise, there is a high risk of them exhausting the facilities that will be provided for the park and market and/or contaminating the surrounding through open deposition of human excreta, which will ultimately contaminate the hydrological system in the area.

<table>
<tr><th>Environmental Aspect</th><th>Impact Description</th><th>Mitigation/Enhancement Measures</th></tr>
<tr><td>Ecology</td><td>While most of the project-related ecology impacts will likely be experienced during the construction phase, the operations phase, without any specific projects, will not result in any restoration.</td><td>• Plant trees and ornamentals plants (flowers and grasses) on locations set side during construction to create some ecological beauty and at the same time provide environmental service to these areas and the people using them. These spaces and the planted vegetation could also serve as road habitats for some crawling fauna and birds.
• Establish an effective mechanism to ensure that planted roadside vegetation and ornamental flowers and grasses are well kept and controlled so that they do not become overgrown and be a nuisance to the ecology of the area.
• Maintain a proper waste disposal system so that potential pollutants and contaminants into the soil and hydrological system can be prevented or at least controlled.</td></tr>
<tr><td>Air Quality</td><td>Interventions to reduce traffic congestion will result in shorter traffic delays and reduced incidence of vehicle idling. This will improve air quality within these communities and also reduce the GHG effect on ozone depletion.</td><td>• Effective maintenance of roads and related features to ensure that they are kept in proper working condition</td></tr>
<tr><td>Noise</td><td>Noise and vibration may result from day-to-day activities. Noise may be a result of a market, religious establishments, generators, and many other activities.</td><td>• Activities producing excessive noise levels will be controlled, and equipment normally producing high levels of noise should be suppressed.
• Markets will be properly sited.
• It will be ensured that noise levels do not exceed World Bank thresholds at the nearest sensitive receptor during normal activities. If existing noise levels exceed these threshold values, the project will not cause more than a 3 dB increase in measured ambient levels during normal activities.
<table>
<tr><th rowspan="2">Receptor</th><th colspan="2">Noise level
One Hour L_{Aeq} (dBA)</th></tr>
<tr><th>Daytime
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<tr><td>(b) Industrial; commercial</td><td>70</td><td>70</td></tr>
</table>
• Advance notice will be given to communities if short-term noisy construction activities are to take place, which could cause these levels to be exceeded.</td></tr>
</table>

Environmental Aspect	Impact Description	Mitigation/Enhancement Measures
Public Health and Safety	Miscellaneous risks to the public in relation to vehicular traffic and unfamiliarity with traffic systems (for example, traffic lights), which could result in injury and death	• Regular community sensitization programs, radio programs, and so on, on road safety issues
Management of Sanitary Landfills and Dumpsites	• Badly managed sanitary landfills and dumpsites are a risk to public health and a risk to the aquatic and terrestrial environment. • Other impacts related to the development of engineered landfill are traffic, movement of solid wastes, leachate generation, potential for odor, influx of scavengers, management of surface runoff, potential for groundwater pollution, and so on.	• Sanitary landfills and dumpsites will be constructed and operated in compliance with international standards. The operation requirements will be detailed in the ESIA/ESMP for each sanitary landfill and dumpsite. The ESMP should address issues of traffic control, management of surface runoff, and many other issues affecting the operations.
Smell/Odor	Soil and water pollution, poor sanitary conditions, and many other factors may result in bad odor, which can affect health.	• An industrial hydrogen peroxide may be used to deodorize, disinfect, and neutralize hazardous pollutants. • Maintain good sanitary conditions. • Remove the source of the odor.
Emergency Response and Disaster Management	Poor management of emergencies or disasters could result in injury, loss of life, and disruption of livelihoods.	• Implementation of National Disaster Management and Preparedness policies and procedures • Awareness raising of general emergency response procedures • Hazard identification and implementation of preventative maintenance/actions (for example, immediate repairs to road damage/wear such as potholes, and maintenance of safety features at the ferry terminals).
Security Issues	Security risks around facilities may heighten due to the attraction of modern facility and increased localized trading, customers, traders, and vulnerable groups (women, disabled persons, and so on)	• Provision of police or guards in and around the market area • Formation of local security watch groups among traders.
Resettlement Issues	Complaints and grievances are expected to continue to arise during and after the resettlement process.	• Establish and implement a grievance mechanism that ensures that complaints are received and handled within the shortest possible time.

Environmental Aspect	Impact Description	Mitigation/Enhancement Measures
Urban Greening Issues	The pressures of the rapidly expanding city are taking an increasing toll on the forest expanse, with the fringes of the city rapidly pushing up into the mountains of the forested peninsula. Such an expansion fueled by intense deforestation is a critical cause for concern, as the forested area lost and under threat provides vital functions for the city, such as a catchment for water reserves and as a protector against natural hazards including landslides, flooding, and coastal erosion. Tree and vegetation cover loss in Freetown and the Western Area peninsula has also created loss of biodiversity and habitat in the forest and woodlands system along the Freetown peninsula.	• Encourage reforestation by planting trees around rivers to increase the floodplains as these are the areas especially susceptible to erosion, and plant and grow trees on steep slopes to help stabilize sediments and slopes. This will, among others, ○ **Moderate temperatures.** Trees provide shade that can significantly reduce temperatures and, when strategically placed around buildings, can lower air-conditioning requirements. ○ **Moderate storm water runoff.** Tree canopies and roots absorb heavy rainfall and reduce storm water flows. This reduces runoff and pollutants entering water courses. ○ **Reduce air pollution.** Trees absorb gaseous pollutants through their leaves such as ozone, nitrogen dioxides, and sulfur dioxide while at the same time producing oxygen. Trees are important to climate change mitigation considering their ability to remove carbon dioxide from the atmosphere and act as carbon sinks. ○ **Provide habitat.** forests provide a range of habitats for a wide variety of species. They contribute significantly to local biodiversity and provide connecting networks for regional biodiversity.
Exposure of Employees of Contractors and Subcontractors to COVID-19 and Other Infections	Employees of project consultants, contractors, subcontractors, and third-party contractors may be exposed to COVID-19. Third-party suppliers may also find themselves in the same environment while doing deliveries.	• A detailed work program will be prepared for each of the civil works allowing for rotation of workers and other measures that avoid overcrowding on site. • All employees of project consultants, contractors, and subcontractors including cleaners will be made to undergo sensitization on COVID-19 preventive measures and symptoms based on the WHO Guidelines for Rationale on the use of PPE for COVID-19, Getting Your Workplace Ready for COVID-19, and so on; as part of the OHS training. • Persons including workers and visitors entering or leaving the site will be documented in a log or visitors' book as appropriate. • Daily basic health screening will be undertaken for all workers and visitors on site, for example, checking and recording temperature. • Periodic toolbox meetings will include briefing on COVID-19-specific issues including symptoms, cough etiquette, hand hygiene, and distancing measures and reporting symptoms of COVID-19 to the health and safety officer on site, using demonstrations and participatory methods.

Environmental Aspect	Impact Description	Mitigation/Enhancement Measures
		• Workers from affected areas or who have been in contact with an infected person upon returning to site will be made to self-isolate for 14 days, and the relevant health authorities will be notified. • Sick workers will be prevented from entering the site and referred to local health facilities. • Posters and other education/illustrative materials on COVID-19 and other infections will be pasted at vantage points on site and given to workers and visitors. • Site workers will be provided with toilet, handwashing facilities, and disinfectants on site as well as at their accommodation, for example, soap, laundry services, disposable paper towels, closed waste bins, and so on. • All subproject contractors and subcontractors will be made to recruit qualified and ISO 45001:2018 certified OHS supervisors/officers.
Potential social issues	• **Conflict of management of facilities.** Various interest groups may push for monopoly of usage or may bring political and other pressures to bear on usage. • **Maintenance and sustainability of project infrastructure.** Infrastructure needs to be maintained for project to meet its expectations. • **Discrimination on usage of project facilities for the poor and vulnerable** (for example, after market rehab, allocations of stalls may be discriminatory and some market women are unable to return due to cost of payment, and so on).	• Clear guidelines should be drawn to indicate how various facilities should be managed, as well as funds and procedures for maintenance and use of facilities by the disabled. • The GRM must be extended beyond the construction phase and cater for grievance issues during operation of facilities.

Table 19: Decommissioning Stage E&S Impacts and Mitigation

Environmental Aspect	Impact Description	Mitigation/Enhancement Measures
Air Quality-Dust and Emission	**Impact during decommissioning** The use of vehicles and equipment during decommissioning and closure of the site may contribute to dust and exhaust emissions. **Positive Impact (Post decommissioning)** Air quality in the area will improve, with the absence of fumes from vehicles and operational machinery following decommissioning.	• Ensure machinery receive maintenance during this period; workers to be provided with adequate PPE. • E&S monitoring to be conducted up to 2 years after closure.
Noise and Vibration	Removal of structure components may create some amount of noise and vibrations due to the type of machinery used.	• Activities will be conducted during the day for minimal impact on communities. Workers to be provided with adequate PPE.
SWM Issues	• Accumulated waste may attract disease vectors, contribute to clogging of drainage and sewerage networks, make waste readily accessible to neighborhood animals and birds, and pollute waterways. • Air emissions from SWM collection and transport include dust and bioaerosols, odors, and vehicle emissions. • **Problems with hazardous waste.** Contaminated runoff leachate from waste piles caused by exposure to precipitation and from residual liquids in the waste itself may contain organic matter, nutrients, metals, salts, pathogens, and hazardous chemicals. If allowed to migrate, leachate can contaminate soil, surface water, and groundwater potentially causing additional impacts such as eutrophication and acidification of surface water and contamination of water supplies. • **Noise and vibration.** Principal sources of noise and vibration include truck traffic; loading equipment (for example, cranes and wheeled	• To minimize litter and clandestine dumping, include and encourage use of containers or bags for waste at the point of collection and implement a regular collection schedule with sufficient frequency to avoid accumulation of garbage and raise public awareness. • Encourage separation of recyclable materials at the point of generation, so that the collection points do not become sorting points for informal sector waste pickers. • To minimize dust, bioaerosols, and odors, establish frequent waste collection schedules and promote use of bags. • Segregate potentially hazardous materials or wastes identified, including infectious waste, and manage as a hazardous or infectious waste, as applicable. • Recommended noise management strategies include constructing a buffer zone between the facility and the external environment or locate facilities away from sensitive receptors.

Environmental Aspect	Impact Description	Mitigation/Enhancement Measures
	loaders), stationary compactors, balers, grinders, and other treatment and conveyance systems. • **Fire.** Biodegradable wastes can be combustible, and aerobic degradation can produce sufficient heat to cause spontaneous combustion in certain circumstances.	
Closure		• Even after closure, landfills required long-term care, including maintenance of the cap system, collection and treatment of leachate, collection and flaring or utilization of landfill gas, and monitoring of groundwater so that the waste remains isolated. • Specific closure procedures should focus on the preservation of the long-term integrity and security of the site, preferably with a minimum of maintenance.

6.4 Design Measures

General

At the planning stage, the main concern will be ensuring that designs are done in such a way as to limit the negative E&S impacts that could occur during construction and operations/use of the sanitary landfills, dumpsites, markets, and roads/facilities. Proper planning toward the construction phase including choice of construction standards, materials, equipment, contractor, and so on will greatly minimize this risk. Design considerations will include the development of specifications, with respect to appreciable construction codes and standards, for the various features of the project subcomponents to ensure that they can be safely operated for the expected duration. The design lives and maintenance intervals and responsibilities for civil, mechanical, and electrical components of the structure will be specified during this stage.

Many aspects of civil engineering design will be involved in the urban infrastructure and market projects. The sanitary landfill and dumpsite facilities design needs careful consideration related to both the siting and design of main facilities and ancillary facilities. Provision should be made for adequate buffer zones from settlements, adequate daily covering of solid waste and provisions for capturing the leachate and GHG emission. A sanitary landfill is a carefully engineered, structurally stable formation of segregated waste cells separated by soil cover material, with base and side slopes designed to minimize infiltration and facilitate collection of leachates. Landfills are sited, designed, and operated to isolate the wastes from the surrounding environment, particularly groundwater by using a geo-membrane or other impermeable material.

Special Considerations for Users

The designs should consider the use of facilities by various stakeholders including women, children, and the disabled. They should incorporate separate sanitary facilities for women, need for ease of access by the disabled, and convenience of children brought to the facilities.

Incorporation of Climate-Resilient Standards

Infrastructure investments will be designed to climate- and disaster-resilient standards. Energy-efficient street lighting must be used and the use of locally sourced materials encouraged. Low-carbon construction designs will be prioritized to reduce GHG emissions.

Construction Codes and Standards

The structural design will be done under national or international codes of practice which include British Standard codes and American standards of relevance to the project site as specified by the consultants.
The contractor is required to establish procedures for testing of all materials, equipment, and plant in accordance with approved/specified standards and to promptly produce certificates of such testing including all test certificates for proprietary materials, plant, and equipment. All testing procedures and documentation shall be subject to the approval of the engineer.

7 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS

Some of the projects will involve major construction works and in some cases near or in densely populated areas (neighborhood and market upgrades). Depending on the scale of the activity, an ESIA will be required. All construction works will require the preparation and implementation of ESMPs to mitigate anticipated impacts. The content of the ESMPs will be guided by the nature of risks. Typically though, ESMPs will cover pollution risks and inefficient resource use, OHS and labor and working conditions, community health and safety (including COVID-19 preparedness and response), and so on. Other subprojects may only involve small construction and rehabilitation works. For subprojects of this nature, ESMPs should suffice. Once approved by the World Bank, the ESMPs will be disclosed and included in the works contracts of the various subprojects. Where there is land acquisition involving involuntary resettlement, an RAP or ARAP will be prepared. Subproject ESMPs including their accompanying contractual clauses will be included as an integral part of any works or supervision contract for each subproject. Subproject safeguards instruments will be prepared by consultants and reviewed by the E&S and OHS officers in the PMU. The requirements of each subproject will determine the management plans in the ESMP document. Some of these are

- WMP,
- Traffic Management Plan,
- OHS Plan,
- Community Health and Safety Plan,
- Biodiversity Management Plan (where applicable), and
- Cultural Heritage Management (where applicable).

Stakeholders engagement will be carried out periodically, and the SEP will update throughout the project life cycle. The following sections describe some of the main management plans.

7.1 Labor Management Plans

An LMP document has been produced (Annex 9). This provides the framework for addressing the specific impacts that are anticipated as a result of the implementation of the RUSLP. It is a planning tool that sets out a formal procedure for the protection of workers' rights and to manage and implement measures that will avoid or reduce labor-related impacts on community health, safety, and security. It is expected that the LMP will be further updated into a plan by the chosen contractor during implementation. The main purpose of the LMP is to protect the rights, health, safety, and well-being of workers who will be engaged during the implementation of the project, especially employees who will be engaged in the civil works under the project. It considers both national and international labor requirements, especially the World Bank's Standard on Labor and Working Conditions (ESS2). The scope of the LMP covers all types of workers: skilled and unskilled workers, including volunteers, who will be engaged directly and/or indirectly during the implementation of the RUSLP. Specifically, the LMP will be applicable to staff at the PMU and contractors who will be a part of the project. It will also apply to all workers who will be hired during the construction phase of the project, and deals with all aspects relating to recruitment, labor and working conditions, management of worker relationships, and OHS. The LMP also include measures related to the management of workers engaged by third parties or contractors, and the management of workforce-

related risks within the supply chain. The FDD under the MOF will bear ultimate responsibility for all labor issues during the implementation of the project. However, the Ministry of Labor and Social Security shall be responsible for the technical guidance and enforcement of the labor requirements associated with the project. Individual agencies such as the LCs and the contractors will play leading roles in direct supervision and enforcement of all the LMP pertaining to subprojects in their localities. The section of this report on impacts and mitigation measures related to labor issues/risks stipulates the following:

- Labor Management Plans shall be prepared by project contractor(s) based on the project LMP for approval by the World Bank/PMU to guide labor relations.
- Contractors and subcontractors will be required to hire labor through a structured HR process and not 'at the gate'.
- All workers will be given contracts specifying the type of work they are to undertake and their remuneration package as well as their conditions of service.
- All contracts will be vetted by the Ministry of Labor and Social Security before they are signed by workers.
- Contractors shall be required to consider alternative work schedules or shifts to accommodate the hiring of more female workers.
    - Certain employment opportunities on site should be preserved for vulnerable persons such as persons living with disability and women, for example, wardens.
    - A grievance mechanism system will be made available to all workers to report any issues associated with OHS and/or labor and working conditions.

Other issues that could adversely affect labor including the COVID-19 pandemic, HIV/AIDS/STD issues, air quality, and dust are amply dealt with in this report.

Subproject contractors will prepare for the approval of the World Bank subproject/site-specific Labor Management Plans to guide recruitment and labor relations. The Labor management Plans will be guided by the requirements of ESS2 and Sierra Leone labor laws. Subproject contractors will be expected to implement the mitigation measures in the various subproject LMPs under the direct supervision of the subproject consultant and monitoring by the PMU's social safeguards officer.

7.2 GBV Action Plan

The GBV Action Plan is used to outline the project's GBV prevention and response activities. The plan outlines how the project will put in place the necessary protocols and mechanisms to minimize the risk of exacerbating GBV in the project, as well as to address any GBV issues that may arise. The following primary actions are included in the Action Plan:

(a) Develop a methodology for, and a roster of, technical specialists who can provide the assessment of risk of SEA/GBV in the project.

- The capacity requirements in the Implementing Agency and the supervision consultant team must be assessed and responsibilities defined.

(b) Build and improve staff and client capacity to address risks of SEA/GBV through the development of guidance, training, and continuous learning activities and materials.

(c) Develop a clear internal Reporting and Response Protocol to guide staff in case of incidents.

- The GRM needs to have multiple channels where complaints can be registered. Particularly for GBV, where risks of stigmatization, rejection, and reprisals against survivors create and reinforce a culture of silence, complainants may be reticent to directly approach the project management team. Coordination with a GBV NGO will be key. Additional measures may be needed to enable reporting. The GBV pathway referral system should include services available for survivors of GBV.

(d) Strengthen operational processes for the project, including mandating Codes of Conduct for civil works contractors with prohibitions against SEA/GBV—specifically against sexual activity with anyone under the age of 18, strengthening consultation considerations and recommendations for GRMs, supervisory engineers, and third-party monitors.

- Construction contractors will be required to produce GBV Action Plan and Accountability Response Framework to be adhered to by workers.
- The contractor's GBV Action Plan needs to include specific arrangements for the project by which GBV risks will be addressed. This includes considerations such as
  - **Awareness Raising Strategy,** which describes how workers and local communities will be sensitized to GBV risks, and the worker's responsibilities under the contract;
  - **GBV services providers** to which GBV survivors will be referred, and the services which will be available; and
  - **GBV Allegation Procedures.** How the project will provide information to employees and the community on how to report cases of GBV.
- Incorporate GBV requirements into contracts for construction contractors and consultants.
- Promote female-friendly hiring and working conditions including the provision of separate toilet facilities for male and female workers, daylight working hours, and so on.
- Implement effective reporting and response mechanisms for handling GBV complaints within the workforce and the project site community.

(e) Strengthen awareness around GBV issues in development projects among staff and client partners.

(f) Within the Citizen Engagement Strategy, it must be ensured that a communication strategy will be developed to inform communities about SEA and SH risks of the project and the existing reporting and mitigation measures that will exist.

- Develop GBV awareness programs for communities through radio jingles, leaflets, posters, meetings, and so on.
- Visibly display signs around the project site (if applicable) that signal to workers and the community that the project site is an area where GBV is prohibited.

(g) Ensure budget is available to realize the recommendations, including dedicated funds to cover training and knowledge development costs, and through the establishment of a

longer-term GBV Prevention and Mitigation Fund to allocate additional resources to projects to cover additional budget requirements.

- Provision of cost responsibility for GBV and SEA cases within the project, both for cases perpetrated by contractor's workers and others, should be clearly defined.

7.3 Resettlement and Resettlement Action Plans

The preparation of RPF is required for World Bank-funded/assisted investment projects that may entail direct economic and social impacts that both result from World Bank-assisted investment projects and are caused by (a) the involuntary taking of land resulting in (i) relocation or loss of shelter, (ii) loss of assets or access to assets, or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location, or (b) the involuntary restriction of access to legally designated places and protected areas resulting in adverse impacts on the livelihoods of the affected persons. The objective of the RPF for this project prepared in October 2020 (RPF October 2020) is to provide guiding principles for the preparation of the RAP. It provides the basis for developing site-specific resettlement plan.

The RPF is prepared in accordance with the legal system, laws, and procedures of Sierra Leone, in conformity with the World Bank's ESS5 on Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.

The purpose of the RPF is to establish a comprehensive framework to guide and govern the entire RUSLP as civil works packages are defined for funding. The RPF gives a framework for the policy, principles, institutional arrangements, and procedures that the RUSLP will follow in each civil works package involving resettlement. The RPF clarifies the rules for identifying people who may be affected by the implementation of subprojects and considers the requirements of the new ESF especially ESS5, and the national laws and regulations of Sierra Leone that deal with Involuntary Resettlement. The resettlement preparation process will begin with the screening of RUSLP subprojects/activities to determine if there is a need for the preparation of any RAP. The tasks/TOR and contents for the preparation of the RAP are given in Appendix 2 of the RPF. All RAPs will need World Bank approval before commencing resettlement activities and such activities must be completed before commencing civil works. The RAP is normally informed from the output from the pre-feasibility study which determines the project's scope and the extent of the proposed works and its impact on affected communities. This information is not currently available for all the subprojects with potential resettlement implication hence the budget for RAP cannot be determined at this stage. However, project funds are expected to be used for compensation payment through project restructuring when the RAP estimates are determined during implementation. The FDD of the MOF will provide overall oversight for the development and implementation of the RAP. It will supervise the establishment of a Settlement Committee whose composition shall be determined considering the nature and type of project. An RAP will be prepared in the event that the project will involve involuntary resettlement. Grievance redress systems will be set up to provide avenues for groups to bring their grievances to the attention of authorities for speedy resolution and feedback. The World Bank may support with training and capacity-building activities to enhance to livelihood restoration efforts of PAPs. The social safeguards officer of the PMU will be the focal person for RAP issues.

7.4 Review and Approval of E&S Instruments

Subproject instruments will be prepared (through consultants) and then reviewed by the PMU and relevant stakeholders such as EPA-SL. The PMU will forward the updated instruments to the World Bank for review and approval. Upon approval of the subproject ESMPs, EPA-SL will issue EIA licenses to cover the subprojects. The licenses will be renewed annually based on compliance. It should be noted that since this is a high-risk project, the contractor is not permitted to start construction until the ESIAs and ESMPs are approved by the World Bank.

8 PUBLIC CONSULTATION AND STAKEHOLDER PARTICIPATION

8.1 Introduction

A Public Consultation and Disclosure Plan (PCDP) is designed to provide project area residents, project stakeholders, and other interested parties with project information and to allow those stakeholders to participate in the planning process. Stakeholder participation encourages sustainable growth by accounting for community needs as they relate to the proposed project. A PCDP incorporates public meetings for stakeholders to air project concerns, voice their opinions, make suggestions, meaningfully influence the process of project development, and keep them (stakeholders) informed of current updates on project information.

The objectives of a PCDP are

- To disseminate relevant project information to stakeholders/affected communities and to document any concerns/issues from such stakeholders,
- To improve communication between the project proponent and affected communities,
- To document public consultation events, and
- To disclose selected project documents to affected communities/stakeholders.

The main objective of the PCDP is to establish a program for multi-directional communication between project management and stakeholders.

The Project Proponent

The Community Relations Officer (CRO) at the PMU will be directly responsible for the public consultation and disclosure program. He/she will also be responsible for coordinating with the EHS officer on all community relations, public consultation programs, and dispute resolutions.

Other responsibilities and duties of the CRO may include the following:

- Identifying when meetings are necessary and scheduling them
- Inviting specific individuals to meetings
- Attending and documenting meetings
- Directing any required follow-up.

The consultation and disclosure program is aimed at informing the stakeholders of project plans and activities in a manner that promotes open dialogue among all interested parties, but particularly those that are or will be affected by the project. The program allows directly affected parties to have meaningful input in the decision-making process regarding the development of the project and the mitigation of impacts that will affect them. Meetings will be scheduled, and informational materials disseminated as needed, to keep people informed and to maintain project transparency. It is the responsibility of the EHS officer, along with the CRO, to ensure that the program objectives are accomplished.

Stakeholders will be informed about the project and its activities through some or all of the following methods:

- Mass media (newspapers, newsletters, posters, radio, and television)
- Direct communication in local languages
- Illustrated pamphlets and newsletters
- Public meetings
- Informing of appropriate community leaders.

8.2 Public Consultation and Stakeholder Engagement

Consistent with the project SEP, consultations with various stakeholders including with potential beneficiaries and PAPs were undertaken as part of preparation for this ESMF. The list of people met is included in Appendix 5 of the ESMF, and Appendix 6 includes some details of the consultations. A total of 14 stakeholder sessions were held, spanning engagement with market women, opinion leaders in the proposed slum communities, project proponents and staff, disability and gender groups, LCs, NGOs and civil society organizations, and so on. Consultations with the slum communities showed support for the project with strong views to invest in access roads, water, electricity, vocational training center, and so on. There were also many discussions in terms of access to project employment and benefits during constructions. The communities indicated the ability to supply local material as well as both skilled and unskilled labor to support the community infrastructure. In Moyiba, for example, they have carpenters who operate from the Saio Workshop located within the community. The communities have an active quarrying population that is capable of supplying granite for medium-scale construction projects. There are community development committees comprising women, men, and the youth led by their zonal chairpersons who can undertake community project monitoring and supervision. There are occurrences of rock falls, fires outbreaks, flooding, and so on which the project will need to consider. Existing social issues such as transactional sex, teenage pregnancies, drug abuse, and alcoholism could potentially be exacerbated during construction. The project list of proposed interventions for the neighborhood upgrade is comprehensive to cover the priority areas emphasized by the community. The project LMP encourages contractors to use local labor in the infrastructure construction or rehabilitation to the extent possible with emphasis given to the inclusion of various social groups facing marginalization or barriers to participation. During the first quarter of implementation, the project will prepare a GBV Action Plan, which will then form part of the CESMP to mitigate the potential SEA/SH risks.

Points raised during consultation about the potential market rehabilitation saw a general support for the project. A lot of emphasis was placed on the requirement for construction of stalls, water, toilets, electricity, day care centers, security posts, and access to micro-credit with flexible payment conditions. Persons with disabilities also raised concerns with inaccessible market infrastructure resulting in difficulty in movement and communication and general discriminations as key concerns. There is general willingness to pay for market services. Most of the market people (about 90 percent) are paying their market dues, in compliance with the yearly registration of their tables to council.

Several points were raised during consultations regarding the existing waste dumps and planned landfill. Those scavenging the waste dumps for recycling wanted assistance in getting organized and financed to

carry out their activities. Those staying close to the dumpsites admitted being displeased with the environmental problems faced from the dumps and said they would be willing to relocate if granted the opportunity to do so. They were only facing these problems because they had no other alternative. Farmers/gardeners interviewed at the Kingtom Dumpsite indicated that they rely on small-scale gardening. However, they revealed that a huge percentage of crops are destroyed or eaten up by rodents from the dumpsite, which affect crops and inhabitants in the community. In addition, odor, noise levels, and smoke pose environmental and health threat on communities living around dumpsites. These dumpsites predominantly act as a breeding ground for mosquitoes and other vectors. Staff of various councils opined they could do a lot with improving the waste management situation in their localities if given proper equipment to carry out their tasks. Residents in areas close to planned dumpsites were concerned that a dumpsite would be inimical to the health and safety of their communities, if not well planned. Some were concerned about why a waste dump for Freetown would need to be brought to such a considerable distance from Freetown.

8.3 Preliminary Disclosure of Contents of ESMF Document

With the completion of a substantial part of the document, some preliminary disclosure has been done in meetings with various stakeholders.

(a) Discussions were held with the Director FDD and his team to keep them constantly updated on work progress and the contents of all reports.

(b) Individual face-to-face meetings were held with both the Mayor of Freetown and the Technical Head of the Mayor's delivery unit. The relevance of the study and all findings were discussed with them. They were appreciative of all aspects of the report nationally—even those not related to FCC. They were particularly helpful in the analysis of various thorny legal issues between councils and government. They were kept abreast of the issues in the ESMF report and made helpful suggestions.

(c) A telephone meeting was held with the Development Officer, Bo City Council. She had wide knowledge of the issues in the ESMF and also made helpful suggestions.

(d) A face-to-face meeting was held with the Chairman of the WARDC and his core senior staff. Most aspects of the ESMF were disclosed with them. Some misunderstandings about the project were cleared up after this meeting.

8.4 Stakeholder Engagement for ESIA/ESMP Stage

Further information will be collected on project subcomponents. Many activities will be undertaken to ascertain potential positive and negative impacts and in outlining measures to be taken to mitigate those impacts. The consultations will reveal that the project has a number of positive social and environmental impacts. The aim of the consultations would be to collect data/information on the socioeconomic status of potential PAPs, obtaining their views on the project, facilitating, and enhancing awareness, mutual understanding, trust, and capacity building. Questionnaires may include questions on a basic list of key socioeconomic information on demographics, livelihoods, and social amenities such as sources of water, electricity, access to health centers and schools, and so on. Focus group discussion (FGD) meetings will be held with stakeholders and specific categories of PAPs in the various project areas. Checklists with preset questions will be used during the meetings to solicit information mainly on the perceptions of the likely

impacts the planned interventions might have on participants' economic activities. Other safeguard documents—RPF, Resettlement Process Framework, ESIAs, ESMPs, RAPs, and other studies—will be disclosed on the website, and hardcopies will be made available for public consumption in various places.

An ESIA normally includes a Public Consultation and Disclosure component. Sections 27(1) and (2) state that EPA shall circulate an EIA to various bodies and also open it for public inspection and comments in the National Gazette and newspapers for a specified period. EPA would normally require the disclosure of ESIA documents to project stakeholders in a number of localities as requested by the agency.

The level of consultation will be a lot more intense if an RAP is required.

The policy is based on five principles:

- Principle 1: Maximizing access to information
- Principle 2: A clear list of 'exceptions'
- Principle 3: Safeguarding the deliberative process
- Principle 4: Clear procedures for disclosing information
- Principle 5: Right to appeal.

The World Bank would provide access to any information in its possession that is not on a list of exceptions. The approach would not be predicated upon a list of information the World Bank can disclose; rather, it would clearly define the kinds of information that it would not disclose. Guidelines are provided on how the policy would broaden access to information, set out the proposed types of information that would not be disclosed, and suggest timelines for declassifying certain information to make most of it disclosable over time

Furthermore, ESS5 states that to anticipate and avoid or, where avoidance is not possible, minimize adverse social and economic impacts from land acquisition or restrictions on land use, a major requirement is ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.

8.5 Resources and Responsibilities for Implementing Stakeholder Engagement Activities

The FDD will provide oversight and supervision in implementing the SEP. The FDD will also ensure the hiring of the required personnel to implement the project including the rollout of activities related to the SEP. In addition, the FDD will ensure that the required funds are allocated and disbursed for the implementation of the SEP. A proposed budget for the stakeholder engagement activities has been drawn up.

8.6 Disclosure

The final ESMF and other project documents shall be uploaded on the project website. Hard copies shall be disclosed to relevant stakeholders such as EPA-SL and councils. The ESMF shall be disclosed internally within the World Bank and uploaded on to the World Bank's website upon approval by the World Bank.

Before the start of physical works on the project, relevant sections of subproject ESMPs shall be communicated to stakeholders and communities. The ESMPs will be uploaded on the project website.

Hard copies will also be made available to selected stakeholders. The ESMP for the subprojects will be included in the works contracts.

8.7 Grievance Redress

The procedures for handling grievances are comprehensively handled in the SEP for the project produced in 2020.

A comprehensive project-wide GRM will be instituted by the PMU before project implementation commences to enable a broad range of stakeholders to channel their concerns, questions, and complaints to the various implementation agencies, through multiple grievance uptake channels. Grievances will be coordinated at the PMU level with a multi-channel grievance uptake process, through which project-related grievances shall be received and resolved. The GRM will provide for anonymous reporting channels of logging complaints and grievances that will ensure confidentiality and anonymity of complainants. This will largely create an enabling environment to allow for grievances to be raised by PAPs without fear of victimization. Grievances established at all levels, including communities, project sites, district, PMU, and Project Steering Committee (PSC) levels. The GRM process will also be integrated into the Anti-Corruption Commission platform.

Implementation Steps of GRM

The GRM implementation process will involve the following steps:

Table 20:

GRM Stages	Description of Tasks	Responsibility	Timeline
Assign focal persons	The social safeguards specialist together with the GBV specialist and the community outreach specialist will constitute the GRM officers at the PMU level and will liaise with stakeholders to identify focal persons at the district and community levels and grievance committees.	FDD-PMU	Before project implementation
Train assigned focal persons on the design and operation of the GRM	Train focal persons on grievance redress processes.	PMU, GRM consultant, social safeguards specialist, GBV specialist, and the community outreach specialist	Before project implementation
Receive, acknowledge receipt, and transfer and register complaints	The GRM will have several tiers from the community level, district level, PMU level, and PSC. GRM focal persons/officers will be assigned at the district and community levels to receive and register complaints into the complaints and grievances register. Public Information Communications (PIC) campaigns will be used to create awareness of the GRM.	Focal persons	1 working day after receiving complaint
Complaints and grievance register	A customized digital platform will be established to register complaints at the PMU with access to GRM focal persons to transmit	Focal persons	1 working day after receiving complaint

GRM Stages	Description of Tasks	Responsibility	Timeline
	complaints received at project sites and communities. This will be complemented with a simple manual complaint form for use at the local levels.		
Screen and refer complaints	Once complaints are received, the social safeguards specialist or focal person will undertake preliminary assessment of the eligibility of complaints, categorize the grievance, and assign priority (high, medium, and low severity) and acknowledge receipts of complaints to complainant. The complaint will also be referred at this stage to the resolving officer or grievance redress committees if it cannot be resolved immediately by the social safeguards specialist or focal person. The social safeguards specialist/focal person will assign timelines for investigating. Once it is transferred to the appropriate resolving officer or GRM committee, the social safeguards specialist/focal person will track the resolution process to ensure timely feedback.	Social safeguards specialist of PMU	2 working days after receiving complaints
Assessment/investigation of the complaint	The resolving officer or Grievance Committee will undertake further assessment to establish the merits or demerits, undertake fact finding, and outline options for resolving the complaint.	Social safeguards specialist of PMU, Grievance Committee, resolving	Ongoing 2 weeks
Formulate an initial response	Once the assessment/investigation is completed, the social safeguards specialist/focal person will receive the report and formulate a response and communicate to the complainant. The communication should state whether the grievance has been accepted or rejected, providing reasons for the decision, and indicate next steps.	Social safeguards specialist and/or focal persons	2 working days
Select a resolution approach	Where the complaint is not of fraud or corruption, working with the social safeguards specialist, the GRM Committee will investigate and resolve complaints and where applicable to a specialized body or an appropriate pillar, the focal person will assign the complaint for mediation at different levels, engage in direct negotiations and dialogue, facilitate negotiations through a third party, conduct further investigation through the review of documents, and so on.	Social safeguards specialist, focal person, and GRM Committee	Ongoing; 3 working days after receiving complaints
Settle the issues (or further escalate the issues)	The social safeguards specialist will ensure that the GRM Committee takes appropriate measures to remove the cause of the grievance and initiate a monitoring process to assess any further impacts of project-related	Social safeguards specialist, focal person, and GRM Committee	Ongoing; 5 working days after registering complaint

GRM Stages	Description of Tasks	Responsibility	Timeline
	work. Once settled, the social safeguards specialist and focal person record the complaint in the system as 'resolved' and inform the complainant of the outcome of the resolution process. Where the complainant is not satisfied with the outcome, the complainant will be informed about the appeal process and the outcome recorded accordingly.		
Monitor and evaluate grievance redress process	The PMU, through the social safeguards specialist and focal persons, will monitor the grievance redress process and the implementation of the decisions made. The social safeguards specialist will work with focal persons to ensure that redress is granted to affected persons in a timely and efficient manner. They will also provide regular reports to the World Bank, noting the progress of implementation of grievance resolutions, timelines of grievance redress, documentation procedures, and so on.	Social safeguards specialist, focal person, and GRM Committee	Ongoing
Feedback to complainant and other interested parties	The GRM system will be updated once the complaint has been resolved, to close the complaint in the GRM system. The PMU will contact the complainant, to evaluate if the complainant is satisfied with the resolution before the complaint is closed in the GRM system. If the complainant is not satisfied with the outcome of the investigation, a judiciary alternative could apply.	PMU	Ongoing
PIC campaigns	This will be used to raise awareness of the GRM on where to submit complaints and the resolution process.	PMU	Ongoing

The RUSLP GRM will include confidential mechanisms to gather and respond to GBV- and SEA-related grievances. The GRM process will provide survivors of GBV/EA with channels to report to a GBV service provider, the project GBV specialist. or to the call center with encrypted section for data protection. The services of Rainbo Initiative and 50:50, who have already demonstrated strong capacity to respond to GBV issues, will be taken. TOR are in place to identify partners that can provide technical guidance to the setting of an ethically managed GBV GRM as well as prepare and support the implementation of the project GBV Action Plan. The SEA/SH response will include case management and linking to services such as psychosocial, health, legal, and so on.

The project will maintain an up-to-date grievance log and all supporting documents and will institute regular reporting of the grievance data as part of the project quarterly monitoring to the World Bank. The project will track the types of complaints received, response times, offers of resolution, and acceptance and complaints resolved versus appealed, and so on. For SEA/SH, the project will report on the number of SEA complaints (without any identifiers), whether complaints are related to the project workers, and

type and effectiveness of service provision. Through annual surveys and community engagements, the project will assess the effectiveness of the GRM and make changes as appropriate.

9 PROJECT IMPLEMENTATION AND INSTITUTIONAL ARRANGEMENTS

9.1 Institutional Responsibilities, Arrangements, and Capacity Building

9.1.1 Overall Project Responsible Entity

The FDD of the MOF, which has the mandate of coordinating LCs and monitoring their fiscal management, is responsible for the overall management of RUSLP. Under the overall leadership of the Director, FDD, the FDD has established an internal PMU, as well as supervision of the PMU. The PMU has employed E&S safeguard specialists and will recruit before the start of any construction an ISO 45001:2018, OHSAS 18001:2007, or similar certified OHS specialist. Specifically, the FDD shall be responsible for recruiting project staff and consultants before the project appraisal date. The FDD, in collaboration with the PMU, implementing councils, and MDAs, shall establish various Technical Working Groups (TWGs) for key thematic areas or components. The TWG will include PMU staff, representatives of implementing councils, and any other relevant professionals.

Project Management Unit

The PMU shall be constituted by the FDD and comprises eight project staff:

- Project Manager
- Civil Engineer
- Environmental Specialist
- Social Specialist
- OHS Specialist
- Community Liaison and Communications Specialist
- Gender and GBV Specialist
- M&E Specialist
- Procurement and Contracts Management Specialist.

The PMU shall be responsible for the overall management of the RUSLP in coordination with and support of the City Project Implementation Teams (CPITs). The PMU shall be managed by the FDD Director with support from the project manager. The objective of the PMU is to effectively lead the implementation of project activities to achieve the Project Development Objectives according to and within the agreed framework. The PMU is therefore responsible for the overall final deliverables of the project within the duration of the project. The overall responsibilities of the PMU shall be as follows:

- Lead the administrative and operational activities of the project
- Social and environmental safeguards
- OHS aspects
- M&E
- Project communications

- Putting in place and managing a GRM.

The organizational charts are shown in Figures 7 and 8.

Figure 7: Organizational Chart - Project Oversight

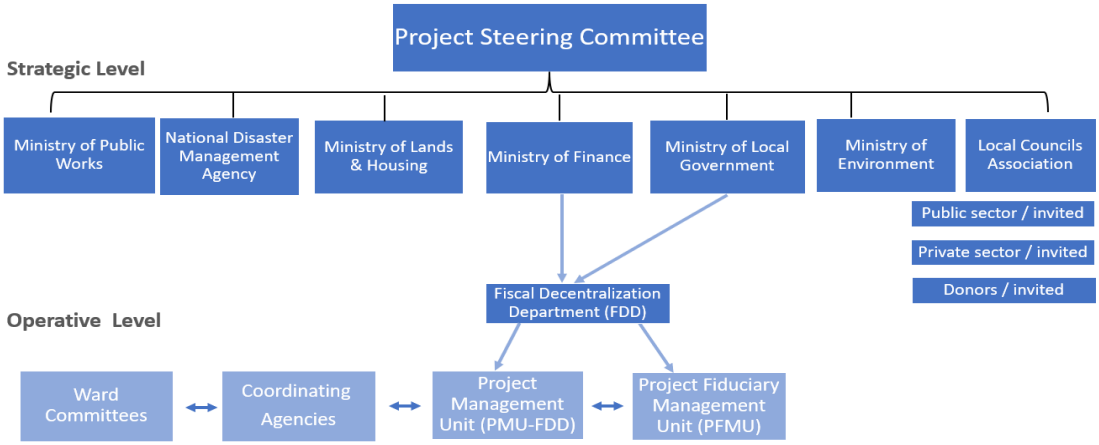
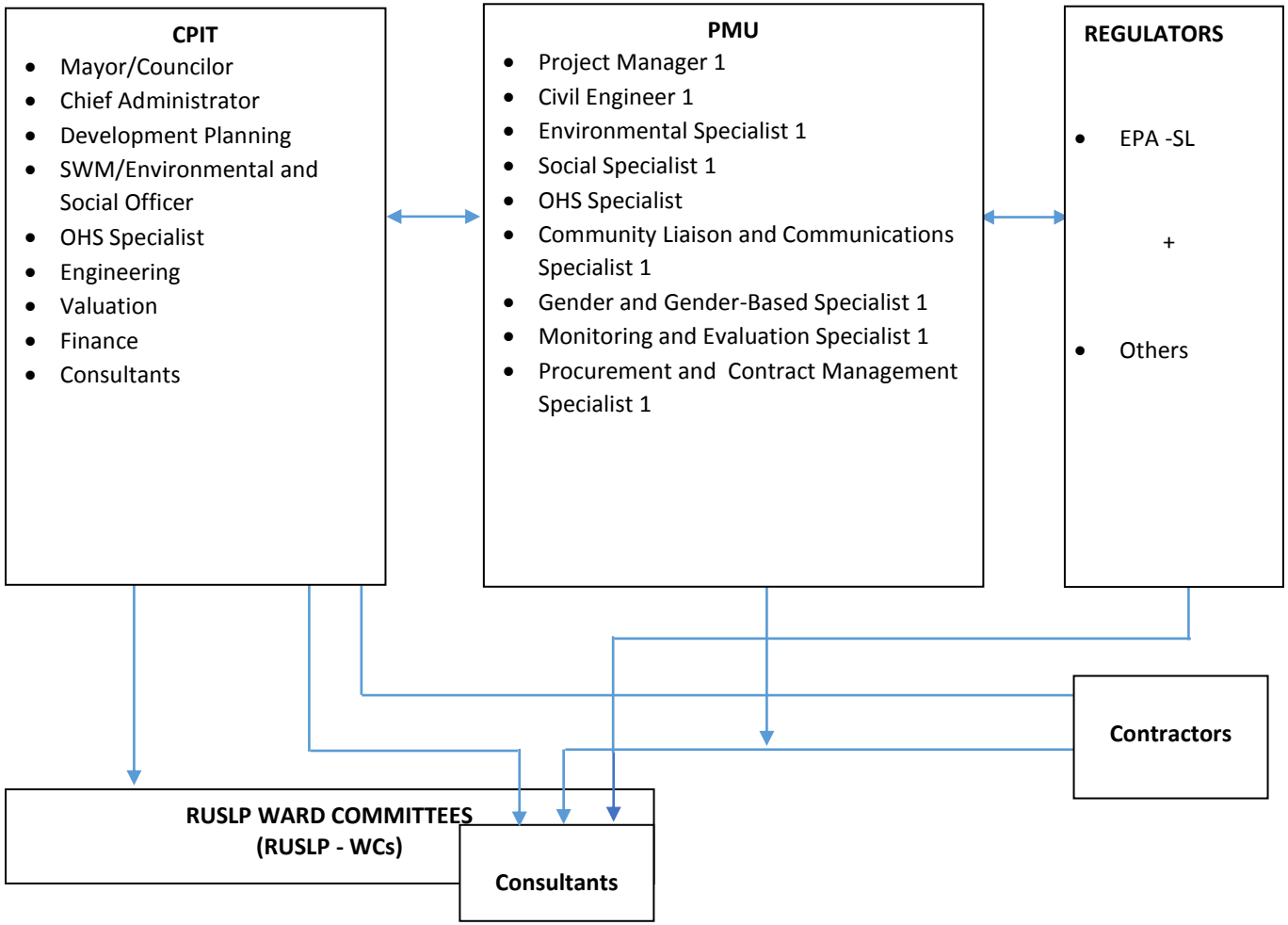


Figure 8: Organizational Chart - Project Management



City Level Implementation of Project Activities

In addition to the overall responsibilities, the PMU shall, among other things,

- Develop and implement appropriate communication strategies and
- Manage stakeholder expectations and information needs.

At the level of cities, work will be coordinated by CPITs. The PMU shall support cities to set up the CPITs within three months of project activation. Membership of CPITs shall comprise relevant representatives (officials) from the following departments:

- Mayor/Councilor
- Chief Administrator
- Development Planning
- SWM/E&S Safeguards Officer
- OHS Specialist
- Engineering
- Valuation
- Finance
- Consultants on need basis.

The specific roles and responsibilities of the CPITs include

- Monitoring project activities in the city/specific location;
- Supporting the functions of the PMU in the city/specific location;
- Facilitating stakeholders and community participation in project activities;
- Collecting project data;
- Supervising ongoing works;
- Facilitating entrance of contractors in communities;
- Liaising with card committees on issues dealing with communities;
- Monitoring compliance to safeguards—including the adequate implementation of CESMPs, OHS Plans, RAPs, labor management plan, and so on;
- Certifying completion of works by contractors to the project; and
- Submitting quarterly progress report—for example, on own-source revenue performance.

The Mayor, Chairperson, or Chief Administrator shall lead the CPIT in the specific city. This role may be delegated to a Councilor by the Mayor, who shall inform the project manager in writing within two weeks of the delegation. The CPITs shall report to the Mayor and the PMU.

The roles and responsibilities of the RUSLP ward committee are as follows:

- Mobilization of communities for active participation in project activities

- Facilitation of community planning and property surveys
- Participation/facilitation in enumeration or socioeconomic surveys
- Community capacity-building initiatives of the RUSLP.

9.2 Institutional Needs

For the PMU to be able to provide the oversight functions, it needs to build capacity around management of the E&S and OHS protection practices. The E&S and OHS specialists at the PMU are responsible for screening subprojects using the screening form to determine which safeguard instruments need to be prepared: ESIA/ESMP/OHS, ESMP/OHS, or an RAP. The PMU has staff that are versed in various disciplines, but refresher training courses may be useful. There are no documented protocols, and these would have to be developed. The ability to implement the ESMF and subsequent safeguard instruments needs to be developed. Although the specialists employed by the PMU may have the requisite theoretical training, there is a dearth of people with the requisite experience to properly handle the gamut of safeguard issues as required by the World Bank. The contractors are required to prepare and adequately implement a CESMP and an OHS Plan and employ E&S specialists, as well as an ISO 45001:2018, OHSAS 18001:2007, or similar certified OHS Specialist to implement provisions in the CESMP and OHS Plan. Where capacity is inadequate, the services of external E&S and OHS consultants will be sought externally. The Contractor E&S and OHS Specialists are full-time present at the construction sites during working hours.

The Supervising Engineers will be responsible for quality of the CESMPs and OHS Plans prepared by the Contractors and for the adequate implementation of these CESMPs and OHS Plans. For this purpose, the Supervising Engineers recruit qualified E&S Specialists and ISO 45001:2018, OHSAS 18001:2007, or similar certified OHS Specialists. The Supervising Engineer and E&S and OHS Specialists are full-time present at the construction sites during working hours. Although the councils employ their own Environmental Officers, many of them are inexperienced to handle the gamut of issues for such a project. Some of the councils also employ Gender Officers who could benefit from training. There are aspects of training that could be of immense benefit to council staff and ward committee members as well as various community groupings. EPA may not have the necessary experience in implementing the ESF. It could also benefit from an ESF training which can be provided by the World Bank or private sector companies with experienced staff in World Bank-related projects. Adequate resources must be committed to allow for the effective implementation of the ESMF and subsequent management plans. Similarly, consultants, and contractors will be required to assign personnel resources sufficient to carry out the requirements of their E&S Action Plans (ESMPs, resettlement plans, and any other action plan that is required to comply with the World Bank ESS).

The PMU shall also be required to allocate budgetary provisions made by the World Bank for the designated purpose. These shall include, but not be limited to, the following:

- E&S studies and impact assessments, including permitting fees
- E&S management costs
- Cost of environmental and resettlement issues and monitoring
- Capacity building for the PMU and other stakeholders
- Engagement of E&S and OHS Specialists

- E&S and OHS due diligence investigations (if any)
- M&E of adequate implementation of CESMPs and OHS Plans.

9.3 Capacity Development

9.3.1 Capacity Building and Training

The projects, together with the World Bank, must play a major role in building the capacities of these institutions in sound environmental management, health and safety, and good working conditions of their staff. To achieve and maintain the level of expertise required for the implementation of this ESMF, the PMU team will coordinate a training program for all relevant employees, consultants, contractors, subcontractors, and sub-consultants, using the ESMF and associated management plans. Training will be primarily on the job, complemented by workshops and, when appropriate, classroom instructions. To maintain the appropriate level of awareness and competence, refresher training will be held periodically. Training programs to equip the PMU staff members (responsible for facilitating implementation of the ESMF) and the consultants in using the environmental assessment tools will be organized by EPA. Private trainers may also be used. Training needs will be further assessed. Training and workshop sessions will be held with project-affected communities both before and during the construction to help prepare the communities for transformations that will occur in their communities, such as construction works, potential for elevated levels of noise and dust, traffic, and influx of workers. The community will be educated on the risk of contracting STDs and sexually transmitted infections (STIs) upon sexual interaction with construction workers, the risk of social conflicts, and how these could be mitigated. They would also be informed of tools at their disposal, such as the GRM channels, stakeholder engagement, and communication mechanisms. Women will be enlightened on the mitigation of GBV and SEA and SH (sexual harassment and sexual exploration and abuse are the most common types of GBV that occur in such projects) and the degree of commitment of the project to protect gender rights and entitlements. Table 21 provides details of training courses and their costs.

Table 21: Capacity Needs for ESMF Implementation

Type of Training	Training Contents	Participants	Time Frame	Responsible Actor	Cost in US$
Community Mobilization	• Importance of community participation and mobilization to enhance project ownership, transparency, and accountability • Community mobilization strategies • Concept of vulnerability	Traditional Leaders Ward Development Committees, LCs, NGOs, religious leaders, school managers youth leaders/groups, women's groups/leaders	During subproject mobilization	Safeguards Unit	30,000

Type of Training	Training Contents	Participants	Time Frame	Responsible Actor	Cost in US$
GRMs	• Dispute resolution management and grievance redress • Trust and consensus building • GBV • Project grievance redress systems	Members of Grievance Redress Committees	Before the commencement of the subproject/works	Safeguards Unit	20,000
Training on guidelines and procedures particularly on E&S/ESMF/ESMP /RAP implementation	• Screening • Introduction to World Bank's ESF • Preparation of ESMPs • Responsibilities of consultants, contractors, and so on in implementing subproject ESMPs	Contractors E&S Specialists/PMU's Environmental, Social, and Gender Specialists, EPA, NPAA, Ministry of the Environment, LC ESOs	Before the commencement of civil works of subprojects	Safeguards Unit of the PMU	40,000
Training on relevant WHO COVID-19 Guidelines and GoSL COVID-19 Standard Operating Procedures and other guidelines	• COVID-19 symptoms and mode of transmission • Introduction to relevant WHO Guidelines on COVID-19	Ward Development Committee Members, religious and tribal leaders, Health and Safety Officers of consultants and contractors	Before the commencement of subprojects	PMU Safeguards Unit	30,000
Environmental Protection Plan (EPP) for an infrastructure project	• Formulating an EPP • Contents of an EPP • Management measures	PMU's Environmental, Social, and Gender Specialist and contractor's E&S Specialists	Before the commencement of the subproject/works	Safeguards Unit of the PMU	20,000
Policy, legal, regulatory, and institutional context of the project	• Analysis of main policies and laws related to the project and their applicability.	PMU Specialists and Environmental Officers in councils	Before the commencement of the subproject/works	Safeguards Unit of the PMU	20,000
E&S monitoring and reporting	• Need for monitoring • Monitoring areas and monitoring requirements • Reporting	PMU's Environmental, Social, OHS, and Gender Specialist/contractor's E&S and OHS Specialists/Environmental Officers in councils	Before the commencement of the subproject/works	Safeguards Unit of the PMU	25,000
Dealing with EPA	• EIA regulations • Procedures for application and licensing • Monitoring, auditing, and reporting	PMU's Environmental, Social, OHS and Gender Specialist/contractor's E&S and OHS Specialists/ Environmental Officers in councils	Before the commencement of the subproject/works	Safeguards Unit of the PMU	15,000

Type of Training	Training Contents	Participants	Time Frame	Responsible Actor	Cost in US$
Emergency preparedness and response	• Need for Emergency Preparedness and Response Plan • Formulating and implementing plan • Role of various stakeholders	PMU's Environmental, Social and OHS Specialists/contractor's E&S and OHS Specialists/ Environmental Officers in councils/select councilors/select ward committee members	Before the commencement of the subproject/works	Safeguards Unit of the PMU	20,000
Waste management, reuse, recycling, and minimization	• Waste management principles and procedures • Problems with implementation • Recycling • Landfill sites	PMU's Social, Environmental, and OHS Specialists/ contractor's E&S and OHS Specialists/Environmental Officers in councils/select councilors/select ward committee members	Before the commencement of the subproject/works	Safeguards Unit of the PMU	20,000
Training on OHS issues	• OHS principles and procedures • OHS issues related to project	PMU's Social, Environmental, Specialists/contractor's E&S Specialists/Environmental Officers in councils/select councilors/select ward committee members	Before the commencement of the subproject/works	Safeguards Unit of the PMU	20,000

9.3.2 Methodology

The methodology of the training will include hands-on environmental assessment of subprojects in addition to exposure visits, interactions with resource persons, and group exercises. The contractor within the classroom construction component, specific trainings and skills will be required in relation to E&S protect and health and safety.

For all construction contracts, training will take place during the mobilization of the construction contractor to ensure their key staff have adequate knowledge of environmental, social, health, and safety management principles and awareness of their E&S contractual requirements before commencement of works. This training will include a brief introduction to policy and legal requirements, E&S documents developed for the project (ESMF, ESMP, OHS Guidelines, and WMP), the responsibilities of various entities and communication among them, E&S mitigation, required permits and approvals, monitoring and reporting requirements, and information disclosure and communication. In addition to general classroom training, special sessions will be organized for groups of workers dealing with machinery and equipment, workers involved in handling of hazardous materials and waste, drivers, people working in confined spaces, and so on. Furthermore, depending on the nature of planned works, on-the-job instructions and guidance for workers will be provided by the site supervisors of the construction contractors daily. This training will be led by the E&S consultant with support as needed, and it is the responsibility of the

construction contractor to ensure information received at the training is disseminated to all required staff and workers. The community training and workshop sessions will be held with project-affected communities both before and during the construction to help prepare the communities for transformations that will occur in their communities, such as construction works, potential for elevated levels of noise and dust, traffic, and influx of workers. The community will be educated on the risk of contracting COVID-19, STDs, and STIs upon sexual interaction with construction workers, the risk of social conflicts, and how these could be mitigated. They would also be informed of tools at their disposal, such as the GRM channels, stakeholder engagement, and communication mechanisms. Women will be enlightened on the mitigation of GBV and SEA and SH (sexual harassment and sexual exploration and abuse are the most common types of GBV that occur in such projects) and the degree of commitment of the project to protect gender rights and entitlements

9.4 ESMF Budget

It is estimated that a total amount of US$722,000 will be required to implement activities identified in the ESMF. The details are summarized in Table 22.

Table 22: Estimated Budget for ESMF Implementation

Number	Activities	Cost (US$)
1	Environmental, social, and OHS monitoring	112,000
2	Capacity building	260,000
3	Preparation of specific ESIAs and ESMPs	250,000
4	Midterm audit of E&S performance	100,000
Total		**722,000**

10 MONITORING AND REPORTING

10.1 Objectives of the Monitoring Program

In the context of a project, environmental monitoring is required to verify implementation of the measures necessary to minimize or offset adverse impacts and to enhance beneficial impacts and regulatory and institutional framework and systems identified in this ESMF. Thus, monitoring will check whether predicted impacts have actually occurred and also check that recommended management plans have been implemented and are effective. Monitoring will also identify any unforeseen impacts that might arise from project implementation. To be effective, environmental monitoring must be fully integrated with the overall project management effort at all levels, which itself should be aimed at providing a high level of quality control, leading to a project which has been properly designed and constructed and functions efficiently throughout its life.

The ESMF monitoring program should provide the basis for rational management decisions regarding impact control. The monitoring program has been undertaken to meet the following objectives:

- To check on whether the safeguards framework has been established and instruments have been developed and are being implemented
- To provide a means whereby any impacts which were subject to uncertainty at the time of preparation of the ESMF, or which were unforeseen, can be identified and to provide a basis for formulating appropriate additional impact control measures
- To provide information on the actual nature and extent of key impacts and the effectiveness of mitigation and benefit enhancement measures.

It is recognized that some measures may have been incorporated into the project designs and contract documents, and such documents have been reviewed and recommended measures have been considered. Also, compliance with the CESMP and OHS Plan should be monitored.

10.2 Review of Environmental and Social Requirements and Compliance - Levels of Monitoring

Environmental, social, and OHS monitoring during the construction phase comprises two principal groups of activities:

- Review of the contractor's CESMPs and OHS plans, E&S and OHS staffing, method statements, temporary works designs, and arrangements relating to obtaining necessary approvals from the Supervising Engineer for the CESMP and OHS Plan, to ensure that E&S and OHS protection measures specified in the contract documents are adopted, and that the contractor's proposals provide an acceptable level of impact control
- Systematic observation on a day-to-day basis by the Supervising Engineer and E&S and OHS Specialists of all site activities and the contractor's offsite facilities as a check that the contract requirements relating to environmental, social, and OHS matters are in fact being complied with, and that no impacts foreseen and unforeseen are occurring

Preliminary environmental inspection checklists are prepared in the CESMP and OHS Plan for site use. These are discussed with the Supervising Engineer and management staff of the contractors. Monthly reports are prepared which summarize the results of site monitoring, remedial actions which have been

initiated, and whether or not the resultant action is having the desired result. The reports identify any unforeseen environmental, social, or OHS problems and recommend suitable additional actions.

Contractor's Monitoring Obligations

The contractor for each subproject will prepare CESMP and an OHS Plan, adapted from the project ESMP. The contractor is committed to carry out the construction of the subproject in a manner that would protect the environment and adequately manage social and OHS aspects.

External Monitoring

Although the PMU is responsible for the implementation of the ESMP, other supporting institutions in the area of monitoring are as follows:

- EPA-SL
- Factories Inspectorate of the Ministry of Labor and Social Services
- Ministry of Gender and Children's Affairs
- Ministry of Lands, Housing and the Environment
- LCs
- Council Environmental Officers.

Relevant legislative instruments back the oversight and monitoring roles assigned to these agencies. The monitoring roles of other non-state actors such as the public will also be complementary in ensuring smooth project implementation and sound E&S performance of the project.

10.3 Responsible Parties for Environmental and Social Monitoring

PMU and City Councils

Monitoring and reporting on the implementation of the ESMF should be carried out. The indicators and their means of verifications will be determined and incorporated into the M&E Plan once the capacity building plans are finalized. The identification of indicators is the responsibility of the Project Director, while the monitoring and reporting against indicators is the responsibility of the M&E Officer.

Contractor

Both the ESMP and the CESMP and OHS Plan will have an internal and external monitoring system and the responsibilities in relation to the development and implementation of monitoring systems.

Reporting Requirements

The environmental, social, and health and safety capacity and effectiveness of the project will be monitored. The E&S and OHS officers within the PMU will report against progress made to the Project Director on a quarterly basis and review and revise the indicators where necessary. The following are the

responsibilities of the E&S and OHS Specialists from the Supervising Engineers in partnership with other PMU staff and the relevant contractors, subcontractors, and sub-consultants:

- Supervise work done by contractor Environmental, Social, and OHS Specialists.
- Supervise the preparation of the CESMP and OHS Plan for the subproject along with any other relevant documentation. The CESMP and OHS Plan will be accompanied by checklists that facilitate communication of respective responsibilities for environmental, social, and OHS that will be used to monitor compliance with all CESMP and OHS requirements.
- Report to PMU on training activities and environmental, social, health, and safety incidents observed.
- Develop and submit to PMU the monthly progress reports, including a summary of E&S and OHS activities carried out during the reporting period, providing details of observations made during site inspections, an analysis of the quality of the contractor's internal monitoring, and a review of all documents and reports. The reports will also identify the number, nature, and frequency of incidents of noncompliance with items on the approved checklists, as well as the corrective measures taken.
- Review all the reports developed by the contractor and endorse them before authorizing implementation of respective activities.

ANNEXES

ANNEX 1

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING FORM

Please type or print clearly, completing this form in its entirety. You may provide additional information on a separate sheet of paper if necessary.

SECTION 1: INFORMATION ON THE CONTACT PERSON

Name: _____

Institutional Affiliation: _____

Business Title/Position: _____

Business Address: _____

Telephone:
Fax:
Email:

SECTION 2: DESCRIPTION OF THE INDUSTRY/FACTORY/COMPANY/PROJECT AND/OR PROPOSED PROJECT

Name of Company/Organization:

Name of Project:

Proposed Date of Start of Construction:

Proposed Date of Start of Operations: _____

_____

Location of Project: (Attach a map or maps, covering the proposed site and surrounding 5 km radius and coordinates.)

Land Area: _____
(Approximate land area and of proposed location)

-State Units

Current Land Use (Describe how the land/area is being used at present.) and Ownership of the Land

_____

Describe any possible alternative site(s).

_____

_____

Describe types of industries or facilities (including health centers and schools) which are located within 100 meters of the site, or are proposed to be located near the proposed facility. Indicate the proximity of the proposed site to residential areas, national parks, or areas of ecological, historical, or cultural importance.

_____

Indicate whether adequate infrastructure exists at the location and/or proposed location and whether new buildings, roads, electricity, and water lines or drainage systems will be needed at the location and/or proposed site.

_____

Indicate whether any of the following are within the site or in very close proximity to it as to be affected by the operation: electricity lines, roads, pipelines for water or other products such as hydrocarbons, telecommunications lines, and drainages.

_____

SECTION 3: EMPLOYEES

Number of people employed or to be employed:

	During Construction	During Operation
FULL-TIME		
PART-TIME		

Indicate whether you have or plan to construct housing/sanitation facilities for temporary or permanent workers (state number of workers and briefly describe structures/sanitation facilities).

_____

SECTION 4: DESCRIPTION OF OPERATION AND PROCESSES

Briefly describe the operation and processes involved in it (include list and number of major equipment used).

_____

_____

_____

_____

State the type and quantity of energy to be used (including the origin of the energy, that is, public utility, on-site generator, wood, solar, wind, and so on).

Type(s)	Quantity (Installed)	Quantity (Used)	Period Used (per Day/Week/and so on)

Estimate the quantities of water to be used for various activities:

Use(s) of Water	Quantity (State Units)	Period	Source

List the type and quantity of raw material(s) used per year in the production process (including soil, sand, cement, aggregates, wood, animals, and so on). Identify the source(s) of all raw materials.

Type	Quantity (State Units)	Source

List all of the chemical(s) used in the production process or expected to be used for an aspect of the production process (A separate list may be attached with more detailed information.).

Name/Type	Description	Source

List all refrigerants and refrigeration equipment used/intended to be used during the operation of the project. (A separate list may be attached with more detailed information)

Name of Equipment/Type of Gas	Description	Quantity

SECTION 5: PRODUCTS

Briefly state the nature of the product(s) or output of facility and/or the proposed facility, and the expected quantities on a quarterly or annual basis. Indicate the use and/or intended uses of the product(s).

Name of Product/Output	Description of Uses	Anticipated Output per Quarter/Year

SECTION 6: BY-PRODUCTS, WASTE MANAGEMENT, AND DISPOSAL

Specify the nature of each waste or by-product, the quantity to be generated (State whether solid, liquid, or gaseous.), and proposed method of disposal.

Type	Hazardous (Yes/No)	Description	Quantity in kg per Week/Month	Proposed Method of Disposal

Indicate sources of noise pollution and the type/quantity of noise (that is, machine/repetitive pounding, and so on).

Source of Noise	Type of Noise	Day or Night (for How Long?)?

SECTION 7: ENVIRONMENTAL AND SOCIAL IMPACT

Please indicate E&S and OHS impacts that may occur as a result of the proposed project.

Nature of Impact	Yes/No	Brief Description of the Anticipated Impacts
Air Quality		
Drainage		
Landscape		
Forest Cover		
Vegetation		
Human Population		
Animal Population		
Soil Quantity		
Soil Erosion		
Water Quality		
Tranquility/Noise		
OHS		
Natural Habitats and Critical Habitats		
Land Acquisition		
Physical Displacement		
Economic Displacement		
Labor Influx		
SEA/SH		
Other		

SECTION 8: PROPOSED MITIGATION MEASURES

Indicate whether measures are being considered to mitigate against damage likely to be caused by the proposed project to humans and/or the environment. Briefly describe these measures.

Impacts	Mitigation Measures
Air Quality	
Drainage	
Landscape	
Forest Cover	
Vegetation	
Human Population	
Animal Population	
Soil Quantity	
Soil Erosion	
Water Quality	
Tranquility/Noise	
OHS	
Natural Habitats or Critical Habitats	
Land Acquisition	
Physical Displacement	
Economic Displacement	
Labor Influx	
SEA/SH	
Other	

State any and all experience you have with implementing the abovementioned mitigation measures. If you do not have experience, what skills do you possess to implement these mitigating measures?

_____

_____

_____

_____

What staff training will be provided to ensure compliance with health and environmental safety standards?

_____

_____

_____

SECTION 9: SUPPLEMENTARY SUMMARY CHECKLIST

The checklists are divided into the categories below. The questions in each checklist have been arranged under the following headings: land, water, and air; biological diversity; human beings; and effects of chemicals.

Specific Questions (Answer Yes or No.)

Will the project:

Land, water, and air

- Pollute or cleanse surface water or groundwater, soil, or air?
- Have an effect on land areas which are sensitive to drying up or erosion?
- Cause land degradation as a result of forestry activities, building activities (including road construction), mining activities, or other mechanical impacts or reduce such degradation?
- Cause an increase or decrease in the availability of surface water or groundwater, locally or regionally?
- Lead to greater surface runoff and less infiltration due to forestry activities, road construction, and so on or counteract such effects?
- Lead to increased or decreased discharges of fossil carbon dioxide, methane, or other GHGs?
- Lead to increased or decreased discharges of ozone-depleting substances?
- Have a negative effect on water quality?
- Result in the risk of accidents which can have consequences for workers, people, and the environment in the surrounding area?
- Contribute to or counteract the pollution of surface water or groundwater, air, or land?

Biological diversity

- Exploit or substantially change important or sensitive ecosystems (for example, areas which are covered by natural vegetation, protected areas, natural habitats, and critical habitats), or restore such ecosystems?
- Reduce natural biodiversity through threatening plant or animal species, or increase diversity by supporting and protecting ecosystems and species?
- Contribute to or counteract the introduction of new species in areas where they do not belong naturally?
- Facilitate access to areas with important or sensitive ecosystems which were previously inaccessible, resulting in threats to biodiversity and management conflicts?

People

- Result in a greater or smaller risk that diseases or other negative effects on people's health are spread as a result of pollution, poor-quality building materials, poor sanitary conditions, or the building of slums?
- Make it easier or more difficult, directly or indirectly, for the local population to move or to use natural resources inside or outside the project area?
- Increase or reduce conflicts with respect to the present use or tenure of the land?

- Damage or protect archaeological relics, places, or areas of religious, cultural, or historic value and cultural monuments or make considerable changes to areas of great beauty?
- Result in migration of people out of or into the project area?
- Increase or reduce the risk of depleting fish stocks, that is, that extraction is greater than natural reproduction?
- Prevent or enable migratory fish to reach their reproduction areas?
- Result in a greater or smaller risk that diseases (for example, bilharzia, malaria, or other waterborne diseases) or other negative effects on people's health are spread?

Chemical effects

- Use chemicals which are difficult to break down?
- Have as a result large areas that are exposed to chemicals?
- Contribute to a situation in which untrained personnel handle dangerous chemicals or contribute to training personnel in handling chemicals and providing them with protective equipment?
- Result in acute and/or long-term health hazards for personnel who handle chemicals or for the population in the area or reduce such risks?

SECTION 10: TESTIMONY

I confirm that the information provided herein is accurate to the best of my knowledge.

I will also endeavor to provide additional information and facilitate a site visit if required.

Signed: Developer Date

FOR OFFICIAL USE

Received by **Date**

Reviewed by **Date**

Category of Classification-A, B, C, or F _____

Risk Classification (circle as appropriate):

High Risk, Substantial Risk, Moderate Risk, or Low Risk

Reasons for Classification:

Requirements for preparing any specific plans (ESIA, ESMP, RAP, Biodiversity Management Plan, Cultural Heritage Management Plan, OHS Plan, GBV Action Plan, and so on)

ANNEX 2
CRITERIA FOR ASSESSMENT OF LANDFILL SITES

These criteria are based on the need to have a quick appraisal of the four alternative landfill sites contemplated for the SWM component of the Resilient Urban Sierra Leone Project. Time limitations and limitations on the scope of study would not allow a more comprehensive investigation. The methods for obtaining the necessary information for the assessment are also outlined.

Criteria	Relevance	Methodology for Investigations
Hydrology and Hydrogeology	Site hydrology and hydrogeology are important. Pollution of surface and ground water resources by leachates is a principal concern in relation to landfill location. Leachates are highly concentrated with contaminants. Leachate is generated by water passing through waste materials in landfills and becoming exposed to and dissolving a wide range of contaminants. Private or public drinking, irrigation, or livestock water supply wells located downgradient of the landfill boundaries should be further than 500 m from the site perimeter, unless alternative water supply sources are readily and economically available. A perennial stream should not be located within 300 m downgradient of the proposed landfill site development, unless diversion, culverting, or channeling is economically and environmentally feasible to protect the stream from potential contamination. The presence of watercourses and the potential for inundation by floodwaters and/or the proximity to water bodies may not be advisable. The site should not be very close to water sources.	• Review literature and relevant GIS information. • Elicit relevant information from community members on history of site, water table fluctuations during rainy season and dry season, inundation by floodwaters, use of water bodies, and sources of potable water. • Make relevant observations on presence of water courses and streams, water wells within site and in vicinity (carry out a quick hydrocensus), wetlands, and estuaries present. • Review geological maps and read up on the history of the site.
Topography and Soils	Landform in the vicinity of disposal sites will influence drainage, potential groundwater problems, soil erosion risk, access, site visibility, and protection from prevailing winds. A suitable site will preferably have a sufficient contour cross-fall to provide drainage of surface runoff and adequate level areas to enable excavation of trenches and associated earthworks and the construction of service facilities. Mountainous sites with slopes exceeding 1 in 5 are generally not suitable because of soil erosion risk and long-term stability concerns after construction. Soil structure should be suitable for the excavation of landfill cells or trenches and the construction of drainage works and should also be of sufficiently low permeability to slow the passage of leachates from the site. Sites in clay-rich environments are preferable, as their low permeability will allow more time for natural attenuation of leachates to occur. Preferably, the site would have adequate soil to also meet required cover needs. There should be no underlying limestone, carbonate, fissured, or other porous rock formations which would be incompetent as barriers to leachate and gas migration.	• Examine topography from relevant maps and comment on extent of slopes present. Review literature for soil information. • Examine any open excavations present to discern lithological information and augment information with community interviews from farmers/builders, and so on. • Check for drainage direction. • Check for adequacy of soil cover and measure thickness. • Review literature and relevant GIS information.

Criteria	Relevance	Methodology for Investigations
Adjacent Land Use	Consideration should be given to existing and possible future developments adjacent to the site. Sites with potential for higher-value alternative uses such as nature conservation and agriculture and residential development should not be used. Consideration should therefore be given to long term planning projections to ensure that the establishment of the site will not jeopardize any environmentally sensitive areas or have an unacceptable negative impact on existing or future land uses. The impact of landfill operations on neighboring residential, commercial, or public developments should be minimized by including a buffer zone around the landfill. Residential development should be typically further than 250 m from the perimeter of the proposed landfill cell development to minimize the potential for migration of underground liquid or gaseous emissions. For high-rainfall areas, effective storm water diversion is essential if leachates production is to be avoided.	• Review map of area and augment information by examining site and neighboring lands for presence of environmentally sensitive areas, agricultural land, and so on. Note domestic, industrial, and commercial facilities present. Explore the possibility of having a buffer zone. • Interview community members to corroborate information and observations. Enquire about possible future land uses. • Review literature and relevant GIS information.
Flora and Fauna	Some areas may contain protected or important natural flora and fauna, which causes the site to assume a special significance that may render it unsuitable for a landfill. Wetlands are also important for nature conservation, especially bird and fish life, and selection of a site near a wetland may also increase the risk of spreading disease through scavenging birds visiting the landfill and then travelling into gardens and other populated areas.	• Observe flora and fauna in area. Take samples of unrecognized flora for further examination if necessary. • Interview community members of presence of the types of flora and fauna present and prevalence. • Observe area for presence of wetlands. • Review literature and relevant GIS information.
Site Capacity Considerations	The site should be large enough to store the envisaged tonnage of waste. Ease of constructing access roads, fencing, drainage, and landscaping and use of machinery should also be considered. Prior estimates have ensured however that areas demarcated on maps are adequate in size.	• Walk through site, and based on various parameters discussed, form an opinion on the suitability of the site.
Vehicle Access	Access to the site should be as direct as possible to ensure that people are not tempted to dump their rubbish before getting to the landfill and to minimize waste spillage from vehicles. Roads leading to the site should be in good condition and wide enough to handle the anticipated traffic load.	• Examine roads leading to site and habitations/other facilities along the route and comment on traffic along routes. Augment information by using maps. • Review literature and relevant GIS information.

Criteria	Relevance	Methodology for Investigations
Other Subsidiary Issues	These may include site purchase costs, site development costs, and infrastructure; historical use of site; closeness to cultural heritage sites; visual impacts; and compensation and resettlement issues.	• Examine sites to form an opinion on infrastructure, closeness to cultural heritage sites, and visual impacts. • Interview community members for cultural heritage and historical use of site. • Find out from community members/WARDC about land ownership issues at site. • Do a cursory assessment of the extent of compensation and resettlement at each site and the ease of carrying out resettlement (if any). • Review literature and relevant GIS information.

ANNEX 3
ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) TEMPLATE

Introduction

The ESMP includes several matrices of E&S mitigation measures throughout the project lifecycle. A full-fledged ESMP shall include other key elements such as institutional arrangement, capacity-building and training plan, and background information.

The ESMP presents the E&S management, mitigation, monitoring, and institutional measures to be taken during the project to reduce adverse E&S effects to acceptable levels. It specifically defines what actions must be taken and who is responsible to reduce project impacts. The ESMP also includes several component-plans defining specific action programs for waste management, emergency response, post-construction closure, public consultation, and disclosure. The ESMP highlights the issues and concerns that are presented in the ESIA and identifies reasonable and practical responses to address and mitigate potentially adverse effects.

Management Plans

The Management Plans document the systems and processes that will be implemented throughout the project to ensure compliance with local and international standards. The PMU, in collaboration with the supervising engineer, will have the overall responsibility for ensuring that the construction contractor manages construction related E&S and OHS risks by applying systematic risk management principles. Such plans may include

- CESMP,
- OHS Plan in compliance with ISO 45001:2018,
- WMP,
- Traffic Management Plan,
- Camp Management Plan,
- Influx Management Plan,
- Emergency Response Plan,
- Post-Construction Plan,
- PCDP,
- GBV Management Plan,
- E&S and OHS Monitoring Plans, and
- Code of Conduct.

CESMP and Occupational Health and Safety Plan

The CESMP and OHS Plans identify the principles, approach, procedures, and methods that shall be used to control and minimize the E&S and OHS impacts of all the project activities.

Waste Management Plan

The WMP describes the procedures, systems, equipment, and structures specific to waste management and disposal. Waste generation at source will be applied to make waste disposal more manageable. Hazardous and non-hazardous waste management practices should be developed and applied.

Emergency Response Plan

The Emergency Response Plan provides employees and managers with specific instructions that will allow them to respond quickly and efficiently to any foreseeable emergencies likely to occur during the project. It is developed using recognized and accepted methods and practices and includes specific responses, protocols, and management contacts. Emergency types usually include

- Fire or explosion,
- Work-related accidents,
- Pollution or chemical spills,
- Flooding and rainstorm (natural disaster),
- Medical health cases, and
- Civil unrest and disturbances.

Public Consultation and Disclosure Plan

The PCDP is intended to define objectives and establish the framework necessary to provide understandable information to all parties involved. This plan will be implemented to ensure timely and effective communication between the project's management and the affected stakeholders.

Post-Construction Closure

The primary objective of post construction closure is to ensure the environmental and community health and safety of an area once construction activities have ceased. The construction contractor will be required to provide a plan for closure of all construction sites, which will ensure that all construction materials, waste, equipment, and so on are cleared away; all borrow sites and waste disposal sites are closed; and the project areas are rendered safe for public use.

Environmental and Social and Occupational Health and Safety Monitoring Plan

The Environmental and Social Monitoring Plan and the OHS Monitoring Plan should outline a comprehensive monitoring plan.

Good Practices to Be Considered

Many pertinent mitigation measures and good practices are well documented in World Bank Group EHS Guidelines and other GIIPs. They should be followed in general, considering the country context.

ANNEX 4
WASTE MANAGEMENT PLAN TEMPLATE

WASTE MANAGEMENT PLAN

Introduction

The Waste Management Plan (WMP) is an essential component of the ESIA and is designed to ensure the control and minimization of potential sources of waste during construction. The WMP describes the proposed measures to be used to protect affected environmental and social receptors from adverse impacts associated with the generation of project waste. The WMP considers

- Proposed handling, storage, and disposal methods and
- Equipment and staff.

The objectives of the WMP are to

- Identify all potential sources of waste;
- Generate the least possible amount of waste through reduction, reuse, and recycling practices and review/approve all orders for materials, chemicals, and supplies to limit the environmental impact thereof;
- Protect the health and safety of workers and communities;
- Avoid or mitigate any potential negative impacts on all elements of the environment—including, but not limited to, people, flora, fauna, air, soils, and surface water and groundwater resources;
- Monitor waste generation, handling and disposal to assess whether waste management is being carried out according to the WMP and its associated directives;
- Avoid costly cleanup through prevention; and
- Ensure a logical and efficient plan for waste collection, sorting, and disposal that reduces the number of times the waste is handled.

Waste Identification and Management

Waste streams likely to be generated include the following:

- Construction wastes
- Earthworks waste (spoils)
- Domestic wastes
- Hazardous wastes
- Wastewater.

Construction Wastes

These could include materials such as

- Concrete,

- Wood,
- Packaging (cement bags, plastic, and cardboard),
- Waste steel, and
- Nails.

Earthworks Waste (Spoils)

Spoils are unwanted and unusable rock or soil materials generated from earthworks.

Spoils Management

Spoils will not be stored in areas that are sloping or where surface runoff can easily wash away the materials.

Domestic Wastes

These include

- Aluminum, glass, plastic, paper, cardboard, and so on;
- Food and food packaging;
- Old tires, hoses, and rubber; and
- Fabrics and other domestic type wastes.

Hazardous Wastes

Hazardous wastes are materials considered reactive, flammable, radioactive, corrosive, and/or toxic. Hazardous wastes that may be generated include the following:

- Batteries
- Aerosol cans
- Excess paints, thinners, and solvents
- Used oil, as well as oil/petroleum-contaminated soils
- Medical wastes (first aid).

Used/Waste Oils and Hydrocarbon-Contaminated Soils

Construction activities may have the potential for release of petroleum-based products, such as lubricants, hydraulic fluids, or fuels during their storage, transfer, or use in equipment. The World Bank Group Guidelines include techniques for prevention, minimization, and control of these impacts. Soil contamination may occur, and actions necessary to manage the risk from contaminated land will be taken depending on factors such as the level and location of contamination and the type and risks of the contaminated media.

Wastewater

Wastewater will be produced through construction activities such as concrete wastewater (slurry). The construction contractor will be responsible for treating concrete wastewater if needed.

Housekeeping

- All work areas are maintained in a tidy state, free of debris and rubbish.
- In cases where an inadequate standard of housekeeping has developed and compromised safety and cleanliness, the environmental and OHS officers shall notify the relevant site supervisor to halt work until the area has been tidied up and made safe.

Waste Storage

All wastes will be stored in an environmentally responsible manner.

Waste Transportation and Disposal

Handling procedures, developed based on World Bank Group EHS Guidelines for Waste Management Facilities (2007), will be adopted as part of the project's waste management program.

Segregation and Reuse of Materials

Material reuse will be enforced where possible to ensure that maximum use of available materials is made and limit as best as possible the materials which would have to be disposed of. Segregation of wastes at source will be enforced through the provision of labelled waste bins, which will be stationed around active construction areas.

Management Responsibilities

The supervising engineer and environmental officer have the overall responsibility for ensuring the implementation of the WMP. Regular monitoring of the contractor's compliance with the waste management system established will be monitored by the supervising engineer, including compliance with waste segregation and housekeeping along the route and especially waste storage areas.

Waste Facility Record Keeping

The environmental officer will be responsible for maintaining records, including types and volumes of wastes generated by the project activities.

Contractor Responsibility

The construction contractor is responsible for ensuring that all workers are aware of the waste management procedures contained in the WMP. The contractor will liaise with the supervising engineer and environmental officer on whether there are any issues or challenges possibly preventing compliance with the plan, for example, unavailability of facilities (waste bins) and irregular collection and disposal schedules.

ANNEX 5
STAKEHOLDERS CONSULTED FOR THE ESMF

Work Area	Name	Designation	Date	Communications Medium	Issues Discussed
FDD	Adams Kargbo	Director, FDD	November 11, 2020	In person Email	Project overview, project management, and provision of literature
FDD	Saad Barrie	FDD	November 11, 2020	In person Email	Project management and provision of literature
National Disaster Management Agency	Major General Bureh Kargbo	Head, NDMA	November 12, 2020	Telephone	Views on new agency, challenges and expectations
ONS	Francis Lagumba Keili	Director of Planning, ONS	November 10, 2020	In person Telephone	The role of ONS in disaster management, provision of literature, and views on new Disaster Management Agency
EPA	Mohamed Bah	Director, EPA	November 10, 2020	In person	EPA's practices and procedures relating to this project and new EPA Act
Ministry of Works	Paul Bockarie	Professional Head, Ministry of Works	November 13, 2020	In person	MWTIE's role in certifying contractors, relationship between MWTI and MLHCP
WARDC	Rahman Tom-Farmer	Chief Administrator	November 13, 2020	In person	WARDC's operation organogram
WARDC	Maurice George Ellie	Development Planning Officer	November 13, 2020 December 10, 2020	In person In person	Operation of Planning Department and plans for spatial planning in WARDC
WARDC	Marian J. Tucker	Environmental and Sanitation Officer	November 13, 2020 December 10, 2020	In person In person	Operation of Environmental Department and SWM issues in WARDC
WARDC	Sheku Jah	Valuator	November 13, 2020	In person	Property valuation in WARDC
WARDC	Chernoh Juldeh Bah	Information Education Communication Officer	November 13, 2020 December 10, 2020	In person In person	Communications issues within WARDC
Shaadeen Enterprise	Isaac Lamin	Manager	November 14, 2020	In person	SWM project run for WARDC
Freetown City Council	Yvonne Aki Sawyerr	Mayor	December 9, 2020	In person Email	Management of FCC - plans and constraints, relationships with GoSL, current World Bank projects. All subcomponents of project dealing with FCC.
Freetown City Council	Modupe Williams	Consultant	November 11, 2020 December 9, 2020	In person Email	Operation of Mayor's delivery units. Current World Bank FCC projects. All subcomponents of project dealing with FCC.
Freetown City Council	Eugenia Kargbo		November 11, 2020	In person	SWM in FCC

Work Area	Name	Designation	Date	Communications Medium	Issues Discussed
Freetown City Council	Lyndon Baines-Johnson	Development Policy Analyst, Mayor's Delivery Unit	November 12, 2020	In person	Waste management projects in FCC
Freetown City Council	Marrah	Development Officer	Nov ember 17, 2020	Telephone	Current World Bank FCC projects. All subcomponents of project dealing with FCC
Bo City Council	Veronica J Fortune	Chief Administrator	Nov ember 17, 2020	Telephone	Management and organizational structure of Bo City Council
Bo City Council	Haja Halima Lukay	Development and Planning Officer	November 17, 2020 November 18, 2020	In person Telephone Email	Spatial planning, property tax management, SWM issues, and Gender issues.
Bo City Council	Juliana Bah	E&S Officer	Nov ember 17, 2020	In person	SWM issues
Bo City Council	Saidu D. Kamara	Property Tax Manager	Nov ember 17, 2020	In person	Property tax management issues
Bonthe City Council	Layemie Joe sandy	Mayor	Nov ember 17, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Bonthe District Council
Bonthe City Council	Adu Vandi Kondorvoh	Development Planning Officer	November 19, 2020	Telephone	Spatial planning and property tax management issues
Bonthe City Council	Sylvester Abdul Dagima	Information, Education, and Communication	November 19, 2020	Telephone	Communications issues
Kenema City Council		Deputy Mayor	November 20, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Kenema District Council
Kenema City Council		Development/Planning Officer	November 20, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Kenema District Council
Kenema City Council		Environmental Officer	November 20, 2020	In person	SWM issues
Kenema City Council		Property Tax Officer	November 20, 2020	In person	Property tax issues
Kenema City Council	Mr. Hardy Jalloh	Chairman, Kenema Traders Union	November 23, 2020	In person	Issues related to constraints faced by traders
Port Loko City Council		Deputy Mayor	November 23, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Kenema City Council
Port Loko City Council		Chief Administrator	November 23, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Kenema District Council
Port Loko City Council		Environmental Officer	November 24, 2020	In person	SWM issues

Work Area	Name	Designation	Date	Communications Medium	Issues Discussed
Port Loko City Council		Development/Planning Officer	November 24, 2020	Telephone	Planning issues and property tax management issues
Makeni City Council	Santigie Brima Mansaray	Deputy Mayor	November 24, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Makeni City Council
Makeni City Council	Daniel Kpukumu	Chief Administrator	November 24, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Makeni City Council
Koidu City Council	Komba Sam Sam	Mayor	November 24, 2020	Telephone	Management and operation of council. All subcomponents of project dealing with Koidu City Council
Port Loko City Council		Chief Administrator	November 24, 2020		Management and operation of council. All subcomponents of project dealing with Port Loko City Council
Port Loko City Council	Ing Sesay		November 24, 2020		Management and operation of council. All subcomponents of project dealing with Port Loko City Council
Coconut farm - Ward 421	Musa Almamy Sesay	Councilor	November 25, 2020	In person	Discuss plans for FGD meeting
	Kadiatu Kamara	Women's Leader	November 25, 2020	In person	Discuss plans for FGD meeting
Moyiba - Ward 419	Solomon J Kamara	Councilor	November 25, 2020	In person	Discuss plans for FGD meeting
	Kadie Haward	Women's Leader	November 25, 2020	In person	Discuss plans for FGD meeting
Rokupa - Ward 408	Shaka A G Turay	Councilor	November 25, 2020	In person	Discuss plans for FGD meeting
Rokupa - Ward 408	Nene Sesay	Women's Leader	November 25, 2020	In person	Discuss plans for FGD meeting
Shaadeen Enterprise	Isaac Lamin	Manager	November 13, 2020		
WARDC	Kasho Holland-Cole	Chairman	December 10, 2020	In person	Management and operation of council. All subcomponents of project dealing with WARDC
WARDC	Rahman Tom-Farmer	Chief Administrator	December 10, 2020	In person	Management and operation of council. All subcomponents of project dealing with WARDC
WARDC	Marian J Tucker	Environmental and Sanitation Officer	December 10, 2020	In person	Management and operation of council. All subcomponents of project dealing with WARDC
WARDC	Chernor Juldeh Bah	Information Education Communication Officer	December 10, 2020	In person	Management and operation of council. All subcomponents of project dealing with WARDC
FCC	Rosetta Wilson		December 14, 2020	Telephone Email	Digital town hall pilot in Ward 422

Work Area	Name	Designation	Date	Communications Medium	Issues Discussed
FCC	Eugenia Kargbo		December 14, 2020	Telephone Email	5-year (Transform Freetown) strategy for waste management
FCC	Amira El Halabi		December 14, 2020	Telephone Email	Details of recycling projects
FCC	Manja Kargbo		December 14, 2020	Telephone Email	Employee information by gender

ANNEX 6
DETAILS OF FOCUS GROUP DISCUSSIONS AND INTERVIEWS FOR SPECIFIC SUB PROJECTS

A. URBAN INFRASTRUCTURE COMPONENT

Moyiba - FGD Participants

1. Abu Turay - Councilor's representative - 077-300340
2. Fatmata Bangura (F) - Women's Leader/Mammy Queen - 088-391037
3. Ibrahim S. Bangura - Youth Leader - 077-236161
4. Abu Bakarr Sesay - Disabled person
5. Saidu Koroma - Elderly person (over 65) - 078-793675
6. Moses Pessima - Policeman - 077-551684
7. Yaraba Bangura - Section Chief - 077-272392
8. Lamrana Jalloh - Chairman - 077-326071
9. Kadie Howard (F) - Chairlady for bike riders - 099-208230
10. Suad Kamara (F) - Youth representative
11. Safie Turay (F) - Women's representative - 074-270271
12. Abdul Karim - Council committee member - 088-753574.

Rokupa - Wharf Community- FGD Participants

1. Sheku A. G. Turay - Councilor - 079-245775
2. Nana Sesay (F) - Women's leader - 077-572445
3. Chrispin Koroma - Police officer - 099-706676
4. Sallu Bah - Elderly person - 076-962396
5. Ibrahim Sesay - Disabled person - 077-514153
6. Saidu Bangura - Youth leader - 077-599472
7. Isata Conteh (F) - Youth - 030-708064
8. Alima Kamara (F) - Youth - 077-250837
9. Abdul S. Bangura - Youth - 077-377504
10. Alusine M. Sesay - Youth - 077-263495
11. Mabinty Fofanah (F) - Youth - 088-949908
12. Ishmael Kamara - Youth - 077-507894
13. Alhaji M.S.Y. Kanu - Observer - 078-440617.

Coconut Farm -FGD Participants

1. Musa Sesay - Councilor - 077-692141

2. Nawoh Mansaray (F) - Women's leader - 077-349987
3. Ibrahim Jibu Kamara - Disabled person - 088-674942
4. Ibrahim Mansaray - Youth leader - 079-691951
5. Yeabu Kargbo (F) - Elderly person
6. Fatmata Kamara (F) - Youth - 099-037414
7. Chernoh Saidu - Police officer - 077-347131
8. Fatmata Koroma (F) - Youth - 088-413454
9. Ibrahim Kamara -Youth - 088-390303
10. Mohamed A. Kabia - Youth - 088-699134
11. Chernor Bangura - Youth - 077-202663
12. Musa Bah - Youth - 080-113315
13. Foday Kuyateh – Youth - 030-048046.

(i) MARKET SUBCOMPONENT

FGDs for Market Project

Kenema City Market

Participants

(a) Fisheries City Market Chairladies

- Madam Massa Mansaray - 076-650600
- Madam Haja K. Ngiawo - 076-711761
- Madam Lucy Mattia - 076-840587
- Madam Jebbeh Junisa - 076-512106.

(b) Kenema Traders Union Reps.

- Mr. Hardy Jalloh - Chairman - 076-797656
- Mr. Lansana Jawara - Public relations officer - 076-508199
- Mr. Mohammed Saidu Fornah - 076-507663.

Campbell Street Market - Makeni

Participants

1. Isatu Koroma - Chairlady
2. Zainab Yambasu - Junk seller - 033-642940
3. Fatmata J. Bangura - Onion and seasonings trader - 080-631033
4. Samuel Fornah - Meat seller (butcher) - 088-019543
5. Mohamed Sesay - Frozen products (chicken) - 030-884300

6. Isatu Jalloh - Fish trader - 033-642940
7. Isatu Kamara - Vegetable seller - 080-023399
8. Hassan Kamara - Grinder
9. Zandra - Union chairman - 077-703738
10. Daniel Gbukumu - CA Makeni – 099-394687.

Bo Market

People Interviewed

1. Fina Tommy - Market chairlady - 078-467647
2. Mamie Kamara - Market vice chairlady.

(ii) SWM SUBCOMPONENT

Interviews with people around Kingtom and Kissy Landfill sites/observations

Interviews

Interview at least 15 people in each landfill site (equal number of men and women at the site) on the following:

(a) Job carried out by respondent at the dumpsite
(b) Tenure of carrying out this job
(c) Brief details of job
(d) Educational status
(e) Marital status - single, married, divorced
(f) Number of dependents
(g) Typical number of hours per day on the job and days per week
(h) Earnings from dumpsite job per month
(i) List of any alternative jobs done
(j) Monthly earnings from alternative job
(k) OHS issues associated with this job
(l) Assistance required for this job.

RESULTS OF CONSULTATIONS HELD

Feedback from various stakeholders on many of the salient aspects of the project have been incorporated into various sections of the report, especially in the section on E&S baseline. Notwithstanding this, the outcome of key informant interviews and FGDs are presented in this section.

FGDs - Urban Infrastructure project

Issues for discussion

1. What are the main occupations and sources of income for household members in this community? Do most people earn their income from this community or outside it? How would you describe the poverty levels experienced in this community?
2. What are your views on the state on infrastructure in this community - roads, electricity, water, telecommunications, and so on? What suggestions do you have on addressing and prioritizing any infrastructure problems?
3. What is the state of gender-based violence in this community? This includes any violence that exists on the basis of gender, including physical, sexual, and psychological abuse. Such acts could include (but are not limited to) domestic violence, sexual violence, rape, and forced marriage including child marriage.
4. Do you have any concerns in this community related to natural disasters or other disasters? How could you guard against preventing such problems and how could you address them if they occur?
5. Comment on the access of women to decision-making. Is there equal participation of women and men in decision-making? Do women have an equal right to use resources, leadership opportunities, and skills training?
6. What is the status of health and sanitation in this community? How do most people access health care, and what are the most prevalent diseases?
7. How are projects handled in this community? How does the community ensure projects are well managed? What monitoring mechanisms are put in place?
8. What are the problems of disabled people in this community and what is being done/should be done to address these?
9. What skills/business supplies are available/could be made available for implementing infrastructure projects in this community? How do you ensure such skills are available for projects?
10. How easy is it to get business finance in this community? Can loans be accessed easily?
11. What are the five major needs of this community, and how would you prioritize these?
12. Is this a safe community to live in? What is the status of crime, and how is crime being addressed?
13. Do you have any other issues you would like addressed?

Summary of Responses from Participants

Rokupa

- The main sources of income of the people in the community are fishing, petty trading including plastic collection, and unskilled labor.
- The community has lots of school dropouts with an estimated ratio of only 1 out of 10 girls finishing high/secondary school.

- There are only two Government-assisted primary schools and no government assisted secondary schools within the community; hence, the secondary school pupils in the community do not have access to the Government's free quality education.
- The Rokupa community has very poor infrastructure; roads are unpaved with very bad drainage system. Safe water supply is a challenge. There is no reliable electricity supply, and houses are very poorly built with mud walls and poor foundations.
- GBV in this community is low, and the police officer stated that they hardly get such reports nowadays. The low GBV has been a result of the conscious efforts of human rights organizations such as MAGE Salone, Save the Children, Defense for Children International, GOAL, and so on which have been engaging the community people on issues of GBV, rape, and child labor.
- There is a high level of prostitution in the community. There are two main slogans that are used to describe the situation: fish for fish or water for water; this means the fishermen offer fish for sex while water owners offer water for sex.
- The community stakeholders however signed a memorandum of understanding including all political parties, the security (police), and other human rights organizations to ensure that perpetrators of GBV, rape, and other human rights violators are exposed and brought to justice without fear or favor
- The community is prone to natural disasters such as coastal flooding along the coastal communities and poor drainage triggered flooding along Vandy street, Cinna Lane, Bongo Lane, and Sanko Street.
- Fire incidences among the fishing community along the seaside are common; most fishermen take into their homes outboard boat machines containing fuel, thereby risking the possibility of fire accidents in their homes. Also, the fish drying facilities are made of wooden and other materials that can easily catch fire.
- There have also been incidences of rock falls and landslides resulting into deaths and property destruction in cliff-side settlements within the community.
- The government, through the NPAA, has drawn a red line along the coast to prevent the coastal communities from extending settlements seaward.
- Proper drainage systems within the community could go a long way to stop flooding along the streets prone to flooding within the community.
- Women have appreciable access to decision-making and are represented in several decision-making bodies/institutions in the community including the ward council.
- In governance, women said they participate fully in political activities including elections; they said they are not intimidated by the male counterparts in decision-making, and they do put up women candidates for ward committee and other positions.
- According to community stakeholders, the common diseases reported are malaria, cold, and typhoid.
- The community has access to a renowned medical facility (Rokupa Government Hospital) within a short distance from the community.
- The community also has a World Bank Community Projects Monitoring Group which was constituted by the Decentralization Secretariat.

- The Rokupa-Wharf community has many disabled who are confronted with several problems including unemployment, lack of survival skills, and street begging.
- The disabled representative is the disabled chairman; he runs a blacksmith center from which he trains many other disabled people in blacksmithing.
- The blacksmith workshop is run as an organization called the Indigenous Handicap Blacksmith Development Association.
- The community has business contractors and building material shops that can supply building materials.
- There are also both skilled and unskilled labor to support community project initiatives.
- The community has access to microcredit facility, but the non-profitability of businesses and the rigid interest rates have caused people to refrain from taking microcredit.
- The five major community needs in the order of priority are roads, water, electricity, vocational training center, and community schools approval.
- Crimes reported in the community include common assaults, fraudulent conversions, and robbery.
- According to the Sierra Leone police representative, there are criminal gangs in the community who hang around prominent areas like Gaza, Rokupa Junction, and Zubairu Street.
- The community and police have formed an anti-robbery squad comprising active youths who do community night patrols to help curtail these crimes.
- There is high incidence of drug abuse in the community; the drug abusers have a common base in the community called road block.
- Most of these drug addicts belong to cliques in the community. Some known cliques in the community include the Rokupa hood, Rokupa Wharf hood, and the prime state.
- The major source of water within this community is from hand-dug wells located close to the coast. These water sources are usually salty as sea water usually encroaches into them.

Moyiba

- Incidences of GBV, including rape and child penetrations, are not common because of stringent community efforts in making sure that perpetrators of such crimes are brought to justice.
- Teenage pregnancy is high within the community, and this is mostly because young girls and teenagers are not properly cared for and are left vulnerable to men who can afford to care for them.
- In the recent past , there used to be fatal natural disasters including rock falls from the cliff of mount Aureol and floods especially in the rainy season, but with the disaster mitigation initiative by the FCC, measures are now in place for monitoring and preventing the occurrences of such natural disasters.
- Women in the Moyiba community do not have any form of restriction in the decision-making process at all levels of community engagement.

- Women in the community are mostly not interested and stay away from decision-making engagements such as politics and other community mobilization efforts.
- The community has a public health unit that can handle very minor health issues. Serious health issues are usually referred to faraway facilities.
- The community usually puts together a project monitoring committee to ensure compliance with project specifications and actualization. The project monitoring community is usually headed by the councilor.
- The disabled representative said they usually suffer provocation and intimidation from some community people.
- There is no existing organization for the disabled within the Moyiba community.
- The community can provide/supply some unskilled and some form of skilled labor when needed; it has carpenters who operate from the Saio Workshop located within the community.
- There is a building material shop in the community called Abu Ninker Enterprise that is capable of supplying all forms of building materials when required.
- The community has an active quarrying population that is capable of supplying granite for medium-scale construction projects.
- Business finances (particularly large sums) are hard to secure, petty traders in the community do not have property to use as collateral, and the bank interest rates are also very high.
- Petty traders in the community have access to microcredit facilities. There is a women's group that secures credit facility from a microcredit organization called Munafasa.
- According to the community stakeholders, the five major community needs in the order of importance include roads, water, health facility, electricity, and drainage.
- Moyiba community is considered a relatively safe community, but it is not entirely free from crimes that may cause discomfort to the community.
- Common crimes that are committed in the community include fraudulent conversion, fighting, assault, theft, and domestic violence.
- There is a high rate of drug abuse among the community youth which is responsible for most of the violence perpetrated in the community, including domestic violence.
- There is a clique operating in the community, and it is the main abuser of drugs and perpetrator of community-based violence. Most often, the Moyiba community clique clashes with the Mount Aureol clique result in serious violence.
- However, community stakeholders believe that the crime rate has significantly reduced over the last two years due to police and community policing efforts

Coconut Farm

- The main occupations of Coconut Farm community people are petty trading, stone mining, okada riding, waste management, and other skilled and unskilled labor.
- The community needs in the order of preference are roads, water, electricity, market, and hospital.

- Electricity supply in this community is relatively stable as this community and the Ashobi Corner community house one of EDSA'S branches
- The community has two public health units, but they are still inadequate to address the health needs of the growing population in the community as they cannot handle severe/difficult health issues.
- Incidences of GBV are low in the community, and common crimes include debts, assault, fraudulent conversion, and fighting.
- There are cliques that are based at the old school environment, Gaza, and Mount Auroel.
- Teenage pregnancies and child marriages are not commonplace in the Coconut Farm community.
- Drug abuse is pronounced among clique members operating within the community
- There is child labor and maltreatment, and children are forced to do street trading, which results in most of them absconding home.
- There are youth groups within the community such as Combined Youth Organization and The Money Team which participate in regular community cleaning exercises.
- The main natural disaster is flooding, which occurs mostly during the rainy season; according to the stakeholders, in 2017, one child was lost to flooding through the Coconut Farm drainage. There have also been incidences of rockfalls resulting from the Mount Aureol cliff which destroyed houses and property during the rains.
- Women are allowed to fully partake in governance issues, elections, local community deliberations, and engagements. There are Mammy queens and women's representatives in the ward development committees
- It was understood that there are no microcredit facilities in this community and that the community people will be ready to accept a microcredit scheme which is reasonable.
- There are different private groups that help collect refuse/waste and do community cleaning. Some use tricycles which charge SLL 2,000 rice bag.
- The most prevalent diseases are malaria, cold, and typhoid.
- The community has a community development committee comprising women, men, and the youth led by their zonal chairpersons who undertake community project monitoring and supervision. The community can provide local materials like granite and both skilled and unskilled labor when needed for project execution.
- The disabled population do not have clutches or wheelchairs. They claimed that people especially young people and children provoke them and that they would like to be involved in decision-making in their community. Since they are vulnerable and handicapped, the disabled representative said they are mostly unemployed and live by street begging.
- There is a community school called Ndawa primary school that is 20 years old, but it is not upgraded and is a death trap. The walls are all cracked, and it has no furniture. The teachers are volunteers, not on government payroll. Other schools in the community are the Quarry Sidique, Sierra Leone Muslim Brotherhood primary and secondary, and Science World—a private senior secondary school.

FGDs - Market Project

Issues for Discussion

Liaise with market chairman/chairlady and get FGD with six people at each market to discuss the following issues:

1. What are your views on the state on infrastructure in this market - water, buildings, electricity, toilets, and so on? What new facilities would you want?
2. What is the current compliance on payment of market dues/willingness to pay market dues?
3. What is the state of GBV in this market? This includes any violence that exists on the basis of gender, including physical, sexual, and psychological abuse. Do you have any child labor problems? Are there any prostitution problems?
4. What are the problems of disabled people in this market and what is being done/should be done to address these?
5. What areas of town do most of your clients come from?
6. Do you have any other issues you would like addressed?
7. Who makes decisions related to this market? How involved are women in decision-making?
8. What financial problems do you experience in running your business?

Summary of Responses

Bo Market

- There is a general willingness to pay market dues. Most of the market people (about 90 percent) are paying their market dues and are also in compliance with the yearly registration of their tables to council. The traders further assured us that they are willing to pay their dues going forward.
- GBV in this market is increasing; fighting, quarrelling, child labor, theft, and other psychological abuses are all increasing.
- Incidences of child labor have increased in the Bo Big Market; most of the people you see carrying stuff on their heads for sale are children under the age of 18.
- Prostitution among traders is also increasing, and it is becoming a problem in the market, but this occurs mostly during the night hours.
- Disabled people in the Bo Big Market are faced with several challenges including
    - Discrimination and
    - Difficulty with climbing high/steep steps in the market area, resulting in difficulty in movement and communication within the market.

Makeni Market

The following suggestions were made:

- Market expansion

- Improved toilets sensitive to gender services
- Cold storage, running water, and garbage collection site for Campbell Street Market
- Car park, good drainage system, better roads, and paved market surroundings.

Kenema Market

Views on the state on infrastructure in the fisheries city market

- Group members concluded that the water, toilet, and electricity facilities at this market were all very poor.
- The entire market building is completely dilapidated.

The entire Fisheries City Market needs the following:

- A newly constructed market building with the following modernized facilities:
    - Storages for the safety of their goods, day care center for the children of market women, improved water and toilet facilities, available electricity within the market structures and vicinity, provision of shops for fabrics and other commodities, and security/police post.

Payment of market dues

- Dues are paid.
- Market women are willing to pay their market dues at all times.

GBV

- There was no experience or report of GBV within the market.
- Women colleagues have always been advised to avoid the use of school-going children in the sales of items during school hours. Initially, this practice was rampant, but it has reduced.
- The problem of prostitution has not been experienced at the marketplace.

Problems with disabled persons

- It was observed that there were no provisions made for people with disability to have access to the market. No space was previously made for their accessibility.
- It was recommended that serious considerations be given to people with different disabilities each time a market is constructed, letting them have easy access to the market.
- Specific areas should be constructed and identified for the disabled.

Any other issues that need addressing?

Several issues were discussed, but emphases were laid on women that take microcredit loans with high interest rates making the women to be indebted, and as a result, some run away and go into hiding in other towns /communities.

Who makes decisions related to this market?

- The overall decision-making body for this market is the Traders Union with representatives from the various markets within the city.
- Each market within the city has an executive headed by a chairlady.
- Each chairlady from the various markets within the city is a member of the Traders Union Executive.
- Decisions that are taken by the Traders Union Executive are disseminated by the chairlady of the respective market, and similarly, problems that do exist in a particular market are shared by the chairlady to the Traders Union Executive for their timely actions.
- Participatory decision-making is ensured at every level.
- The Traders Union Executive has women's representatives who take major decisions pertaining to the day-to-day functions of the various markets within the Kenema City.

What financial problems do women experience in running their business?

- There is involvement in microcredit loan facilities with high interest rates
- There is dishonesty on the part of some women who take the loans and run away with the money to some other locations
- Loan recoveries are difficult from women. Sometimes, women stand as guarantors for other women colleagues who prove to be dishonest, and most times, the guarantors are harassed in case of any default.
- All of these cities have one major market which is overcrowded. There are other markets in various locations of the cities. Some have structural problems with the main buildings, and others need repairs. All of them have problems with toilets, water, and electricity. Collection of dues in most cases is ad hoc, and councils do not realize much from these dues. In prioritizing these markets, consideration should probably be given to the overcrowding issue. One major market in each city plus another one might be considered.

Key Informant Interviews at Landfill Sites

Interviews Covered

- Job carried out by respondent at the dumpsite
- Personal details
- Earnings
- Any alternative jobs done

- E&S and OHS issues associated with job
- Assistance required for the job.

Farmers/gardeners interviewed at the Kingtom Dumpsite indicated that they rely on small-scale gardening. However, they revealed that a huge percentage of crops are destroyed or eaten up by rodents from the dumpsite. The farmers/gardeners interviewed at the Kissy Dumpsite also indicated that they are engaged in small-scale gardening. Common crops include garden eggs, onions, peppers, bananas, and so on. Waste from the dumpsites affects drainage channels which leads to flooding during the rainy season. Rodents from the dumpsites affect crops and inhabitants in the community. In addition, odor, noise levels, and smoke pose environmental and health threat to communities living around dumpsites. These dumpsites predominantly act as a breeding ground for mosquitoes and other vectors.

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ANNEX 8
GUIDELINES FOR CULTURAL HERITAGE ISSUES

(Extracted from WB Document "Environmental & Social Framework for IPF operations-ESS8: Cultural heritage-Guidance notes for borrowers")

Introduction

1. ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present, and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge, and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. ESS8 sets out measures designed to protect cultural heritage throughout the project life cycle.

2. This ESS sets out general provisions on risks and impacts to cultural heritage from project activities. ESS7 sets out additional requirements for cultural heritage in the context of Indigenous Peoples. ESS6 recognizes the social and cultural values of biodiversity. Provisions on Stakeholder Engagement and Information Disclosure are set out in ESS10.

Objectives

- To protect cultural heritage from the adverse impacts of project activities and support its preservation.
- To address cultural heritage as an integral aspect of sustainable development.
- To promote meaningful consultation with stakeholders regarding cultural heritage.
- To promote the equitable sharing of benefits from the use of cultural heritage.

Scope of Application

3. The applicability of this ESS is established during the environmental and social assessment described in ESS1.

4. The term 'cultural heritage' encompasses tangible and intangible heritage, which may be recognized and valued at a local, regional, national, or global level, as follows:

- Tangible cultural heritage, which includes movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Tangible cultural heritage may be located in urban or rural settings, and may be above or below land or under the water; and
- Intangible cultural heritage, which includes practices, representations, expressions, knowledge, and skills—as well as the instruments, objects, artifacts, and cultural spaces associated therewith—that communities and groups recognize as part of their cultural heritage, as transmitted from generation to generation and constantly recreated by them in response to their environment, their interaction with nature, and their history.

5. The requirements of this ESS8 will apply to all projects that are likely to have risks or impacts on cultural heritage. This will include a project which:

(a) Involves excavations, demolition, movement of earth, flooding, or other changes in the physical environment;

(b) Is located within a legally protected area or a legally defined buffer zone;

(c) Is located in, or in the vicinity of, a recognized cultural heritage site; or

(d) Is specifically designed to support the conservation, management, and use of cultural heritage.

6. The requirements of ESS8 apply to cultural heritage regardless of whether or not it has been legally protected or previously identified or disturbed.

7. The requirements of ESS8 apply to intangible cultural heritage only if a physical component of a project will have a material impact on such cultural heritage or if a project intends to use such cultural heritage for commercial purposes.

Requirements

A. General

8. The environmental and social assessment, as set out in ESS1, will consider direct, indirect, and cumulative project-specific risks and impacts on cultural heritage. Through the environmental and social assessment, the Borrower will determine the potential risks and impacts of the proposed activities of the project on cultural heritage.

9. The Borrower will avoid impacts on cultural heritage. When avoidance of impacts is not possible, the Borrower will identify and implement measures to address impacts on cultural heritage in accordance with the mitigation hierarchy[22]. Where appropriate, the Borrower will develop a Cultural Heritage Management Plan[23].

10. The Borrower will implement globally recognized practices for field-based study, documentation, and protection of cultural heritage in connection with the project, including by contractors and other third parties.

11. A chance finds procedure is a project-specific procedure which will be followed if previously unknown cultural heritage is encountered during project activities. It will be included in all contracts relating to construction of the project, including excavations, demolition, movement of earth, flooding, or other changes in the physical environment. The chance finds procedure will set out how chance finds associated with the project will be managed. The procedure will include a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence-off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of this ESS and national law; and to train project personnel and project workers on chance find procedures.

12. Where necessary due to the potential risks and impacts of a project, the environmental and social assessment will involve the participation of cultural heritage experts. If the environmental and social assessment determines that the project may, at any time during the project life cycle, have significant potential risks and impacts on cultural heritage, the Borrower will engage cultural heritage experts to assist in the identification, valuation assessment, and protection of cultural heritage.

B. Stakeholder Consultation and Identification of Cultural Heritage

13. The Borrower will identify, in accordance with ESS10, stakeholders that are relevant for the cultural heritage that is known to exist or is likely to be encountered during the project life cycle. Stakeholders will include, as relevant:

(a) Project-affected parties, including individuals and communities within the country who use or have used the cultural heritage within living memory; and

(b) Other interested parties, which may include national or local regulatory authorities that are entrusted with the protection of cultural heritage and nongovernmental organizations and cultural heritage experts, including national and international cultural heritage organizations.

14. The Borrower will carry out meaningful consultations[24] with stakeholders in accordance with ESS10 in order to identify cultural heritage that may be affected by the potential project; consider the significance[25] of the cultural heritage affected by the project; assess the potential risks and impacts; and explore avoidance and mitigation options.

Confidentiality

15. The Borrower, in consultation with the Bank, project-affected parties (including individuals and communities), and cultural heritage experts, will determine whether disclosure of information regarding cultural heritage would compromise or jeopardize the safety or integrity of the cultural heritage or would endanger sources of information. In such cases, sensitive information may be omitted from public disclosure. If the project-affected parties (including individuals and communities) hold the location, characteristics, or traditional use of the cultural heritage in secret, the Borrower will put in place measures to maintain confidentiality.

Stakeholders' Access

16. Where the Borrower's project site contains cultural heritage or prevents access to previously accessible cultural heritage sites, the Borrower will, based on consultations with users of the site, allow continued access to the cultural site, or will provide an alternative access route, subject to overriding health, safety, and security considerations.

C. Legally Protected Cultural Heritage Areas

17. As part of the environmental and social assessment, the Borrower will determine the presence of all listed legally protected cultural heritage areas affected by the project[26]. If the proposed project will be located within a legally protected area or a legally defined buffer zone, the Borrower will:

(a) Comply with local, national, regional, or international cultural heritage regulations[27] and the protected area management plans;

(b) Consult the protected area sponsors and managers, project-affected parties (including individuals and communities), and other interested parties on the proposed project; and

(c) Implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area.

D. Provisions for Specific Types of Cultural Heritage

Archaeological Sites and Material

18. Archaeological sites comprise any combination of structural remains, artifacts, human, or ecological elements and may be located entirely beneath, partially above, or entirely above the land or water surface. Archaeological material may be found anywhere on the earth's surface[28],singly or scattered over large areas. Such material also includes burial areas[29], human remains, and fossils. For more recent burial places connected directly to project-affected parties, appropriate mitigation measures will be identified pursuant to paragraphs 8 and 9 through consultations with such parties.

19. Where there is evidence or high probability of past human activity in the area of the project, the Borrower will conduct desk-based research and field surveys to document, map, and investigate archaeological remains. The Borrower will document the location and characteristics of archaeological sites and materials discovered during the project life cycle and provide such documentation to the national or subnational cultural heritage authorities.

20. The Borrower will determine, in consultation with cultural heritage experts, whether archaeological material discovered during the project life cycle requires: (a) documentation only, (b) excavation and documentation, or (c) conservation in place; and will manage the archaeological material accordingly. The Borrower will determine ownership and custodial responsibility for archaeological material in accordance with national and subnational law, and until such time as custody has been transferred, will arrange for identification, conservation, labelling, secure storage, and accessibility to enable future study and analysis.

Built Heritage

21. Built Heritage refers to single or groups of architectural works in their urban or rural setting as evidence of a particular civilization, a significant development, or a historic event. Built Heritage includes groups of buildings, structures, and open spaces constituting past or contemporary human settlements

that are recognized as cohesive and valuable from an architectural, aesthetic, spiritual, or sociocultural perspective.

22. The Borrower will identify appropriate mitigation measures to address the impacts on Built Heritage, which may include (a) documentation; (b) conservation or rehabilitation in situ; and (c) relocation and conservation or rehabilitation. During any rehabilitation or restoration of cultural heritage structures, the Borrower will maintain the authenticity of form, construction materials, and techniques of the structure(s)[30].

23. The Borrower will preserve the physical and visual context of individual or groups of historic structures by considering the appropriateness and effect of project infrastructure proposed for location within the range of sight.[8]

Natural Features with Cultural Significance

24. Natural features may be imbued with cultural heritage significance. Examples include sacred hills, mountains, landscapes, streams, rivers, waterfalls, caves, and rocks; sacred trees or plants, groves and forests; carvings or paintings on exposed rock faces or in caves; and paleontological deposits of early human, animal, or fossilized remains.[31] The significance of such heritage may be localized in small community groups or minority populations.

25. The Borrower will identify, through research and consultation with project-affected parties (including individuals and communities), natural features with cultural heritage significance affected by the project, the people that value such features, and the individuals or groups with authority to represent and negotiate regarding the location, protection, and use of the heritage place(s).

26. Most natural features with cultural heritage significance are best protected by preservation in situ. If it is not possible to preserve the natural features in their existing location, the transfer of the cultural heritage to another location will be conducted in consultation with project-affected parties, in accordance with GIIP. The agreement that is reached regarding the transfer will respect and enable continuation of the traditional practices associated with the cultural heritage that has been transferred.

Movable Cultural Heritage

27. Movable cultural heritage includes such objects as: historic or rare books and manuscripts; paintings, drawings, sculptures, statuettes, and carvings; modern or historic religious items; historic costumes, jewellery, and textiles; fragments of monuments or historic buildings; archaeological material; and natural history collections such as shells, flora, or minerals. Discoveries and access resulting from a project may increase the vulnerability of cultural objects to theft, trafficking, or abuse. The Borrower will take measures to guard against theft and illegal trafficking of movable cultural heritage items affected by the project and will notify relevant authorities of any such activity.

28. The Borrower, in consultation with relevant cultural heritage authorities, will identify movable cultural heritage objects that may be endangered by the project and make provisions for their protection

[31] Often the designation of cultural significance is kept secret, known only to a specific local population, and associated with ritual activities or events. The sacred character of such heritage may pose a challenge in determining how to avoid or mitigate damage. Natural cultural sites may contain archaeological material.

throughout the project life cycle. The Borrower will inform religious or secular authorities or other custodians with responsibility for overseeing and protecting the movable cultural heritage objects of the schedule for project activities and alert them regarding the potential vulnerability of such items.

E. Commercial Use of Cultural Heritage

29. Where a project intends to use cultural heritage of project-affected parties (including individuals and communities) for commercial purposes, the Borrower will inform the project-affected parties of: (a) their rights under national law; (b) the scope and nature of the commercial development and the potential impacts; and (c) the potential consequences of such development and impacts.

30. The Borrower will not proceed with such commercial use unless it: (a) carries out meaningful consultation with stakeholders as described in ESS10; (b) provides for fair and equitable sharing of benefits from commercial use of such cultural heritage, consistent with customs and traditions of the project affected parties; and (c) identifies mitigation measures according to the mitigation hierarchy.

ANNEX 9
LABOR MANAGEMENT PROCEDURES

1.0 Introduction

The LMP provide the framework for addressing the specific impacts that are anticipated as a result of the implementation of the RUSLP. The LMP is a planning tool that sets out a formal procedure for the protection of workers' rights and to manage and implement measures that will avoid or reduce labor-related impacts on community health, safety, and security. It is expected that the FDD, together with the beneficiary LCs and other relevant agencies and civil works contractors, will ensure full compliance and application of this tool during the implementation of RUSLP. The LMP will further be updated into a plan by the chosen contractor during implementation.

1.1 Background to the RUSLP

The proposed RUSLP is a five-year International Development Association (IDA) funded project supported with a US$56.73 million grant. The project's main implementing agency is the FDD of the MOF. The project consists of the reconstruction and modernization of Sierra Leone's urban centers through urban planning, own-source revenue enhancement, infrastructure upgrading, SWM, and DRM. The project will be implemented in eight localities in Sierra Leone: Freetown, WARDC, Makeni, Koidu New Sembehun, Kenema, Bo, Port Loko, and Bonthe.

The Project Development Objective (PDO) is to improve urban management, service delivery, and disaster resilience in the Western Area and other cities and municipalities of Sierra Leone. The PDO will be achieved through the following four components:

Component 1: Institutional and Capacity Development in Integrated Urban Management

The subcomponents and related activities under Component 1 focus mainly on transfer of knowledge, technology, data, and tools that will enhance the operations of the beneficiary LCs. The subcomponents are

- Subcomponent 1.1: Strengthening Urban Planning and Spatial Data Infrastructure
- Subcomponent 1.2: Modernizing Urban Property Tax Administration System.

The anticipated labor issues under Component 1 will mainly be limited to the staff at the various MDAs and consultants who will be deployed to implement the activities under this component. The activities of these staff will also be guided by the LMP.

Component 2: Resilient Municipal Infrastructure Investment and Urban Greening

The main activities of Component 2 will include market renovations, renovation of waste transfer stations, tree planting, and so on which are likely to involve involuntary resettlement as highlighted in the subcomponents below:

- Subcomponent 2.1: Neighbourhood Upgrading and Greening in Freetown

- Subcomponent 2.2: Solid Waste Management Upgrading in Freetown and Secondary Cities (including the Western Area Land Fill Site)
- Subcomponent 2.3: Market Upgrading in Secondary Cities.

Component 2 is where the application of the LMP will be the most pronounced because of the multiple workforce that will be involved. This section specifically will involve civil works which will imply the award of contracts to third-party contractors to execute the civil works. It is therefore imperative to ensure that the contractors and any employee involved in the project activities are regulated by the provisions of the LMP.

Component 3: Emergency Management and Institutional Capacity Development

Component 3 will focus mainly on technical assistance and capacity building of the national and local government's agencies in emergency preparedness and response, to be better prepared for, respond to, and recover from disasters and enhance effectiveness and efficiency of response. This component is unlikely to cause involuntary resettlement.

- Subcomponent 3.1: Strengthening Emergency Preparedness and Response Systems
- Subcomponent 3.2: Contingent Emergency Response Component.

This section will also seldom use the provisions of the LMP since most of the activities will involve internal staff of the beneficiary MDAs. It is however expected that the staff who will be involved in the activities of the project adhere to the provisions of the LMP.

Component 4: Project Management and Accelerating Entrepreneurship and SME Growth

The project will also finance the creation and implementation of a citizen engagement digital platform in which citizens can access the status of activities funded under the project and provide feedback. This platform will be piloted in Freetown initially with the objective to scale it up nationwide. This component is also not labor-intensive, and as such, the provisions of the LMP may not be applied in detail.

1.1 Purpose and Scope of the LMP

The main purpose of the LMP is to protect the rights, health, safety and well-being of workers who will be engaged during the implementation of the project, especially employees who will be engaged in the civil works under the project. It is also intended to help manage and implement measures that will avoid or reduce labor-related impacts on community health, safety, and security. The LMP is also intended to promote equal opportunity and non-discrimination in the management of the workforce considering both national and international labor requirements, especially the World Bank's Standard on Labor and Working Conditions (ESS2).

The scope of the LMP therefore covers all types of workers: skilled and unskilled workers, including volunteers, who will be engaged directly and/or indirectly during the implementation of the RUSLP. Specifically, the LMP will be applicable to staff at the PMU and contractors who will be a part of the project. It will also apply to all workers who will be hired during the construction phase of the project and deals with all aspects relating to recruitment, labor and working conditions, management of worker

relationships, and OHS. The LMP also includes measures related to the management of workers engaged by third parties or contractors and the management of workforce-related risks within the supply chain.

1.1.1 Objectives

The LMP is developed considering ESS 2 which specifies the requirements for the management of labor and working conditions under any World Bank-funded project. The LMP seeks to achieve the following specific objectives.

- Establish arrangements to appropriately manage and protect the OHS and welfare of workers including both employees and contractors and others who may be exposed to risks associated with the construction and rehabilitation of facilities under the RUSLP.
- Ensure that employees understand their rights in relation to labor and working conditions.
- Allow employees to exercise their right to freedom of association and collective bargaining.
- Provide employees and contractors with a feedback mechanism for them to raise feedback, concerns, complaints, and grievances and to receive information on the response and any associated corrective action.
- Prevent discrimination in hiring, remuneration, and access to training on the grounds of race, national or social origin, birth, religion, disability, gender, sexual orientation, union membership, political opinions, and age and promote equal opportunities.
- Manage disciplinary practices and grievances in a manner that treats the affected individuals with respect and dignity and without threat, abuse, or ill-treatment.
- Ban the use or support of child, forced, or compulsory labor in direct operations and in the supply chain.
- Prevent sexual and GBV that may arise from activities of the RUSLP.

2.0 Summary of Legislation Relevant to the LMP

A summary of the legal requirements and standards applicable to the LMP is presented as follows:

2.1 National Legislation and Policy

At the national level, the following laws and legislations are relevant to the LMP of RUSLP.

The Constitution of Sierra Leone

The Constitution of Sierra Leone protects the freedom of association and promotes health and safety at work, fair working conditions, equal pay for equal work, and fair compensation.

Chapter 2 subsection 8 of the Constitution of Sierra Leone states that the state shall direct its policy toward ensuring that

- Every citizen, without discrimination on any grounds whatsoever, shall have the opportunity for securing adequate means of livelihood as well as adequate opportunities to secure suitable employment (right to work);

- Conditions of service and work are fair, just, and humane and there are adequate facilities for leisure and for social, religious, and cultural life (right to rest and leisure);
- The health, safety, and welfare of all persons in employment are safeguarded and not endangered or abused, and in particular, special provisions are made for working women with children, having due regard to the resources of the state (right to safe work environment and equal);
- There is equal pay for equal work without discrimination on account of sex, and adequate and satisfactory remuneration is paid to all persons in employment (the right to equal pay for work).

Employers and Employed Act

This act is used to manage relationships between employers and employees in Sierra Leone. There are ongoing efforts to review the labor laws of Sierra Leone because of the 'obsolete' nature of some of the provisions of this Act and some inherent weaknesses such as its inability to make adequate provisions for the protection of labor rights and settlement of employment disputes. These old labor laws did not also adequately provide for the redress of labor issues in the private sector.

Regulation of Wages and Industrial Relations Act 1971 (No. 18)

This regulation specifies the collective agreement between Employers in the Building and Construction Trade Group in the Republic of Sierra Leone and the following Workers Unions:

- Artisans, Public Works, and Services Employees Union
- General Construction Workers Union
- Skilled and Manual Productive Workers Union
- Sierra Leone Union of Securities, Watchman and General Workers Union.

The major shortfall of this act is that it provides for collective bargaining agreements on wages and working conditions in the formal sector and not in the informal sector. The wages of all workers in the project shall be subjected to the applicable tax deductions in line with the consolidated income tax laws of the country.

The National Social Insurance Trust (NASSIT) Act 2001

The NASSIT Act 2001 covers benefits and pensions for all sectors. Section 24(1) stipulates that regardless of the existence of a private/company pension or provident fund, employers and employees are subject to the NASSIT Act. It is expected that all workers in the project will be treated in conformity to the requirements of this act.

The Factories Act of 1974

The Factories Act of 1974 makes demands for all aspects of cleanliness and reports of all injuries, accidents, diseases, and death.

Sierra Leone Local Content Act of 2016

The Local Content Act is aimed at promoting growth and development of the domestic private sector by creating links with the large domestic and foreign firms through the utilization of local resources and products and to promote the integration of Sierra Leoneans in all economic activities. It also requires sectoral policies and projects to promote the utilization of locally available Sierra Leonean goods in the industrial and manufacturing sectors as well as support the growth of small and medium enterprises through targeted government procurement and promote a culture of local ownership and participation in all aspects of productive work.

The RUSLP is therefore envisaged to use skilled and unskilled labor mainly from local and surrounding communities. It is also anticipated that contracting and procurement for the project will be done using local resources.

2.2 International Laws and Conventions

A total of 35 of ILO Conventions have been ratified by Sierra Leone.

- Fundamental Conventions: 8 of 8
- Governance Conventions (Priority): 2 of 4
- Technical Conventions: 25 of 177

Out of 35 conventions ratified by Sierra Leone, of which 30 are in force, 5 conventions have been denounced and none have been ratified since the ratification of the conventions on Worst Forms of Child Labor Convention (1999) and the Minimum Age Convention (1973), both ratified in June 2011.

2.3 ESS2: Labor and Working Conditions

Labor and Working Conditions (ESS2) is to ensure a safe, healthy, and conducive working environment for workers and ensure that the working environment is free of forced and child labor as well as other forms of intimidation and harassment. ESS2 also ensures that workers have channels for grievance redress, freedom of association, and access to collective barging rights as prescribed by national law. The standard also seeks to protect vulnerable workers such as migrant labor. The requirements of Labor and Working Conditions (ESS2) extends to direct, indirect, community, and contracted workers as well as primary supply workers on a World Bank-financed project.

It is expected that at all times, all workers involved in the project will be treated in accordance with the requirements of ESS2.

3.0 Responsibility for the LMP

The FDD under the MOF will bear ultimate responsibility for all labor issues during the implementation of the project. However, the Ministry of Labor and Social Security shall be responsible for the technical guidance and enforcement of the labor requirements associated with the project. Individual agencies such as the LCs and the contractors will play leading roles in direct supervision and enforcement of all the LMP pertaining to subprojects in their localities.

Table 23: Summary of the Key Roles and Responsibilities Associated with the LMP

Responsible Party/Agency	Designation of Responsible Officer	Roles and Responsibilities in LMP
FDD-MOF		• Develop labor protocols and procedures for all subprojects in accordance with the World Bank's ESS2 and relevant national laws. • Monitor and report on all labor issues. • Ensure labor issues identified are resolved in accordance with ESS2 and national laws. • Coordinate the inputs of all relevant MDAs and LCs in resolving labor-related disputes. • Undertake public disclosure of the LMP.
Ministry of Labor and Social Security		• Provide technical support to FDD-MOF on labor requirements associated with the project. • Assess, evaluate, and address the welfare situation affecting all workers especially vulnerable groups. • Ensure the rights of children in accordance with the government's current policies based on the United Nations Convention on the Rights of Children. • Collaborate with all government ministries and establishments and with all national advocacy and welfare groups. • Undertake periodic spot check visits to project sites to monitor compliance with the requirement of the LMP and other legal regimes governing workers in Sierra Leone.
Ministry of Works		• Develop an agreed Contractor Control Plan. • Support public tendering processes to contractors. • Assess responsiveness of tenders to environment, labor, health and safety, and community relations issues.
LCs		• Enforce various policies and procedures developed under the project for the management of the workforce and their health and safety. • Report issues on labor and working conditions of projects being implemented in their localities.
Contractors		• Update the LMP into a plan and comply with all the provisions in the LMP for the management of the workforce and their health and safety.
Workers		• Comply with various policies and procedures developed for the management of the workforce and their health and safety.
Local Community		• Enforce various policies and procedures developed under the project for the management of the workforce and their health and safety.

4.0 Summary of Worker Categories and Impacts

4.1 Category of Workers to Be Engaged in the Project

It is estimated that the project will directly benefit about 1.7 million people, including residents and businesses in the eight targeted cities. The main benefits will stem from improved access to services (across a range of sub-sectors, including access roads, SWM, sanitation, markets, stormwater drainage, and reduction of flooding) and street lighting and living and working conditions as well as from job opportunities from labor-intensive construction activities and community tree planting intervention. The construction phase of the project will create dozens of direct and indirect employment opportunities for

many individuals and groups from the national level through the LCs, local communities, and third-party service providers. The category of workers to be engaged in the project will include skilled-labor like engineers, surveyors, and administrators as well as semiskilled labor such as drivers and construction equipment operators, together with unskilled labor such as construction workers (laborers, site security personnel, and so on).

It is expected that the project will engage the following categories of project workers as defined by ESS2:

Direct workers. Direct workers would likely include project management staff at the national and LC levels who will be directly involved in the day-to-day management and supervision of the project. It is estimated that the direct workers would include persons from each of the eight city councils in addition to the national-level staff at the PMU. Another category of direct workers will be independent consultants, who are specialized in certain disciplines (such as social safeguards and community relations). These consultants will be hired under individual contracts, on a part-time basis, with specific definition of the assigned tasks and responsibilities.

Contracted workers. Contracted workers would be hired under design and construction of the infrastructure. Several contractors will be hired based on a strict bidding regime which might include subcontractors. Even though the number of contract workers is not yet known, they are estimated to be in the hundreds because of the scale of the project.

Community workers. The project will encourage the hiring of local labor, especially contracted staff and labor from the project communities. It is therefore anticipated that the LCs will work closely with the contractors to ensure substantial recruitment of community workers for the project.

The tree planting component of the project will engage several thousand individuals who will serve as stewards to the trees that will be planted in and around their properties. Even though their role will be voluntary, there is the need to ensure that their activities are done in line with the labor laws and conditions of the country.

Migrant workers. The project does not expect to hire foreign migrant workers. However, on a limited scale, the project will hire a few skilled staff from other towns and regions to support project activities in certain project locations that do not have the skills required for a particular job.

Women workers and other marginalized workforce. The PMU and contractors will be encouraged to employ as many women as possible into the project. It is recommended that efforts be made to achieve at least a 30 percent female worker ratio of the total workforce of the project. The PMU and LCs are also encouraged to reserve certain jobs for persons with disability to ensure inclusive labor management processes.

4.2 Anticipated Risks/Impacts during Project Construction

The project footprint is envisaged to be large and will likely occur in a sensitive environment given the nature and topography of Freetown and its environs. The project will require a large number of skilled workers and some unskilled workers especially for the design and construction of the sanitary landfill site and in situ slum upgrading, project workers to maintain project oversight, and so on. Even though the total number of labor required cannot be estimated at this stage, it is envisaged that different types of

workers, including direct, contracted, and primary supply workers, will be required which can lead to labor influx and its attendant risks and impacts as highlighted below;

Labor Influx and Other Risks to Labor

Even though the RUSLP intends to use local labor in the construction and rehabilitation of the facilities, it is envisaged that there will be influx of local labor into the project areas because the contractors for the various projects are expected to camp at the project sites where project machinery and some category of staff will be accommodated. It is also anticipated that the greater number of the workers will rent accommodation within the project communities, which will contribute to the influx of workers and its attendant adverse social impacts such as the risk of spread of communicable diseases and pressure on limited local amenities. The other likely labor risks may include the exposure of the construction workers to health and safety hazards during the construction and operational phases (especially given the current COVID-19 outbreak and the country's high risk of infectious diseases outbreak), general poor labor working conditions, community grievances over recruitment process and selection, and protection of female workers and local communities from GBV risks.

Rise in GBV

There is the potential risk that contractors and their related suppliers may employ children under 18 years directly or indirectly as errand boys/girls or laborers if the right recruitment processes are not implemented. Also, considering that the project's civil works will mainly be undertaken within the inner cities where there will be close proximity of workers and staff with the general population, potential incidence of sexual interaction between workers and minors can add additional GBV risk to the project area. Increased transactional sex due to higher wages for workers in low-income communities, and the search for jobs and procurement opportunities from the project, could provide grounds for SH and exploitation of girls and women.

Workers on the project may also be involved in prostitution, sexual harassment, and rape as well as defilement involving children and other persons in the project communities. There may be other forms of GBV and discriminatory practices that workers may engage in threats, insults, beating, using employment opportunities as bait to elicit sexual favors from potential employees and other forms of abuse of girls, women, children, and other vulnerable groups within the project communities. These criminal acts may occur during the pre-construction (mobilization) and construction phase of the project.

Exposure to Hazardous Waste (Asbestos)

There is the possibility that some of the facilities to be constructed will have asbestos roofs and asbestos pipes. If such a situation arises, the removal, transportation and disposal of these hazardous materials will pose a health threat to site workers and those in the immediate project environs. For example, the WHO has indicated that exposure to asbestos through inhalation of the fibers (asbestos dust) is a major cause of asbestosis and lung cancer.

Loss of Livelihoods and Physical Displacement

The majority of the civil works will take place in the major cities where many individuals including squatters and businesses already occupy the lands. There is therefore the need to conduct thorough due

diligence and appropriate mitigation measures put in place to mitigate the impact of the project on people's livelihoods.

Additionally, the impacts that may occur during the construction of the facilities are

- Exposure of workforce (including contractors) to potential harm, injury, ill-health, violation of human rights, and so on;
- Exposure of the workforce (including contractors) to poor accommodation standards (both in design and operation);
- Exposure of workforce (including contractors) to inadequate OHS standards;
- Conflict and tension associated with interaction between the workforce (including contractors) and local communities;
- Workers' illicit sexual relations with minors and resulting pregnancies, presence of sex workers in the community, the spread of HIV/AIDS, SH of female employees, GBV, and so on;
- Child labor and abuse;
- Potential discrimination based on gender, religion, and so on; and
- Failure to ensure community participation and lack of road safety.

The project will include mitigation measures such as

- Establishing and enforcing a mandatory Code of Conduct for the company, managers, and workers and an Action Plan for implementation;
- Ensuring appropriate health and safety conditions at work sites including safe disposal of wastes, handwashing facilities, and other basic hygiene needs;
- Taking countermeasures, indicated in the ESMP, to reduce the impact of the labor influx on the public services;
- Devising and implementing a strategy for maximizing employment opportunities for local population, including women;
- Actively ensuring GBV cases are properly and promptly redressed exhaustively—this would require a specific SGBV Redress Mechanism; and
- Establishing a transparent, accessible, and participatory work-based grievance redress system that protects aggrieved parties.

5.0 Policies and Procedures for Labor Impact Management

5.1 Working Conditions and Management of Worker Relations

5.1.1 Terms and Conditions of Employment

The RUSLP PMU, LCs, and contractors shall establish written employment contracts for all workers upon hiring.

These contracts will be vetted and approved by the Ministry of Labor and Social Security.

The contractor shall inform hired workers of all employment-related information and ensure that the workers understand the rights and obligations of both parties under the contract.

It is also important that workers know the standards of conduct expected of them. A written policy manual (Code of Conduct) specifying the rules and procedures should be issued and made readily available to all workers as part of the labor contract. The Code of Conduct should be explained to workers who are not literate in English in a language they understand.

The PMU may establish disciplinary rules and procedures to promote orderly employment relations as well as fairness and consistency in the treatment of individuals.

The contractor should ensure that all its workers, both skilled and unskilled or casual labor, are paid living wages which should not be below the current minimum wage.

5.1.2 Non-discrimination and Equal Opportunity

In Sierra Leone, common grounds of discrimination in the workplace include gender (against women), disability, health status (against people with HIV/AIDS), physical appearance, and organizational affiliation. Therefore, the LCs and contractors should monitor discriminatory practices not only in hiring procedures but throughout all stages of employment.

To avoid any discrimination,

- The contractors must treat workers equally and fairly with respect to all policies, conditions, and benefits of employment;
- The contractors must ensure that employment decisions are based on relevant and objective factors (merit, experience, tasks, skills, and so on) and that consistent procedures are followed in decision-making processes;
- In case of hiring workers from local communities, the communities should be consulted to make an employment/labor plan to ensure maximum sourcing of labor locally;
- The company/employer should also ensure that its workers and suppliers are aware of its policy on nondiscrimination and equal treatment to promote a culture of respect and zero tolerance for discrimination; and
- The contractors should ensure that adequate mechanisms are in place for workers to report on workplace discrimination, bullying, or SH. These mechanisms should be able to promptly investigate all complaints and take appropriate preventive or disciplinary action.

All workers must be informed of their rights and encouraged to use the mechanism without fear of reprisal. The FDD-MOF, LCs, and contractors should designate specific staff (for example, a workers' representative) to act as the workers' focal point on employment discrimination issues. Workers should be able to report discriminatory incidents to the focal point on a confidential basis. At the same time, the focal point should possess adequate knowledge to advise workers on national laws and contractor/employer policies regarding nondiscrimination and the various remedies available.

5.1.3 Workers Organization

Sierra Leone law permits employees in the private sector and selected parts of the public sector to join unions of their own choosing. At present, the Regulation of Wages and Industrial Relations Act 1971 does not support the Right to Freedom of Association and conflicts with the Sierra Leone Constitution and the Core ILO Conventions. Nonetheless it is expected that efforts should be made to allow workers to organize, assemble, and associate with the trade union of choice where,

- The contractors or employers must not attempt to influence the right of workers to organize or associate with any trade union;
- The union workers must be allowed to have access to company/employer premises to carry out their responsibilities therein, as long as they exercise their duties in a reasonable and non-disruptive manner;
- The contractors or employers shall not intimidate or harass union workers due to their active participation in collective bargaining or strikes aimed at improving working conditions; and
- Contractors/employers must not refuse to recognize the elected representatives of the union members. Thus, the elected representatives of the unionized workers should be recognized and engaged during collective bargaining deliberations.

5.2 Protecting the Workforce

5.2.1 Child Labor and Minimum Age

According to international and Sierra Leonean laws, children are entitled to the basic right to education and must not be hired to work before completing their compulsory education. Therefore,

- No child under the age of 18 years shall be employed either directly or indirectly to work during the implementation of the RUSLP;
- The FDD-MOF, together with the LCs, must institute a verification system where every worker must have his/her age verified by a recognized community/opinion leader as a precondition for employment or birth certificate where available before employment.
- The site inspection team must routinely undertake spot checks for issues of child labor.

5.2.2 Forced Labor

The project shall not allow any form of forced labor, and every effort must be made to ensure that all workers work without any form of restrictions on their movement and/or work on their preferred choice of work. Thus, under no circumstance should workers be compelled to work at the location or time against his or her will. The contractors must not limit workers' ability to use the toilet, eat, drink, perform religious prayers, and take breaks during the working hours.

5.2.3 Worker Privacy

The contractors or employers must comply with international standards aimed at safeguarding workers' right to privacy. Hence, for any personal information the contractor gathers about its workers, the contractor should ensure that the personal data are used for the intended purpose which the worker must

be made aware of. Personal information about a worker must be collected directly from the worker unless he/she consents, in writing, to the third-party release of personal information. Where workers are being monitored, using closed-circuit television cameras, the contractors should ensure that such practices do not violate workers' right to privacy. Hence, regardless of how the company/employer decides to monitor its workers, its monitoring practices must be reasonable, proportional, and justifiable to the business need served.

5.3 Grievance Mechanism

Workers must have the right to submit grievances regarding workplace concerns without the threat of adverse employment action or prejudice. Complaints may range from dissatisfaction with work hours and rest periods to claims of coercion, intimidation, or abuse. To facilitate the expression of these complaints,

- The contractor must work with the workers or their representatives to establish and maintain an effective grievance mechanism through which workers can lodge complaints.
- Workers' grievance and complaints boxes must be kept at places where workers can lodge their complaints. The contractors must inform all workers about the grievance mechanisms put in place.
- The grievance mechanism should serve three key functions. First, it should serve as a focal point of communication across the organization where workers can report and receive advice on their concerns and grievances and from which concerns and grievances are channeled to management. Second, the mechanism should be mandated to identify remedies to be implemented through internal procedures in the form of corrective action, mediation, settlement, or dispute resolution. Third, the mechanism should have the capacity to direct complainants or hand over cases to appropriate external mechanisms, including state-based mechanisms, such as courts.
- The internal GRM should not in any way prejudice the complainant's ability to seek recourse through external mechanisms.
- The contractor/employer must examine all grievances pursuant to its pre-established grievance procedure.
- Any worker filing a grievance must receive notice of the contractor/employer's findings regarding his or her particular complaint and whether corrective action will be taken.

5.4 Occupational Health and Safety

The contractors must provide safe and healthy working facilities and take appropriate precautionary measures to protect workers from anticipated dangers in the workplace.

There must also be a pre-established action plan designed to respond effectively to workplace accidents and health hazards in the event that all precautions fail.

The contractor must consult employees and their representatives on health and safety matters in the workplace. Employees must be given adequate information regarding health and safety matters and asked to contribute their input on such issues as the alteration of workplace processes, occupational safety, and the organization of work.

No employee must be punished for removing himself/herself from a working environment that he or she reasonably perceives to be dangerous or harmful.

Workers must be provided with health and safety training on all tasks for which they are responsible before beginning a new assignment.

The contractor/employer must also ensure that workers are fully updated and capable of carrying out their work tasks safely.

Workers must be provided with the appropriate PPE which must be worn at all times required to perform a task.

Workers must be provided facilities such as dining area, rest rooms, first aid kits, water, and hygiene and sanitation facilities.

5.5 Contractor and Contracted Worker Management

Steps to identify any actual and potential impacts in the supply chain is a critical aspect of contractual due diligence where third-party entities are made to comply with agreed standards and practices. Therefore, since the RUSLP will maintain numerous business partners such as contractors and other third-party suppliers, it is advisable to inform the contractors and other third-party suppliers about their commitment and obligation to ensuring worker welfare and safety which must be included in clauses in the contractual agreement. The FDD-MOF and LCs must periodically undertake on-site monitoring to check compliance of the third-party entities with the employee management requirement.

5.6 Community Workers

Where possible, the contractor should have in place provisions for local purchasing and recruitment that are implemented in accordance with the right to nondiscrimination policy. To this end, the project must hire, to the extent possible, skilled and unskilled workers from affected communities in the project area to avoid, if not minimize, labor influx into the project area.

5.7 Primary Supply Workers

The Project Management Team must ensure that any contractor or supplier engaged by the RUSLP has sound knowledge to comply with the requirements of ESS2. Therefore, all suppliers to the project must be assessed to ensure compliance to the requirements of ESS2 which should be embedded in the tendering, hiring, and contracting processes and any due diligence measures required in the sourcing of supplies for the project.

The bidding documents for works will include specific requirements that minimize the use of workers from outside the vicinity. While hiring labor from local communities, the contractors will ensure that workers are hired as contract labor and not temporary/day wage labor to the extent possible. The contract documents for works as well as for monitoring consultants require explicit Codes of Conduct to be signed by all workers. The contractor shall also provide periodic mandatory training of all workers on SEA issues and Code of Conduct for employees. The contractor shall develop a GBV Action Plan including an Accountability and Response Framework to be included in the contractor’s ESMP.

6.0 Monitoring Mechanism and Reporting on the LMP

Several layers of monitoring systems will be instituted as part of the LMP. These will include the following:

6.1 HR Employee Database

There shall be a database of all workers employed under the RUSLP. The database will record information on the personal details of employees (such as home address and next of kin/emergency contact), their job description, role and responsibilities, training records and training needs, and so on.

6.2 Contractor Database

There shall be a comprehensive database of all primary and secondary contractors for the project. The database will record a summary of their scope of work, business origins, and a brief profile about history of compliance to ESS.

6.3 Supply Chain Database

This will contain information on the key suppliers, which will be used to monitor the primary supply chain and record results of risk assessments for child and/or forced labor and significant environmental safety issues.

6.4 Worker Feedback System

The worker feedback system will log all grievances, issues, and concerns raised by workers during engagement sessions. The system will also record information on measures to address issues, time frames, personnel responsible, and any subsequent feedback that is required. The Labor Inspection Officer of the Ministry of Labor and Social Security at the National and/or Regional Offices shall undertake periodic spot check visits to the project site to observe and document levels of compliance to the requirements of the LMP. This spot check visit will also serve as an avenue for workers to provide direct feedback on issues bordering on their work.

6.5 Accident and Incident Recording, Reporting, and Investigation System

The number and type of all accidents and incidents including near misses occurring during the construction phase shall be recorded including the corrective actions required to address them. In addition, the system should identify roles and responsibilities for recording, reporting, and investigating incidents and for corrective action planning.

6.6 Community Feedback, Complaints, and Grievance System

Community complaints and concerns will be captured and addressed through the main GRM (refer to the GRM).

6.7 Monitoring Plan for the LMP

The LMP will be monitored by consciously tracking the key performance indicators specified in the detailed monitoring plan that will be used to ascertain compliance to the LMP. Table 24 presents detailed

information on the various objectives of the LMP and the monitoring indicators to be tracked to establish compliance to the requirements of the LMP.

Table 24: Detailed Monitoring Plan for the LMP

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
Labor Conditions				
Develop and implement HR policies and protocols.	Develop and implement HR policies and protocols that meet the Sierra Leone legal requirements, as well as the requirements of ESS2. Policies and procedures should include relevant topics such as working hours, contracting terms, wages, leave, equality and diversity, collective bargaining, hiring and recruitment, and so on. Monitor and audit implementation of HR policies and procedures of contractors including contractor performance based on HR Audit Action Plan.	Presence of HR policies and protocols HR Audit Action Plan (annual review) Number of HR audits undertaken	Annually	The RUSLP E&S Specialist LCs Contractors
Deliver workforce training on HR policies and procedures	Train workforce on all HR policies and protocols and labor standards before commencement of work. Annex policies to worker contracts of employment.	Percentage of workers that receive induction on HR and HR policies Record of information provided Percentage of workers that receive training	Annually	The RUSLP E&S Specialist LCs Contractors
Limits on working hours and overtime	Develop and implement a policy on working hours and overtime in adherence with Sierra Leone legislation and industry good practice (as appropriate to different job categories).	Policy on working hours and overtime	Annually	The RUSLP E&S Specialist LCs Contractors
	Monitor working hours and exercise control of overtime, and any payment of overtime premiums, to ensure that the limits set in the law and company policy are understood and respected.	Number of man-hours worked as overtime for key worker categories Worker check-in and check-out procedure to monitor working hours	Monthly	The RUSLP E&S Specialist Contractors Site Supervisors

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
	Ensure that all workers understand that they may lodge grievances or contact trade union representatives in relation to excessive working hours.	Terms of workers' written contract. Payment for overtime compared to total overtime due. Number of grievances or complaints filed for lack of payment of overtime.	Biannually	The RUSLP E&S Specialist Contractors Site Supervisors
Ensure suitable framework for delivery of fair wages and benefit	Ensure that workers understand the contents of their contracts related to wages and benefits through suitable engagement, training, and dissemination of relevant information in suitable local languages.	Percentage of contracts that include wages and benefits in relevant languages Percentage of staff receiving training on wages and benefits before starting work.	Biannually	The RUSLP E&S Specialist Contractors
	Ensure timely payment of wages and benefits and provide payslips to all workers.	Percentage of workers that receive payslips and payment within defined time	Monthly	The RUSLP E&S Specialist Contractors
Create an environment favorable to the development of healthy worker-management relationships	Promote an open dialogue with trade union representatives. Formalize the procedures around communication and exchange of information with union representatives to ensure that information needed for meaningful discussion or negotiation is received on time. Ensure workers representation, consultation, and participation and strengthen capacities of union representatives to act on behalf of those who they represent.	Creation of a worker forum Number of meetings held (worker forum) to discuss worker concerns Number of issues raised and resolved during workers forum Presence of quarterly communications/consultation between workers and contractors	Bi-annually	The RUSLP E&S Specialist LCs Contractors

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
Ensure an adequate approach to managing grievances is available to the project workforce.	Establish and operate a grievance mechanism to receive and respond to all concerns of internal and external stakeholders. Grievances will be addressed with no cost to the party that raised the concern and without retribution. The GRM will not impede access to other judicial or administrative remedies available to affected parties.	Presence of the Workforce Grievance Procedures Implementation of the Workforce Grievance Procedures Worker feedback mechanism in place Number of issues raised Number of issues addressed Percentage of relevant personnel that receive training on Grievance Mechanism	Biannually	The RUSLP E&S Specialist LCs Contractors
Contractors				
Develop pre-qualification screening procedure for all contractors and suppliers	Screening of all contractors and suppliers to assess whether their management of worker OHS and well-being is appropriate	Number of screenings undertaken of total number of contractors hired Number of contractors rejected due to failure to meet worker OHS and well-being standards	Biannually	LCs Health and Safety Officer at LC Contractor Health and Safety Officer
Develop and implement auditing program for contractors and primary suppliers.	Conduct risk assessment of contractors and primary suppliers for child labor, forced labor, and safety concerns. Audit contractors for adherence to OHS, labor, and accommodation standards.	Percentage of audits undertaken of total contractors Number of gaps identified Number of gaps addressed	Annually	LCs Health and Safety Officer at LC Contractor Health and Safety Officer
Develop and implement Worker Code of Conduct	Work with local communities and worker representatives to develop a Worker Code of Conduct. This should include but not be limited to standards relating to interaction with local communities; discipline and behavior within and outside of the camp; alcohol consumption; and disciplinary procedures for nonconformance.	Evidence of consultation with local communities and worker representatives and the inclusion of their preferences as far as they are practicable and appropriate	Annually	LCs Health and Safety Officer at LC Contractor Health and Safety Officer

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
	Ensure all workers are briefed upon recruitment of requirements and Code of Conduct for worker-worker interactions and worker-community interactions, with periodic updates thereafter as required.	Number of workers that receive induction on Code of Conduct and thereafter as required	Biannually	LCs Health and Safety Officer at LC Contractor Health and Safety Officer
	Implement and monitor adherence to Code of Conduct.	Number of incidents reported Number of incidents addressed		LCs Health and Safety Officer at LC Contractor Health and Safety Officer
Develop Contractor Control System	Develop an agreed Contractor Control Plan to distribute to tendering companies that outlines the process for contractor management. Tendering contractors will be assessed according to responses to environment, labor, health and safety, and community relations performance and planned activities. The FDD-MOF, LCs, and contractors will perform commence-work reviews to develop implementation protocols and plans for contractor's environment, labor, health and safety, and community relations management.	Plan developed and distributed Percentage of tendering organizations receiving Contractor Control Plan Criteria for award of contracts agreed and documented Percentage of contractors with implementation protocols and plans agreed with FDD-MOF and LCs	Biannually	Ministry of Works The RUSLP E&S Specialist LCs

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
Occupational Health and Safety				
Review and update the existing OHS Management System.	Review OHS Management System to align with the requirements of ESS2 and national standards, including requirements associated with the protection of contractors. The OHS Management System should provide the framework for managing all OHS issues and management programs (risk assessment, training, and so on)	Presence of Comprehensive OHS Management System Annual Review of OHS Management systems Identified gaps addressed	Annually	The RUSLP E&S Specialist LCs Health and Safety Officer Contractors
Develop and implement a Hazard Identification and Risk Assessment procedure for construction workers.	Develop and implement a task-based Hazard Identification and Risk Assessment to analyze and manage OHS risks related to construction and operations activities.	Presence of an Organizational Hazard Identification and Risk Assessment Procedure Annual Review of Organizational Hazard Identification and Risk Assessment Procedure	Annually	Health and Safety Officer at LC Contractor Health and Safety Officer
Implement OHS training program.	Develop OHS training plan based on policies, procedures, and risk/hazard assessment to define OHS training requirements for staff. Provide OHS training to all workers as part of the recruitment and induction procedures. Deliver role-specific OHS training for workers assigned to tasks associated with specific OHS risks. Provide staff basic hygiene and sanitation training, including training on food hygiene standards. Provide specific sexual health training including HIV/AIDS, GBV awareness and prevention program, and so on.	Presence of OHS training plan Percentage of workers that receive OHS training	Annually	Health and Safety Officer at LC Contractor Health and Safety Officer Rainbo Initiative 50:50

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
Provide workforce-suitable PPE.	Provide suitable PPE for workforce based on task-based Hazard Identification and Risk Assessment. Provide relevant training on PPE use. Audit PPE use on a monthly basis.	Percentage of workers that receive PPE Percentage of workers that receive training in use of PPE Appropriate use of PPE (assessed through regular monthly audits by Health and Safety Officer)	Monthly	Contractors Health and Safety Officer at LC Contractor Health and Safety Officer
Develop relevant safety signage.	Utilize visual safety warning signs, including those for electrical and mechanical equipment and chemical hazards.	Appropriate warning signs erected (assessed through third-party OHS audit) Number of incidents reported and recorded	Monthly	Contractors Health and Safety Officer at LC Contractor Health and Safety Officer
Monitor OHS risks and incidents	Routine safety checks carried out on construction sites in line with standard safety procedures. Safety check should include assessment of equipment functionality, PPE usage, and staff adhering to procedures.	Recorded number of safety checks conducted	Monthly	LCs Contractors Health and Safety Officer at LC Contractor Health and Safety Officer
Develop and implement safe driving policy.	Develop driving policy that provides the driving requirements, speed limits, non-stopping requirements, safety protocols, and so on. Provide training to employees on safe driving standards including driving speeds, hours, and policies regarding unauthorized stopping.	Percentage of relevant driving staff who receive training related to safe driving Number of recorded health and safety or grievances recorded related to driving	Biannually	LCs Contractors Health and Safety Officer at LC Contractor Health and Safety Officer
Develop worker engagement procedure	Supervisors implement tailored toolbox talks on a daily basis during team meetings to address common OHS risks. Develop worker feedback mechanism to enable workers to raise issues and grievances and make suggestions.	Daily toolbox talks held with all workers Worker feedback mechanism developed Number of issues received and addressed	Monthly	Contractors Health and Safety Officer at LC Contractor Health and Safety Officer

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
Community				
Local Employment and Community Relations	Contractor is to ensure the strict implementation of LMP to minimize local unrest. Contractor to hire workers through a systematic process managed by the HR office and avoid hiring 'at the gate' to discourage spontaneous influx of job seekers and migrant workers. Prioritize the hiring of the locals for qualified skilled and unskilled work. Train women in a variety of skilled and non-skilled jobs such as operating construction equipment, involving them in supervisory jobs, and inform communities of all hiring opportunities in construction areas.	Percentage of workers hired through the LMP Number of site-specific LMP developed Ratio of locals hired for skilled and unskilled work Percentage of women hired	Biannually	LCs Community leaders Contractors
GBV, including SH, child abuse, and exploitation at the community level	The bidding documents will include specific requirements that minimize the use of workers from outside the vicinity. The contract documents for works as well as for monitoring consultants require explicit Codes of Conduct to be signed by all workers. Periodic mandatory training of all workers will be conducted on SEA issues and Code of Conduct. Contractors will be required to develop a comprehensive GBV Action Plan. The contractor to partner NGO will support implementation of the GBV	GBV Action Plan developed GBV referral protocols established and well known Number of workers signed GBV Code of Conduct GBV-sensitive GRM established Number of GBV trainings organized for workers Number of GBV community awareness organized	Biannually	LCs GBV NGO Ministry of Gender and Children's affairs

Objective	Mitigation Measure	Monitoring Indicators	Frequency	Responsible Party
	Action Plan, lead community awareness raising, and ensure accompaniment to service providers. FDD will establish a GBV-sensitive GRM. Commitment to providing alternative work schedules or shifts to accommodate the hiring of more local female workers. This ensures they can carry out their domestic duties and avoid potential domestic abuse for reasons justified in the ESIA.			

ANNEX 10
PICTURES

ANNEX 11
MISCELLANEOUS DOCUMENTS REVIEWED

1. Legal Framework/Mandate of the ONS Presented by Francis Langumba Keili, Dir., PIAR.
2. For Official Use Only Report No: PAD3447, International Development Association Project Appraisal Document on a Proposed Grant in the Amount of (SDR xx) million (US$56.73 million equivalent) to the Republic of Sierra Leone for a Resilient Urban Sierra Leone Project Draft: July 13, 2020.
3. Sierra Leone National Disaster Risk Management Policy.
4. The National Flood Preparedness Response Plan for Sierra Leone.
5. Disaster Preparedness and Response at Community Level by Sinneh Mansaray, Agriculture Director, Disaster Management Department, Office of National Security.
6. Consultancy Services to Undertake a Capacity Needs Assessment for Emergency Preparedness and Response. Projects Fiduciary Management Unit, Ministry of Finance. August 13–March 13, 2020.
7. Projects Fiduciary Management Unit, Ministry of Finance, Free Town Emergency Recovery Project. Office of National Security, Free Town Emergency Recovery Project. Volume 2: NDMA/NEOC Establishment Needs Assessment Report. March 21, 2020.
8. Number of People Affected by Various Disasters 2015–2020, Disaster by Geographical Location and Government's Contribution.
9. Bo City Development Plan.
10. The Government of Sierra Leone's New Medium-Term National Development Plan (MTNDP) 2019–2023.
11. Port Loko District Council. Revised Medium-Term Development Plan 2017–2019.
12. Kenema City Council Development Plan 2019–2021. Reviewed in November 2018.
13. Koidu Sembehun City Council 2012–2014.
14. Makeni City Council, Bombali District, Makeni. Revised Medium-Term Development Plan 2018–2020.
15. Billing Rate Used by Shaadeen Enterprise for Property Rates Collection in Lot Four-Shadeen Enterprise, 3 Frey Street, Waterloo, Old Post Office.
16. Western Area Rural District Development Plan 2018–2020.
17. A Bill Entitled 'The Appropriations Act, 2021-Supplement to the Gazette Extraordinary vol CXLXL, No. 72A' Dated November 6, 2020.
18. A Bill Entitled 'The Finance Act, 2021-Supplement to the Gazette Extraordinary vol CXLXL, No. 73' Dated November 9, 2020.
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20. The National Disaster Management Agency Act, 2020.

21. Emergency Management Institutional and Capacity Development.

22. Developing Fiscal Strategy Statement.

23. The National Flood Preparedness Response Plan for Sierra Leone - The National Strategic Group.

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27. World Bank. Report No: PGD175 INTERNATIONAL DEVELOPMENT ASSOCIATION PROGRAM DOCUMENT FOR A PROPOSED DEVELOPMENT POLICY GRANT IN THE AMOUNT OF SDR 73.2 MILLION (EQUIVALENT TO US$100 MILLION) TO REPUBLIC OF SIERRA LEONE FOR A THIRD PRODUCTIVITY AND TRANSPARENCY SUPPORT DEVELOPMENT POLICY FINANCING May 20, 2020.

28. The World Bank Sierra Leone COVID-19 Emergency Preparedness and Response Project (P173803). Appraisal Environmental and Social Review Summary Appraisal Stage (ESRS Appraisal Stage) Date Prepared/Updated: March 24, 2020 | Report No: ESRSA00580.

29. Integrated Waste Management Plan for Makeni City. PREPARED BY WELT HUNGER HILFE IN COLLABORATION WITH MAKENI CITY COUNCIL-2015.

30. Bo City Waste Management Project - A DFID Investment in the Future of Sierra Leone. Glenn Fleet Group Manager - Waste Management, Warwickshire County Council.

31. Sierra Network Salone. FCC and DFID Working On 7 Transfer Stations across Freetown. May 9, 2020.

32. SLURC/DPU Action-Learning Alliance Understanding Urban Risk Traps in Freetown MSc Environment and Sustainable Development Practice Module 2017–18 POLICY BRIEF No 4: Multi-hazards of poor solid waste management.

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34. Projected Own-Source Revenues of Local Councils for FY 2021.

35. Government of Sierra Leone. The Ministry of Local Government and Rural Development. Guidelines for the Implementation of Property Tax in Sierra Leone. September 2020.

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