REPUBLIC OF SIERRA LEONE

MINISTRY OF EDUCATION YOUTH AND SPORTS

Sierra Leone Education For All Fast Track Initiative (EFA FTI) Project

ENVIRONMENTAL AND SOCIAL ASSESSMENT FOR THE EDUCATION SECTOR SUPPORT PROJECT

July 2008
List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB</td>
<td>African Development Bank</td>
</tr>
<tr>
<td>AWPs</td>
<td>Annual Work Plans</td>
</tr>
<tr>
<td>BP</td>
<td>Bank Procedure</td>
</tr>
<tr>
<td>CBOs</td>
<td>Community Based Organizations</td>
</tr>
<tr>
<td>DEPAC</td>
<td>Development Partnership Committee</td>
</tr>
<tr>
<td>DOE</td>
<td>District Office of Education</td>
</tr>
<tr>
<td>DSL</td>
<td>Department of Surveys and Lands</td>
</tr>
<tr>
<td>EA</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>EFA</td>
<td>Education For All</td>
</tr>
<tr>
<td>EFA FTI</td>
<td>Education For All Fast Track Initiative</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EMP</td>
<td>Environmental Management Plan</td>
</tr>
<tr>
<td>ESMF</td>
<td>Environmental and Social Management Framework</td>
</tr>
<tr>
<td>ESP</td>
<td>Education Sector Plan</td>
</tr>
<tr>
<td>FCC</td>
<td>Freetown City Council</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GER</td>
<td>Gross Enrollment Rate</td>
</tr>
<tr>
<td>GoSL</td>
<td>Government of Sierra Leone</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>IDA</td>
<td>International Development Association</td>
</tr>
<tr>
<td>IDB</td>
<td>Islamic Development Bank</td>
</tr>
<tr>
<td>IPM</td>
<td>Integrated Pest Management</td>
</tr>
<tr>
<td>JSS</td>
<td>Junior Secondary School</td>
</tr>
<tr>
<td>LA</td>
<td>Local Authority</td>
</tr>
<tr>
<td>LCs</td>
<td>Local Councils</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MEST</td>
<td>Ministry of Education, Science and Technology</td>
</tr>
<tr>
<td>MEYS</td>
<td>Ministry of Education, Youth and Sports</td>
</tr>
<tr>
<td>MLCPE</td>
<td>Ministry of Lands, Country Planning, and the Environment</td>
</tr>
<tr>
<td>MTR</td>
<td>Mid Term Review</td>
</tr>
<tr>
<td>NEAP</td>
<td>National Environmental Action Plan</td>
</tr>
<tr>
<td>NEP</td>
<td>National Environmental Policy</td>
</tr>
<tr>
<td>NEPBP</td>
<td>National Environmental Protection Board</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>OP</td>
<td>Operational Procedures</td>
</tr>
<tr>
<td>PAD</td>
<td>Project Appraisal Document</td>
</tr>
<tr>
<td>REBEP</td>
<td>Rehabilitation of Basic Education Project</td>
</tr>
<tr>
<td>RPF</td>
<td>Resettlement Policy Framework</td>
</tr>
<tr>
<td>SMCs</td>
<td>School Management Committee</td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
</tr>
<tr>
<td>TORs</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nation’s Children’s Fund</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
Table of Contents

**EXECUTIVE SUMMARY** .......................................................................................................................... VI
  Background ........................................................................................................................................ vi
  Project Components ......................................................................................................................... vi
  Administrative and Legal Framework for Environmental Management ........................................ vi
  World Bank’s Safeguard Policies ..................................................................................................... vii
  Purpose of the Environmental Assessment .................................................................................... vii
  Selection of Districts for Environmental Assessment ................................................................ vii
  Methodology of Environmental Assessment ................................................................................... vii
  Possible Environmental and Social Impact ..................................................................................... vii
  Recommendations from Environmental Assessment ................................................................. viii
  Conclusion ....................................................................................................................................... viii

1. **INTRODUCTION** .......................................................................................................................... 1
  1.1 Background .................................................................................................................................. 1
  1.2 Purpose of Environmental Assessment ..................................................................................... 1

2. **PROJECT DESCRIPTION** ........................................................................................................... 1
  2.1 Context and Objectives of the EFA FTI Project .......................................................................... 1
  2.2 EFA FTI Project Components .................................................................................................... 1
  2.3 Requirement of the Environmental Assessment ........................................................................ 3

3. **BIOPHYSICAL AND SOCIOECONOMIC ENVIRONMENT OF SIERRA LEONE** ............. 4
  3.1 Biophysical Environment .......................................................................................................... 4
    *Soils* .............................................................................................................................................. 4
    *Climate* .......................................................................................................................................... 4
    *Hydrology* .................................................................................................................................... 4
    *Relief and Vegetation* ..................................................................................................................... 4
    *Wetlands* ....................................................................................................................................... 5
    *Fauna* ........................................................................................................................................... 5
    *Natural Resources* ......................................................................................................................... 6
  3.2 Socioeconomic Environment ....................................................................................................... 6
    *Education Sector* .......................................................................................................................... 6
    *Challenges in Basic Education Sub-Sector* .................................................................................. 7

4. **INSTITUTIONAL AND LEGAL FRAMEWORK FOR ENVIRONMENTAL MANAGEMENT** ............. 7
  4.1 Administrative Framework for Environmental Management .................................................. 8
  4.2 Legal and Regulatory Framework for Environmental Management ........................................ 9
  4.3 Structure of Environmental Management at the Local Level .................................................... 10
  4.4 International Conventions .......................................................................................................... 10
5. **OVERVIEW OF THE WORLD BANK’S SAFEGUARD POLICIES** .......................................................... 11
   OP 4.01 Environmental Assessment ......................................................................................... 11

6. **OBJECTIVES OF THE ENVIRONMENTAL ASSESSMENT AND METHODOLOGY USED** .................. 13
6.1 Objectives of the Environmental Assessment ....................................................................... 13
6.2 Methodology and Techniques for Environmental Assessment ............................................ 13
   Sampling Technique ............................................................................................................... 13
   Site Visits ............................................................................................................................... 14
   Data Collection ..................................................................................................................... 14
   Consultations with Communities ........................................................................................... 15

7. **ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT** ......................................................... 16
7.1 Administrative and Socio-Physical Characteristics of Areas covered by EA ....................... 16
   Kailahun District .................................................................................................................. 16
   Kono District ....................................................................................................................... 17
   Kambia District .................................................................................................................... 18
   Western Area ....................................................................................................................... 19
7.2 Description of Environmental and Social Impact and Mitigation Measures ....................... 20
   Production of Construction Waste; Contact with Hazardous Materials ............................... 20
   Dust and Noise ..................................................................................................................... 21
7.3 Specific Mitigation Measures associated with Constructional Activities and Impact on Local Populations .................................................................................................................. 21
   Land availability .................................................................................................................. 21
   Employment of Community Members ................................................................................ 21
   Capacity Building .............................................................................................................. 21
7.4 Potential Environmental and Social Impacts of Increased Provision of Water Supply and Sanitation Facilities .............................................................................................................. 22
   Public Health Impact ......................................................................................................... 22

8. **ENVIRONMENTAL MANAGEMENT PLAN (EMP)** ..................................................................... 23
8.1 Environmental and Social Monitoring Indicators ................................................................. 23
8.2 Institutions Responsible for Implementing and Monitoring Mitigation Measures ............... 23
   Coordination and Supervision ............................................................................................ 23
   Implementation ..................................................................................................................... 23
   Monitoring .......................................................................................................................... 23
8.3 Capacity Strengthening for the Environmental and Social Management of the EFA FTI Project ...................................................................................................................... 24
   Training Required .............................................................................................................. 24
   Training Cost Estimates ..................................................................................................... 25
   Other Capacity Strengthening Activities ............................................................................. 25
8.4 Environmental and Social Monitoring Plan and Indicators ........................................... 26
Costs for Implementing the Monitoring Plan .................................................................... 26
Public Disclosure ........................................................................................................... 26

9. RECOMMENDATIONS .................................................................................................. 28

ANNEXES

Annex 1: Proposed Environmental and Social Screening Form ........................................ 30
Annex 2: Environmental and Social Management Checklist ............................................. 35
Annex 3: Proposed Mitigation Measures ............................................................................. 36
Annex 4: Proposed Environmental Guidelines for Contractors ........................................ 38
Annex 5: Summary of World Bank Safeguard Policies ....................................................... 39
Annex 6: Proposed Environmental Management Plan for EFA FTI-P .............................. 43
Annex 7: List of Persons and Institutions Contacted ......................................................... 45
Annex 8: References .......................................................................................................... 45
Annex 9: Register of International Treaties and other Agreements related to the Environment (Signed/Dates Ratified), 1996 ................................................................. 46
EXECUTIVE SUMMARY

Background
The Government of the Republic of Sierra Leone is preparing an Education For All Fast Track Initiative (EFA FTI) Project to support the objectives of the its Education Sector Plan to increase access and improve the quality of basic education. An aspect of the component objective of the project is to expand and improve basic schools infrastructural facilities. An amount of US$5,930,000.00 (five million, nine hundred and thirty thousand United States dollars) has been set aside to fund the construction and rehabilitation of approximately 318 basic classrooms, 52 head teachers’ offices as well as stores for textbooks and exercises books. Each school will have a special classroom for integrating children with special needs will also be provided with equivalent 52 water wells and 52 6-compartment ventilated improved pit latrines.

Project Components
Component 1: Expand access to basic education by enhancing the awareness of government fee-free and other education policies, increasing enrollment especially in primary one, and expanding and improving basic schools infrastructure.

Component 2: Improving quality of teaching and increase access to learning materials through the expansion of teacher in-service training and professional development at basic level and the provision of teaching/learning materials to basic schools.

Component 3: Enhance coordination and management of the education sector by strengthening sector capacity to coordinate and monitor education interventions and improving human resource and teacher payroll management.

Administrative and Legal Framework for Environmental Management
At national level, a few legal instruments regarding environmental issues exist:

- The National Environmental Policy
- The Environmental Protection Act (EPA), 2008
- The Local Government Act, 2004
- International Conventions on the Environment

The administrative framework for environmental management at national level lies with the Department of the Environment of the Ministry of Lands, Country Planning, and the Environment (MLCPE). A National Environmental Action Plan (NEAP) has been developed with World Bank support.

The legal and regulatory framework for environmental management is the Environmental Protection Act, 2008. The Environmental Protection Act (EPA) 2008 provides for the establishment of the National Environmental Protection Board (NEPB) and the Sierra Leone Environmental Protection Agency.

At the local level, the environmental functions are carried out by provincial officers of the DoE of the MLCPE through its Assistant Environmental Officers. Community groups are often empowered to arrest people who degrade the environment and pose threat to the health and wealth of the community.

Sierra Leone is also a signatory to a number of international agreements including Biodiversity and Wetlands.
World Bank’s Safeguard Policies

The EFA FTI Project triggers the World Bank’s Safeguard Policy: OP 4.01 Environmental Assessment. The remaining operational policies are not triggered by the EFA FTI Project. Annex 5 summarizes the World Bank Safeguard Policies. It is not envisaged that construction and rehabilitation of schools will require land acquisition and resettlement, but should resettlement be unexpectedly needed, a Resettlement Plan acceptable to the Bank will be prepared and disclosed before any resettlement occurs.

Purpose of the Environmental Assessment

The purpose of this Environmental Assessment (EA) is to provide an assessment of the potential environmental and social impacts of the education project components, particularly with regard to construction activities (i.e. schools construction and rehabilitation).

Selection of Districts for Environmental Assessment

Although the specific sites for rehabilitation and construction are yet to be determined, the project will have national coverage involving all nineteen Local Councils. The EA was originally conducted in three provincial districts, namely Kailahun, Kono, Kambia, and the Western Area.

The first three districts were severely affected by the civil conflict which ravaged the country for nine years from 1991 and was finally resolved in 2002. During the civil conflict, Kailahun and Kono districts were more or less the hottest spots as compared to Kambia. However, the level of destruction of public facilities and the environment in all the three districts was high according to various reports, personal communications and site visits.

The Western Area was chosen because it clearly contrasts with the other three districts in terms of physical damage to educational infrastructures, environmental degradation, and institutional arrangements for impact management. Appropriate consultations with affected groups, local communities and NGO's were undertaken during the preparation of the EA in order to assess the level of destruction of educational facilities in the different areas. This EA builds on the EA for the ongoing Rehabilitation of Basic Education Project (REBEP) prepared in 2002 which has been used successfully.

Methodology of Environmental Assessment

The selection of districts was based on a combination of purposeful and random sampling techniques. Primary data collection involved visits to identified sites and the use of structured questionnaires while secondary data was obtained from related assessments from various sources (e.g. MEYS, NGOs), and from the Environmental and Social Assessment for the current Rehabilitation of Basic Education Project (REBEP). The project will have national coverage involving all nineteen Local Councils.

Possible Environmental and Social Impact

In implementing the EFA FTI Project, the possible environmental impact will result mainly from the rehabilitation and construction activities. The expected environmental impact are expected to be limited and related to creation of open pits, production of construction waste materials (waste water, solid waste, rejection and elimination of wastes such as oils and paints), pollution, soil erosion, loss of vegetation, as well as dust and noise during the civil works. For the boreholes and water wells, sustaining the quality of water for drinking will also have to be ensured.
On the social level, construction and rehabilitation works could generate adverse effects, for example, risk of outbreak of personal and social conflicts, occupation of private space during works, and exclusion of vulnerable groups from participating in and benefiting from project activities. Land acquisition/use resulting in involuntary resettlement, and/or loss of livelihoods or access to economic resources is not expected. Measures have been identified by the EA that shall be adopted to avoid, reduce or remedy all significant adverse impacts on the environment.

**Recommendations from Environmental Assessment**

i. Construction of buildings should be in accordance with existing building code and enhanced provisions to reduce overcrowdings and discomfort to both staff and pupils.

ii. Adequate latrine facilities should be provided with a proper waste disposal system.

iii. No entertainment centers should be allowed near the educational facilities although the facilities itself could be used for such activities as an income generating activity.

**Conclusion**

The environmental analysis concluded that there are no significant environmental issues related to this project. The proposed project sites are not likely to be affected by or likely to affect national parks, natural reserves and national monuments, most of which were completely destroyed during the rebel war.

Furthermore, most of the proposed project sites either already exist as schools, or have been marked out for schools in conformity with local development plans and in accordance with the provisions of the National Environmental Protection Act 2008, the Labor and Public Health Acts, and Land Policy.

The findings of the EA indicate that the project is well conceived and environmental concerns seem to have been taken into consideration implicitly. In conclusion, the environmental impacts of the project are insignificant and manageable.
1. Introduction

1.1 Background

The Government of the Republic of Sierra Leone is preparing an Education For All Fast Track Initiative (EFA FTI) Project to support the objectives of its Education Sector Plan (ESP) to increase access and improve the quality of basic education over a three year implementation period. The ESP, developed over a two year consultative process from 2005 to 2007 was facilitated by the education sector group made up of in-country development partners and sector stakeholders. In March 2007, in-country Development Partners successfully appraised the Sierra Leone ESP incorporating the Education For All Fast Track Initiative Proposal. The EFA FTI proposal presented a funding gap of US$19 million out of which US$13.9 million was approved for Sierra Leone during the FTI Expanded Catalytic Fund Strategy Committee meeting held in Bonn (Germany) in May, 2007.

An aspect of the component objective of the project is to expand and improve basic schools infrastructural facilities. An amount of US$5,930,000.00 (five million, nine hundred and thirty thousand United States dollars) has been set aside to fund the construction and rehabilitation of approximately 318 basic classrooms, 52 head teachers' offices as well as stores for textbooks and exercises books. Each school will have a special classroom for integrating children with special needs will also be provided with equivalent 52 water wells and 52 6-compartment ventilated improved pit latrines.

1.2 Purpose of Environmental Assessment

It is within this framework that the current Environmental Assessment is being prepared to ensure that the environmental and social aspects of the project construction and rehabilitation activities are specifically considered. The current EA will ensure that the infrastructure development is carried out in an environmentally and socially sustainable manner.

The purpose of this Environmental Assessment (EA) is to provide an assessment of the potential environmental and social impacts of the education project components, particularly with regard to construction activities (i.e. schools construction and rehabilitation), and for proposed mitigation measures to be carried out during project implementation.

2. Project Description

2.1 Context and Objectives of the EFA FTI Project

With the acceptance of Sierra Leone into full FTI Partnership on April 27, 2008 and the approval of US$13.9 million for activities towards achieving universal basic education, the World Bank team together with Development Partners assisted the Ministry of Education, Youth and Sports (MEYS) in preparing the project document for the EFA FTI Project. The intended investment will contribute to a pooled fund to support the development objective of expanding access to and improving the quality of basic education in Sierra Leone.

2.2 EFA FTI Project Components

The project is comprised of the following three components (Please refer to Annex 1 of the Sierra Leone EFA FTI PAD for a detailed project description):

(i) Expand Access to Basic Education by enhancing the awareness of government fee-free and other education policies, increasing enrollment, especially admission into primary one, and expanding and improving basic schools infrastructure. The
component is targeted at increasing the number of pupils enrolled at primary level from the current 1.3 million pupils by 45,000 pupils in three years and the percentage of girls enrolled from 40.9 percent in 2009 to 43.9 percent in 2011. The number of new entrants into primary one will also increase from 324,000 pupils in 2009 to 346,500 pupils in 2011.

Specifically, the components will consist of the following sub-components and activities:

(a) Enhance the awareness of government fee-free and other education policies (US$41,400.00)

An amount of US$7,000.00 from the EFA FTI fund has been set aside to fund education and sensitization campaigns in targeted communities. The campaign will be based on the recommendations of the out-of-school and other diagnostic studies and will aim at improving the effectiveness of key education policies for improving enrollments. A first step will be to conduct an out-of-school study with UNICEF contribution of US$34,400.00 to the pooled fund. The results of the out-of-school report will be disaggregated by the 19 Local Councils and widely disseminated to inform policy interventions and sensitize communities at the local level.

(b) Increase enrollment, especially admission into primary one (US$8,000.00)

The component will ensure that all 19 LCs include in their Annual Work Plans (AWPs), the implementation of community enrollment drives, "first-day-at-school", and other relevant activities to increase enrollments. An amount of US$8,000 has been set aside from the EFA FTI for these local level activities which will be assessed annually.

(c) Expand and improve basic schools infrastructural facilities (US$5,930,000.00)

The number and quality of basic schools infrastructure will be improved by constructing and rehabilitating approximately 318 basic classrooms, 52 head teachers' offices as well as stores for textbooks and exercises books. All classrooms will be fully furnished with teachers' and pupils' desks and chairs, as well as chalk boards. Each school will have a special classroom for integrating children with special needs (depending on the number of children with special needs in the catchment area), and will also be provided with equivalent 52 water wells and 52 6-compartment ventilated improved pit latrines.

(ii) Improve Quality of Teaching and Increase Access to Learning Materials by expanding teacher in-service training and professional development at basic level, and providing teaching/learning materials to basic schools. The component aims at providing in-service training to 1,000 primary teachers and 260 Junior Secondary teachers. It will also enroll 100 teachers each year in the on-going distance learning program and distribute 850,000 sets of primary and 3,000 sets of adult learners teaching and learning materials to pupils and learners.

Specifically the component will:

(a) Expand teacher in-service training and professional development at basic level (US$312,100.00)

An estimated 1,260 untrained and unqualified teachers made up of 1,000 primary and 260 junior secondary teachers will be provided with in-service
training. In order to ensure teacher professional development, second tier distance education teacher training will be made available to teachers who have participated and excelled in the initial in-service training. A total of 300 new teachers at primary level will also be admitted into the distance education program (100 teachers enrolled annually). Both the initial in-service training and the distance education teacher training will provide certification on successful completion. Two studies will also be conducted under this sub-component: (a) an evaluation of on-going in-service teacher training, and (b) a study on overall teacher training.

(b) Provide teaching/learning materials to basic schools (US$7,546,000.00)

Approximately 850,000 sets of primary and 3,000 sets of adult learners teaching and learning materials will be delivered to pupils and learners for use. To cater for schools rehabilitated or newly constructed, around 14,400 2-seater pupils’ desks and chairs, 576 teachers’ desks and chairs, and 750 sets of technical/vocational worktables and 893 storage cupboards will be supplied for rehabilitated or constructed schools as well as schools in dire need of furniture.

(iii) Enhance Coordination and Management of the Education Sector by strengthening sector capacity to coordinate and monitor education interventions, and improving HRM and teacher payroll management. The component aims at institutionalizing the review of education sector performance through the annual education sector performance review, and implement and maintain a teacher payroll and salary verification exercise.

The implementation of these project components has not yet commenced fully since MEYS is currently awaiting the release of the funds to fill in the funding gap from the Education For All-Fast Track Initiative (EFA-FTI) Catalytic Fund with regards to the above (i), (ii) and (iii).

2.3 Requirement of the Environmental Assessment

The requirements of the current EA is to address in detail the environmental and socioeconomic issues associated with all phases of rehabilitation and reconstruction of damaged primary and junior secondary school facilities and construction of additional schools at existing designated school sites, as well as the provision of water wells and sanitation facilities.

The EA includes an environmental, socio-economic and socio-cultural assessment of potential future impacts of the above activities and appropriate mitigation and monitoring measures. It is also intended to satisfy the requirements of the national and local authorities.

Appropriate consultations with affected groups, local communities and nongovernmental organizations (NGO's) were undertaken during the preparation of the EA.

Public disclosure of the EA will be by newspaper adverts and distribution of a summary to all affected parties, local communities and NGO's. The EA and its executive summary will also be placed in the WB's public information centre in Washington D.C as well as in its country office in Freetown.
3. **BIOPHYSICAL AND SOCIOECONOMIC ENVIRONMENT OF SIERRA LEONE**

3.1 **Biophysical Environment**

The Republic of Sierra Leone is a small West African country located at latitude 8 30° N and longitude 11 30° W and bordered on the north and east by Guinea, on the southeast by Liberia and by on the west by the Atlantic Ocean. Sierra Leone has a total surface area of 71,740 sq. km of which 71,620 sq. km is made up of land area while water covers the remaining 20 sq. km. The country has a wide variety of ecological and agricultural zones. In the west, Sierra Leone has some 400 kilometers of coastline making it rich in marine resources and significant tourism potential. In the east are Low-lying mangrove swamps, rain-forested plains and farmlands, and a mountainous plateau with Mount Bintumani rising to 1,948 meters above it.

**Soils**

The dominant soils are the red to yellow-brown colored weathered and leached laterite (ironbearing) soils rich in oxides of iron and aluminum and acidic. Kaolin clays are important in some areas. When cultivated these soils are light, readily workable, free-draining and obtain their productivity largely from residual nutrients from the vegetation previously cleared and burned. In the coastal plains, the soil is agriculturally poorer because laterite soils develop on sandy deposits instead of from basic igneous rocks which provide agriculturally better soils in other parts of Sierra Leone.

**Climate**

With two seasons determining the agricultural cycle, Sierra Leone has a tropical climate. The rainy season spans May to November, followed by the dry season from December to May. The annual rainfall ranges from as much as 5,080 mm on the Peninsula Mountains to 2,032 mm in the northeast. The rainy season is characterized by humid air masses blowing in from the Atlantic. During this time, precipitation is greater on the coast than inland. The dry season is characterized by the cool dry Harmattan winds blowing in from the Sahara Desert. Conditions are mostly hot and humid with mean monthly temperatures ranging from 25°C to 28°C in the low-lying coastal areas, and from 23°C to 28°C inland. In the northeast, the range in mean daily temperature tends to be wider from 13°C in January to 32°C in March. The rainy season tends to have cooler daily maximum temperatures than the dry season but relative humidity may be as high as 90 percent for considerable periods during the wettest seasons from July to September.

**Hydrology**

Sierra Leone has a dense drainage pattern. Numerous rivers rise in the well-waters of the Fouta Djallon highlands of Guinea and flow in a general northeast to southwest direction across Sierra Leone. Their middle courses are interrupted by rapids that restrict navigability to only a short distance inland. River levels show considerable seasonal fluctuations. The drainage system has nine major rivers and a series of minor coastal creeks and tidal streams. From north to south, the principal rivers are the Great Scarcies, Little Scarcies, Rokel, which is known in its lower courses as the Sierra Leone River, Gbangbaia, Jong, Sewa, Wanjie, Moa, and Mano. The Great Scarcies and Moa form portions of the border with Guinea, while the Mano river forms much of the country's frontier with Liberia.

**Relief and Vegetation**
About 25-35 percent of the land area, mostly in the north consists of Savannah or grasslands. Low bush in the south-center covers 20-25 percent and secondary forest or high bush covers another 20-25 percent in the southeast. The remaining is made up of swampland (20 percent) and rain forest (3-5 percent).

Sierra Leone is characterized by four distinct physical regions namely:

(i) The Coastal Swamp region extends along the Atlantic for about 320 km. It is flat, low lying, and frequently flooded plain that is between 32 and 64 km wide and is composed mainly of sands and clays. Its numerous creeks and estuaries contain mangrove swamps. Parallel ridges, often separated by silting lagoons, are common and sometimes form the actual coast.

(ii) The Sierra Leone Peninsula, which is the site of Freetown, is characterized by thickly wooded mountains that run parallel to the sea for about 40 km. The Peninsula Mountains rise from the coastal swamps and reach 888m at Picket Hill.

(iii) Inland from the coastal plain is the Interior Plains region. In the north it comprises featureless grasslands (Savannah) that are known as "Bolilands" ("Boli" being a Temne word for those lands that are flooded in the rainy season and hard in the dry season and on which only grass can grow). The south the plains comprise rolling wooded country where isolated hills rise abruptly to more than 200 m. The interior contains a variety of landforms ranging from savannah-covered low plains to rocky scarp and hill country. The plateau region, encompassing roughly the eastern half of the country, is composed mainly of granite with a thick laterite (iron-bearing) crust; to the west it is bounded by a narrow outcrop of mineral bearing metamorphic rocks known as the Kambui Schists.

(iv) Rising above the plateau is a number of mountain masses. In the northeast the Loma Mountains are crowned by Mount Loma Mansa (Mount Bintimani) at 1,948 m (the highest point in Sierra Leone) and the Tingi Hills rise to 1,824 m at Sankanbiriwa Peak.

Wetlands

On April 13, 2000, the Convention on Wetlands came into force in Sierra Leone. The Sierra Leone River Estuary is designated as a Wetland of International Importance. With a surface area of 295,000 hectares, the Estuary, located near the Freetown Peninsula, is dominated by mangrove swamps, with lowland coastal plains to the north. As it enters the Atlantic Ocean, the estuary widens to about 11 km and deepens to form a large natural harbor reputed to be the third largest in the world.

Fauna

Sierra Leone has limited but exotic fauna. About 19 percent of Sierra Leone's total mangrove is included within this site which exceeds the 1 percent threshold for at least eight bird species, namely Ringed and Kentish Plovers, Sanderling, Curlew Sandpiper, Whimbrel, Greenshank and Redshank, and Western Reef Heron; and is a breeding habitat for some of these birds. The emerald cuckoo, described as the most beautiful bird in Africa is found in Sierra Leone although it has disappeared from the rest of West Africa. Other birds include the Senegal firefinch, bulbuls, little African swifts, didric cuckoos, bronze manakins and cattle egrets. Crocodiles and hippopotamuses are indigenous to the river regions and the swamps and marshlands. Other fauna include chimpanzees, Diana monkeys, red colobus, wild dogs, African elephants, African golden cat, Büttikofer's epauletted fruit bats, Jentink's duikers, lions, pygmy spotted-necked otters, West African manatees and zebra duikers.
Sierra Leone has abundant mineral resources which include diamonds, chromite, rutile (among the largest reserves in the World), iron ore, titanium ores, bauxite, columbite (a black mineral of iron and columbium) pyrochlore, gold, platinum, and manazite. Forests cover more than one-fourth of the country, the most important area of which is the Gola Forest Reserve, a tract of primary tropical rain forests, near the Liberian border. The country is famous for tree species like the African teak, the Khaya better known as the African mahogany, and the fire resistant palm tree.

3.2 Socioeconomic Environment

Sierra Leone's population is estimated at 4.9 million with a growth rate of 5 percent in 2004, projected to grow at 6.9 percent by 2015. In 2004, the population aged 0-14 represented 42 percent of the population. About 66 percent of the population lives in rural areas in 2004. Between 1985 and 2004, the largest increase in population occurred in Freetown (an increase of more than 300,000) as a result of the civil conflict (1991-2002). Increased migration has brought with it the attendant problems of refuse disposal and waste management. For administrative purposes, Sierra Leone has four provinces and 19 Local Councils. Each Local Council is organized according to Chiefdoms which consist of several towns and villages.

The GDP per capita for Sierra Leone was estimated at $149 in 2003, Sierra Leone ranks lowest on the UNDP Human Development Index out of 177 countries according to the 2006 Human Development Report. Annual economic growth has averaged 4 percent between 2002 and 2005. Real growth rate of Gross Domestic Product (GDP) per capita increased from 4.3 percent in 2002 to 4.5 percent in 2005. The predominant economic sector, agriculture contributes over 36 percent to the GDP. The agriculture sector also employs over 70 percent of the rural population. Rice is the major staple food cultivated by about 80 percent of farmers in the country. Sierra Leone is rich in minerals, mainly rutile, gold, bauxite, and diamonds, which provide a significant source of export earnings, although smuggling of gold and diamonds hamper the effective contribution to the growth of the economy.

The general consensus is that poverty in Sierra Leone is pervasive in all dimensions. The overall poverty level is 70 percent. Sierra Leone’s poverty profile show insufficient food, poor shelter, poor health and high infant mortality, high level of illiteracy, limited access to clean water and lack of money as the key poverty indicators. Sierra Leone’s full PRSP (2005-2007) strives to achieve the Millennium Development Goals (MDGs) and other socio-economic indicators. The three pillars of the Sierra Leone PRSP focus on promoting: (i) good governance, security and peace, (ii) pro-poor sustainable growth for food security and job creation; and (iii) human development. The objective of Pillar 3 is set with reference to the MDGs and underscores the idea that poverty reduction must be underpinned by investment in human resources. Increasing access to basic services provide the basis for enhancing the capacities of the poor to sustainably reduce poverty and reduce their vulnerability.

Education Sector

Sierra Leone has adopted and is firmly committed to attaining the eight MDGs. The education goal of achieving universal quality basic education and literacy by 2015 is a key priority. To this

---

1 Source: Education in Sierra Leone: Present Challenges, Future Opportunities, 2005.
2 Source: Public Expenditure Review: From Post-Conflict Recovery to Sustained Growth, 2004
end, an Education Sector Plan (ESP 2007–2015) was developed by the Ministry of Education, Science and Technology (MEST) in 2007. The ESP outlines the goals and aspirations for education over an eight year period. The strategy emphasizes primary education and skills training as well as relevant and appropriate tertiary education to meet pressing and future developmental needs. It also lays a foundation for the achievement of universal basic education and expansion of post-basic secondary education. The Education Act of 2004, the Polytechnics Act of 2001 and the Universities Act of 2005, are key legislation guiding the education sector and establishing institutional councils for the tertiary education sub-sector in Sierra Leone.

Much progress has been made in the education sector in the last five years. The percentage of primary school aged population enrolled increased from 131 percent in 2002/03 to 162 percent in 2004/05. The Gross Enrollment Rate (GER) is estimated to be sustained at over 100 percent until 2015. The high GER is explained by the proportion of over aged pupils attending school following the civil conflict. At Junior Secondary and Senior Secondary levels respectively, GER increased from 38 percent to 44 percent and from 12 percent to 14 percent respectively over the same period. Entry into primary 1 increased from about 200,000 to 300,000 between 2001/02 and 2004/05, and Primary completion rate doubled over the same period from 33 percent to 65 percent. There has also been reduction in gender disparity at primary level.

**Challenges in Basic Education Sub-Sector**

In spite of these access improvements Sierra Leone faces key challenges of equity of access, quality and disparities. It is estimated that about 25-30 percent of primary and junior secondary school-aged children (more than 240,000 children) are out of school. A common reason cited for non attendance is economic difficulties. Girls especially in the rural areas and the Northern Region are less likely to attend and complete primary education and gender, rural-urban, income and geographical disparities are more pronounced at the Junior Secondary level than at the primary level. Most schools in Sierra Leone have poor classroom conditions and still lack sufficient textbooks and other learning materials. About 40 percent of teachers are untrained or unqualified. Many teachers are believed to be outside the teacher payroll because of budget constraints and the hidden costs of education are a burden to parents even with the abolition of all authorized school level fees and levies. Given these challenges and other risks associated with the country’s post conflict situation and external economic environment, Sierra Leone is not likely to meet education MDG targets by 2015.

A number of government strategies have been implemented to address these challenges. Recognizing the need to establish in-country coordination mechanisms and to provide opportunities for engagement and dialogue and sector review, the GoSL established the Development Partnership Committed (DEPAC) in 2003. Co-chaired by the GoSL, the World Bank and UNDP, DEPAC has contributed to significant improvements in the quality and focus of policies including coordination, harmonization, resource mobilization and effectiveness. In 2002/03, the GoSL introduced the fee free primary education and made an effort to supply free textbooks.

**4. Institutional and Legal Framework for Environmental Management**

This section outlines the legal and institutional framework for environmental management in Sierra Leone and internationally. The national and local institutional framework for environmental management and protection is the overall structure which is designed to protect, conserve and restore our environment.

---

3 Sierra Leone Education Sector Plan: A Road Map to a Better Future, 2007-2015, MEST, 2007
4 Sierra Leone Integrated Household Survey, 2003/04
In the context of the EFA FTI Project, the key elements of the framework are:

- The National Environmental Policy
- The Environmental Protection Act (EPA), 2008
- The Local Government Act, 2004
- International Conventions on the Environment

4.1 Administrative Framework for Environmental Management

The overall institutional and legal framework for the management and protection of the environment in the national context is the responsibility of the Department of the Environment of the Ministry of Lands, Country Planning, and the Environment (MLCPE). The Department is headed by the Minister. The Permanent Secretary of the MLCPE or administrative head is responsible for coordinating the functions of the departments within the Ministry and relevant departments like the Department of Land and Country Planning (DLCP), the Department of Surveys and Lands (DSL) Department of Forestry (DOF) and the Department of the Environment, (DOE). He is also the Principal Adviser to the Minister and the Vote Controller of the Ministry's budget.

The National Environment Protection Board (NEPB) ensures that environmental and social management is maintained. It monitors the Districts/Local Councils procedures and reports on a regular basis.

A National Environmental Action Plan (NEAP), developed with World Bank support outlines in two volumes, (i) an analysis of the environmental issues in Sierra Leone and the recommended interventions, and (ii) a proposal for investments. The goals, objectives and strategies of the National Environmental Policy (NEP) are the following:

The NEP’s goal is to achieve sustainable development in Sierra Leone through sound environmental management.

The NEP’s objectives are to:

- secure for all Sierra Leoneans a quality environment adequate for their health and wellbeing;
- conserve and use the environment and natural resources for benefit of present and future generations;
- restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere; to preserve biological diversity and the principle of optimum sustainable yield in the use of living natural resources and ecosystems;
- raise public awareness on environmental issues and to promote understanding of the essential linkages between the environment and development and to encourage individual and community participation in environmental improvement efforts.

In order to achieve the policy goals and objectives, the following strategies are being pursued:

- establish and/or strengthen environmental protection standards, monitor changes in, and publish relevant data on, environmental quality and resource use;
- mandate environmental impact assessment (EIA) of proposed activities which may significantly affect the environment and/or use of a natural resource, to provide relevant
information in a timely manner, to persons likely to be significantly affected by a planned activity, and to grant them equal access and due process in administrative and judicial proceedings;

- promote environmental management through the creation of administrative and infrastructure support with appropriate financial backing;
- co-operate in good faith with other countries and agencies to achieve optimal use of transboundary natural resources and effective transboundary environmental protection.

A number of government ministries are also involved in environmental management and protection by virtue of their responsibilities. The activities of these ministries are regulated by their various acts and are determined generally by their policies:

(i) Ministry of Lands, Country Planning, and the Environment - is responsible for conserving and managing Sierra Leone's natural environment. It is also responsible for addressing land acquisition and transfer, land ownership and use, national development in a planning capacity and to provide advisory services to the public on land matters; physical planning and management of the forestry resources.

(ii) Ministry of Mineral Resources - is responsible for supervising mining operations in the country. It issues licenses for all mining operations, enforces laws and provisions contained in the Mining Act and its amendments. It is also responsible for enforcing provisions in the new mining act relating to the rehabilitation of mined out areas. The main institutional conflicts are;

   a. the extent to which the ministry has jurisdiction over marine areas with respect to marine based mineral resources, offshore dredging and its impact on marine resources, and
   b. the overlap of water quality monitoring with the interest of the Ministry of Marine Resources.

4.2 Legal and Regulatory Framework for Environmental Management

The legal basis for the implementation of the NEAP and for Environmental Management and Protection in Sierra Leone is the Environmental Protection Act, 2008. The Environmental Protection Act (EPA) 2008 provides for the establishment of the National Environmental Protection Board (NEPB) which has the following functions:

(i) facilitating coordination, cooperation and collaboration among government ministries, local authorities and other agencies in areas of environmental protection;

(ii) review national and sectoral policies and make such recommendations or proposals as may be necessary to the Minister;

(iii) review environmental impact assessments prepared pursuant to this Act and make appropriate recommendations to the Director;

(iv) investigate or cause to be investigated, any activity, occurrence or transaction which it considers is likely to have or result in harmful consequences to the environment and advise on measures necessary to prevent or minimize such consequences;

(v) advise the Minister on areas of environmental protection and control requiring special or additional measures indicating the priorities and specific goals to be achieved;

(vi) undertake or cause to be undertaken specific studies and research aimed at developing strategies for the protection of the environment and make appropriate recommendations to the Minister; and
(vii) consider any other matters which may be referred to it by the Minister and make appropriate recommendations or proposal thereon.

4.3 Structure of Environmental Management at the Local Level

At the local level, the environmental functions are carried out by provincial officers of the DoE of the MLCPE through its Assistant Environmental Officers in the Northern, Southern and Eastern Provinces, and an officer for the Western Area. These officers are also expected to collaborate with the Area/Town Planning Committees within Town Councils.

The main tasks of the Assistant Environmental Officers operating at provincial levels includes monitoring of environmental programs and projects, evaluation of environmental degradation and compilation of reports. The assistant environmental officers at the provincial level are also expected to assist the local governments in their province to carry out the requirements of environmental management.

Town Councils, including the Freetown City Council (FCC) have statutory powers similar to those at the Local Authority (LA) as mandated by the Local Council Act, 2004. Councils are mandated to play a pivotal role in environmental management. The City and Town councils have environmental units/committees which are expected to focus mainly on health and sanitation issues.

At the Chiefdom level, community groups are often empowered to arrest people who degrade the environment and pose threat to the health and wealth of the community. Environmental management for the EFA FTI Project therefore envisages a bottom-up approach where in the local communities will be assisted to develop and execute projects related to mitigation measures identified in the EA.

Environmental and social management at the local level is sometimes carried out by Community Based Organizations (CBOs) and Non-Governmental Organizations (NGOs) which operate through local groups, mainly youths. These environmental management activities are often associated with reforestation programs, sensitization and regulation enforcement. These CBOs and NGOs are coordinated by the Department of the Environment which has posted environmental officers to Northern, Southern and Eastern regions of the Country. Environmental management will be greatly enhanced if these groups are incorporated in the management plan.

4.4 International Conventions

Sierra Leone is a party to many international agreements on Biodiversity, Climate Change, Desertification, Endangered Species, Law of the Sea, Marine Life Conservation, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution, and Wetlands. Details are listed in Annex 9.
5. **OVERVIEW OF THE WORLD BANK’S SAFEGUARD POLICIES**

The World Bank’s environmental and social (“safeguard”) policies are designed to avoid, mitigate, or minimize adverse environmental and social of projects supported by the Bank. The Bank encourages its borrowing member countries to adopt and implement systems that meet these objectives while ensuring that development resources are used transparently and efficiently to achieve desired outcomes. In the use of country systems, the World Bank considers the following:

- Equivalence and acceptability where country objectives adhere to the applicable operational principles as determined.
- Improving borrower capacity to address gaps if required to meet the objectives and applicable principles as determined.
- Borrower role and obligations for achieving and maintaining equivalence as well as acceptable implementation practices, track record, and capacity.
- Bank responsibility in determining equivalence and acceptability of borrower systems, and for appraisal and supervision.
- Changes in Borrower Systems and Bank Remedies during project implementation e.g. legislation, regulations, rules or procedures.
- Disclosure of intent to use country systems. This required to promote transparency and facilitate accountability, through the Bank’s PID early in the project cycle.

The World Bank’s ten safeguard policies are:

- OP 4.01 Environmental Assessment
- OP 4.04 Natural Habitats
- OP 4.09 Pest Management
- OP 4.10 Indigenous Peoples
- OP 4.11 Physical Cultural Resources
- OP 4.12 Involuntary Resettlement
- OP 4.36 Forests
- OP 4.37 Safety of Dams
- OP 7.50 Projects on International Waterways
- OP 7.60 Project in Disputed Areas

The World Bank’s disclosure policy requires that all safeguard documents are disclosed in the respective countries and at the Bank’s Infoshop prior to appraisal. The EFA FTI Project triggers OP 4.01 which may require an environmental assessment. The remaining operational policies are not triggered by the Project.

**OP 4.01 Environmental Assessment**

The World Bank’s environmental assessment policy and recommended processing are described in Operational Policy (OP)/Bank Procedure (BP) 4.01: Environmental Assessment. This policy is considered to be the umbrella policy for the Bank's environmental "safeguard policies" which among others include: Natural Habitats (OP 4.04), Forests (OP 4.36), Pest Management (OP 4.09), Physical Cultural Resources (OP 4.11)), and Safety of Dams (OP 4.37). OP 4.01 Environmental Assessment is one of the ten environmental and social Safeguard used in the Bank to examine the potential environmental risks and benefits associated with Bank lending operations. An environmental assessment (EA) of projects
proposed for Bank financing is required to help ensure that they are environmentally sound and sustainable, and also to improve decision making.

Environmental Assessment is a process whose breadth, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project’s potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, siting, planning, design, and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout project implementation. The Bank favors preventive measures over mitigation or compensatory measures, whenever feasible.

The EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources); as well as transboundary and global environmental aspects. The assessment considers natural and social aspects in an integrated way. For the EFA FTI Project, potential negative and social impacts due to construction and rehabilitation activities are likely to include soil erosion, pollution of soil, ground water and air around construction sites, loss of vegetation at construction site, creation of open pits, and production of waste materials, nuisances such as noise and dust during construction.
6. OBJECTIVES OF THE ENVIRONMENTAL ASSESSMENT AND METHODOLOGY USED

6.1 Objectives of the Environmental Assessment

The objective of the Environmental Analysis is to assess the potential environmental and social impacts of the project components, particularly regarding the construction and rehabilitation of schools. The analysis covered the issues detailed out in the draft Terms of Reference (TOR). The assessment will also propose an environmental and social screening for identification assessment and mitigation of potential negative environmental and social impacts related to the construction and rehabilitation of schools and related provision of water wells and sanitation facilities. The actual schools to be rehabilitated and actual location for construction under the EFA FTI Project are yet to be identified. The results of the Environmental Assessment will provide practical lessons for mitigation should these be required during project implementation. The related Environmental Management Plan will provide a pre-construction screening and environmental and social checklist, environmental guidelines for contractors, and an environmental mitigation plan. To ensure the effective use of environmental management tools, the EFA FTI will provide support for environmental training.

The World Bank’s OP 4.01: Environmental Assessment calls for at least an environmental impact assessment of all similar education projects. Subsequently, the assignment of a project environmental category, ranging from (i) Category A for a proposed project which is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented; (ii) Category B for a proposed project with potential adverse site specific environmental impacts on human populations or environmentally important areas--including wetlands, forests, grasslands, and other natural habitats which are less adverse than those of Category A projects; (iii) Category C if a proposed project is likely to have minimal or no adverse environmental impacts--beyond screening, no further EA action is required for a Category C project; (iv) Category FI for a proposed project which involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts. The current EFA/FTI Project is classified as category B.

An Environmental and Social Screening Form (Annex 1) is proposed to assist in evaluating planned construction and rehabilitation activities under the EFA FTI Project. The form will place information in the hands of implementers and reviewers so that impacts and their mitigation measures, if any, can be identified and/or for the requirements for further environmental impact assessment to be determined.

6.2 Methodology and Techniques for Environmental Assessment

The current Environmental Assessment was prepared using both primary and secondary data. References for secondary data include the National Environmental Protection Act 2008, the Labor and Public Health Act, and the World Bank’s Safeguard Policies. In addition to the literature review, consultations were held with affected persons and stakeholders including institutions, communities, and other community based organizations. The consultative process was done in collaboration with the MEYS, OCHA, and other relevant organizations. The methodology employed to provide primary data included a combination of purposeful and random sampling techniques and site visits.

Sampling Technique

The study employed Multistage Stratification based on the following clusters:

- Stage 1 – Provincial
- Stage 2 -- District
- Stage 3 – Chiefdom
- Stage 4 -- Villages

**Provincial Level:** This first stage of stratification was purposefully chosen since all the provinces and Western Area were affected by the ten year rebel war and educational structures were damaged. The provinces are: Eastern, Southern, Northern, and Western Areas.

**District Level:** This was the next stage or stratum selected because they reflected a homogeneous setting in terms of socio-economic activities and the impact of the war was more significant.

**Extent of Damage:** The third stage of stratification was undertaken based on the level of damage to educational structures as examined during the site visits.

**Village/Settlement:** The fourth stage involved the villages/settlements in each administration area in the Western Area where visits revealed the level of damaged educational structures.

**Site Visits**
The purpose for on site data collection was to assess the:
- overall damage of educational structures
- level/extent of damage, i.e. total, partial
- environmental impact

Primary data collection also provided field data in line with the objective of the project to assess the environmental impact. It also enabled the team to double check secondary information gathered. The information collected was used to assess the potential environmental and social impacts of the components of construction activities.

**Data Collection**
Primary data collection involved visits to identified sites where structured questionnaires were administered. Observation and questions sought to address the following issues:

(i) assess potential environmental and social impacts of construction activities in the urban areas.
(ii) assess environmental and social impacts of increased provisions of water supply and sanitation facilities.
(iii) assess the need for liquid and solid waste collection, disposal and management.

Secondary data included desk reviews, consultations and visits. To complement the primary assessment, related assessments were made with information from various secondary sources/institutions including the MEYS, NGOs etc. Discussions and questions sought to address the following issues:

(i) biophysical characteristics of the environment in the rural area/urban area covered by the project.
(ii) review of national environmental policies and regulatory legislation.
(iii) administrative framework together with the WB's safeguard policies.
(iv) environmental Analysis

Consultations with Communities

Consultations with communities in the Kailahun, Kono and Kambia districts were facilitated by the regional environmental officers based in Kenema in the east and Port Loko in the north respectively. Structured questionnaires were employed to obtain data/information for the environmental analysis.

The team visited the Kailahun, Kono, Kambia districts and sites in the Western Area. The principal aim of the visits was to assess the level of destruction of educational facilities in these districts, the Western Area and their surrounding areas. At the various districts, the team held a meeting with the paramount chiefs of the main chiefdoms.

The whole assignment provided the team with first hand experience. It was clear that the project will not concentrate on the construction of large buildings, but will undertake the rehabilitation and construction on existing sites of small primary and junior secondary schools. The extent of the project will determine the extent of environmental degradation and according to the responses obtained, in this case, the impact is manageable.
7. **ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT**

The Environmental Assessment was based on three provincial districts namely; Kailahun, Kono and Kambia, in addition to the Western Area. The first three districts had been severely affected by the civil conflict which ravaged the country for ten years from 1991 to 2002. The Western Area was selected because it clearly contrasted with the three districts in terms of physical damage to educational infrastructure, environmental degradation, institutional arrangements for impact management and capacity to handle management options. The level of destruction of public facilities and the environment in the three districts was high according to various reports and personal communications and this was confirmed during the site visits. Under the EFA FTI Project, all districts are likely to benefit from construction and rehabilitation activities.

7.1 **Administrative and Socio-Physical Characteristics of Areas covered by EA**

It is important to understand the administrative and socio-physical characteristic of the areas covered by the EA in order to develop suitable environmental management strategies for the educational sector.

The three districts covered by the EA have similar social structure with the exception of the Western Area. Kailahun, Kono and Kambia Districts are organized by Chiefdoms, each of which is ruled by local chiefs representing the various ethnic groups in the Chiefdom. The paramount chief is the overall traditional head of the Chiefdom. The Chiefdom council is made up of traditional authorities organized by ethnic groups (Chiefdom Councilors). The Chiefdom Councilors are set up to administer the Chiefdoms and to advise the paramount chief who in turn coordinates with the district councils. Headmen work with village area committees to oversee and administer the villages. The lowest level of organization is the household level.

The Western Area is administered by the Freetown City Council (FCC) which in turn coordinates with the various villages committees in the rural areas, headmen and district councils.

**Kailahun District**

The administrative headquarter of the district is Kailahun town located 270 miles from Freetown. Kailahun is located in one of four provinces with the provincial headquarter office located in Kenema. Administratively Kailahun is divided into fourteen (14) Chiefdoms.

Kailahun district located in the Eastern province of Sierra Leone is bordered on the north by the Republic of Guinea and on the southeast by the Republic of Liberia along the Mano river. It covers an area of 1,490 sq. miles. The topography of the area is undulating, ranging from low lying inland plains to more dissected upland areas with elevation between 600-700 meters altitude. Most of the area has an average annual rainfall of over 2,500 mm, with 80 percent of this average falling during the period of June to November, average annual temperatures vary between 25°C and 28°C with higher values occurring in March/April when solar radiation is most intense. The vegetation of the district is dense farm bush dominated by fast growing, fire resistant species that thrive under the bush fallow system. The district also has over 5,000 acres of forests reserves and protected forest areas (Gola rainforest). High trees traditionally surround many of the villages and are used as shade for cocoa and coffee. However, most of these forest reserves were affected by the war.

The district is predominantly inhabited by the Mendes although traditionally the Kissi dominated area. The minority tribes include the Krim, Val and Gola inhabiting areas along the border with Liberia. The district which used to be under the control of rebels during the war is now under the control of the government of Sierra Leone. The population of the district is estimated at 358,190 according to the 2004 population Census. The population accounts for 7.2 percent of...
the population of Sierra Leone. Mass migration of the people occurred as a result of the rebel war. Migration to the neighboring countries of Guinea and Liberia as well as to other parts of the country was common during the war when the district was under rebel control. The major economic activities in the area are agriculture, mining and hunting. Major cash crops like coffee and cacao used to fetch a sizeable proportion of Sierra Leone’s foreign exchange earnings. Commercial activity in the area is low mainly restricted to the provision of services.

Educational and other Infrastructure Facilities

Kailahun district and the town of Kailahun in particular had several primary and secondary schools, hospitals, medical centers, churches, and mosques before the war. Although facilities were destroyed during the ten years of civil war as reports from various organizations (both governmental and nongovernmental) suggests, interventions from the ongoing “Sababu Project” (IDA-AfDB-GoSL funded Rehabilitation of Basic Education Project) has brought some improvement to the situation. Under the ongoing project, a total of 48 school, made up of 38 primary and 10 JSS schools had been constructed, rehabilitated and handed over to communities. Twelve (12) additional schools are currently under construction. The hospital, many churches and mosques have been rehabilitated.

In addition to international funding which includes support from the Islamic Development Bank (IDB), local and international NGOs have also contributed greatly to improving the infrastructure situation in the district.

Kono District

The Kono District comprises fourteen (14) Chiefdoms. The headquarter town is Koindu and it also serves as the administrative headquarter town.

The Kono district is located in the Eastern province of Sierra Leone. The district is bordered on the north by Koinadugu district, on the east by the Republic of Guinea, the southeast by Kailahun and Kenema districts and in the west by Tonkolili and Moyamba districts. The topography of Kono district is characterized by hills to the east and lowland covered with savanna grassland to the north. Relatively fertile inland valley swamps occupy a vast area of the district. The climate of the area is typical of the Eastern region of Sierra Leone with an average annual rainfall of over 250 mm, 80 percent of which occurs between May and November. Average monthly air temperature ranges between 25°C and 28°C. In terms of biological diversity, the district is now covered mostly with low grassland and most of the forest cover has been lost due to intense mining activities and the rebel war. Wild life is not prevalent and restricted to a limited species of birds and other wild animals like monkeys.

The population of Kono district was estimated at 335,401 (2004, census). This corresponds to 6.74 percent of the total population. The main economic activity centers around mining of diamonds which is widely believed to be the dominant source of funding for the ten year old brutal civil war the country experienced. Agricultural activity is modest in the area as the land for most part has been degraded by mining activities with little or no rehabilitation. Most of the soils are ferralitic and shallow with low fertility, except for the inland valley swamps which are relatively fertile. The district was under rebel control during the war but no longer. Commercial and other related activities are growing in the district.

---

5 As at end March 2008, data source: Civil Works Unit, Sababu
Educational and other Infrastructure Facilities

Given that Kono was the scene of intense military activities throughout the ten years of civil conflict, there were hardly any educational facilities in the district in the time immediately after the war. Almost all schools were destroyed in addition to hospitals and public services infrastructure. Water storage and delivery facilities were also been destroyed. Roads were and in some cases are still in deplorable condition and sanitation is poor. Indeed infrastructure damage in the district was almost absolute. This situation is now a thing of the past as infrastructural development is ongoing. Regarding schools, a total of 16\(^6\) schools (15 primary and 1 JSS) have been completed with about 17 more planned for the future.

Kambia District

The administrative headquarter is Kambia Town and the provincial headquarter office is located in Makeni. Kambia district is administered in seven (7) chiefdoms.

The Kambia district is located in the northern province of Sierra Leone. Covering an area of about 1,100 sq. miles, the district is bordered on the north and northeast by the Republic of Guinea, Bombali and Port Loko districts, and on the south and west by the Republic of Guinea and the Atlantic ocean. The topography of Kambia district is dominated by low lying plains with heights between 50 and 250 feet. The drainage system of the Great and Little Scarcies rivers lies within the district. Kambia district has an average annual rainfall of over 3000 mm. The bulk of the rains falls during the rainy season as in most parts of country. Average annual temperatures ranges from 200˚C and 250˚C. The district is mostly covered by low shrubs and grassland. In the proximity of the Scarcies river, mangrove swamps dominate but these have been severely degraded to make way for rice cultivation.

The present population according to the 2004 population census is estimated as 270,462 corresponding to 5.43 percent of the total population. This district was first attacked by the RUF and AFRC forces in 1995 and was subsequently occupied by the RUF forces in 1999. This resulted in widespread displacement of the civilian population some of which fled to neighboring Republic of Guinea. The district was under the RUF until may 2001 when a formal agreement was reached paving the way for RUF's withdrawal from the district. Presently the district is under government control with the return of a sizeable number of internally as well as externally displaced people. Commercially activity has resumed and the government is in the process of restoring essential services in the area. Kambia district is dominated by such activities as agriculture, fishing and hunting. The district is a major producer of swamp rice. Upland rice production is also important in the area. Petty trading (commerce) is a growing economic activity as the district lies on the border with the Republic of Guinea.

Educational and other Infrastructure Facilities

With regards to educational facilities, school structures are still intact in then chiefdoms. In the town of Kambia town were all the schools were burnt down, Sababu interventions has led to the construction of 28\(^7\) (23 primary and 5 JSS) schools with only 3 to be completed under the provisions of the World Bank. Many of the other remaining structures have been renovated since they only had either cracked walls or damaged roofs. Other infrastructure facilities such as health, water and sanitation have also been restored and rehabilitated.

\[^6\] As at end March 2008, data source: Civil Works Unit, Sababu

\[^7\] As at end March 2008, data source: Civil Works Unit, Sababu
Western Area

The Western Area is one of the four main physical divisions of Sierra Leone and is situated between latitude 8° 5’ and 8° 30’ and longitudes 130 00’ and 130 15’ west. It covers an area of about 110 square miles. It has a population estimated at 947,122 - being 19.03 percent of the total population. The population in the Western Urban was estimated at 772,873 (15.53 percent of total population) and Western Rural was 174,249 (3.50 percent of total population) according to the 2004 population census. The area falls naturally into two main physical divisions, the eastern or low-lying area bounded on the North by Koya Chiefdom, the East by the Songo Creek, the South by the Ribbi River and Yawri Bay, and on the West by the Western or Mountain region which itself forms the other main physical region.

The relief and drainage is varied. It consists of the Peninsula mountains of the Western Area near Freetown which are the result of a large basic intrusion of Norite and Gabbro probably of Cambrian age. The present youthful topography with its strongly dissected mountain range rising up to almost 3,000 feet (Picket Hill, 2912 feet) has resulted from a relatively recent uplift, possibly of tertiary times. They stretch for some 23 miles into the Banana Island south of Freetown. Around the base of these hills, a large number of erosional platforms have been carved which present excellent pastures during the wet season.

The Eastern or low-lying region is made up of undulating plains, which have been described as “Raised Beaches”. This preserves that much of what is, for example Freetown, is below the sea. These raised beaches increase in size as they approach the Bunce River in the north and Yawri Bay in the south. After Waterloo town, they merge into the Interior Plains and Plateaux, another physical region of Sierra Leone. The Western Area is drained by a large number of short and swift flowing streams and rivers which rise from the Peninsula mountains. These flows are mountain torrents during the tropical rains becoming virtually dry in the dry season. As the rivers reach the Costal plains they flow through gorges 25 to 50 feet to empty themselves into the sea. Notable among these are the Orugu, No.2, Whale and Sussex rivers.

The rainfall and temperature pattern is dual. The dry season spans November to April and a wet season is from May to October. During the wet season over 90 percent of the rainfalls occurs between Aberdeen and Kent. In the dry season only a trace amount of rain falls. Rainfall decreases inland and with decreasing height above sea level. In the mountainous areas, over 200 inches of rain falls in a single year. In the Costal areas between 180 and 200 inches of rainfall is registered annually. Inland rainfall decreases as low as 120 inches annually. The average maximum temperature registered at a meteorological station in Freetown was 85.70F and the average minimum temperature was 76.90F. Such a pattern can be said to represent the general temperature system in the Western Area.

The soils of the Western Area are classified under three major groups: Soils of the Peninsula mountains, Soils of the Coastal swamps and Soils of the raised beaches and terraces. The soils of the peninsula mountains have been formed from Norite and Gabbro which are rich in iron. Under high rainfall and a pronounced dry season, this is an optimum environment for plinthite formation which is abundantly present in the form of gravel, boulders or hardpan. On the steep slopes, very stony soils are shallow over bed-rock. On the foot slopes of the mountains and on the erosional platforms, soils have developed that have less than six inches of surface soil over hard, impenetrable highly indurated plinthite sheet. In some valleys, small areas of thick gravel-free soils are present. These colluvial soils are very valuable especially for vegetable growing in the dry season and are now being used for swamp rice cultivation in the wet season.
Educational and other Infrastructure Facilities

The locations for educational institutions were initially acquired by the Ministry of Education. Since independence new sites have been acquired and new schools built on a demand driven basis. Schools were however systematically destroyed during the ten-year civil war and a rapid assessment conducted in 1996 by the MEYS revealed that extensive damage had occurred. This included burnt down school buildings, looting involving the removal of roofing sheets, doors and windows, removal or destruction of school furniture and equipment, and loss of teaching materials. School buildings which were directly damaged by vandalism had deteriorated because lack of maintenance or abandonment due to the frequent attacks and threats.

Over the years following the war, schools are being rehabilitated and/or reconstructed on existing school sites or marked out sites. Currently, seven (5 primary and 2 JSS) out of the 15 schools being constructed and rehabilitated under the IDA funded REBEP has been completed. About 27 additional schools are being constructed and rehabilitated with the AfDB support under the same project.

The selection of existing school sites will employ a participatory planning exercise based on school base line data collected during preparation. The selection will be done in consultation with NGOs, missions, Local Council representatives and Chiefdom authorities. Final approval of school sites selection will be approved by the MEYS and the project steering committee to ensure that schools match the needs of catchment areas for projected enrollments.

7.2 Description of Environmental and Social Impact and Mitigation Measures

The Environmental Assessment identified a number of possible impacts of the project on the environment including, creation of some open pits, production of construction waste materials, and pollution. These environmental impacts are likely to affect the EFA FTI Project component on schools construction and rehabilitation and the provision of relevant water wells and sanitation facilities. The section also attempts to provide a detailed account of measures that shall be adopted to avoid, reduce or remedy adverse impacts identified.

In addition, the Ministry in collaboration with the Local Councils will assume a more definitive and strategic role in responding to the needs of the local population. This requires making sure that schools provided are demand driven with communities themselves identifying location in discussion with the Local Councils. This will place the communities in a better position socially if not economically to benefit from construction and rehabilitation activities.

Production of Construction Waste; Contact with Hazardous Materials

The construction of schools buildings and support structures produces waste materials which have to be safely disposed at identified dump sites. These materials may include scrap metals, nails, pieces of wood, broken glass, pieces of cement blocks etc. If not properly disposed, these may cause personal injury, and lead to land degradation. The painting and decorative phase of civil works may produce such wastes such as paint, oil, etc. which might find their way into the soil and into nearby streams and polluting them.

A clean-up exercise will be put in place to clean up materials like nails, pieces of timber, broken blocks, scattered sand and gravel, pieces of iron, mortar mixing, waste water, saw dust etc., and where recycling or reuse is appropriate, this must be encouraged. For example, saw dust could be used as manure in the experimental tree nurseries and school gardens.

To protect workers from contact with hazardous materials or substances, protective head and body gear will be worn at the construction phase of the project in accordance to building safety
regulations. Training and relevant information will also be provided to workers to complement this.

*Dust and Noise*

The project is likely to cause pollution of the environment in terms of the limited amount of noise associated with construction of simple buildings which does not require heavy machinery. Pollution can also be caused as a result of the abandoning and poor disposal of paint materials. The dust associated with earth excavation for building the foundation would also be limited and temporary and is likely to have minimal impact on the quality of air around construction sites.

Noise pollution will be an issue during the construction stage of the project but will be expected to minimize once the schools become fully operational. Post construction/building materials should be cleared and properly disposed.

7.3 Specific Mitigation Measures associated with Constructional Activities and Impact on Local Populations

A number of measures were identified to have some impact on local populations during the construction of schools. These include location of school and land availability, employment of community members, social programs and NGO operations, and capacity building.

*Land availability*

During the consultation process, stakeholders emphasized that the acquisition and use of land for the construction of schools would not present a problem as long as there is demand by the community for a school or additional classrooms. In the provincial areas and at Chiefsdom level, the land is owned by the community and held in trust by the Paramount Chief. The Paramount Chief is the custodian of the land and based on the need of the community, the Paramount Chief would give permission for land to be used for specific purposes. An analysis of this issue indicates that the amount of land required for the project activities is not significant. The prevailing vegetation is shrub and farm bush with an insignificant variety of wildlife.

In the urban setting the land is owned by the Government or the proprietor who is constructing the school. Before the construction of the school is initiated, a site plan is requested together with the minutes of the meeting at which the decision to construct a school was taken. Under the decentralization process, all of the documents are requested to be submitted to MEYS and must be accompanied by a document indicating that the Local Council has given approval for the construction of a school at a particular location within that district. This procedure is usually followed by individuals or groups dealing with school construction or related activities.

*Employment of Community Members*

The MEYS and Local Councils will review the opportunities for extending preferential employment amongst the local indigenous population with the requisite skills. The MEYS and Local Councils will need to draw on people with the required skills. Preference will be given to local employees for most of the unskilled labor that will be required.

*Capacity Building*

The rehabilitation and reconstruction activities require capacity building. The perception of the communities is that they would be key participators in the construction process from decision making to actual implementation. Participation of communities at all phases of the process will enhance their capabilities and capacities. Special skills that could be developed include block
laying, masonry, carpentry and painting. Other skills connected with preventing erosion and improving aesthetics such as greening, tree planting and beautification will extend far beyond the school to the community if capacity of community members is strengthened in these areas.

7.4 Potential Environmental and Social Impacts of Increased Provision of Water Supply and Sanitation Facilities

Some of the areas covered by the EA also have very poor sanitary conditions and environmental degradation from unhealthy refuse and sewage disposal system, and depending on poor sources of drinking water. The EA reveals that communities have low health status and water borne diseases are common. This is particularly the case in areas where drinking water is derived from streams or where the open bush and streams are used as places of convenience and for sewage disposal.

Against this backdrop, the increased provisions for potable water and sanitation facilities will have a positive effect on the communities where schools are located. Most of the areas covered by the EA reported either having a well or pipe borne water before the war, apart from Gorama in Kono Chiefdom.

Public Health Impact

The provision of latrines in the schools should have significant social impact especially because it targets a significant proportion of community members, school children. Indeed if the community agrees, school water and sanitation facilities could be extended to the community. Although most of the Chiefdoms covered by the EA in the various districts reported having pit latrines, the community occasionally used village streams and the open bush for sewage disposal. Over 50 percent of these latrines were completely destroyed during the war. For the purpose of combating the expected increase in access and providing safe hygiene there is urgent need of not only to restore the old pit latrines, but also to construct new ones to correspond basic hygiene education.

A potential positive impact of increased provision of water supply and sanitation facilities, therefore, is the reduction of diseases like malaria, diarrhea, dysentery, bilharzia, lassa fever, measles, polio etc.
8. ENVIRONMENTAL MANAGEMENT PLAN (EMP)

8.1 Environmental and Social Monitoring Indicators

An Environmental Management Plan (EMP) for the EFA FTI Project is intended to ensure efficient environmental management of the project. The EMP outlines (i) the relevant project activities, (ii) the potential negative environmental and social impacts, (iii) the proposed mitigation measures, (iv) persons and institutions responsible for implementing the mitigation measures, (v) persons and institutions responsible for monitoring the implementation of the mitigation measures, (vi) frequency of monitoring mitigation measures, (vii) capacity strengthening for environmental management, and (viii) estimated cost for environmental mitigation measures. The EMP will be used as a guideline during project implementation and the cost of implementation will be taken into consideration in the EFA FTI project costs. A summary of the EMP is provided in Annex 6.

8.2 Institutions Responsible for Implementing and Monitoring Mitigation Measures

The roles and responsibilities regarding environmental planning and approval for rehabilitation activities are outlined and summarized as follows:

Coordination and Supervision

- The Civil Works Engineer/Quantity Surveyor/Architect in the Local Council will be responsible for completing the environmental and social screening (Annex 1) and checklists (Annex 2) since civil works contracts for constructing and rehabilitating basic schools will be their responsibility. The Civil Works Unit of the LCs will also determine the environmental category of the screened activity to recommend the appropriate mitigation measures for potential environmental and social impacts of the construction and rehabilitation works. Environmental training will also be provided for LCs as required.
- The ESP Coordinator will work with the Planning Division and the Civil Works Unit of the MEYS to analyze all information/data from the environmental and social screening and checklists.
- Technical services of LCs will ensure the supervision (oversight) of the implementation of mitigation measures which will be executed by private contractors. The ESP Coordinator will work with the Planning Division and the Civil Works Unit of the MEYS to ensure this.

Implementation

- Individual consultants or consultancy firm will be responsible for (i) carrying out the EIA studies, and (ii) drafting the environmental section of guidelines for the maintenance of educational facilities and related water supply and sanitation facilities.
- The contractors are responsible for the implementation of the mitigation measures as indicated in the Environmental Guidelines for Contractors (Annex 4).

Monitoring

- The technical services of the Civil Works Units (where educational facilities will be rehabilitated), will be responsible for monitoring of the implementation of the mitigation measures.
8.3 Capacity Strengthening for the Environmental and Social Management of the EFA FTI Project

Training Required

Environmental capacity strengthening will be required for technical personnel who are involved with the civil works program of EFA FTI Project at the level of the LCs and also in the MEYS if necessary.

To ensure that screening and EFA FTI Project activities are carried out in a manner that is environmentally and socially sound, it has been suggested to train the ESP Coordinator and one technical personnel in each of the LCs where schools will be constructed and rehabilitated in the following: (i) completing the screening forms; (ii) completing the environmental and social checklists; (iii) developing the terms of References for EIA; and (iv) recruitment of consultants. The results of the screening and the EIA will be submitted for the approval of the Steering Committee. The ESP Coordinator and technical personnel of the LCs will also be trained in environmental and social assessment, and on the EIA procedures to allow them play the role of environmental and social experts during the implementation of the EFA FTI Project activities. The ESP Coordinator will be responsible at the level of the EFA FTI for coordination and supervision (overseeing) of environmental and social management and the EFP must make an effort to visit all the educational facilities to be constructed and rehabilitated, at least once at the beginning of the civil works, in order to assist LC technical personnel in completing the screening forms.

The technical personnel of the LCs will collaborate with the ESP Coordinator on the day-to-day monitoring of environmental and social of sites where educational facilities will be constructed and rehabilitated. They will also follow up on environmental and social indicators and the implementation of mitigation measures where necessary.

Capacity strengthening for environmental and social monitoring will be required at national and LC level as follows:

- The ESP Coordinator to strengthen his capacity to apply the screening/checklist process as outlined in Annexes 1 and 2.
- Technical personnel of the Civil Works units of the LCs to reinforce their capacities in environmental monitoring.
- Selected contractors to sensitize them on environmental and social considerations.

The ESP Coordinator, Civil Works Unit of MEYS and Technical Personnel at the LCs will conduct the following activities:

- Screening of the educational facilities and related water supply and sanitation facilities at each of the school construction and rehabilitation sites, using the Environmental and Social Screening Form
- Completion of the Environmental and Social Screening Form (Annex 1) and submission to Steering Committee for information
- Carrying out environmental work, i.e. recommending simple mitigation measures (Annex 3), or, arranging for the preparation of a separate EIA (Annex 6)
- Preparation of the draft TORs for the EFA FTI Project activities requiring a separate EIA
- Submission of the TORs to MEYS and DPs for clearance
- Recruitment of qualified consultancy firms to conduct the EIAs if necessary
- Sending the EIA reports to the appropriate institutions accessible to the public.

Concerning the environmental management of EFA FTI Project activities, the specific needs for environmental capacity strengthening by category of stakeholders are:

<table>
<thead>
<tr>
<th>Stakeholders</th>
<th>Topic of Training</th>
</tr>
</thead>
</table>
| The ESP Coordinator, Civil Works Unit of MEYS | ▪ Environmental assessment (screening and classification of sub-projects; EIA procedure etc.)  
▪ Impacts identification  
▪ Draft terms of reference for environmental assessments and selection of consultants  
▪ Selection of simplified mitigation measures in the checklists  
▪ Hygiene and quality standards including HIV/AIDS aspects  
▪ Sierra Leone's national environmental policies, procedures, and legislation  
▪ Environmental Impact Assessment (EIA) procedures  
▪ World Bank Safeguards Policies |
| Technical Personnel at the LCs | ▪ Monitoring the implementation of measures and environmental indicators.  
▪ Hygiene and quality standards including HIV/AIDS aspects |

There are a few consultancy firms specialized in EIA issues in Sierra Leone who could be contracted to design short courses that meet the capacity strengthening needs of stakeholders who will be involved in environmental and social management.

**Training Cost Estimates**

The training program will be implemented by the ESP Coordinator working with the EFA FTI implementation team. The costs estimates, including travel expenses, and training modalities will be prepared by the ESP Coordinator with support from the relevant Local Councils. Trainers/facilitators with the requisite skills in EIA, etc will be recruited by the MEYS to carry out the training courses. For planning purpose, a 5-day national workshop including the Sierra Leone Environmental Projection Authority, the ESP Coordinator, and technical personnel from LCs (19 officials) will be organized during the implementation of the project, for a total cost of US$15,000.

**Other Capacity Strengthening Activities**

The others capacity building activities the environmental and social management of the EFA FTI Project are:

**Provision for EIA:** After the initial screening of sights, it might become necessary to undertake EIAs during the implementation of EFA FTI activities relating to the construction and rehabilitation of schools to ensure they are environmentally and socially sound. For planning purposes about 318 schools are to be constructed and/or rehabilitated. An amount of
US$12,000 has been set aside for an EIA should this become necessary following the screening of sites.

Draft Environmental and Social Guidelines for School Maintenance: An environmental and social management guideline for the maintenance of schools and related facilities will be prepared by the MEYS with TA from DPs. The guidelines refer to all aspects of building maintenance, including the environmental

The total cost for capacity strengthening is estimated at US$27,000

8.4 Environmental and Social Monitoring Plan and Indicators

The Environmental and Social Monitoring Plan monitoring plan covers a set of mitigation, monitoring and institutional measures to be taken during implementation/construction and operations of schools and related water and sanitation facilities. The plan aims to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The plan also includes actions needed to implement these measures.

The objectives for monitoring are to: (i) to alert project authorities and to provide timely information about the effectiveness of the Environmental and Social Management process; and (ii) to make a final evaluation in order to ensure that mitigation measures designed for the construction and rehabilitation of educational facilities have been successful in such a way that the pre-program environmental and social conditions have been restored, improved upon or worst than before and to determine what further mitigation measures may be required.

<table>
<thead>
<tr>
<th>Potential Social and Environmental Negative Impacts</th>
<th>Mitigation Measures</th>
<th>Monitoring Measures</th>
<th>Phase/Stage</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncontrolled storage of products or materials for the project</td>
<td>Fully implement the ESMF screening form and checklist in Annexes 1 and 2</td>
<td>Periodic monitoring and evaluation of verifiable indicators for all impacts identified</td>
<td>Ongoing throughout the life of the project</td>
<td>Local Councils</td>
</tr>
<tr>
<td>Dust,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidents,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Septic tanks overflowing and posing health risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk of outbreak of social conflicts (not employing skilled locals)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Costs for Implementing the Monitoring Plan

The Districts/Local Councils will be responsible for monitoring their own Environmental and Social Monitoring Plans. The cost of activities will be taken into consideration in the LC Annual Work Plans. The cost is however not envisaged to be significant since the IRCBP is already funding LCs to provide the same service.

Public Disclosure

For an effective and sustainable environmental and social management, there is the need for public disclosure in addition to public consultations. The World Bank’s disclosure policy
requires that all safeguard documents are disclosed in the respective countries and at the Bank’s Infoshop.

The Environmental Assessment and attached Annexes (Annexes 1 to 6) for environmental and social management will be disclosed in Sierra Leone through wide distribution of the relevant documents, notices at all LCs, and at the Infoshop of the World Bank.
9. **Recommendations**

The EFA FTI Project will expand access to and improve the quality of basic education in Sierra Leone. The project aims to increase enrollments especially new admissions into primary one, and improve quality of teaching and learning. In this respect, the social benefits of the project outweighs probable adverse effects deemed insignificant. According to the Word Bank operational policies, the EFA FTI Project is classified as a category B because the potential adverse site specific environmental impacts on human populations or environmentally important areas is comparably low compared to for e.g. the construction of a dam. However, construction and rehabilitation of schools and related water and sanitation activities could have moderate adverse impacts, particularly in terms of pollution of ground water supplies and waste generation during execution of the works. This EA takes cognizance of these environmental and social considerations. The aspects relating to displacement and resettlement in the unlikely event that persons will be displaced in order for a school or related facility to be constructed will be tackled following a site screening exercise.

For better inclusion of the environmental and social requirements in the preparation and implementation of the EFA FTI activities, the following recommendations are proposed before the identification of the sites for construction and rehabilitation of school infrastructure:

- identify good environmental practice measures (environmental and social clauses) to be included in the contracts for construction and/or rehabilitation
- organize frequent missions (include environmental expects) for the EFA FTI project and ensure that the mitigation measures of the EFA FTI project recommended by the EIA are complied with
- recruit national expertise in EIA where necessary and for environmental training sessions

In addition, the following recommendations are proposed:

The ESP Coordinator and Civil Works Unit which will work with implementing agency (Local Councils) should undertake to manage operations in a manner that protects the environment and the health and safety of employees, clients, contractors and the public. To this effect, s/he:

- has overall responsibility for ensuring that the EMPs for the construction and rehabilitation activities are prepared and implemented, and that they comply with all legislative and contractual requirements
- ensures that non-compliance is addressed
- ensures that contractors fulfill their environmental obligations
- ensures that the RPF if required is prepared and implemented, as required, by qualified personnel
- advises managers, supervisors and employees on safety, health and environmental requirements, and holds them accountable for their performance
- monitors, evaluates and reports on performance in safety, health an environmental protection
- provides training when needed on topics pertaining to environmental protection
- informs personnel that failure to report incidents and willful non-compliance will result in disciplinary action in accordance with internal disciplinary guidelines.
Contractors will:

- Comply with the environmental guidelines described in Annex 4
- Comply with all of the requirements of the EA and EMP and shall, in accordance with accepted standards, employ techniques, practices and methods of construction that will ensure compliance with this standard and, in general, minimize environmental damage, control waste, avoid pollution, prevent loss or damage to natural resources, and minimize effects on surrounding landowners, occupants and the general public
- Quickly agree with remedial measures and immediately implement these to prevent further damage and to repair any damage that may have occurred
- Organize labor, plant, transport and equipment to perform work in accordance with the environmental requirements
- Ensure that the EFA FTI project is implemented in accordance with the environmental standards specified in the EMP
- Implement agreed actions resulting from routine monitoring, or inspections

In addition the contractor shall implement their own audits to ensure performance with the requirements of the EMP. Technical staff in MEYS and LCs will monitor the compliance with these guidelines.
ANNEX 1: PROPOSED ENVIRONMENTAL AND SOCIAL SCREENING FORM

The proposed Environmental and Social Screening Form is designed to assist in the evaluation of planned construction and rehabilitation activities under EFA FTI Project. The form is designed to place information in the hands of implementers and reviewers so that impacts and their mitigation measures, if any, can be identified and/or requirements for further environmental impact assessment determined.

The form contains information that will allow reviewers to determine the characteristics of the prevailing local bio-physical and social environment with an aim to assess the potential impacts of construction and rehabilitation activities on this environment. The environmental and social screening form will also assist in identifying potential socio-economic impacts that will require mitigation measures and/or resettlement and compensation.

Name of sub-project ........................................................................................................

Sector ................................................................................................................................

Name of region/district/chiefdom/community for school construction and rehabilitation
..............................................................................................................................................

Name of Executing Agent ...................................................................................................

Name of the Approving Authority ........................................................................................

Name, job title, and contact details of the person responsible for filling out this ESSF:

Name: ---------------------------------------------------
Job title: -----------------------------------------------
Telephone numbers: -------------------------------------
Fax Number: -------------------------------------------
E-mail address: -----------------------------------------
Date: -----------------------------------------------
Signature: ---------------------------------------------

PART A: BRIEF DESCRIPTION OF THE PROPOSED ACTIVITIES

- Please provide information on the type and scale of the construction/rehabilitation activity (area, required land, approximate size of total building floor area, number of stand-alone buildings).

- Provide information about actions needed during the construction of facilities including support/ancillary structures and activities required to build them, e.g. need to lay pipes/lines to connect to energy or water source, access road etc.

PART B: BRIEF DESCRIPTION OF THE ENVIRONMENTAL SITUATION AND IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL IMPACTS

Describe the education facility's location, sitting; surroundings (include a map, even a sketch map)
Describe the land formation, topography, vegetation in/adjacent to the educational facility's area

Estimate and indicate where vegetation might need to be cleared.

Environmentally sensitive areas or threatened species

Are there any environmentally sensitive areas or threatened species (specify below) that could be adversely affected by the project?

(i) Intact natural forests: Yes □ No □
(ii) Riverine Forest: Yes □ No □
(iii) Surface water course, natural springs: Yes □ No □
(iv) Wetlands (lakes, rivers, swamp, seasonally inundated areas): Yes □ No □
(v) How far is the nearest wetland (lakes, rivers, seasonally inundated areas)? km.
(vi) Area of high biodiversity: Yes □ No □
(vii) Habitats of endangered/threatened or rare species for which protection is required under Sierra Leonean national law/local law and/or international agreements: Yes □ No □
(viii) Others (describe): Yes □ No □

Rivers and Lakes Ecology

Is there a possibility that, due to construction and operation of the educational facility, a river and/or a lake ecology will be adversely affected? Attention should be paid to water quality and quantity; the nature, productivity and use of aquatic habitats, and variations of these over time.

Yes □ No □

Protected areas

Is the education facility (or parts of the facility) located within/adjacent to any protect areas designated by the government (national park, national reserve, world heritage site etc.).

Yes □ No □

Is the educational facility outside of, but close to, any protected area, is it likely to adversely affect the ecology within the protected area(s) (e.g. interference with the migration routes of mammals or birds).

Yes □ No □
Geology and Soils
Based upon visual inspection or available literature, are there areas of possible geologic or soil instability (prone to: soil erosion, landslide, subsidence, earthquake etc) where the educational facility will be located?
Yes ☐ No ☐

Based upon visual inspection or available literature, are there areas that have risks of large scale increase in soil salinity where the educational institution will be located?
Yes ☐ No ☐

Based upon visual inspection or available literature, are there areas prone to floods, poorly drained, low-lying, or in a depression or block run-off water –where the educational facility will be located?
Yes ☐ No ☐

Contamination and Pollution Hazards
Is there a possibility that the education facility will be a source of contamination and pollution (from latrines, dumpsites, etc)
Yes ☐ No ☐

Landscape/aesthetics
Is there a possibility that the education facility will adversely affect the aesthetic attractiveness of the local landscape?
Yes ☐ No ☐

Historical, archaeological or cultural heritage site.
Based on available sources, consultation with local authorities, local knowledge and/or observations, could the education facility alter any historical, archaeological, cultural heritage traditional (sacred, ritual area) site or require excavation near same?
Yes ☐ No ☐

Resettlement and/or Land Acquisition
Will involuntary resettlement, land acquisition, relocation of property, or loss, denial or restriction of access to land and other economic resources be a result of the construction/ rehabilitation of the educational facility?
Yes ☐ No ☐

If “Yes” OP 4.12 Involuntary Resettlement is triggered. Please refer to the Resettlement Policy Framework (RPF) for appropriate mitigation measures to be taken.

Loss of Crops, Fruit Trees and Household Infrastructure
Will the construction/rehabilitation of the educational facility result in the permanent or temporary loss of
crops, fruit trees and household infra-structure (such as granaries, outside latrines and kitchens, livestock shed etc)?

Yes □ No □

**Barrier to access, routes or disruption of normal operations in the general area**

Will the educational facility interfere with or block access, routes etc (for people, livestock and wildlife) or traffic routing and flows?

Yes □ No □

**Noise and Dust Pollution during Construction and Operation**

Will the operating noise level exceed the allowable noise limits? (define allowable noise level)

Yes □ No □

Will the operation result in emission of copious amounts of dust, hazardous fumes?

Yes □ No □

**Degradation and/or depletion of resources during construction and operation**

Will the operation involve use of considerable amounts of natural resources (construction materials, water spillage, land, energy from biomass etc.) or may lead to their depletion or degradation a points of source?

Yes □ No □

**Solid or Liquid Wastes**

Will the education facility generate solid or liquid wastes? (including human excreta/sewage)

Yes □ No □

If "Yes", does the architectural plan include provisions for their adequate collection on and disposal, particularly asbestos?

Yes □ No □

**Occupational health hazards**

Will the construction/rehabilitation of the educational facility require large number of staff and laborers; large/long-term construction camp?

Yes □ No □

Are the construction/rehabilitation activities prone to hazards, risks and could they result in accidents and injuries to workers during construction or operation?

Yes □ No □
Will the education facility require frequent maintenance and/or repair

Yes ☐ No ☐

Public Consultations

Has public consultation and participation been sought?

Yes ☐ No ☐

PART C: MITIGATION MEASURES

For all "Yes" responses, describe briefly the measures taken to this effect.

Once the Environmental and Social Screening Form is completed it is analysed by the Environmental Focal Point and Head of Civil Works of the Planning Division and MEYS who will classify it into the appropriate category based on a predetermined criteria and the information provided in the form.
ANNEX 2: ENVIRONMENTAL AND SOCIAL MANAGEMENT CHECKLIST

For each construction or rehabilitation activity proposed, fill the corresponding section on the checklist. Annex 4 includes several mitigations measures; that can be amended if necessary.

<table>
<thead>
<tr>
<th>EFA FTI PROJECT activity</th>
<th>Questions to be answered</th>
<th>Yes</th>
<th>No</th>
<th>If Yes,</th>
</tr>
</thead>
</table>
| Construction and rehabilitation of school and educational infrastructures | ▪ Are there cultivated or non cultivated lands, natural resources, structures or other properties, used or non-used for any purpose, and any way?  
▪ Will there be any vegetation loss during infrastructures construction/rehabilitation? Are there appropriate departments for the collection of scheduled waste during construction/rehabilitation works?  
▪ Will the refuse generated during works collected?                                                                                                                                                                                                 |     |    | Refer to general mitigation measures                                                                                                                                                                  |
| Operation of school and education infrastructures | ▪ Are there pollution risks of groundwater by work sites activities  
▪ Are there ecologic and sensitive zones in the neighboring areas of the infrastructure that could be adversely impacted?  
▪ Are there impacts on the health of the populations living next to the infrastructure scheduled to be build /renovated?  
▪ Are there visual impacts caused by work site installations but also during the transport and discharge of work site wastes?  
▪ Are there smells coming from the discharge of work site wastes?  
▪ Are there human settlements and land uses (such as agriculture, recreational areas) next to the school infrastructures, or sites of cultural, religious or historic importance? |     |    | If yes, see the Plan for the appropriate mitigation and monitoring measures (see also Annex 6)                                                                                                           |
ANNEX 3: PROPOSED MITIGATION MEASURES

Table 3a: General Mitigation Measures

<table>
<thead>
<tr>
<th>Potential adverse impacts</th>
<th>Potential Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual impact following the turning of work sites discharge areas into waste dumps</td>
<td>Regular collection and evacuation of work site refuse to authorized dumps</td>
</tr>
<tr>
<td>Air pollution during the burning of some work site wastes (wheels, papers, etc...)</td>
<td>Involve the Local Councils and communities in the selection of suitable disposal sites</td>
</tr>
<tr>
<td>Risks of accidents during works</td>
<td>Put in place safety measures</td>
</tr>
<tr>
<td>Disturbance of school and education activities during works</td>
<td>Select work periods (avoiding as much as possible the period of school term)</td>
</tr>
<tr>
<td>Waste generation during building works</td>
<td>Ensure hygiene and security measures are respected in work sites</td>
</tr>
<tr>
<td>Pollution and Nuisance; degradation of the living environment</td>
<td>Post signaling systems for the works</td>
</tr>
<tr>
<td>Use of lands and displacement people</td>
<td>Ensure the safety rules are complied with during works</td>
</tr>
<tr>
<td>Disruption or destruction of cultural, historic or religious sites of importance.</td>
<td>Include in the project support measures (connection to water and sanitation networks, equipment; upkeep program)</td>
</tr>
<tr>
<td></td>
<td>Avoid installing the facilities in a way that will need resettlement, the displacement of other important soil uses; or the encroachment on historic, cultural or traditional use areas; refer to the Bank's safeguard policies in Annex 6</td>
</tr>
</tbody>
</table>

Impacts on the natural environment

<table>
<thead>
<tr>
<th>Potential adverse impacts</th>
<th>Potential Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impacts on protected areas; critical habitats for rare species or of ecologic or domestic importance; and wills areas.</td>
<td>Avoid to excavate building materials in natural protected areas</td>
</tr>
<tr>
<td></td>
<td>Careful planning and selection of new installation sites</td>
</tr>
<tr>
<td></td>
<td>Respect protected areas particularly trees</td>
</tr>
<tr>
<td></td>
<td>Refer to the Bank's safeguard policies, Annex 6</td>
</tr>
</tbody>
</table>
Table 3b: Specific Mitigation Measures for Sanitation in Educational Facilities

<table>
<thead>
<tr>
<th>Potential Negative Impacts</th>
<th>Possible Mitigation measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Septic Tanks</strong></td>
<td></td>
</tr>
<tr>
<td>Soil and water pollution due to seepage from tanks</td>
<td>Ensure regular emptying; conduct hygiene education campaigns to raise awareness of the health risks from exposed sewage; establish and support affordable pump out services</td>
</tr>
<tr>
<td>Contamination of water supply sources</td>
<td>Locate latrine downstream and at least 30m, but preferably 60m away from wells, springs and boreholes</td>
</tr>
<tr>
<td>Soak-away pits overflowing and contaminating water surface</td>
<td>Ensure that soak-away pits are located in soil where seepage can percolate. Establish and support affordable pump out services</td>
</tr>
<tr>
<td>Blocked and overflow latrine (health risks)</td>
<td>Establish a routine maintenance and cleaning service</td>
</tr>
<tr>
<td>Lack of water for continuous latrine services</td>
<td>Provide suitable latrines for water scarce areas, ensure installation of water supply or metered reservoir with enough capacity in areas with adequate water supply</td>
</tr>
<tr>
<td>Inadequate cleaning and maintenance of latrine facilities, creating unhygienic condition, and as a result students avoid using them</td>
<td>Establish a system to support the employment of a caretaker for routine cleaning and maintenance</td>
</tr>
<tr>
<td>Animal vector such as flies and rodents carry diseases from the latrines</td>
<td>Ensure regular cleaning and block access pathways to decomposing excrements to avoid access by flies and rodents</td>
</tr>
<tr>
<td>Students defecating in open areas</td>
<td>Design, promote and conduct public hygiene awareness campaigns focusing on the adverse health impacts from open defecation, promote the use of latrines.</td>
</tr>
</tbody>
</table>
ANNEX 4: PROPOSED ENVIRONMENTAL GUIDELINES FOR CONTRACTORS

The following guidelines should be included in the contractor's agreements:

- Install the work site on areas far enough from water points, houses and sensitive areas. Regulate sites (what is allowed and not allowed on work sites)
- Comply with laws, rules and other permits vigorously.
- Ensure hygiene and security at work sites
- Protect neighboring properties
- Ensure traffic flow and access of neighboring populations during the works to avoid hindrance to traffic
- Protect staff working on work sites
- Protect soil, surface and groundwater: avoid any waste water discharge, oil spill and discharge of any type of pollutants on soils, in surface or groundwater, in sewers, drainage ditches or into the sea.
- Protect the environment against dust and other solid residues
- Compensate by re-planting in case of deforestation or tree felling
- Avoid waste slash and burn on site
- Avoid the use of illegal timber
- Ensure compliance with speed limit of work site engines and cars
- Organize the storage materials properly
- Provide signaling of works
- Respect cultural sites
- Consider impacts such as noise, dust, and safety concerns on the surrounding population and schedule construction activities appropriately
- Protect soil surfaces during construction and re-vegetate or physically stabilize soil surfaces
- Ensure proper drainage
- Prevent standing water in open construction pits, quarries or land fill areas to avoid potential contamination of the water table and the development of a habitat for disease-carrying insects
- Provide adequate waste disposal and sanitation services at the construction site
- Preserve natural habitats along streams, steep slopes, and ecologically sensitive areas
### ANNEX 5: SUMMARY OF WORLD BANK SAFEGUARD POLICIES

| OP 4.01 Environmental assessment | The objective of the policy is to ensure the projects financed by the Bank are sound and sustainable, and decision making be improved through an appropriate analysis of actions and of their potential environmental impacts. This policy is triggered if a project is likely to have environmental risks and impacts (adverse) on its area of influence. OP 4.01 covers the environmental impacts (nature air, water and land); human health and security; physical cultural resources; as well as transboundary and global environmental problems. | Depending on the project, and nature of impacts a range of instrument can be used: EIA, environmental audit, hazard or risk assessment and environmental management plan (EMP). When a project likely to have sectoral or regional impacts, sectoral or regional EA is required. The EIA is the responsibility of the borrower. In the context of the EFA FTI Project, an Environmental and Social Management Plan was prepared (ESMF), including an Environmental Management Plan (EMP); the ESMF will help assess the impacts of future constructions and rehabilitation activities and orient implementation. |
| OP 4.04 Natural Habitats | This policy recognizes that the conservation of natural habitats is essential for long-term sustainable development. The Bank, therefore, supports the protection, maintenance, and rehabilitation of natural habitats in its project financing, as well as policy dialogue and analytical work. The Bank supports, and expects the Borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development. | This policy is triggered by any type of project (including any sub project under sectoral investment regime or intermediary funding) that have the potential to cause some important conversion (loss) or degradation of natural habitats, whether directly (by the construction) or indirectly (by human activities triggered by the less project). In the context of the EFA FTI Project, the construction and rehabilitation activities that could have adverse impacts on natural habitats will not be funded. |
### OP 4.36 Forests

The objective of this policy is to help borrowers exploit the potential of forests in order to curb poverty in a sustainable manner, efficiently integrate forests in sustainable economic development and protect vital local and global environmental services and forests values. Where forest restoration and plantation are needed in order to achieve these objectives, the Bank helps borrowers in forest restoration activities in order to maintain or develop biodiversity and the operation of ecosystems. The Bank help borrowers in the creation of forest plantations appropriate from the environmental viewpoint and socially beneficial and economically sound in order to help meet the growing forests' needs and services.

This policy is triggered each time an investment project financed by the Bank: (i) has the potential to cause health impacts and the quality of forests or the rights and the well being of the people and their dependency level with the interaction with forests; or (ii) aims at ringing some change in the uses of natural forests or plantations.

In the framework of the EFA FTI Project, the building and rehabilitation activities that will adversely affect the quality of the forests or ring in some change in the management will no be financed.

### OP 4.09 Pest Management

The objective of this policy is to promote the use of biological or environmental control methods and reduce reliance on synthetic chemical pesticides. In Bank-financed agricultural operations, pest populations are normally controlled through Integrated Pest Management (IPM) approaches. In Bank-financed public health projects, the Bank supports controlling pests primarily through environmental methods. The policy further ensures that health and environmental hazards associated with pesticides are minimized. The procurement of pesticides in a Bank-financed project is contingent on an assessment of the nature and degree of associated risk, taking into account the proposed use and the intended user.

The policy is triggered if procurement of pesticides is envisaged (either directly through the project or indirectly through on-lending); if the project may affect pest management in a way that harm could be done even though the project is not envisaged to procure pesticides. This includes projects that may lead to substantially increased pesticide use and subsequent increase in health and environmental risks; and projects that may maintain or expand present pest management practices that it are unsustainable.
<p>| OP 4.11 Cultural Property | The objective of this policy is the help countries avoid or reduce the adverse impacts of development projects on physical cultural resources. In order to implement such policy, the word &quot;physical cultural resources&quot; means movable and unmovable objects, sites, structures, natural's aspects of landscapes that have an importance form the archeological, pale ontological, historical, architectural, religious, aesthetic or other. Physical cultural resources could be found in urban or rural areas, as well as both in the open air, under the ground and in the sea also. | This policy applies to all projects included in category A or B of the environmental assessment scheduled in OP4.01. With the EFA FTI Project, construction and rehabilitation activities that are likely to have adverse impacts on cultural property will not be financed. |
| OP 4.10 Indigenous populations | The objective of the policy is (i): ensure that the Indigenous development process encourages full respect of dignity, human rights and cultural features of indigenous people; (ii) ensure they do not suffer from the detrimental effects during the development process; and ensure indigenous people reap economic and social advantages compatible with their culture. | The policy is triggered when the project affects indigenous people (with the characteristics described in OD 4.20 para 5) in the area covered by the project. With the EFA FTI Project, building and rehabilitation activities that are likely to have adverse impacts on indigenous people will not be financed. |
| OP 4.12 Involuntary Resettlement | The objective of this policy is to avoid or minimize involuntary resettlement where feasible, exploring all viable alternative project designs. Furthermore, it intends to assist displaced persons in improving their former living standards; it encourages community participation in planning and implementing resettlement; and to provide assistance to affected people, regardless of the legality of title of land. | This policy is triggered if physical relocation occurs, and also by any loss of land resulting in: relocation or loss of shelter; loss of assets or access to assets; loss of income sources or means of livelihood, whether or not the affected people must move to another location. Under EFA FTI Project, the construction and rehabilitation of schools is not expected to require land acquisition and resettlement, but should resettlement be unexpectedly needed, a Resettlement Plan acceptable to the Bank will be prepared and disclosed before any resettlement occurs. |
| OP 4.37 Dams Security | The objectives of this policy are established as follows: For new dams, ensure the design and supervision are done by experienced and competent professionals, for existing ones, ensure that any dam that can influence the project performance is identified, an assessment of the dam security conducted, and the other required safety measures and corrective measures implemented. | The policy is triggered when the Bank finances (i) a project involving e building of a big dam (15 m of height or more) or a dam presenting great hazard; and (ii); project depending on another existing dam. For small dams, general safety measures designed by qualified engineers are appropriate. In the framework of the EFA FTI Project, no funds will be available for the building or rehabilitation of dams. |</p>
<table>
<thead>
<tr>
<th>OP 7.50</th>
<th>Projects implemented on international waterways</th>
</tr>
</thead>
<tbody>
<tr>
<td>The objective of this policy is to operate in such a way as the projects financed by the Bank affecting the international watercourses do not affect: (i) the relationships between the Bank and her borrowers and between States (members or non members of the Bank); and (ii) the international watercourses are used and efficiently protected? The policy applies to the following project types: (a) hydro electric, irrigation, flood control, drainage, water collection, industrial and other projects involving the use or potential pollution of international watercourses, and (b) detailed studies for project design under item (a) above quoted including those carried out by the Bank in her position of implementation agency or else.</td>
<td></td>
</tr>
<tr>
<td>This policy is triggered if a) A river, a channel, lake c any other watercourse located between two states, or a river or a surface river discharging into a river located in one or two states, be they members of the World Bank or not (b) a river branch which s a component of a watercourse descried under item (a); recognized to be a necessary communication channel between the ocean and t-othe states, and any river discharging into the e waters and (c) a bay, strait, or channel bound by two states or more or flowing in an unknown state. In the framework of the EFA FTI Project, the building and rehabilitation activities that are likely to have an impact on international waterways will not be financed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OP 7.60</th>
<th>Projects located in contentious zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>The objective of this policy is to operate in such a way as the problems experienced by projects in contentious areas are tackled as early as possible so that: (a) the relationships between the Bank and member countries are not affected, (b) the relationships between the borrower and neighbors are not affected; and either the Bank or concerned countries do not suffer any damage because of this situation.</td>
<td></td>
</tr>
<tr>
<td>This policy is triggered f the project proposed is located in a “contentious area”. The questions to be asked are particularly he following ones: Is the borrower involved in these conflicts concerning an area? Is he project located on a conflict area? Is a component of the project that was financed or likely to be financed part located in a conflict area? In the framework of the EFA FTI Project, building and rehabilitation activities will not take place in areas of conflicts</td>
<td></td>
</tr>
</tbody>
</table>
**ANNEX 6: PROPOSED ENVIRONMENTAL MANAGEMENT PLAN FOR EFA FTI-P**

<table>
<thead>
<tr>
<th>Activity of the project</th>
<th>Potential environmental and social Impacts</th>
<th>Mitigation measures</th>
<th>Responsibility</th>
<th>Timing</th>
<th>Cost estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental impact and measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction/ rehabilitation of educational facilities</td>
<td>Dust, emissions, noise/vibration accidents</td>
<td>Controlled operation times, use of appropriate equipment. Installed panels for circulation and security measures (Refer also Annexes 4a, 4b and 5)</td>
<td>Contractors</td>
<td>Technical services of Local Councils</td>
<td>In progress</td>
</tr>
<tr>
<td></td>
<td>Septic tanks overflowing and creating health risk</td>
<td>Ensure regular emptying and cleaning and block access ways to decomposing excrements to avoid access by flies and rodents. Promote and conduct public hygiene awareness campaigns.</td>
<td>School Directorates</td>
<td>Technical services of Local Councils</td>
<td>In progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity building</td>
<td>Studies (EIA)</td>
<td>Adverse environmental impacts</td>
<td>Recruitment of EIA consultants to conduct the EIA</td>
<td>National Consultant</td>
<td>MEYS/Civil Works Unit</td>
</tr>
<tr>
<td></td>
<td>Capacity Building</td>
<td>Lack of knowledge of EIA and environment management of rehabilitation work sites</td>
<td>Organize a national training workshop</td>
<td>National firms/consultants specialized in EIA</td>
<td>MEYS/Civil Works Unit</td>
</tr>
<tr>
<td></td>
<td>Monitoring assessment</td>
<td>Non enforcement of the measures</td>
<td>Ensure the EAP measures are complied with</td>
<td>Technical services of Local Councils</td>
<td>MEYS/Civil Works Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$27,000</td>
</tr>
<tr>
<td>Screening Process – Summary</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>Before civil works commences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------</td>
<td>------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening of Schools and Sites</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>Before civil works commences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigning the appropriate environmental categories</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carrying out environmental works</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and Approval</td>
<td>MEYS Local Council Directors</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of the classification of the activities</td>
<td>MEYS Local Council Directors</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection of the consultant in case of the need to conduct a study</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduction of environmental Impact Assessment</td>
<td>National Consultants</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approval of environmental assessment</td>
<td>MEYS Local Council Directors</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public consultations and disclosure</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>If required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>Technical services of Local Councils</td>
<td>Supervision, MTR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental and Social Indicators</td>
<td>Planning Division and Civil Works Unit of the MEYS</td>
<td>Before and during civil works</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 7: LIST OF PERSONS AND INSTITUTIONS CONTACTED
Department of the Environment Ministry of Lands, Country Planning and the Environment.
Ministry of Education Youth and Sports, Planning Division.
Paramount Chiefs and Elders of Kono, Kailahun and Kambia Districts and the Western Area.

ANNEX 8: REFERENCES
National Environmental Protection Act, 2008
National Environmental Policy
Guidelines for the implementation of school construction projects Ministry of Education Republic of Sierra Leone, March 1997.
World Bank Safeguard policies (OP 4.01)
ANNEX 9: REGISTER OF INTERNATIONAL TREATIES AND OTHER AGREEMENTS RELATED TO THE ENVIRONMENT (SIGNED/DATES RATIFIED), 1996

3. Treaty Banning Nuclear Weapon Test in the Atmosphere, in outer space and underwater, 1964
5. Treaty on Principles Covering the Activities of State in the Exploration and the use of outer space including the moon and other celestial bodies, 1967
7. Convention on the Prohibition of the Development Production and stock piling of Bacteriological (Biological) and toxic Weapons, and on their destruction, 1979
13. Convention on assistance in the case of a Nuclear Accident, 1987
15. Convention on the Prohibition of the development production, stockpiling and use of chemical weapons and on their destruction, 1993
17. International Convention on Civil Liability for oil and Pollution Damage, 1993