Environmental & Social Management Framework
States Education Sector Project - Kaduna, Kano & Kwara
Draft Report

October 16, 2006
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List of Acronyms

AML  Agency for Mass Literacy
CDA  Community Development Association
CDO  Community Development Officer
COE  College of Education
CPS  Country Partnership Strategy (World Bank)
CUBE  Capacity for Universal Basic Education
DEC  District Education Committee
DFID  Department for International Development (UK)
EIA  Environmental Impact Assessment
EMIS  Education Management Information System
EMP  Environmental Management Plan
ERC  Education Resource Centre
ESIA  Environmental and Social Impact Assessment
ESMF  Environmental and Social Management Framework
ESMP  Environmental and Social Management Plan
ESMU  Environmental & Social Mitigation Unit
ESMU  Environmental and Social Management Unit
ESP  Education Strategic Plan
ETF  Education Trust Fund
FEPA  Federal Environmental Protection Agency
FGN  Federal Government of Nigeria
FME  Federal Ministry of Education
FMEnv  Federal Ministry of Environment
GER  Gross Enrolment Ratio
HIV/AIDS  Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HSE  Health, Safety & Environment
IDA  International Development Association
IMM  Impact Mitigation and Monitoring
JICA  Japanese International Cooperation Agency
JSS  Junior Secondary School
LGAs  Local Government Authorities
LGEA  Local Government Education Authority
NAPEP  National Poverty Eradication Programme
NCE  National Certificate of Education
NECO  National Examinations Council
NEEDS  National Economic Empowerment & Development Strategy
NGO  Non-Governmental Organisation
NPE  National Policy on Education
NTI  National Teachers Institute
NUT  National Union of Teachers
OP  Operational Policy (World Bank)
PCN  Project Concept Note
PPT  Project Planning Team
PSC  Project Steering Committee
PT  Project Team
PTA  Parent Teacher Association
RPF  Resettlement Policy Framework
SDP  School Development Plan
SEEDS  State Economic Empowerment & Development Strategy
SEPA  State Environmental Protection Agencies
SESP  State Education Sector Project
SIL  Specific Investment Loan
SMCs  School Management Committees
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>SMOE</td>
<td>State Ministry of Education</td>
</tr>
<tr>
<td>SMOF</td>
<td>State Ministry of Finance</td>
</tr>
<tr>
<td>SSCE</td>
<td>Secondary School Certificate Examination</td>
</tr>
<tr>
<td>SSS</td>
<td>Senior Secondary School</td>
</tr>
<tr>
<td>SUBEB</td>
<td>State Universal Basic Education Board</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>TSB</td>
<td>Teachers Service Board</td>
</tr>
<tr>
<td>UBE</td>
<td>Universal Basic Education</td>
</tr>
<tr>
<td>UBEC</td>
<td>Universal Basic Education Commission</td>
</tr>
<tr>
<td>UBEP</td>
<td>Universal Basic Education Programme</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific &amp; Cultural Organisation</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>JSS</td>
<td>Junior Secondary School</td>
</tr>
<tr>
<td>SSS</td>
<td>Senior Secondary School</td>
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</tbody>
</table>
Executive Summary

Nigeria’s education sector faces serious challenges in meeting the key objective of providing affordable, accessible and qualitative education. The major issues are inequitable access to quality education; inadequate education quality; inadequate management, planning and monitoring capacity; and lack of and inefficiencies in funding.

The states and local governments are primarily responsible for funding primary and secondary education, although the Federal Government also provides additional funding for the implementation of the Universal Basic Education (UBE) programme through the Universal Basic Education Commission (UBEC), the Education Trust Fund (ETF) for physical infrastructure, and the virtual poverty fund from the debt relief initiative, for the achievement of the Millennium Development Goals (MDGs).

The Federal and State Governments have recognized the importance of education for individual, socio-economics and political development and the risks to Nigeria’s economy if its workforce is inadequately prepared. In 2003, the Government prepared the National Empowerment and Economic Development Strategy (NEEDS), a multi-sectoral reform program that sees educational reforms as a vital transformational tool for socio-economic empowerment. Similarly, Nigerian States have also developed individual State Empowerment and Economic Development Strategies (SEEDS) which prioritize education provision at the state level.

The governments of Kaduna, Kano and Kwara States have expressed a strong interest in engaging reforms based on their comprehensive Education Sector Programmes (ESPs) and have requested the assistance of the World Bank and Department for International Development (DFID) with their ESP implementation.

The State Education Sector Project (SESP) project aims to support and improve education development in the three participating states. The overall development objectives of the proposed SESP are to: (a) improve access to quality basic and secondary education, especially for the poor and disadvantaged groups (in particular girls) and (b) strengthen the capacity of planning, management and monitoring at the state and local levels for more effective delivery of basic and secondary education.

The SESP is organized into four components to support the objectives of the ESP programmes and also to finance critically needed infrastructure improvements. The four main components are:

- Expansion of basic and secondary education coverage
- Improved quality and relevance of basic and secondary education
- Strengthening management, planning and monitoring capacity
- Project management and institutional arrangements

The SESP will focus mainly on basic and secondary education in each of the participating state, and also support pre-service teacher education for the delivery of basic and secondary education. The main activities will entail design, rehabilitation, expansion and new construction of schools in the three states. The SESP is classified as a category B project, implying that the impacts are small scale and site-specific; thus easily remedied.

In recognition of the fact that environmental and social concerns may arise as a result of the proposed project, the British Council commissioned an Environmental and Social Management Framework (ESMF) study in fulfillment of the World Bank’s requirement for project appraisal. This ESMF has been prepared to satisfy national and state regulatory requirements as well as World Bank’s safeguard policies that address the environmental and socio-economic consequences of the project. The existing environment is described only for those aspects of the physical, biological, social and economic environment that are relevant to the project. The legal framework also identifies the project-environment interactions during operational phase.
In addition, the ESMF defines standard procedures and methods for incorporating potential environmental and social impacts and their associated mitigation measures into the selection, planning and implementation of all sub-projects carried out under the project. The ESMF also provides guidelines for preparing an Environmental and Social Management Plan (ESMP) or an Environmental and Social Impact Assessment (ESIA) as may be applicable during project implementation.

The project will have both beneficial and negative impacts on the physical, biological and social environment. Both these impacts and their associated mitigation measures are discussed as well as the institutional mechanisms used to implement the ESMF. Roles and responsibilities are clearly stated, including capacity building efforts for participating stakeholders in the SESP.

The monitoring plan defines roles and responsibilities for routine monitoring of the project. Routine monitoring focuses mainly on construction supervision and health, safety and environmental (HSE) protection awareness. Routine monitoring requirements are defined according to potential impacts and recommended mitigation measures.

Finally, a consultation plan was developed to provide a framework for achieving effective stakeholder involvement and promoting greater awareness and understanding of issues.
1.0 Introduction

1.1 Project Background

Nigeria is a highly populous country with an estimated population of about 140 million people with decentralized government structures. Over the past decade, Nigeria has been plagued by frequent political unrest. This political instability has generated negative effects on the education system. Following the political changes, which saw the reintroduction of democracy in the country, the new government acknowledged the need to revise and update the National Policy on Education to ensure that the education system meets the needs of a new democracy.

The education system of Nigeria is based on the National Policy on Education (1977, revised 1999). The system comprises 9 years of basic education (6 years of primary and 3 years of junior secondary education), 3 years of senior secondary, and 4 years of tertiary education. The purpose of basic education is to equip its recipients with basic knowledge and skills to allow them to function as competent and productive citizens in a free society.

Education plays a key role in national development and is an essential path of a nation’s well being. Through education, individuals are empowered to make choices that affect their health and livelihood. The United Nations’ International Conference on Population and Development encouraged governments’ worldwide to ensure access to all to education beyond the primary level.

The Federal Government of Nigeria (FGN) realized the bottleneck to national development and has introduced policies like the Universal Basic Education (UBE) and adult literacy programs to boost literacy levels in the country. The Government further recognizes that education is an important ingredient in the development and nurturing of an educated leadership and effective governance. In this regard, the National Economic Empowerment and Development Strategy (NEEDS) - the Government's blueprint for economic development - underlines the important role education should play in promoting a democratic culture, overall good governance and national unity.

The Universal Basic Education (UBE) programme was launched in 1999, with the sole purpose of ensuring that in the nearest future illiteracy is reduced to its barest minimum among the adult population of Nigeria. In pursuance of this goal, the UBE programme aims at making education compulsory at the primary and junior secondary school levels. This is one of the cardinal programmes of the government, aimed at demonstrating its strong commitment to international policies geared towards the eradication of illiteracy in Africa.

In Nigeria, State and Local Governments have the principal responsibility for the provision of the primary and secondary education while the Federal Government plays a dominant role in the provision of tertiary education. This arrangement has however changed with the launch of the UBE programme, the Federal Government now provides additional funding to the state and local governments for the implementation of the UBE programme.

International development partners (World Bank, JICA, DFID, UNESCO etc) also play significant roles in education financing in Nigeria, especially with regard to the purchase of teaching materials, equipment, and furniture and the building, renovation and maintenance of educational institutions.

Through the UBE programme, the Nigerian government demonstrates a strong commitment to the Jomtien Declaration (1990) on the promotion of basic education for all as well as the New Delhi Declaration (1991) requiring stringent efforts by the E-9 countries (nine countries...
of the world with the largest concentration of illiterate adults) to drastically reduce illiteracy within the shortest possible time frame.

However, Nigeria’s education sector faces serious challenges, which are common across Kaduna, Kano and Kwara States. The major issues hindering the effective implementation of the UBE programme are inequitable access to quality education; inadequate education quality; inadequate management, planning and monitoring capacity; and lack and inefficiencies in funding.

The governments of Kano, Kaduna and Kwara States are embarking on reforms of their education sectors and have requested the assistance of the World Bank and DFID with their Education Sector Project (ESP) implementation.

The overall development objectives of the proposed SESP are to: improve access to quality basic and secondary education, especially for the poor and disadvantage groups (in particular girls); and strengthen the capacity of planning, management and monitoring at the State and local levels for more effective delivery of basic and secondary education.

The SESP will be implemented as a three year Specific Investment Loan (SIL) made available to the three states based on their: (a) project performance; (b) accountability indicators; and (c) overall education sector performance. It will focus mainly on basic and secondary education in the participating states with some level of support to pre-service teacher education.

The activities under the proposed project as identified in the project concept note will support design, construction, expansion and upgrading, expansion of literacy classes for young people (15-35 years), as well as recruitment and training of teachers for the planned expansion of basic and secondary education.

In recognition of the fact that environmental and social concerns may rise as a result of the proposed education sector project, the British Council Nigeria commissioned EnvironQuest to develop an Environmental and Social Management Framework (ESMF) in fulfillment of the World Bank requirements for project appraisal.

The World Bank’s Operational Policy (OP) 4.01 requires that an ESMF be prepared which will establish a mechanism to determine and assess future potential environmental and social impacts of project investments under components I of the proposed SESP, and then to set out mitigation, monitoring and institutional measures to be taken during design, implementation and operation of the sub-projects to minimise adverse environmental and social impacts to acceptable levels.

The operational policy further requires that the ESMF report must be disclosed as a separate and stand alone document by the State Government and the World Bank as a condition for Bank Appraisal of the SESP. The disclosure should take place both in Nigeria where it can be accessed by the general public and local communities and at the Infoshop of the World Bank.

1.2 Objectives of the Environmental and Social Management Framework (ESMF)

The primary goal of this ESMF is to improve decision making and to ensure that the design, construction, expansion, upgrading of educational infrastructures and other activities being considered under component I (expansion of basic and secondary education coverage) of the proposed project are environmentally sound and sustainable. The secondary objective is to ensure that in-country capacity, regulatory framework; principles and procedures are established to provide a basis for environmental assessments of all sub-projects to be carried out under the SESP.
More specifically, the purpose of the framework is to:

1. Assess the potential environmental and social impacts of the sub-projects (rehabilitation, extension, or new constructions), whether positive or negative and propose mitigation measures;

2. Inform the project preparation team and the Nigerian Government of the potential impacts of different anticipated subprojects and relevant mitigation measures and strategies;

3. Establish clear directives and methodologies for the environmental and social screening of sub-projects to be financed by the project; and

4. Identify potential environmental policies, legal and institutional framework pertaining to the project.

1.3 Study Approach & Methodology

The ESMF study was prepared in accordance with applicable World Bank safeguard policies and Nigerian environmental impact assessment guidelines. The distinct phases of the study include:

- Data Gathering;
- Literature review;
- Reconnaissance Surveys;
- Characterization of the baseline conditions;
- Identification of potential impacts;
- Identification of impact mitigation measures;
- Preparation of an Environmental and Social Management Plan; and
- Preparation of sub-project guidelines.

- Literature Review

The approach was based on review of SESP literature and other strategic planning documents at the national and state level. Specifically, the following were reviewed: project concept notes (PCN), infrastructure report, situation analysis, national education policy, state education plan, federal and state environmental laws regulations, decrees, acts, policies and guidelines, World Bank safeguard policies and other relevant documents.

- Data Gathering

EnvironQuest team assembled and evaluated relevant baseline data related to the physical, biological and socio-cultural environment of each participating state. The baseline data reviewed included: topography, soil, water resources, climate and meteorology; biological and socio-economics data.

- Field Surveys

Field reconnaissance was undertaken between the 18th and 22nd September 2006 to confirm the data reviewed and to acquire additional baseline data to eliminate gaps in the environmental and socio-economic baseline data for the three states under consideration.

1.4 Assessment of Education Sector

In the recent past the states education sector has had problems in the implementation of policies for the improvement and expansion of its system; this has contributed to its failure to assist in the social and economic development of the country.
A survey of the education system in the three states where the SESP is to be implemented revealed pertinent issues such as inequitable access to quality education; poor education quality; inadequate management, poor planning, inadequate teacher supply, training and development requirements as well as lack of relevance of the curriculum to provide students with appropriate life skills for enhanced socio-economic development and poverty reduction. A situation analysis of the state of the education and its infrastructures in the participating states was commissioned by the British Council, to gather pertinent information on the education sector.

In the course of preparing this document, EnvironQuest also conducted a limited reconnaissance survey of schools in the three states. The team visited 3 Local Government Authorities (LGAs) and assessed two urban, two semi-urban and two rural schools in each LGA visited. The survey indicated that most of the schools are in poor condition, and require complete rehabilitation. This is principally due to faulty designs, poor construction practice, inadequate maintenance funding and lack of an articulated maintenance programme.

The major education indicators for the three states are summarised below:

**Table 1.1: Education Indicators for Kaduna, Kano and Kwara States**

<table>
<thead>
<tr>
<th>Indicator (Year 2005)</th>
<th>Primary School</th>
<th>Junior Secondary School</th>
<th>Senior Secondary School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kaduna</td>
<td>Kwara</td>
<td>Kano</td>
</tr>
<tr>
<td>Population (millions)</td>
<td>5.8</td>
<td>2.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Gender parity index</td>
<td>0.81</td>
<td>0.82</td>
<td>0.77</td>
</tr>
<tr>
<td>No. of schools reported</td>
<td>3,070</td>
<td>1,170</td>
<td>3,066</td>
</tr>
<tr>
<td>Pupil teacher ratio</td>
<td>33.52</td>
<td>24.26</td>
<td>49.63</td>
</tr>
<tr>
<td>Pupil qualified teacher ratio</td>
<td>90.16</td>
<td>34.15</td>
<td>248.4</td>
</tr>
<tr>
<td>Pupil classroom ratio</td>
<td>95.24</td>
<td>50.74</td>
<td>134.26</td>
</tr>
<tr>
<td>Pupil to core text book ratio</td>
<td>3.49</td>
<td>3.4</td>
<td>2.72</td>
</tr>
<tr>
<td>Enrolment (total)</td>
<td>859,215</td>
<td>312,404</td>
<td>1,291,702</td>
</tr>
<tr>
<td>Enrolment (female)</td>
<td>373,446</td>
<td>139,793</td>
<td>544,823</td>
</tr>
<tr>
<td>Gross Enrollment Ratio</td>
<td>84.59</td>
<td>88.19</td>
<td>89.86</td>
</tr>
<tr>
<td>Repetition rate</td>
<td>0.04</td>
<td>0.02</td>
<td>0.04</td>
</tr>
<tr>
<td>Number of teachers (total)</td>
<td>25,630</td>
<td>12,878</td>
<td>26,028</td>
</tr>
<tr>
<td>Number of teachers (female)</td>
<td>10,668</td>
<td>7,432</td>
<td>3,763</td>
</tr>
</tbody>
</table>

Source: EMIS School Census2004/2005

An overview of the education sector for each state is presented below.
Kano State

Over 50% of Kano’s populations are children. Thus education is a key instrument to empower the children to take charge of their lives in the future. The state accorded the formal, informal and religious education importance in human development. The majority of children, especially girls are enrolled in Quranic and Islamiyya schools, which are being mainstreamed into the formal system by the State Primary Education Board (SPEB). So far, out of the 9,466 Quranic and Islamiyya schools identified throughout the State, 123 and 741 have been integrated respectively.

Kano has a coordinated indigenous basic education support programme. The Government provides free primary and secondary education policy for children within the school age. Basic education remains the cornerstone of the State policy on education. The state government plans to sustain the current strategies in human development, which focuses on the empowerment of the citizenry to acquire skills and knowledge that prepare them to be functional members of their society, participate actively in the affairs of their State and have a meaningful and purposeful life.

The major problems observed in Kano are dilapidated infrastructures; shortage of teaching and non-teaching staff; inadequate teaching materials; poor remuneration of staff; inadequate teachers/students furniture; inconsistency in implementing educational policies by successive governments; and poor boarding facilities. Others include poor community participation in educational development; poor orientation of staff and others to achieve the target goals; proliferation of unregistered primary and secondary schools; and lack of planning data.

Although, the State has over 3,066 primary schools and 393 junior secondary schools, the state government faces considerable challenges in achieving its Education for All (EFA) plan. The UBE programme has placed the government under enormous pressure in providing equitable access to basic education due to the increasing enrollment in primary and junior secondary schools.

Most of the schools in the state were observed to be constructed with low-grade materials and have no toilets and water facilities. Many are in state of disrepair which has shortened their life span.

The downward trend in learning achievement (examination performance) was attributed by students to lack of instructional materials and the inadequacy of qualified teachers. Gender disparity is a major area of concern in Kano. The average enrolment of girls in school is considerably low compared to the boys. Most girls are enrolled in Islamiyya and Quranic schools where they are taught mostly the principles of Islam.

Kaduna State

The major problem in Kaduna is the inadequacy of teachers. Teacher to pupil ratio ranges from 1:29 in Kafanchan to 1:93 in Giwa. The state government data shows that in the Year 2004 there was a shortfall of 4,041 teachers across the 24 LGAs. Presently science and technical subjects lack adequate teachers.

Where the teachers are available the qualifications are below the national minimum standard. Of the 5,554 teaching staff in the state, 46% are graduates (though not necessarily with teaching qualifications) while 54% are a mix of college graduates and diploma holders. Over 25% of primary teachers possess only the obsolete Grade II teaching certificate highlighting upgrading of teachers’ qualifications and skills at primary level as an urgent priority.
There is a steady decline in the learning achievement of the students, most especially in the secondary schools. Only 8% of the candidates that sat for the 2002/03 National Senior Secondary School Examination (NECO SSCE) examinations made up to the minimum 5 credits level recording a decline of 9.1% from the previous year and in 2005, the figure was abysmally low (1.17%). The state has also recorded a high and increasing incidence of examination malpractices.

Available infrastructure and facilities are in poor condition and unable to meet the demands of UBE class sizes. In 2004/05, existing primary school classrooms in good condition constituted only 41% of requirements and the class sizes, ranging from 70 to 100 students were above the national standard of 40 pupils per class in the urban areas. The rural schools are in relatively bad condition in terms of physical infrastructure. It was observed that only few (35%) secondary schools have functional libraries. There is also an acute shortage of materials for sciences and technical practical sessions.

Learning materials e.g textbooks are grossly insufficient. The 2005 EMIS report indicates that the pupil to core subject textbook ratios is of 3.51 (primary), 10.47 Junior Secondary School (JSS) and 13.95 Senior Secondary School (SSS).

Gender disparities are highly pronounced in primary schools. In 2005, the enrolment pattern of girls to boys was ratio was 1:4 in public schools, although the situation is much better in private schools.

**Kwara State**

In Kwara the teacher-pupils ratio in the public primary school ranges from 1:10 in rural areas to 1:76 in urban areas, far above the national standard (1:30) for effective teachers and pupil interaction. Over-crowding of classrooms was observed in most of the schools visited in Ilorin, the state capital.

Inadequate teachers are a major area of concern in both the primary and secondary schools. This has affected students’ performance in English, Mathematics and core Science subjects in national examinations. In 2004 the state had a number of teachers 48% lower than required; the situation has not significantly improved.

The reluctance of the traditional Islamiyyah and Quranic schools to embrace modern subjects needs to be urgently addressed. Learning materials including textbooks are insufficient; the pupil to core textbook ratios in 2005 was 3.65 and 5.49 for primary and junior secondary schools respectively.

Gender parity indicators in Kwara are largely positive although there are isolated examples of severe disparities in some LGAs. These are 0.82 and 0.83 for primary and junior secondary school respectively.
2.0 Project Description

2.1 General Description

The State Education Sector Project (SESP) to be implemented in Kaduna, Kano and Kwara States aims to support and improve education development in the three participating states. The overall development objectives of the proposed SESP are to: (a) improve access to quality basic and secondary education, especially for the poor and disadvantaged groups (in particular girls) and (b) strengthen the capacity of planning, management and monitoring at the state and local levels for more effective delivery of basic and secondary education.

The project will focus mainly on basic and secondary education in each of the participating state, and also support pre-service teacher education for the delivery of basic and secondary education. The main activities will entail design, rehabilitation, expansion and new construction of schools in the three states. The SESP is classified as a category B project, implying that the impacts are small scale and site-specific; thus easily remedied.

The rationale for World Bank involvement is based on the quality of the States ESP, poor education indicators and demonstrated ownership by the respective state governments. The World Bank has been the only major development agency during the 1990’s to support the education sector reforms in Nigeria. It focused its role in supporting the implementation of the universal primary education by providing assistance as a form of credit.

The Bank special role in the SESP is to be the lead agency working closely with other development partners to support the implementation of the state specific EFA programs; provide institutional capacity strengthening at federal and states level to improve management, planning and monitoring capacity of quality and effectiveness in education; work with UNICEF and others to improve girls’ access to quality education in the states; and provide support to the government in promoting the knowledge of economy through secondary and tertiary education.

Based on the four components of the SESP (Expansion of Education Coverage, Improved Quality and Relevance of Education, Project Management and Institutional Arrangements, Strengthening Management Planning, and Monitoring Capacity) we determine that all the activities listed in Table 2.1 will be included in the project, as is typically the case with most World Bank education project.

Table 2.1: Education Projects Typology

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Typical Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Infrastructure Development</td>
<td>① Construction of a new school</td>
</tr>
<tr>
<td></td>
<td>② Significant expansion of an existing school</td>
</tr>
<tr>
<td>Infrastructure Rehabilitation or Expansion</td>
<td>① New Roof, new heating/cooling systems, structural repairs, etc.</td>
</tr>
<tr>
<td></td>
<td>③ New classroom wing, laboratories, library, etc.</td>
</tr>
<tr>
<td>Institutional Strengthening</td>
<td>① Design or improvement of strategies, plans and programs</td>
</tr>
<tr>
<td></td>
<td>② Upgrading educational management</td>
</tr>
<tr>
<td>School Coverage/Technical Assistance</td>
<td>① Expansion of Coverage</td>
</tr>
<tr>
<td></td>
<td>② Quality enhancement</td>
</tr>
<tr>
<td></td>
<td>③ Improving availability of didactic material</td>
</tr>
</tbody>
</table>
2.2 Project Components

Detailed project components of the SESP will be finalized during the preparation phase. However, through consultation with representatives of the participating states, four components have so far been developed:

(i) **Expansion of Basic and Secondary Education Coverage**

This component will support the expansion of basic and secondary education through (a) the design, construction, expansion and upgrading of basic and secondary schools (targeted at the most disadvantaged LGAs); and (b) expansion of literacy classes for young people 15-35 years.

(ii) **Improved Quality and Relevance of Basic Secondary Education.**

This component will support the improvement of the quality and relevance of basic and secondary education based on each state’s ESP. The activities proposed include: (a) developing teachers’ professional knowledge and skills through in-service training for teachers (including skill upgrading for untrained teachers) and school head teachers/principals (including school level leadership programs); (b) promoting school-level improvement and creation of professional learning communities in schools (c) reform initiatives that improve the quality and relevance of basic and secondary schools (e.g. the provision of textbooks and instructional materials; equipment and hardware), and (d) the scaling up of HIV education programmes.

(iii) **Strengthening Management Planning, and Monitoring Capacity**

This component will strengthen the capacity of State Governments’ to plan, manage, and monitor the delivery of basic and secondary education services. The project will support the implementation of key reforms, which will include: (a) the development of policy and planning capacities at the state and local levels; (b) the establishment of effective monitoring and evaluation systems, including the development of the ability of the state ministry of education (SMOEs) to collect, analyze and disseminate information related to inputs, processes, outputs and other performance, including management information systems (EMIS) and sample-based student assessment systems; and (c) the establishment of transparent/decentralized procurement and effective financial management systems. Finally, strategies will be developed and supported under the project to guide the process of empowerment of communities in school management and to devolve some resources to school management committees leading in the longer term to reform budget mechanism, including the establishment of per-capita funding so that they can be used to address local educational priorities.

(iv) **Project Management and Institutional Arrangements.**

This component supports overall project management, monitoring and evaluation and design and implementation of a communication strategy. Under the UBE project, weak capacity for project management (e.g., procurement, financial management) was one of the main constraints for effective project implementation. Therefore, the capacity building support for implementation would begin during the preparation stage. Additionally, DFID will be providing technical support for the three participating states to assist in the preparation and implementation of the project through capacity for Universal Basic Education (CUBE). The technical support will include a team of long and short term consultants, specializing in project implementation (including project management, financial management and procurement) to be located in each state.
3.0 Baseline Data

3.1 General Description and Location

Nigeria is situated in the western portion of Africa, and lies between latitudes 4\(^\circ\) 00’ N and 14\(^\circ\) 00’ N, and longitudes 2\(^\circ\) 50’ E and 14\(^\circ\) 45’ E. Nigeria is bordered by Chad to the northeast, Cameroon to the east, Benin Republic to the west, Niger to the northwest and the Atlantic Ocean to the south. The total area of the country is 923,768 sq km, of which 910,768 sq km is land and 13,000 sq km is water.

Nigeria was created by the amalgamation of the northern and southern protectorate by the British Colonial Government in 1914. The country gained independence on October 1\(^{st}\), 1960 and was declared a republic in 1963. The country is presently divided into 36 administrative divisions called states and 1 federal territory.

Figure 3-1: Map of Nigeria. Showing Kaduna, Kano and Kwara States

The scope of the ESMF covers Kaduna, Kano and Kwara States (Figure 3.1) as identified in the project concept note (PCN). A description of the physical, biological and socio-economic environment for each of the participating states is presented below.
3.2 Description of the Environment

3.2.1 Kaduna State

Kaduna occupies almost the central portion of Northern Nigeria extending between latitudes 12° 40'E and 10° 30'E and longitude 7° 40'N and 9° 30'N. It is bordered by Niger, Plateau, Sokoto, Katsina and Kano States and presently comprises 23 LGAs.

Physical

− Climate and Meteorology

The wet and dry seasons are the climatic regimes experienced in the state. The wet season lasts from April to October with a spatial and temporal distribution of rainfall ranging from 1530mm (south-east) to 1015mm (Northeast) while the dry season lasts from November to May.

The mean monthly temperatures during the day exceed 36°C while the mean monthly temperatures at night falls below 22°C. Mean annual wind speed varies between 2 to 6 m/s. The dry season months (November - March) experience lower wind speed while it could rise to 15 m/s during the wet season months (April–October). Values of up to 25 m/s are sometimes experienced due to inducement by convective rainfall activities and relative diffusion.

− Geology

The bedrock geology is largely metamorphic rocks of the Nigerian Basement Complex consisting of biotite gneisses and older granites. In the south-eastern part of the state, younger granites and bathyliths are evident. Deep chemical weathering and fluvial erosion, influenced by the bioclimatic nature of the environment, have developed the characteristic high undulating plains with subdued interfluvies. In some places, the interfluvies are capped by high grade lateritic ironstone especially in the North-west.

− Soil

The soil type is a tropical ferruginous soil which is formed on parent materials rich in quartz. There is a downward movement of clay within the soil profile resulting in a sandy surface horizon low in organic matter. However, soils within the swampy areas are richer in kaolinitic clay and organic matter, very heavy and poorly drained.

− Water bodies

Two major rivers, Kaduna and Gurara traverse the state. There are also 41 lakes and dams.

Biological/Natural resources

− Flora

The dominant vegetation types in the state is the guinea savannah with characteristic woodland of a fairly closed canopy of trees and shrubs and the Sahel savannah where woody plants are really sparse and grasses predominant.

− Fauna

The animals found in the state include: cattle, goats, sheep and rams, pigs, rabbits and birds (poultry mainly chicken are kept in commercial farm pens and on traditional free-range in compounds).

Socio-economics
- Population/Demography

The 1991 census projection estimated the population to be about 6.05 million people with an average density of 129 people per sq km and land area of about 46,953km$^2$.

- Ethnicity

Kaduna has six major ethnic groups and over twenty minority ethnic groups, each with its language. Hausa and English are the most widely spoken languages. The major ethnic groups include Hausa, Kamuku, Gwari and Kadara.

- Livelihood

The mainstays of economy in the state are farming and animal husbandry. About 80% of the people are actively engaged in farming. The major crops cultivated include: yam, cotton, groundnut, tobacco, rice, cassava and various vegetables.

- Facilities

Due to the effort of Christian missionaries in the 20th century, Kaduna leads the other states in northern Nigeria in terms of educational development.

The 2005 an EMIS survey revealed that the state had 3,070 public primary schools, 219 public junior secondary schools, 159 public senior secondary schools and a large number of private schools. However, the state faces major challenges with dilapidated infrastructures; inadequate teaching staff; lack of teaching aids; poor remuneration of staff; inadequate teachers/students furniture; and inconsistency by successive governments in implementing educational policies.

The state has two university teaching hospitals, three general hospitals, several private hospitals and a few primary healthcare facilities in the rural areas.

The major water sources in the state are wells, boreholes and the streams. The state is served by over 3,000km of road connecting it with to other parts of the country. The roads are in fairly good conditions. An international airport is also located in the state.

- HIV/AIDS

The state has an effective HIV/AIDS awareness programme, although coordination with educational institutions is loose. The AIDS/HIV prevalence rate has reduced from 11.6% in 1999 to 5.6% in 2005 (KADSEEDS 2005).
3.2.2 Kano State

Kano State is located in the semi-arid savanna belt of Nigeria. It covers an area extending between latitudes 12° 40’ E and 10° 30’ N and longitude 7° 40’ E and 9° 30’ N. It is bordered by Jigawa, Bauchi, Kaduna, Katsina and Jigawa States.

Physical
  – Climate
As with other parts of Nigeria the state experiences two seasonal regimes: wet and dry seasons. The wet season starts in May and ends in October while the dry season starts from November and ends in April. Mean annual rainfall ranges from over 1,000mm in the south to a little less than 800mm in the north. Mean temperature ranges from 26°C to 33°C.
  – Geology
The major geologic formations of Kano include crystalline igneous, metamorphic rocks and granite. The relief range from heights of 500meters for lower plains to 1000meters above sea level for higher ones.
  – Soil
The soil types are classified into three main groups; the ferruginous tropical soils; the reddish brown soils and hydromorphic soils which are found in poorly drained sites. The state soil is chemically poor with 80-90% sand and 2 -4% clay contents, hence the application of manure is essential for farming practices.
  – Water Resources
The major rivers are Kano, Challawa, Watari, Jatau, Dudurun and Gaya. These rivers flow into the Hadejia River which empties into the Lake Chad. Kano also has 25 lakes and dams which provide potable water to towns and villages.

Biological/ Natural Resources
  – Flora
The dominant natural vegetations are the guinea and the Sahel savannah. These vegetations have been heavily degraded by human activities e.g bush burning etc.
  – Fauna
The major animals include: cattle, sheep, goats and livestock. Pastoral farming is dominant in the state.

Socio-Economics
  – Population/Demography
Based on the 1991 population census, Kano has 8,07 million inhabitants with an almost equal distribution of male (51%) and female (49%). 75% of the population lives in the rural area. The state has 44 local Government areas and covers 20,131 km².
  – Ethnicity
The major ethnic groups in Kano state are the Hausas and Fulanis. Hausa, English and Arabic are languages widely spoken in the state.

  – Livelihood
75% of the rural population derives its livelihood from agriculture. Kano is the main producer of groundnut in Nigeria. Other important crops are cotton, guinea-corn, maize, cowpeas and varieties of vegetables.

- **Facilities**

There are 3,066 public primary schools, 393 public junior secondary schools, 161 public senior secondary schools and a large number of private schools. 76.6% of male children have access to education compared to 31.7% of female children. 37.6% of the population has access to a potable water supply (that is pipe-bone water) while 75% has access to health services. Kano has a 35% literacy rate and the average school enrolment rate is 90% for primary education, 80% for secondary school education and 60% for tertiary education.

The state has 18 general hospitals, 5 specialist hospitals, 19 comprehensive health centres and 14 primary health centres.

The major water sources are dams and streams; which however face the problem of water pollution from industrial discharges.

The transport system comprises road, rail and air services. These are in fairly good condition.

- **HIV/AIDS**

The HIV/AIDS prevalence status has reduced from 4.3% to 4.1% between 1999 and 2003. The state has a high transmission rate due to second marriages and mother to child transmission.

### 3.2.3 Kwara State

Kwara is situated between parallels 8° and 10° N latitudes and 3° and 6° E longitudes covering an area of about 32,500 sq. km. The state has the river Niger as its natural boundary with Niger, Kogi, Oyo, Ekiti and Osun States.

**Physical**

- **Climate**

The state is characterised by the wet and dry seasons like other parts of Nigeria. The rainy season begins in late March and lasts till October. The total annual rainfall in the state ranges from 800mm to 1200mm in the northwest and 1000mm to 1500mm in the southeast. The mean temperature of the area ranges from 30°C to 35°C.

- **Geology**

The geology is basically the crystalline rocks of the basement complex. The igneous and metamorphic rocks such as granite, gneisses and quartites have generally undergone intense chemical weathering.

- **Soil**

A large proportion of the land in the state is characterised by ferruginous tropical soils. The soils are loamy, alkaline, low in organic matter, and vulnerable to erosion.

- **Water bodies**

The major rivers in the state include the rivers Niger and Asa. The state also has 25 lakes and dams.

**Biological/ Natural Resources**
Flora
The vegetation of the state is mainly guinea and derived savanna.

Fauna/Wildlife
Apart from the domestic animals (cattle, goats and sheep) found in the state, wildlife present include: monkeys, crocodiles, lizards and snakes of many species.

Socio-Economics

Population
Based on the 1991 census, the population of Kwara is about 4.2 million, comprising 48% of people age 18 and below and 52% of people above 18 years old.

Ethnicity
The major ethnic group is the Yorubas, who occupy 75% of the entire state. Other major ethnic groups include Nupes and the Barubas.

Livelihood
The major occupation in Kwara is agriculture (65%). However, fishing is common among the riverside population. Fish species such as Tilapia, catfish, mud-fish and crabs are abundant in the state. The major crops include cotton, cocoa, coffee, kolanuts, tobacco leaves, beniseed and palm produce.

Facilities
Kwara has over 1170 primary schools which enrol over a third of a million pupils; 231 junior secondary schools and 229 senior secondary schools which enrol about 133,000 students; 2 colleges of education and 2 polytechnics which enrol about 25,000 students and 1 university with more than 15,000 students.

Kwara has 3 specialist hospitals, 6 general hospitals, 6 rural health centres, 15 basic health clinics, 17 general hospitals and 17 district health units and also a university teaching hospital. The shortage of medical personnel is a major problem, especially in government hospitals.

The major water source for the State is the dams. The majority of rural people and urban dwellers rely on streams and wells for their water needs, there about 1000 boreholes in the state.

Kwara is served by over 1351 km of road network and railway which extends from the state to the northern part of the country. An international airport is also located in the state.

HIV/AIDS
According to the National Action Committee on AIDS (NACA) 2005 study, the current HIV/AIDS prevalence in Kwara is 2.7% of the population.
4.0 Policy, Legal and Institutional Framework

The major national policies and regulations (environmental and educational) that are considered relevant to the project are summarized in this section.

4.1 Policy Framework

National Policy on Education

The education system in Nigeria is based on the National Policy on Education (NPE). The policy document addresses the issues of imbalance in the provision of education in different parts of the country with regard to access, quality of resources and girls’ education. It seeks to inculcate national consciousness, unity, training and appropriate skill acquisition as well as mental and physical competence for the survival of the individual and Nigerian society.

National Policy on the Environment

The stated goal of the National Policy on the Environment is to achieve sustainable development in Nigeria, and in particular to:

- Secure a quality of environment adequate for good health and well being;
- Conserve and use the environment and natural resources for the 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 and promote understanding of the essential linkages between the environment, resources and development, and encourage individual and community participation in environmental improvement efforts; and
- Co-operate in good faith with other countries, international organizations and agencies to achieve optimal use of trans-boundary natural resources and effective prevention or abatement of trans-boundary environmental degradation.

National Economic Empowerment and Development Strategy (NEEDS)

Nigeria’s economic reform program is the National Economic Empowerment and Development Strategy (NEEDS), which was launched in 2004 to boost growth and to help achieve the MDGs.

The objective of NEEDS is to enable Nigeria achieve a turn around and grow a broad based market oriented economy that is private sector - led and in which people can be empowered so that they can, as a minimum, afford the basic needs of life. It is therefore a pro-poor development strategy with sources of economic empowerment being gainful employment and provision of social safety nets for vulnerable groups.

The features of Nigeria’s reform programme are:
- It is Nigeria’s Poverty Reduction Strategy and gains inspiration from the poverty reduction strategy paper (PRSP) which had been under preparation since 2001
- ii. It is a reform programme aimed at re-engineering the growth process
- iii. Its formulation process has been largely participatory
- iv. The Nigerian President has expressed his commitment to the programme and has set up an economic team to drive it
- vi. The NEEDS focuses on strategy and policy directions rather than programmes and projects. It signals a shift in the direction of decentralised project planning and execution
4.2 Legal Framework

A number of national and international environmental guidelines are applicable to the construction and upgrading of schools and other sub-projects under the SESP. In Nigeria, the power to enforce all activities that might impact the environment is vested in the Federal Ministry of Environment (FMEnv). Internationally, agencies such as the World Bank, DFID and other development agencies usually set environmental criteria for projects they are involved in.

The major national administrative environmental instruments that are considered relevant to the environmental issues in Nigeria are considered in this report.

- Federal

The Federal Ministry of Environment (FMEnv) was created in 1999 to take over the function of the Federal Environmental Protection Agency (FEPA or the Agency). The ministry has a mandate to co-ordinate the environmental protection and conservation of natural resources for sustainable development in Nigeria. The specific responsibilities of the ministry are to:

1. monitor and enforce environmental protection measures;
2. enforce international laws, conventions, protocols and treaties on the environment; and
3. prescribe standards and make regulations on air quality, water quality, pollution and effluent limitations, the atmosphere and ozone layer protection, control of toxic and hazardous substances; and
4. promote cooperation with similar bodies in other countries and international agencies connected with environmental protection.

![Federal Ministry of Environment Organisational Structure](image)

Figure 4.1: Federal Ministry of Environment Organisational Structure

As contained in FEPA Acts 58 of 1988 and 59 of 1992. FMEnv has put in place statutory documents to aid the monitoring, control and abatement of industrial waste. The statutory documents currently in place include:

2. National Environmental Protection (Effluent Limitations) Regulations (S.1.8) 1991;
3. National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) (S.1.9) 2004;
4. National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations (S.1.15) 1991;
5. Guidelines and Standards for Environmental Pollution Control in Nigeria 1991;
These statutory documents clearly state the restrictions imposed on the release of toxic substances into the environment and the responsibilities of all industries whose operations are likely to pollute the environment. Such responsibilities include provision of anti-pollution equipment and adequate treatment of effluent before being discharged into the environment, etc. (S.1.8 & 9).

FMEnv also has put in place procedural and sectoral guidelines detailing the EIA process including a categorization of environmental projects into Categories I, II and III. These guidelines require that a complete EIA be performed for Category I projects. Category II projects may not require an EIA depending on the screening criteria, while Category III projects do not require an EIA.

The sectoral guidelines on infrastructure development apply to this project as schools construction is classified as a category II project.

In addition, the following laws are considered relevant to the project:

**Universal Basic Education Act 2004**

The Universal Basic Education Act provides the legal framework for the implementation of the UBE Programme, which makes basic education not only free but also compulsory. Subsequently, a Universal Basic Education Commission was established as a way of ensuring the proper implementation of the UBE programme. The commission is responsible for the coordination of the activities of the programme.

**Child Rights Act (2003)**

The act gives full protection to privacy, honour, reputation, health and prevention from indecent and inhuman treatment through sexual exploitation, drug abuse, child labour, torture, maltreatment and neglect to a Nigerian Child. It also declares that every child has a right to life, to be allowed to survive and develop.

**Land Use Act**

The legal basis for land acquisition and resettlement in Nigeria is the Land Use Act of 1978 which was modified in 1990. The following are selected relevant sections:

Section 1: Subject to the provision of this Act, all land comprised in the territory of each state in the Federation is hereby vested in the Governor of each state and such land shall be held in trust and administered for the use and common benefit of all Nigerians in accordance with the provisions of this Act.

Section 2: (a) All land in urban areas shall be under the control and management of the Governor of each State; and (b) all other land shall be under the control and management of the local government within the area of jurisdiction in which the land is situated.
Therefore, according to the Land Use Act, all land in Nigeria is vested in the Governor of each State, and shall be held in trust for the use and common benefit of all people. The administration of land area is divided into urban land which will be directly under the control and management of the Governor of each State; and non-urban land, which will be under the control and management of the Local Government. The Governor of each State will have the right to grant statutory rights of occupancy to any person or any purpose; and the Local Government will have the right to grant customary rights of occupancy to any person or organization for agricultural, residential and other purposes.

- State

By the provision of acts, edicts and laws the states have also set up State Environmental Protection Agencies (SEPA}s) as the regulatory bodies to protect and manage the environmental issues in the states.

The functions of the SEPA{s} include:

1. Enforcement of all environmental legislations and policies;
2. Coordination and supervision of environmental assessment studies;
3. Minimization of impacts of physical development on the ecosystem;
4. Preservation, conservation and restoration to pre-impact status of all ecological processes essential to the preservation of biological diversity;
5. Protection of air, water, land, forest and wildlife within the states;
6. Pollution control and environmental health in the states; and
7. Co-operation with FMEnv and other agencies to achieve effective prevention of abatement of trans-boundary movement of waste.

4.5 Assessment of the Legal Framework

The existing legal framework for environmental assessment in Nigeria is considered adequate. Detailed laws, regulations and guidelines have been developed and serve as the framework for conducting EIAs in both the public and private sectors. The implementation of these rules has been poor due to lack of adequate enforcement.

EIA Act

The Act does not encourage the participation of people whose lives are likely to be affected by a project; rather, it encourages the collection and documentation of technical information which is confusing and unintelligible to a majority of people. All too often, the provisions enshrined in the law are not enforced.

FEPA Sectoral Guideline

FEPA’s Guideline covering infrastructural projects deals with both the procedural and technical aspects of EIA for construction projects. The guideline stresses the need to carry out an EIA at the earliest stage possible. Infrastructure Project EIAs have been conducted in rather loose form, and often taken as a supplementary requirement to overall economic and engineering issues.

Environmental Policy

The policy and its laudable institutional arrangements have not yielded the desired results. This is principally due to weak enforcement; inadequate manpower in the area of integrated environment management; insufficient political will; inadequate and mismanaged funding; a
low degree of public awareness about environmental issues; and a top–down approach to the planning and implementation of environmental programmes.

Land Use Act

The Land Use Act points out that the interests of individuals and communities have been reduced to mere rights of occupancy, which can be revoked by the appropriate authorities on certain conditions such as ‘over-riding public interest’ (right-of-way, mining activities etc). Moreover, the law is ambiguous in certain respects and makes interpretation difficult. The Act which grants excessive powers to the Federal and State Governments has a dramatic impact on land rights. It does not provide adequate security against forced evictions, harassment, and threats.

Education Policy

The major problems hindering the actualization of the policy objectives are inadequate manpower; insufficient political will; mismanaged funding; a low public participation in policy formulation; and a top–down approach to the planning and implementation of environmental programmes.

Universal Basic Education Act

The UBE programme implementation has been hindered by poor project supervision, poor funding and lack of commitment from state governments. Based on this, critical issues of poor facilities and unbalanced access to education have remained unaddressed.

The UBE programme objectives are also being duplicated in other agencies such as the National Mass Education Commission and National Commission for Nomadic Education. The complex institutional framework comprising federal, state and local governments has hampered coordination. Another major hindrance includes the shortage of qualified primary and junior secondary school teachers.

4.4 International Environmental Agreements

Nigeria is a signatory to the following relevant international conventions:

2. The Convention Concerning the Protection of the World Cultural and Natural Heritage, The World Heritage Convention, 1972;
6. The Framework Convention on Climate Change, Kyoto Protocol, 1995;
7. The Convention on Biological Diversity, 1992;

Nigeria also has obligations to protect the environment through various commitments to the African Union (AU), the Economic Community of West African States (ECOWAS) and the Commonwealth. It is also committed through relations with the European Community under the Lome IV Convention.
World Bank Safeguard Policies

The World Bank has 10 Environmental and Social Safeguard Policies to reduce or eliminate the adverse effects of development projects.

- OP/BP 4.01: Environmental Assessment
- OP/BP 4.04: Natural Habitats
- OP 4.09: Pest Management
- OP/BP 4.12: Involuntary Resettlement
- OD 4.20: Indigenous Peoples
- OPN 11.03: Cultural Property
- OP 4.36: Forestry
- OP/BP 4.37: Safety of Dams
- OP/BP 7.50: Projects on International Waters
- OP/BP 7.60: Projects in Disputed Areas

Based on the general applicability of Safeguard Policies to Education Projects (Table 4.1), the WB policies relevant to this transaction are:

BP/OP 4.01: Environmental Assessment

The World Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of Environmental Assessment (EA). The World Bank classifies any proposed project into one of four categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts. This transaction can be classified as a category C project, that is, it has minimal adverse impacts on both man and the environment.

Department for International Development (DFID) Environmental Guideline

DFID’s Environmental Guide provides advice on planning and managing the environmental assessment of DFID interventions. The guide provides advice and guidance on environmental screening for DFID’s project officers. It also provides a summary of the activities involved in environmental screening and wider assessment processes. It contains:

- guidance on completing an environmental screening note which is mandatory for interventions over £1 million;
- checklists identifying key environmental opportunities and risks covering a range of aid instruments, from projects and programmes to sectoral approaches and budget support; and
- answers to common questions and sources of further information.

This guide mainstreams environmental sustainability into all DFID’s development activities with the aim of achieving sustainable poverty reduction. The most up-to-date information is available at www.dfid.gov.uk.

For co-funded projects, the DFID has responsibility to ensure that the procedures and standards of the lead donor are adhered to. For the SESP the World Bank’s safeguard policies will be followed.
### Table 4.1: General Applicability of Safeguard Policies to Education Projects

<table>
<thead>
<tr>
<th>Safeguard Policy</th>
<th>Type of Project Activity</th>
<th>Major Infrastructure Development</th>
<th>Infrastructure Rehabilitation or Expansion</th>
<th>Institutional Strengthening</th>
<th>School Coverage/Technical Assistance</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP 4.01)</td>
<td></td>
<td>All projects are subject to</td>
<td>All projects are subject to environmental screening</td>
<td>Unlikely to trigger policy</td>
<td>Unlikely to trigger policy</td>
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<td></td>
<td></td>
<td>environmental screening</td>
<td></td>
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<tr>
<td>Natural Habitats (OP/BP 4.04)</td>
<td></td>
<td>Projects must be sited to avoid significant conversion or degradation of any critical natural habitats, and to avoid or minimize damage to non-critical habitats to the extent feasible.</td>
<td>Projects must be sited to avoid significant conversion or degradation of any critical natural habitats, and to avoid or minimize damage to non-critical habitats to the extent feasible.</td>
<td>Unlikely to trigger policy</td>
<td>Unlikely to trigger policy</td>
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<td>Pest Management (OP 4.09)</td>
<td></td>
<td>Pest Management is unlikely to be a key component of an infrastructure project, but any pest management activities implemented (e.g., during construction or ground keeping) must be screened for consistency with the policy.</td>
<td>Pest Management is unlikely to be a key component of an infrastructure project, but any pest management activities implemented (e.g., during construction or ground keeping) must be screened for consistency with the policy.</td>
<td>Unlikely to trigger policy</td>
<td>Unlikely to trigger policy</td>
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<td>Cultural Property</td>
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<td>All projects must be screened for the presence of potential cultural resources and include “chance finding” procedure as part of technical specifications for contractors.</td>
<td>Include “chance finding” procedure as part of technical specifications for contractors.</td>
<td>Unlikely to trigger policy</td>
<td>Unlikely to trigger policy</td>
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<tr>
<td>Involuntary Resettlement (OP/BP 4012)</td>
<td></td>
<td>Project location should be screened to avoid sites where people live or work, although new construction in densely populated urban areas should be dealt with on a case-by-case basis. If necessary, settlement plans must be developed</td>
<td>Project location should be screened to avoid sites where people live or work, although new construction in densely populated urban areas should be dealt with on a case-by-case basis. If necessary, settlement plans must be developed</td>
<td>Unlikely to trigger policy</td>
<td>Unlikely to trigger policy</td>
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<tr>
<td>Indigenous Peoples (OD 4.20)</td>
<td></td>
<td>Triggered if project activities affect indigenous peoples, positively or negatively, and there is a reasonable need to enhance or differentiate the impact on indigenous people.</td>
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</tr>
</tbody>
</table>
4.5 Assessment of Institutional Arrangement and Framework

The main institutions with key responsibilities for the implementation of the project and this ESMF are described below.

− State Ministries of Education (SMOE)

The States Ministries of Education are responsible for the development, management and maintenance of schools in the states. The SMOE has responsibilities for project monitoring and evaluation, quality assessment and control, and coordination, and providing information on a range of procedural and project management issues including procurement, financial management, disbursement, performance benchmarking etc..

Specifically with regards to this ESMF, the Project Planning Team (PPT) at SMOE will play an oversight role by ensuring that they are performing and carrying out their responsibilities as detailed in the ESMP. In this regard, the PPTs will be relying on the analysis of periodic reports of the respective State Environmental Protection Agencies/Authorities (SEPAs).

− Project Steering Committee (PSC)

To ensure policy level coordination across sectors and to provide a forum for discussing implementation progress and sharing experience, a PSC will be constituted. The committee will be chaired by the Permanent Secretary, Ministry of Education and will include representatives from the state education board (SUBEB), education resource center, (ERC), agency for mass education (AME), PPT, chairmen of affected local governments and community development associations representatives.

The Committee will provide overall policy guidance, planning and management for the different components of the project, will oversee progress to ensure it is being made as planned, will resolve any sectoral issues as they arise, and will remove any impediments that may cause implementation delays. The PSC will be responsible for advising the SMOE through the PPT on any and all technical decisions required to successfully implement the civil works activities in the SESP.

Specifically, the PSC will:

1. advise the PPT on whether or not to approve the construction of a new school in a locality;
2. advise schools which need to be expanded;
3. approve the selection of sites for the building of schools and facilities;
4. check for compliance of this ESMF with the EA process by contractors;
5. be responsible for ensuring that the monitoring plan as contained in the individual submissions for civil works are implemented
6. be responsible for the overall monitoring of the entire SESP; and
7. support the execution of the HIV/AIDS awareness campaign on relevant project sites.

− State Project Planning Team (PPT)

The State Ministry of Education (SMOE) will be the implementing agency for the State Education Sector Project (SESP) while the PPT within the SMOE will support and manage the implementation of all project components and activities. The PPT will work in collaboration with other parastatals within the state (SUBEB, AME, and ERC) to ensure the successful delivery, implementation and monitoring of the project. The PPT will be headed by a civil servant of director level with experience in administration and management of schools.
In addition, four sectoral specialists with qualifications in facilities design, contracts administration, procurement and environmental safeguard will form the core of the PPT.

The PPT will be responsible for: (i) overall technical management of the project, (ii) preparation of engineering designs and environmental assessments and mitigation plans, (iii) procurement; (iv) monitoring of implementation process and progress; (v) effective coordination with other State and Local Government Agencies; and (vi) reporting on the progress of the project.

An Environmental and Social Management Unit (ESMU) needs to be established within the PPT to manage safeguards issues as contained in the ESMF. The PPT Environmental Specialist (ES) will serve as the focal point for the environmental assessment of the sub-projects. The duties of the ES will include the following:

- Environmental capacity building at the state and local level;
- Review of proposals, plans for school construction and renovation to ensure that environmental concerns are addressed;
- Training organization for local government counterparts; and
- Performance monitoring under the environmental management plan formulated for the SESP.

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Local Government Project Unit

At the local government level, the Local Government Education Authority (LGEA) is charged with the responsibility for the management and funding of allocation for primary schools. Within the LGEA a Project Team (PT) will be set up for the SESP to provide planning, technical support, implementation and monitoring services required for the school expansion, rehabilitation and/or construction program and all other project components.

The PTs will have within it an environmental desk officer who will be supported by the LG Community Development Officer (CDO), appointed by their respective LGs and acceptable to the World Bank, DFID and other funding agencies. This Unit will co-opt other officers as necessary. The head of the PT will participate in the procurement processes at the PPT for the selection of consultants, contractors and for the evaluation of bids that impact his/her jurisdiction, to ensure transparency and ownership of the procurement process.

A community representative from the Community Development Association (CDA) in each local government area will be selected to work closely with the PT through the CDO. His/her role will be to inform residents of the project objectives, project progress, criteria and technical standards and mobilize and organize their community’s participation. He/she will liaise with PT on a routine basis to get regular updates on project progress through the CDO and ensure that the information is shared with the community.

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Federal Ministry of Environment (FMEEnv)

One of the primary responsibilities of the Federal Ministry of Environment (FMEEnv) is to ensure that all major development projects in Nigeria are subject to mandatory Environmental Impact Assessment (ESIA) pursuant to EIA Act. No. 86 (Decree No. 86) of 1992. The FMEEnv reviews and approves EA documents for Category A projects; especially the complex and more risky ones. For the SESP the FMEEnv and/or the respective competent SEPA will handle the reviews and approvals.

The role FMEEnv will play in this project is one of monitoring to ensure (i) that the SEPA are reviewing the ESMPs (or ESIA) and clearing them according to Federal Guidelines, State Laws and World Bank Safeguards policies, (ii) that respective SEPA are monitoring the
activities of the PPT during and after construction at all locations in the state in which the PPT have ongoing works.

− **State Environmental Protection Agencies (SEPAs)**

The SEPAs have responsibility for (i) ensuring that activities planned under this project by the PPT complies with respective states environmental laws and requirements, and that of the Federal Government and the World Bank’s triggered Safeguards Policies, (ii) receiving, reviewing, commenting, requiring revisions where necessary and clearing and approving the mandatory and corresponding ESMP, (iii) ensuring that contractors/consultants adhere to the General Environmental Management conditions for construction contracts in collaboration with the PPT (iv) performing regular monitoring of the construction, operations and maintenance stages of the activities of the PPT, and (v) preparing periodic monitoring reports and sending them on a regular basis to the SMOE, who will process and transmit them to both FMEnv and the World Bank

− **The World Bank**

The World Bank has the overall responsibility to ensure that its Safeguards Polices are complied with. In addition, the WB is responsible for the final review and clearance of the ESMPs (or ESIAs); as well as for the review and approval of ESMP TORs.

![Figure 4.2: Proposed Project Implementation Structure](image-url)
5.0 Potential Impacts and Mitigation Measures

5.1 Potential Impacts

The implementation of the SESP will enhance the economic, social and political development of Kaduna, Kano and Kwara States through the facilitation of improved access to primary and junior secondary education, infrastructure improvement, equitable distribution of schools and adequate training for teachers. The project will contribute to reducing illiteracy and poverty in Nigeria and induce socio-economic development in the participating states especially their rural areas.

The construction, maintenance and rehabilitation of educational infrastructures (schools, libraries etc), however, may cause negative environmental impacts. Poorly planned schools and bad practices in construction, maintenance and rehabilitation could have negative effects. Table 5.1; gives an overview of the major environmental impacts resulting from the construction and operation of education infrastructures (classrooms, libraries etc).

<table>
<thead>
<tr>
<th>Environmental Parameters</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil</td>
<td>① Soil erosion and modification of surface relief</td>
</tr>
<tr>
<td></td>
<td>② Sedimentation of roadside water bodies and drains</td>
</tr>
<tr>
<td></td>
<td>③ Loss of productive topsoil in burrow areas</td>
</tr>
<tr>
<td></td>
<td>④ Contamination from waste materials e.g. cement, paints, lubricants, fuels and detergents</td>
</tr>
<tr>
<td>Water</td>
<td>① Modification in flow of surface water /increased runoff</td>
</tr>
<tr>
<td></td>
<td>② Drainage clogging and creation of stagnant water pools</td>
</tr>
<tr>
<td></td>
<td>③ Contamination from hazardous wastes e.g. paints, lubricants, fuels</td>
</tr>
<tr>
<td></td>
<td>④ Sedimentation of surface water bodies</td>
</tr>
<tr>
<td>Ecosystem</td>
<td>① Damage, fragmentation or loss of habitat and biodiversity</td>
</tr>
<tr>
<td></td>
<td>② Destruction of vegetation</td>
</tr>
<tr>
<td></td>
<td>③ Contamination of biota</td>
</tr>
<tr>
<td></td>
<td>④ Transmission of diseases</td>
</tr>
<tr>
<td></td>
<td>⑤ Destruction/disruption of wildlife</td>
</tr>
<tr>
<td></td>
<td>⑥ Threats to rare and endangered species</td>
</tr>
<tr>
<td>Displacement and Resettlement</td>
<td>① Air pollutants emission from construction machinery</td>
</tr>
<tr>
<td></td>
<td>② Displacement of private and public institutions and utilities</td>
</tr>
<tr>
<td></td>
<td>③ Displacement of settlements and business</td>
</tr>
<tr>
<td></td>
<td>④ Loss of crops, properties, and sources of livelihood</td>
</tr>
<tr>
<td></td>
<td>⑤ Problem with basic utilities in displaced and resettled areas</td>
</tr>
<tr>
<td></td>
<td>⑥ Change in natural drainage pattern</td>
</tr>
<tr>
<td>Landscape</td>
<td>① Destruction of vegetation and trees</td>
</tr>
<tr>
<td></td>
<td>② Deforestation and desertification</td>
</tr>
<tr>
<td></td>
<td>③ Transmission of diseases</td>
</tr>
<tr>
<td></td>
<td>④ Contamination of local water supplies</td>
</tr>
<tr>
<td></td>
<td>⑤ Air pollution</td>
</tr>
<tr>
<td></td>
<td>⑥ Noise &amp; vibration disturbance</td>
</tr>
<tr>
<td>Human health and safety</td>
<td>① Obstructions owing to presence of road side barriers</td>
</tr>
</tbody>
</table>

In Nigeria, infrastructure projects were mostly based on economic and social needs without taking environmental consideration into account. Environmental assessments have been conducted in loose forms, and often taken as a supplementary requirement, secondary to the overall economic and engineering issues.
5.1.1 Environmental Impacts

Construction Phase

i Flora and Fauna

The construction of new schools and/or the expansion and upgrading of existing schools could result in clearing and depletion of vegetation that will result in: loss of plant cover, disturbance and loss of fauna habitats, weakening and degradation of soils, disturbance of the natural landscape and disfiguring of the natural morphology.

ii Soil and Land Degradation

Earth-moving equipment such as excavators will be used in cutting and excavation. This earth moving equipment will expose the soil to erosion and also compact it and break down the soil structure which will potentially decrease the drainage of the areas.

Furthermore, the risk of accidental discharge of hazardous products, leakage of hydrocarbons, oils or grease from construction machinery also constitute potential sources of soils and water pollution. Moreover, the high pressure on water resources can cause potential conflicts, particularly during the dry seasons in certain localities of high water scarcity in Kano and Kaduna States.

iii Vehicular Traffic

Construction works will result in a high traffic volume around the schools and within the communities. Wastes generated from project activities such as cement bags, paint drums and debris will result in pollution and constitute obstructions to vehicular traffic. The transport of raw materials will introduce a number of heavy trucks on the access road and this could increase the risk of motor accidents and result in vehicular-pedestrian conflicts.

iv Waste Management

Activities at construction sites will produce construction wastes such as excavated soils and debris. Excavated wastes could obstruct the general public, the movement of the workers and vehicles as well as affect the aesthetics of the environment.

v Slope, erosion and drainage

If the topography of the project area is hilly, erosion problems during construction are likely to be more severe, as compared to a flat area. However, if the area is flat, water will not drain away easily, and stagnant pools of water will be created. These pools, if not drained regularly will provide favourable breeding grounds for mosquito and other disease vectors.

vi Air Quality

Air Quality will be impacted by emissions from vehicles, earthmoving equipment and released particulate matters. At the peak of construction; various equipment rated between 200-600 horsepower and burning diesel fuel will be operated. The USEPA AP-42 Emission Factors for diesel industrial engines was used to estimate emissions from construction equipment. These are shown in Table 5.2.
Table 5-2: Estimated Emissions from Construction Equipment

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Quantity Emitted (kg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrates</td>
<td>160</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>6400</td>
</tr>
<tr>
<td>Sulphates</td>
<td>10</td>
</tr>
<tr>
<td>Particulates less than 10µm</td>
<td>10</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>15300</td>
</tr>
<tr>
<td>Aldehydes</td>
<td>10</td>
</tr>
</tbody>
</table>

vii Water Quality

Water quality will be impacted by wastewater discharges from construction activities. These will include discharges from onsite sewage system and rainwater run-off from the developed areas such as workshops etc. The discharge of this wastewater into surface waters will impact water quality by causing changes to its physical, chemical and biological properties.

Given the high anticipated volume of waste/spoil that will be generated, it is likely that the waste will be stockpiled on road sides. If it is not properly contained, rains could carry it along with runoff into other surface waters, leading to increased turbidity and siltation. This could affect aquatic resources such as fisheries and aquatic invertebrates.

Operation Phase

i. Visual Intrusion

School rehabilitation and construction will change the characters of the area (marred landscapes). The clearing of vegetation required for the expansion of existing school will impact the visual amenity of nearby houses and surrounding communities.

5.1.2 Social and Health Impacts

Construction Phase

i. Loss of Livelihood

Land acquisition for construction of new schools could cause changes in land use pattern and result in displacement, especially in the urban areas. This will cause significant disruption to the communities as it could affect small businesses such as cafeterias, mechanic shops etc.

ii. Disruption of Utilities Service

The excavation and cutting during construction may cause temporary disruptions of utility services such as electricity and water. Such disruptions may incur the anger of the communities in the project area.

iii. Contractors’ (Workers) Camp

The civil work contractor will have to establish and operate a camp which will house offices, workshops etc. The selection of the camp location should be based on approval of the PPT project engineer.

Problems that may be encountered include disposal of liquid and solid wastes. Other social impacts associated with the contractors’ camp are theft, alcoholism and sexually transmitted diseases (especially HIV/AIDS).
iv **Occupational Safety and Health**

The safety of the local population may be at risk during construction activities. The movement of trucks to and from the site, the operation of various equipment and machinery and the actual construction activities will expose the workers to work-related accidents and injuries. Pollutants such as dust and noise could also have negative implications for the health of workers and near-by communities.

v **Noise**

Noise and vibration caused by machines, site vehicles, pneumatic drills etc will be commonplace during construction activities. These impacts can affect the quietness of the communities and provoke irritation and anger.

vi **Traffic**

Communities around the construction sites (where schools are being upgraded or constructed) will experience heavier human and vehicular traffic. Construction related activities will be a nuisance to road users e.g. storage of construction stones by the road side.

**Operation Phase**

i **Improved access to education**

The project implementation will improve access to quality basic education, especially for disadvantaged groups (e.g. girls, poor families).

ii **National Development**

The impacts of the project on national development are largely positive. The implementation of the SESP will enhance the opportunities available for the general public in the participating states especially the rural areas.

iii **Road Accidents**

The improvement of access and quality of the schools will translate into a higher pedestrian traffic (teachers, students and pupils). This could increase the likelihood of road accidents.

iv **Community Development**

Positive impacts on community development would include enhancement of educational standards, diversification of knowledge notably in the scientific and technical fields, and improved access to formal education previously unavailable to a large number of rural communities.

Provision of socio-cultural infrastructures such as playgrounds and sports facilities will have beneficial impacts on the communities as well as contributing towards the reduction of delinquency.

v **Girl Child Education**

The project will improve girls’ enrollment in primary and secondary schools. This will bridge the gender disparity in basic education in Northern Nigeria and ensure an increased female literate population in the future.
5.2 Mitigation

Environmental mitigation consists of measures that can reduce the negative environmental impacts associated with implementation (construction, expansion, rehabilitation etc) of the project.

5.2.1 Mitigation Measures

Mitigation measures have been identified that would reduce both existing and potential impacts associated with existing facilities and rehabilitation/upgrading/new construction on the SESP. Potential impacts and related measures are identified in Table 5.3.

The table indicates the areas to which the potential impact and its associated measure apply. In addition, mitigation measures are identified as either social or physical measures. Social mitigation includes the measures used to mitigate effects such as noise, land use, and other effects to the human environment. Physical mitigation includes measures that address impacts to the physical environment, such as biological communities, vegetation, air quality, and others.

The measures identified in Table 5.3 serve as the basis for the cost estimates provided in Section 6.9.
Table 5.3: Summary of Environmental Mitigation Measures

<table>
<thead>
<tr>
<th>Physical Land Use</th>
<th>Recommended Mitigation Measures</th>
</tr>
</thead>
</table>
| ① Visual impact following the disposal of construction and demolition waste onto roadsides | ① Regular collection and evacuation of work site refuse towards authorized dumps  
② Involvement of the Local Government Authorities and Communities in the selection of discharge sites |
| ① Employees and communities exposed to high noise level  
② Disturbance of school and education activities during construction works | ① Installation of sound insulation.  
② Schedule work periods to avoid school hours |
| Air Quality | ① Introduction of dust reduction measures in construction sites  
② Safety measures put in place |
| ① Emission of pollutants from mobile (vehicles) and stationary (mixers, generators etc) sources.  
② Air pollution from burning of demolition wastes e.g. wood, paper etc | ① Appropriate containment measures for all operational areas and proper disposal of used lubricants.  
② Soil erosion control measures (e.g. reforestation, reseeding of grasses, land preparation, terracing etc) |
| Soil | ① Appropriate containment measures for all operational areas and proper disposal of used lubrication oil.  
② Work sites installed far from waterways  
③ Regular collection of work sites waste for proper disposal  
④ Liquid waste discharged at designated outfalls after effluent treatment to protect water resources  
⑤ Regular emptying of on-site latrines and toilets |
| Water Quality | ① Potential pollution of surface and ground water though runoff of pollutants e.g. lubricating oil, diesel fuel etc from workshop areas etc  
② Water pollution due to seepage from tanks (diesel, sanitary wastes etc)  
③ Lack of water for sanitation or toilet facilities  
④ Heavy water usage resulting in reduction of surface and groundwater sources |
| Vegetation |  
|---|---|
| ① Vegetation clearing resulting in loss of valuable habitat, species diversity and population levels. | ① No siting and excavations in sensitive habitat and ecotypes. |
| ② Impacts on protected areas; critical habitats for rare species or of ecologic or domestic importance. | ② Careful planning and selection of sites. |
| ③ | ③ Forests and cultural heritage sites protection enforced. |

| Wildlife |  
|---|---|
| ① Wildlife impacted through direct loss, loss of movement corridors, and indirectly through introduction of noise and pollutants. | ① Pre-construction focused surveys, dust and noise abatement measures, and minimization of construction generated pollutants. |

| Wetlands |  
|---|---|
| ① Expansion and new construction encroaching on the wetland and directly impact wetland plant communities. | ① Preservation, restoration, and enhancement of existing wetland. |
| ② | ② Sensitive and critical habitats avoided. |

| Farmlands and Grazing Areas |  
|---|---|
| ① Land take for new school construction could lead to loss of farmland and grazing areas. | ① Farmland and grazing areas should be relocated to other areas. |
| ② | ② If possible avoid farmlands and grazing areas. |

| Solid/Hazardous Waste Management |  
|---|---|
| ① Solid waste generated from demolition and construction activities containing potentially hazardous materials (e.g. asbestos). | ① Quick sorting, collection and disposal of waste removed from the sites in accordance with applicable regulations. |
| ② Waste generation during building works piling on the roadside | ② |

| Social Health and Safety |  
|---|---|
| ① Risks of road accidents during work | ① Conduct an awareness raising campaign for the work sites staff and the users of school infrastructures (pupils, students, teachers, etc.). |
| ② Contamination risk by HIV from the labour force. | ① Conduct awareness raising campaigns on HIV/AIDS. |

| Land Use |  
|---|---|
| ① Involuntary displacement of populations or economic activities | ① Acquisition and relocation should occur in accordance with appropriate regulations including World Bank OP/BP 4.12 Involuntary Resettlement. |
| ② Changes of existing uses within affected communities. | ② Avoid facilities in areas that will need resettlement, the displacement; or the encroachment on historic, cultural or traditional use areas. |
5.2.2 Mitigation Funding

Cost of Design Measures

The quantities, specifications and estimated costs of design measures to avoid or mitigate negative impacts will be assessed by the civil design contractor and incorporated into the bidding documents. The contractor will execute all required works and will be reimbursed through pay items in the bill of quantities, which will be financed by the project.

HIV/AIDS Awareness Program

The quantities, specifications and estimated costs of the HIV/AIDS Awareness Program and condom distribution will be assessed by the design consultant and incorporated into the works bidding documents. The contractor will execute the program through a subcontractor and will be reimbursed through pay items in the bill of quantities, which will be financed by the project.

Post Construction Costs

During implementation, the costs of mitigation in the course of maintenance contracts will be incurred by the contractor and borne by the PPT.
6.0 Environmental and Social Management Planning, Review and Clearing Process

6.1 General

For the rehabilitation, upgrading and construction of schools identified in the project documents; this ESMF instrument has been developed. It includes all the actions to be undertaken to limit, reduce or eliminate the potential negative impacts identified. These actions concern the mitigation measures, control and monitoring measures to be applied as well as the necessary support measures for awareness raising and capacity building.

It is anticipated that the SESP will be implemented through sub-contracts for design, construction, rehabilitation etc. These individual contracts will be about 6-24 months long with the contractor responsible for design and construction works execution. The social and environmental management process will involve the following steps and procedures.

6.2 Screening of Sub-projects

The purpose of the screening process is to determine whether sub-projects are likely to have potential negative environmental and social impacts; to determine appropriate mitigation measures for activities with adverse impacts; to incorporate mitigation measures into the sub-projects design; to review and approve sub-projects proposals and to monitor environmental parameters during implementation. The extent of environmental and social work that might be required for the sub-projects prior to implementation will depend on the outcome of the screening process.

For each state the consultants/contractors shall carry out a screening and review process for all schools by local government area. This will involve: (i) visual inspection of existing schools or proposed site in the case of new constructions and initial consultations; and (ii) identification of safeguard issues for each individual school. Based on this, the contractor shall submit a Screening Report, which will include:

1. Inventory of findings: surface area, number and size of classrooms etc.;
2. Material sources;
3. A summary of baseline environmental and social conditions for all individual schools, based on visual inspection and consultations;
4. A summary of main environmental and social issues to be addressed; and
5. A time-bound Action Plan for completing the ESMP.

The sub-projects Screening Reports will be submitted to the PPT’s Environmental and Social Mitigation Unit (ESMU), who will review the results and recommendations, and confirm that the sub-projects fall within Environmental Category B and that the recommended Action Plan is appropriate. The ESMU will then submit the Screening Report with their recommendations to the World Bank/DFID Task Team Leader for a no-objection to proceed with the detailed Environmental and Social Management Plans or Environmental and Social Impact Assessments (ESIA), and Resettlement Action Plan (if required). Annexes 2a, b and c provide the process and screening report format and the environmental and social checklists.

The screening will enable a categorization of sub-projects based on their environmental and social impacts as described in the next section.
6.3 Project Categorization

Each sub-project under the SESP shall be categorized, based on the visual survey and initial consultations. Each sub-project will be categorized into one of two categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category B:</td>
<td>A proposed project is classified as Category B if its potential adverse environmental and social impacts are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A projects. The scope of Environmental Assessment (EA) for a Category B project may vary from project to project, but it is narrower than that of Category A EA.</td>
</tr>
<tr>
<td>Category C:</td>
<td>A proposed project is classified as Category C if it has little or no potential adverse environmental and social impacts. These impacts are reversible; and in most cases mitigation measures can be designed more readily than for Category A projects.</td>
</tr>
</tbody>
</table>

6.4 Environmental and Social Management Plans

Upon receiving a no-objection to the Screening Report, the contractor will prepare an Environmental and Social Management Plan (ESMP) for each sub-project. The ESMP will consist of the set of mitigation, monitoring and institutional measures to be taken during implementation and operation to eliminate, offset, or reduce adverse environmental and social impacts to acceptable levels.

The ESMP will also provide a specific description of institutional arrangements, (i.e. who is responsible for implementing the mitigation measures and carrying out the monitoring regime (for operations, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting and staff training.). Additionally, the ESMP will include an estimate of the costs of the measures and activities recommended. The mitigation and monitoring measures recommended in the ESMP will be developed in consultation with all the affected groups to include their concerns and views in the design of the ESMP.

Typically, the ESMP will follow a mandatory format as shown in Annex 3, and as the Annex portrays, the infrastructure-specific ESMPs will include the following:

1. Overall description of the sub-project;
2. Baseline conditions;
3. Potential negative and positive impacts;
4. Analysis of alternatives;
5. Mitigation measures for negative impacts;
6. Monitoring and supervision;
7. Implementation arrangements; and
8. Record of public consultations and disclosure

Detailed guidance on ESMP, potential impacts and mitigation measures by the different sub-project phases are provided in Annex 4. In some cases, an Environmental and Social Impact Assessment (ESIA) which will include a detailed Environmental and Social Management Plan (ESMP) will be more appropriate than an ESMF depending on the conditions at the site. Annex 5 shows the procedures for sub-projects requiring an ESIA.

6.5 Resources for ESMP implementation

The resources required for implementing the ESMP are basically personnel and finance. The key stakeholders in the environmental management activities are the project engineer, the contractor, PPT, federal and state ministries of environment, SEPA and the general public. Resources for monitoring the compliance by the PPT will be provided under the project.
The PPT shall establish a system to implement a process to comply with all relevant policies and procedures. Figure 6.1 shows the system to be used for managing the SESP, particularly relationships and reporting responsibilities.

![ESMP Implementation System](image)

**Figure 6-1: ESMP Implementation System**

### 6.6 Institutional Arrangement for ESMP Implementation

The overall objective of the project is to ensure that the SESP integrate harmoniously into the communities, and that the operation provides an opportunity for the selected project areas to play an active part in regional development. The PPT will provide staff to achieve the following objectives:

1. Propose management rules and specific measures that are compatible with sustainable development while implementing the project
2. Promote awareness by its personnel and the general public regarding environmental protection,
3. Propose concrete means of applying the ESMP.

The environmental specialist attached to the PPT will be responsible for the implementation of the ESMP in close collaboration with SEPAs and FMEnv.

Alternatively, EnvironQuest has identified several skills that are requisite to ensuring compliance with the ESMP. The management plan will be executed by a group of professionals to be hired by the PPT or sourced from existing institutions (Ministry of Environment and SEPA). These professionals will be qualified in the following disciplines:

1. Environmental Assessment & Monitoring
2. Soil & Water Conservation
3. Civil Engineering
4. Public Health
5. Sociology and Socio-Economics

These individuals will form the core of the ESMP implementation team that will be directly accountable to the PPT Coordinator. Initiatives should be taken to ensure that each person identified to implement specific aspects of the ESMP fulfill his/her responsibilities as part of his/her daily activities. Each individual will be required to develop a process to ensure the implementation of the ESMP occurs in a structured and formal manner and to ensure that personnel identified to assist in performing tasks defined in the ESMP have the necessary skills to manage the environmental aspects of their work. The PPT will present all
results of environmental monitoring to the SEPA and will indicate which specific member of the ESMP team should be contacted for clarification of issues outlined in the results presented.

The environmental specialist of the PPT will be responsible for the implementation of the environmental monitoring and the ESMP. His/her responsibilities shall include:

- Coordination, liaison with and monitoring of the contractors;
- Compilation and preparation of periodic environmental reports for submission to the World Bank;
- Review of ESIA reports from consultants in collaboration with SEPA and FME
- Data Management; and
- Sub-project Inspections

### 6.7 Capacity Strengthening

In order for PPT and PS to carry out the environmental assessment responsibilities required by the SESP, institutional strengthening will be required at several levels. Capacity building will encompass PPT, PS and state agencies involved in the implementation of the Project. The SESP should therefore ensure that the following concerns and needs are addressed:

- Institutional structuring within the relevant departments to ensure that required professional and other technical staff are available;
- Establishment of consultancy groups to ensure cross departmental discussions and information exchanges.

Proposed capacity strengthening measures are presented below.

**Table 6-3: Institutional Capacity Strengthening Program**

<table>
<thead>
<tr>
<th>Target Audience</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPT staff</td>
<td>General environmental awareness seminar that will include ecological and social science principles, legal responsibilities, consequences of non-sustainable development, costs of poor environmental decisions, and introduction to the EIA process.</td>
</tr>
<tr>
<td></td>
<td>Personnel requires appreciation of WB’s, Federal/State environmental policies, as well as, an appreciation for the need to support environmentally sustainable development.</td>
</tr>
<tr>
<td></td>
<td>Three days</td>
</tr>
<tr>
<td>PPT Environmental specialist, SEPA and FME specialists</td>
<td>In-depth comprehensive course on environmental management including legal requirements, EIA methodology, Impact determination (methods) and mitigation analysis, public involvement methods, EMP preparation, monitoring techniques, preparation of EIAs, TORs, and other. Course will include field visits and classroom exercises.</td>
</tr>
<tr>
<td></td>
<td>The target audience will be responsible for EA review at the State level and for preparing TORs for EIA consultants as well as monitoring consultants’ work and final approval of EIAs. Target audience will also be responsible for conducting environmental audits on selected sub-projects and for periodic monitoring of sub-project implementation to ensure compliance.</td>
</tr>
<tr>
<td></td>
<td>Ten days</td>
</tr>
<tr>
<td>PT Staff</td>
<td>General environmental awareness seminar that will include ecological and social science principles, legal responsibilities, consequences of non-sustainable development, costs of poor environmental decisions, and introduction to the EIA process.</td>
</tr>
<tr>
<td></td>
<td>Local Government level staff requires an appreciation for the WB’s and Nigerian environmental requirements, as well as, an appreciation for the need to support sustainable development.</td>
</tr>
<tr>
<td></td>
<td>One day</td>
</tr>
</tbody>
</table>
To successfully implement this ESMF, it is recommended that the assessment of comprehensive training needs and the development of a training strategy plan be carried out as an initial implementation activity which will, inter alia, determine and conform whether the intense training programme proposed will suffice or is required. It is further recommended that technical assistance from more experienced environmental practitioners (from SEPA for example) be given to “mentor” LGAs staff and support them in building experience to complement the training programme already mentioned earlier and thus build their capacity.

6.8 Cost Estimates

The cost estimates are based on the assumption that resource persons are likely to come from other parts of the country and therefore require travel allowances; participants will come from local communities and attend during the day only but will receive a per diem. These estimates include an allowance for travel expenses. It is proposed that the training programme will be implemented two times a year, over the first four years of the project cycle. The total cost is estimated at US $ 250,000.

6.9 ESMP Budget and Responsibilities

Based on available data, a sum of US$60 million will be allocated to the project. Of the total budget, it is recommended that at least 3% should be allocated to environmental and social concerns.

Table 6-4: Budget and Responsibilities

<table>
<thead>
<tr>
<th>Item</th>
<th>Budget (estimate)</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigation</td>
<td>$850,000</td>
<td>PPT/LSEPA/FMEnv</td>
</tr>
<tr>
<td>Management</td>
<td>$250,000</td>
<td>PPT</td>
</tr>
<tr>
<td>Capacity Strengthening</td>
<td>$250,000</td>
<td>PPT/World Bank</td>
</tr>
<tr>
<td>Monitoring</td>
<td>$500,000</td>
<td>PPT/SEPA/FMEnv</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,850,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

6.10 Consultations and Disclosure

The preparation of the ESMP will include on-site consultations with local stakeholders for each sub-project. All draft ESMPs will be submitted to the PPT and FMEnv, as well as the World Bank for comment and clearance for public disclosure. Upon clearance, the PPT will disclose the documents at the States and request the World Bank to disclose the documents at the Bank’s Info Shop.

6.11 Contract Provisions and Pre-Tender Meeting

Specific provisions will be included in construction contracts to mandate the use of formal health, safety and environment (HSE) measures to minimize accidents and avoid fatalities during construction. Standard environmental and social requirements (as contained in the general environmental management conditions for construction contracts in Annex 6), including provision for HIV/AIDS awareness campaigns and distribution of condoms will be incorporated into the contract provisions.

To ensure full understanding of the contract requirements by the contractors at the pre-bid inspection stage, all participating contractors will attend a Pre-Tender Meeting, where they will be briefed on their responsibilities to address environmental, social, health and safety issues.
6.12 Monitoring and Supervision

Oversight for the environmental and social management process of the sub-projects will be assured by the supervisory consultants in collaboration with the Environmental and Social Specialist of the PPT’s ESMU. The environmental monitoring and supervision program for the implementation of the SESP will serve as an integral part of the operational activities of the PPT and is expected to generate the requisite information for environmental management and environmental information dissemination.

It is anticipated that monitoring will be conducted during all phases of the project: design, construction, execution and maintenance. This plan will play a pivotal role in ensuring that the trends for specific parameters are tracked and it will provide information on compliance with regulatory guidelines or permissible limits. It will also form the basis for corrective actions and modification of activities if necessary.

6.12.1 Monitoring objectives

The aim of the monitoring is to establish appropriate criteria to verify the predicted impact of the project, and to ensure that any unforeseen impacts are detected and the mitigation adjusted where needed at an early stage. Relevant records will be kept to ensure compliance with recommended environmental procedures. The plan will ensure that mitigating measures are implemented during construction upgrading and maintenance.

Specific objectives of the monitoring plan are to:

- check the effectiveness of recommended mitigation measures;
- demonstrate that sub-project activities are carried out in accordance with the prescribed mitigation measures and existing regulatory procedures; and
- provide early warning signals whenever an impact indicator approaches a critical level.

Impact indicators are defined in terms of carrying capacity, threshold levels, and regulatory standards. Implementation of the EMP will allow the PPT to manage the timing, location and level of impacts and potentially provide the cause and effect data for validation of various predictive models of action/impact relationships.

6.12.2 Monitoring Requirements

A monitoring program requires a number of components to ensure effective results. These include:

- Relevant baseline data against which to monitor project results;
- Verifiably objective indicators for each project for which monitoring will be conducted;
- An independent body responsible for monitoring;
- Capacity for monitoring;
- Monitoring on a regular basis;
- An effective monitoring reporting mechanism including feedback and commitment to action on monitoring results and recommendations.

6.12.3 Monitoring Procedure

The PPT Environmental and Social Specialist will prepare a long term monitoring strategy that will encompass clear and definitive parameters to be monitored for each sub-project. The monitoring plan will take into consideration the scope of development, the environmental and social sensitivity and the financial and technical means available for monitoring. The plan will identify and describe the indicators to be used, the frequency of monitoring and the standard (baseline) against which the indicators will be measured for compliance with the ESMP. The monitoring plan will include:

Planning and Preparation:
• Review and approval of the Screening Reports
• Review and approval of ESMP
Execution:

- Review and evaluation of the Project PPT ESMU’s environmental specialist and the Project Engineer’s (PE) monthly reports on contractors’ compliance with general and specific environmental and social contract clauses.

Operations:

- Review and evaluation of PE’s Reports on Contractor’s compliance with general and specific environmental and social clauses.
- Liaison with community on safety campaigns and other mitigation measures during operations.
- Monitoring of socio-economic impact indicators.

For infrastructure construction related sub-projects, monitoring will be carried out monthly. Quarterly and annual reports will be submitted to FMEnv and SEPAEs. Each monitoring programme will follow the established schedule; monitoring may be performed weekly, monthly, quarterly, semi-annually, or annually depending upon the resource available, regulatory requirements, and project-specific requirements for monitoring.

During construction, the Civil or Project Civil or Project Engineer (PE) will be responsible for monitoring the Contractor’s compliance with all contract clauses addressing environmental and social impact mitigation. For this purpose, the PE will refer to the contract Environmental Specifications and project-specific ESMP or ESIA and report on such compliance in his monthly reports.

6.13 Summary of Environmental and Social Management Process

A summary of the ESMP activities by project phase is presented below.

Table 6-5: Summary Environmental & Social Management Process by project phase

<table>
<thead>
<tr>
<th>Project Cycle</th>
<th>Phase</th>
<th>Activities</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Scoping and Screening</td>
<td>– Initial site visit &amp; consultations.</td>
<td>Consultant, PPT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Identification of environment and social issues and applicable safeguards policies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Categorization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Action plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Screening Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– WB No-Objection</td>
<td></td>
</tr>
<tr>
<td>Design</td>
<td>Preparation of ESMP/ESIA and consultations</td>
<td>– Draft ESMP or ESIA</td>
<td>Consultant, PPT</td>
</tr>
<tr>
<td></td>
<td>Disclosure</td>
<td>– Disclosures of ESMP locally &amp; at WB InfoShop</td>
<td>PPT, DFID World Bank</td>
</tr>
<tr>
<td></td>
<td>Finalization and Incorporation</td>
<td>– Final version of ESMP</td>
<td>Consultant, PPT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Incorporation of ESMP into contract documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>– WB No-Objection</td>
<td></td>
</tr>
<tr>
<td>Execution</td>
<td>Implementation and monitoring</td>
<td>– Implementation</td>
<td>Contractors; PE; PPT &amp; Community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Monitoring &amp; reporting on environmental and social mitigation measures</td>
<td></td>
</tr>
<tr>
<td>Operations</td>
<td>Operations and maintenance</td>
<td>– Maintenance</td>
<td>Contractors; PE; PPT &amp; Community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>– Monitoring &amp; reporting on environmental and social mitigation measures</td>
<td></td>
</tr>
</tbody>
</table>
7.0 Public Consultation Plan

The PPT has responsibilities to effectively engage stakeholders in achieving the SESP objectives for the benefit of all. The implementation of the SESP depends on the meaningful participation of all stakeholders for success.

7.1 Objectives

This plan provides a framework for achieving effective stakeholder involvement and promoting greater awareness and understanding of issues so that the project is carried out effectively within budget and on-time to the satisfaction of all concerned.

To ensure effective implementation of this plan, the PPT shall be committed to the following principles:

- promoting openness and communication;
- ensuring effective stakeholder involvement in the development of the project;
- increasing public knowledge and understanding of the project implementation process;
- using all strategies and techniques which provide appropriate, timely and adequate opportunities for all stakeholders to participate; and
- evaluating the effectiveness of the engagement plan in accordance with the expected outcomes.

7.2 Identifying Stakeholders

Stakeholders for the purpose of this project shall be defined as all those people and institutions that have an interest in the successful planning and execution of the project. This includes those likely to be positively and negatively affected by the project. Table 8-1 identifies the key stakeholders.

Table 7-1: Stakeholder Identification Matrix

<table>
<thead>
<tr>
<th>Affected Parties</th>
<th>How to identify them</th>
</tr>
</thead>
</table>
| People living in the vicinity of the proposed works. (pupils, students, teachers, parents etc) | • Identify the local government area(s) that falls within 500m radius of the proposed schools.  
• Review available data to determine the profile of the whole stakeholder or relevant group.  
• Use identified groups and individuals to tap into stakeholder networks to identify others. |
| Special interest groups | • Identify key individuals or groups through organised groups, local clubs, community halls and religious places.  
• Be aware of similar local groups or individuals. |

7.3 Consultation Strategies

The consultation process shall ensure that all those identified as stakeholders are conferred with. Subject to PPT coordinator’s approval, the ESMU’s Environmental/Social Specialist will share information about the project with the public to enable meaningful contributions and thus enhance the success of the SESP.

Public consultation will take place through workshops, seminars, meetings, radio programs, request for written proposals/comments, questionnaire administration, public reading and explanation of project ideas and requirements. The consultation plan will be monitored by FME and/or SEPs who will set their own verifiable indicators to assess the degree of participation of the key stakeholders during all the phases of SESP implementation.
7.4 Level of Engagement

The level of stakeholder involvement will be based on the project phase, location and expected outcome. The extent of stakeholders’ involvement will be based on the following:

- the project is likely to have significant impacts in one area/location, or relatively small impacts spread out over a large area.
- the project involves significant issues, that is, the wider stakeholder may be affected.

Table 7-2: Consultation Plan at Project Phases

<table>
<thead>
<tr>
<th>Project Stage</th>
<th>Activities</th>
<th>Institutional Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>ESIA (or ESMP) reviews</td>
<td>SEPAs/FMEnv</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Review of verifiable indicators</td>
<td>SEPAs/FMEnv</td>
</tr>
</tbody>
</table>

Through these strategies; the PPT’s EMSU will be able to:

- clarify the project’s objectives in terms of stakeholders needs and concerns;
- identify feasible alternatives (in particular alternative locations) and examine their relative merits in terms of environmental, social and economic factors;
- identify and prioritise environmental issues, and establish the scope of future studies; and
- identify processes for continued stakeholders’ involvement.
ANNEX 1

Summary of World Bank Environmental and Social Safeguard Policies

- **Environmental Assessment (OP 4.01).** Outlines Bank policy and procedure for the environmental assessment of Bank lending operations. The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of EA process. This environmental process will apply to all sub-projects to be funded by SESP.

- **Natural Habitats (OP 4.04).** The conservation of natural habitats, like other measures that protect and enhance the environment, is essential for long-term sustainable development. The Bank does not support projects involving the significant conversion of natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs. If the environmental assessment indicates that a project would significantly convert or degrade natural habitats, the project includes mitigation measures acceptable to the Bank. Such mitigation measures include, as appropriate, minimizing habitat loss (e.g., strategic habitat retention and post-development restoration) and establishing and maintaining an ecologically similar protected area. The Bank accepts other forms of mitigation measures only when they are technically justified. Should the sub-project-specific ESMPs indicate that natural habitats might be affected negatively by the proposed sub-project activities with suitable mitigation measures, such sub-projects will not be funded under the SESP.

- **Pest Management (OP 4.09).** The policy supports safe, affective, and environmentally sound pest management. It promotes the use of biological and environmental control methods. An assessment is made of the capacity of the country’s regulatory framework and institutions to promote and support safe, effective, and environmentally sound pest management. This policy will most likely not apply to SESP.

- **Involuntary Resettlement (OP 4.12).** This policy covers direct economic and social impacts that both result from Bank-assisted investment projects, and are caused by (a) the involuntary taking of land resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets, or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or (b) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons. This policy will most likely not apply to SESP as this project will not entail taking of land or restriction of access to sources of livelihood.

- **Indigenous Peoples (OD 4.20).** This directive provides guidance to ensure that indigenous peoples benefit from development projects, and to avoid or mitigate adverse effects of Bank-financed development projects on indigenous peoples. Measures to address issues pertaining to indigenous peoples must be based on the informed participation of the indigenous people themselves. Sub-projects that would have negative impacts on indigenous people will not be funded under SESP.

- **Forests (OP 4.36).** This policy applies to the following types of Bank-financed investment projects: (a) projects that have or may have impacts on the health and quality of forests; (b) projects that affect the rights and welfare of people and their level of dependence upon or interaction with forests; and (c) projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned. The Bank does not finance projects that, in its opinion, would involve significant conversion or degradation of critical forest areas or related critical habitats. If a project involves the significant conversion or degradation of natural forests or related natural habitats that the Bank determines are not critical, and the Bank determines that there are no feasible alternatives to the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs, the Bank may finance the project provided that it incorporates appropriate mitigation measures. Sub-projects that are likely to have negative impacts on forests will not be funded under SESP.
• **Cultural Property (OP 11.03).** The term “cultural property” includes sites having archeological (prehistoric), paleontological, historical, religious, and unique natural values. The Bank’s general policy regarding cultural property is to assist in their preservation, and to seek to avoid their elimination. Specifically, the Bank (i) normally declines to finance projects that will significantly damage non-replicable cultural property, and will assist only those projects that are sited or designed so as to prevent such damage; and (ii) will assist in the protection and enhancement of cultural properties encountered in Bank-financed projects, rather than leaving that protection to chance. The management of cultural property of a country is the responsibility of the government. The government’s attention should be drawn specifically to what is known about the cultural property aspects of the proposed project site and appropriate agencies, NGOs, or university departments should be consulted; if there are any questions concerning cultural property in the area, a brief reconnaissance survey should be undertaken in the field by a specialist. SESP will not fund sub-projects that will have negative impacts on cultural property.

• **Safety of Dams (OP 4.37).** For the life of any dam, the owner is responsible for ensuring that appropriate measures are taken and sufficient resources provided for the safety to the dam, irrespective of its funding sources or construction status. The Bank distinguishes between small and large dams. Small dams are normally less than 15 m in height; this category includes, for example, farm ponds, local silt retention dams, and low embankment tanks. For small dams, generic dam safety measures designed by qualified engineers are usually adequate. This policy does not apply to SESP since the policy is not triggered under the project.

• **Projects on International Waterways (O 7.50).** The Bank recognizes that the cooperation and good will of riparians is essential for the efficient utilization and protection of international waterways and attaches great importance to riparians making appropriate agreements or arrangement for the entire waterway or any part thereof. Projects that trigger this policy include hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways. This policy will not apply to SESP.

• **Disputed Areas (OP/BP/GP 7.60).** Project in disputed areas may occur between the Bank and its member countries as well as between the borrower and one or more neighbouring countries. Any dispute over an area in which a proposed project is located requires formal procedures at the earliest possible stage. The Bank attempts to acquire assurance that it may proceed with a project in a disputed area if the governments concerned agree that, pending the settlement of the dispute, the project proposed can go forward without prejudice to the claims of the country having a dispute. This policy is not expected to be triggered by sub-projects. This policy is unlikely to be triggered by sub-projects to be funded by SESP.
ANNEX 2a

Environmental and Social Screening (ESS) of Education Sub-projects

This stage marks the beginning of the ESIA or ESMP process, which should be initiated as early as possible along with the sub-project planning process after the sub-project is conceived. During this stage, the important functions that need to be performed are:

i. Establish the likely study area by identifying broad boundaries for the sub-project;

ii. Make a preliminary assessment of the significance of potential environmental impacts, and likely mitigating measures;

iii. Identify possible alternatives and the major potential environmental impacts associated with each, as well as the likely corresponding mitigation measures;

iv. Estimate the extent and scope of ESIA to be performed, and offer an initial recommendation as to whether a full ESIA is required;

v. Estimate the time frame of the ESIA study;

vi. Identify the expertise and human resources needed for the ESIA study; and

vii. Prepare the terms of reference for the conduct of an initial environmental examination.

The value of conducting environmental and social screening at the early conception and planning phase of a development project is to provide useful technical input to the project team for their planning and budgeting, thereby eliminating the possibility of costly remedial environmental work and delays caused by problems with adverse environmental damage. Such early input on environmental considerations also provides useful information that helps the project team to gain government approval and win public acceptance.

The environmental and social screening process considers the following aspects in the recommendation: project type, environmental and social setting, and magnitude and significance of potential environmental and social impacts. Some of the typical questions asked in the environmental and social screening process are outlined in the figure in the next page.
Annex Figure 2a-1: Typical Environmental Screening Procedure
ANNEX 2b

Standard Format for Screening Report

1. GENERAL DESCRIPTION
   1.1. Overview of the study area
   1.2. List of Selected Schools

2. PROJECT-SPECIFIC SCREENING (FOR EACH SUB-PROJECT):
   2.1. Existing infrastructure
   2.2. Proposed Works
   2.3. Estimated Cost
   2.4. Summary of Environmental and Social Issues
      2.4.1. Land Resources
      2.4.2. Hydrology and Water Resources
      2.4.3. Air and Noise
      2.4.4. Biological Resources
      2.4.5. Socio-Economic and Cultural
         2.4.5.1. Population
         2.4.5.2. Employment and Other Benefits
         2.4.5.3. Resettlement
         2.4.5.4. Other site-specific issues
   2.5. Environmental Screening Category
   2.6. Applicable Safeguard Policies

3. ESMP ACTION PLAN

4. ATTACHMENTS
   4.1. Maps
   4.2. Photos
   4.3. Location and Administrative Maps
   4.4. Environmental and Social Checklist
## ANNEX 2c

### Screening Report: Environmental and Social Checklist

<table>
<thead>
<tr>
<th>State:</th>
<th>Local Government:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Name:</td>
<td>Location:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Issue</th>
<th>Degree*</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worksite/Campsite Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavation Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disposal Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water Resources &amp; Hydrology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources of Water for Construction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drainage Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Trees/Vegetation around</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protected Areas directly affected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Air Quality &amp; Noise</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special issues (e.g. quiet zone for hospital)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Socio-Economic &amp; Cultural</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Involuntary Resettlement**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graveyards and Sacred Areas affected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population affected/provided access</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Degree:  
N = Negligible or Not Applicable 
L = Low 
M = Moderate 
H = High

**If yes, indicate # of persons likely to be affected and nature of the effect
ANNEX 3

Standard Format for Environmental and Social Management Plan (ESMP)

EXECUTIVE SUMMARY

1. PROJECT DESCRIPTION
   1.1. Overview of the Local Government where the school are located
   1.2. List of Selected Schools
   1.3. Environmental Screening Category

2. POLICY AND ADMINISTRATIVE AND LEGAL FRAMEWORK

3. SCHOOL-SPECIFIC ESMPs (FOR EACH SCHOOL):
   3.1. Location
   3.2. Proposed Works
   3.3. Estimated Cost
   3.4. Baseline Data
      3.4.1. Land Resources
      3.4.2. Hydrology and Water Resources
      3.4.3. Air and Noise
      3.4.4. Biological Resources
      3.4.5. Socio-Economic and Cultural
   3.5. Potential Impacts
      3.5.1. Land Resources
         3.5.1.1. Construction Phase
         3.5.1.2. Post Construction Phase
      3.5.2. Hydrology and Water Resources
         3.5.2.1. Construction Phase
         3.5.2.2. Post Construction Phase
      3.5.3. Air Quality and Noise
         3.5.3.1. Construction Phase
         3.5.3.2. Post Construction Phase
      3.5.4. Biological Resources
         3.5.4.1. Construction Phase
         3.5.4.2. Post Construction Phase
      3.5.5. Socio-Economic and Cultural
         3.5.5.1. Construction Phase
         3.5.5.2. Post Construction Phase
   3.6. Analysis of Alternatives
   3.7. Mitigation Measures
      3.7.1. Construction Phase
      3.7.2. Post Construction Phase
   3.8. Monitoring and Supervision Arrangements
   3.9. Summary ESMP Table

4. ATTACHMENTS
   4.1. Photos
   4.2. Summary of Consultations and Disclosure
   4.3. Other
## ANNEX 4

### Environmental and Social Management Plan (ESMP)

#### Annex Figure 4.1: Guidance on Environmental & Social Management Plan by Project Phases

<table>
<thead>
<tr>
<th>Phases</th>
<th>Issue/Potential Impact</th>
<th>Mitigation Measure(s)</th>
<th>Implementing Responsibility</th>
<th>Monitoring Responsibility</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Phase</td>
<td>Impacts on physical environment: air quality, hydrology, waste, soils, noise</td>
<td>Consider the impact of the construction activities on the physical environment for the design of civil works</td>
<td>Design Consultant</td>
<td>PPT</td>
<td>To be determined</td>
</tr>
<tr>
<td></td>
<td>Impact on Air Quality: Emission of dust and other pollutants</td>
<td>Bid document will include requirement to ensure:</td>
<td>Design Consultant</td>
<td>PPT</td>
<td>To be determined</td>
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<td></td>
<td>- Adequate watering for dust control</td>
<td>- Adequate watering for dust control</td>
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<td></td>
<td>- Prohibition of open burning</td>
<td>- Prohibition of open burning</td>
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<tr>
<td></td>
<td>- Ensure stockpile of materials are properly secured</td>
<td>- Proper unloading/storage of construction materials</td>
<td></td>
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<tr>
<td></td>
<td>- On-site mixing of materials in shielded area</td>
<td>- On-site mixing of materials in shielded area</td>
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<td></td>
<td>- Equipment and materials to be properly covered during transportation.</td>
<td>- Equipment and materials to be properly covered during transportation.</td>
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<tr>
<td>Noise impact</td>
<td>Bid document to include requirement to ensure:</td>
<td>Bid document to include requirement to ensure:</td>
<td>Design Consultant</td>
<td>ESMU/PPT</td>
<td>To be determined</td>
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<tr>
<td></td>
<td>- Noise silencers be installed on all exhaust system</td>
<td>- Noise silencers be installed on all exhaust system</td>
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<tr>
<td></td>
<td>- Use of ear plugs for construction workers</td>
<td>- Use of ear plugs for construction workers</td>
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<td></td>
<td>- Equipment placed as far as possible from sensitive land users.</td>
<td>- Equipment placed as far as possible from sensitive land users.</td>
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<tr>
<td>Impact on hydrology:</td>
<td>The contract document should specify:</td>
<td>The contract document should specify:</td>
<td>Design Consultant</td>
<td>ESMU/PPT</td>
<td>To be determined</td>
</tr>
<tr>
<td>Degradation of surface</td>
<td>- use of good engineering practice during construction, including adequate supervision</td>
<td>- use of good engineering practice during construction, including adequate supervision</td>
<td></td>
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<tr>
<td>water quality</td>
<td>- Minimal water usage in construction area</td>
<td>- Minimal water usage in construction area</td>
<td></td>
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<tr>
<td></td>
<td>- Minimal soil exposure time during construction</td>
<td>- Minimal soil exposure time during construction</td>
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<td></td>
<td>- Minimal chemical usage (lubricants, solvents, petroleum products.</td>
<td>- Minimal chemical usage (lubricants, solvents, petroleum products.</td>
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<tr>
<td>Alteration of surface</td>
<td>Contract document to include requirement to ensure:</td>
<td>Contract document to include requirement to ensure:</td>
<td>Design Consultant</td>
<td>ESMU/PPT</td>
<td>To be determined</td>
</tr>
<tr>
<td>drainage</td>
<td>- installation of adequately sized drainage channels</td>
<td>- installation of adequately sized drainage channels</td>
<td></td>
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<tr>
<td></td>
<td>- stabilization of slopes to avoid erosion</td>
<td>- stabilization of slopes to avoid erosion</td>
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<tr>
<td>Waste generation and</td>
<td>Contract document to include requirement to ensure:</td>
<td>Contract document to include requirement to ensure:</td>
<td>Design Consultant</td>
<td>ESMU/PPT</td>
<td>To be determined</td>
</tr>
<tr>
<td>disposal (solid/ oily/</td>
<td>- Provision of waste management plan.</td>
<td>- Provision of waste management plan.</td>
<td></td>
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</tr>
<tr>
<td>hazardous)</td>
<td>- Proper handling and disposal /recycling of oily waste.</td>
<td>- Proper handling and disposal /recycling of oily waste</td>
<td></td>
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</tbody>
</table>
| Impact on Soil: Increased soil erosion | Contract document to include requirement to ensure:  
- Use of less erodible materials,  
- Lined down-drains to prevent erosion | Design Consultant | ESMU/PPT | To be determined |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Socioeconomic Impact: Disruption during work-demand for local infrastructure increase</td>
<td>- Avoid the creation of congested and unsafe road conditions at intersections and in villages or cities.</td>
<td>Design Consultant</td>
<td>ESMU/PPT</td>
<td>To be determined</td>
</tr>
<tr>
<td>Disruption to traditional lifestyles and other services</td>
<td>- Ensures access to homes, businesses, other key services</td>
<td>Design Consultant</td>
<td>ESMU/PPT</td>
<td>To be determined</td>
</tr>
</tbody>
</table>
| **Construction** | **Impact on Air Quality: Emission of dust and other pollutants** | - Periodically use water to spray areas under construction  
- Construction workers to wear face masks and gloves  
- Ensure that all equipment and materials loaded on trucks are covered during transportation | Contractor, Supervising consultant | ESMU/PPT | To be determined |
| | **Noise Impact** | - Noise standards to be enforced to protect construction workers  
- Ensure that silencers are installed on all exhaust systems.  
- Ear plugs to be worn by construction workers  
- Turn off construction equipment when not in use | Contractor, Supervising consultant | ESMU/PPT | To be determined |
| | **Impact on hydrology: Degradation of surface water quality** | - Use good engineering practice during construction  
- Ensure wastewater from cleaning of equipment is not disposed of in water course.  
- Wastewater should be collected and treated suitably before being disposed of in water courses.  
- Ensure minimal use of water in construction area  
- Minimal soil exposure time during construction | Contractor, Supervising consultant | ESMU/PPT | To be determined |
| | **Alteration of surface drainage** | - Install adequately sized drainage channels  
- Ensure stabilization of slopes to avoid erosion | Contractor, Supervising consultant | ESMU/PPT | To be determined |
| | **Solid waste generation and disposal** | - Ensure all waste earth and materials associated with construction activities are disposed land without prior consent of PPT.  
- Daily life rubbish and waste materials associated with construction activities should be daily collected and disposed of in suitable approved | Contractor, Supervising consultant | ESMU/PPT | To be determined |
<table>
<thead>
<tr>
<th>Environment &amp; Social Management Framework</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poor Sanitation at construction camp and site</strong></td>
<td>- Provide adequately located and maintained latrines.</td>
</tr>
<tr>
<td></td>
<td>Contractor</td>
</tr>
<tr>
<td><strong>Accidental spill of toxic material/oil</strong></td>
<td>- Design and implement safety measures.</td>
</tr>
<tr>
<td></td>
<td>Contractor</td>
</tr>
<tr>
<td><strong>Impact on Soil: Increased soil erosion</strong></td>
<td>- Avoid erosion of cuts and fills by providing proper drainage.</td>
</tr>
<tr>
<td></td>
<td>Contractor, Supervising Consultant</td>
</tr>
<tr>
<td><strong>Impact on vegetation</strong></td>
<td>- Replanting of land within project area.</td>
</tr>
<tr>
<td></td>
<td>Contractor, Supervising Consultant</td>
</tr>
<tr>
<td><strong>Health and Safety Impact</strong></td>
<td>- Ensure adequate health facility systems are in place on-site to deal with influx of temporary workers.</td>
</tr>
<tr>
<td></td>
<td>Contractor, Supervising Consultant</td>
</tr>
<tr>
<td><strong>Socioeconomic Impact: Loss of property</strong></td>
<td>- Avoid or reduce loss of property.</td>
</tr>
<tr>
<td></td>
<td>Contractor</td>
</tr>
</tbody>
</table>

- Ensure that solid wastes are not disposed of in water courses.
- Avoid land where farmers will be displaced.

To be determined
ANNEX 5

Procedures for Sub-project Requiring an ESIA

Step 1: Screening

To determine the depth of ESIA required, potential impacts in the following areas need to be considered:

♦ Social issues
♦ Health issues
♦ Protected areas
♦ Cultural heritage
♦ Existing natural resources such as forests, soils, wetlands, water resources
♦ Wildlife or endangered species habitats

Step 2: Scoping

To identify the relevant environmental and social issues, this step determines:

♦ Level of detail required for the ESIA
♦ Extent of the area to be covered in light of the potential impact zones
♦ Timeframe for the ESIA based on the potential impact zones
♦ Sequencing and scheduling of the various ESIA tasks
♦ Preliminary budgets

Step 3: Preparation of Terms of Reference for Sub-project ESIA

Based on the screening and scoping results, ESIA terms of reference will be prepared. A local consultant will conduct the ESIA and the report should have the following format:

♦ Description of the study area
♦ Description of the sub-project
♦ Legislative and regulatory considerations
♦ Determination of the potential impacts of the proposed sub-projects
♦ Environmental Management Plan
♦ Public consultations process
♦ Development of mitigation measures and a monitoring plan, including cost estimates.
ANNEX 6

General Environmental Management Conditions for Construction Contracts

General

1. In addition to these general conditions, the Contractor shall comply with any specific Environmental Management Plan (EMP) or Environmental and Social Management Plan (ESMP) for the works he is responsible for. The Contractor shall inform himself about such an EMP, and prepare his work strategy and plan to fully take into account relevant provisions of that EMP. If the Contractor fails to implement the approved EMP after written instruction by the Supervising Engineer (SE) to fulfill his obligation within the requested time, the Owner reserves the right to arrange through the SE for execution of the missing action by a third party on account of the Contractor.

2. Notwithstanding the Contractor’s obligation under the above clause, the Contractor shall implement all measures necessary to avoid undesirable adverse environmental and social impacts wherever possible, restore work sites to acceptable standards, and abide by any environmental performance requirements specified in an EMP. In general these measures shall include but not be limited to:

   (a) Minimize the effect of dust on the surrounding environment resulting from earth mixing sites, asphalt mixing sites, dispersing coal ashes, vibrating equipment, temporary access roads, etc. to ensure safety, health and the protection of workers and communities living in the vicinity dust producing activities.

   (b) Ensure that noise levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation, blasting) are kept at a minimum for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities.

   (c) Ensure that existing water flow regimes in rivers, streams and other natural or irrigation channels is maintained and/or re-established where they are disrupted due to works being carried out.

   (d) Prevent bitumen, oils, lubricants and waste water used or produced during the execution of works from entering into rivers, streams, irrigation channels and other natural water bodies/reservoirs, and also ensure that stagnant water in uncovered borrow pits is treated in the best way to avoid creating possible breeding grounds for mosquitoes.

   (e) Prevent and minimize the impacts of quarrying, earth borrowing, piling and building of temporary construction camps and access roads on the biophysical environment including protected areas and arable lands; local communities and their settlements. In as much as possible restore/rehabilitate all sites to acceptable standards.

   (f) Upon discovery of ancient heritage, relics or anything that might or believed to be of archeological or historical importance during the execution of works, immediately report such findings to the SE so that the appropriate authorities may be expeditiously contacted for fulfillment of the measures aimed at protecting such historical or archaeological resources.

   (g) Discourage construction workers from engaging in the exploitation of natural resources such as hunting, fishing, collection of forest products or any other activity that might have a negative impact on the social and economic welfare of the local communities.

   (h) Implement soil erosion control measures in order to avoid surface run off and prevents siltation, etc.
(i) Ensure that garbage, sanitation and drinking water facilities are provided in construction workers camps.

(j) Ensure that, in as much as possible, local materials are used to avoid importation of foreign material and long distance transportation.

(k) Ensure public safety, and meet traffic safety requirements for the operation of work to avoid accidents.

3. The Contractor shall indicate the period within which he/she shall maintain status on site after completion of civil works to ensure that significant adverse impacts arising from such works have been appropriately addressed.

4. The Contractor shall adhere to the proposed activity implementation schedule and the monitoring plan / strategy to ensure effective feedback of monitoring information to project management so that impact management can be implemented properly, and if necessary, adapt to changing and unforeseen conditions.

5. Besides the regular inspection of the sites by the SE for adherence to the contract conditions and specifications, the Owner may appoint an Inspector to oversee the compliance with these environmental conditions and any proposed mitigation measures. State environmental authorities may carry out similar inspection duties. In all cases, as directed by the SE, the Contractor shall comply with directives from such inspectors to implement measures required to ensure the adequacy rehabilitation measures carried out on the bio-physical environment and compensation for socio-economic disruption resulting from implementation of any works.

Worksite/Campsite Waste Management

6. All vessels (drums, containers, bags, etc.) containing oil/fuel/surfacing materials and other hazardous chemicals shall be bunded in order to contain spillage. All waste containers, litter and any other waste generated during the construction shall be collected and disposed off at designated disposal sites in line with applicable government waste management regulations.

7. All drainage and effluent from storage areas, workshops and camp sites shall be captured and treated before being discharged into the drainage system in line with applicable government water pollution control regulations.

8. Used oil from maintenance shall be collected and disposed off appropriately at designated sites or be reused or sold for re-use locally.

9. Entry of runoff to the site shall be restricted by constructing diversion channels or holding structures such as banks, drains, dams, etc. to reduce the potential of soil erosion and water pollution.

10. Construction waste shall not be left in stockpiles along the road, but removed and reused or disposed of on a daily basis.

11. If disposal sites for clean spoil are necessary, they shall be located in areas, approved by the SE, of low land use value and where they will not result in material being easily washed into drainage channels. Whenever possible, spoil materials should be placed in low-lying areas and should be compacted and planted with species indigenous to the locality.
Material Excavation and Deposit

12. The Contractor shall obtain appropriate licenses/permits from relevant authorities to operate quarries or borrow areas.

13. The location of quarries and borrow areas shall be subject to approval by relevant local and national authorities, including traditional authorities if the land on which the quarry or borrow areas fall in traditional land.

14. New extraction sites:
   a) Shall not be located in the vicinity of settlement areas, cultural sites, wetlands or any other valued ecosystem component, or on on high or steep ground or in areas of high scenic value, and shall not be located less than 1km from such areas.
   b) Shall not be located adjacent to stream channels wherever possible to avoid siltation of river channels. Where they are located near water sources, borrow pits and perimeter drains shall surround quarry sites.
   c) Shall not be located in archaeological areas. Excavations in the vicinity of such areas shall proceed with great care and shall be done in the presence of government authorities having a mandate for their protection.
   d) Shall not be located in forest reserves. However, where there are no other alternatives, permission shall be obtained from the appropriate authorities and an environmental impact study shall be conducted.
   e) Shall be easily rehabilitated. Areas with minimal vegetation cover such as flat and bare ground, or areas covered with grass only or covered with shrubs less than 1.5m in height, are preferred.
   f) Shall have clearly demarcated and marked boundaries to minimize vegetation clearing.

15. Vegetation clearing shall be restricted to the area required for safe operation of construction work. Vegetation clearing shall not be done more than two months in advance of operations.

16. Stockpile areas shall be located in areas where trees can act as buffers to prevent dust pollution. Perimeter drains shall be built around stockpile areas. Sediment and other pollutant traps shall be located at drainage exits from workings.

17. The Contractor shall deposit any excess material in accordance with the principles of these general conditions, and any applicable EMP, in areas approved by local authorities and/or the SE.

18. Areas for depositing hazardous materials such as contaminated liquid and solid materials shall be approved by the SE and appropriate local and/or national authorities before the commencement of work. Use of existing, approved sites shall be preferred over the establishment of new sites.

Rehabilitation and Soil Erosion Prevention

19. To the extent practicable, the Contractor shall rehabilitate the site progressively so that the rate of rehabilitation is similar to the rate of construction.
20. Always remove and retain topsoil for subsequent rehabilitation. Soils shall not be stripped when they are wet as this can lead to soil compaction and loss of structure.

21. Topsoil shall not be stored in large heaps. Low mounds of no more than 1 to 2m high are recommended.

22. Re-vegetate stockpiles to protect the soil from erosion, discourage weeds and maintain an active population of beneficial soil microbes.

23. Locate stockpiles where they will not be disturbed by future construction activities.

24. To the extent practicable, reinstate natural drainage patterns where they have been altered or impaired.

25. Remove toxic materials and dispose of them in designated sites. Backfill excavated areas with soils or overburden that is free of foreign material that could pollute groundwater and soil.

26. Identify potentially toxic overburden and screen with suitable material to prevent mobilization of toxins.

27. Ensure reshaped land is formed so as to be inherently stable, adequately drained and suitable for the desired long-term land use, and allow natural regeneration of vegetation.

28. Minimize the long-term visual impact by creating landforms that are compatible with the adjacent landscape.

29. Minimize erosion by wind and water both during and after the process of reinstatement.

30. Compacted surfaces shall be deep ripped to relieve compaction unless subsurface conditions dictate otherwise.

31. Revegetate with plant species that will control erosion, provide vegetative diversity and, through succession, contribute to a resilient ecosystem. The choice of plant species for rehabilitation shall be done in consultation with local research institutions, forest department and the local people.

**Water Resources Management**

32. The Contractor shall at all costs avoid conflicting with water demands of local communities.

33. Abstraction of both surface and underground water shall only be done with the consultation of the local community and after obtaining a permit from the relevant Water Authority.

34. Abstraction of water from wetlands shall be avoided. Where necessary, authority has to be obtained from relevant authorities.

35. Temporary damming of streams and rivers shall be done in such a way avoids disrupting water supplies to communities down stream, and maintains the ecological balance of the river system.

36. No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.

37. Wash water from washing out of equipment shall not be discharged into water courses or road drains.

38. Site spoils and temporary stockpiles shall be located away from the drainage system, and surface run off shall be directed away from stockpiles to prevent erosion.
Traffic Management

39. Location of access roads/detours shall be done in consultation with the local community especially in important or sensitive environments. Access roads shall not traverse wetland areas.

40. Upon the completion of civil works, all access roads shall be ripped and rehabilitated.

41. Access roads shall be sprinkled with water at least five times a day in settled areas, and three times in unsettled areas, to suppress dust emissions.

Blasting

42. Blasting activities shall not take place less than 2km from settlement areas, cultural sites, or wetlands without the permission of the SE.

43. Blasting activities shall be done during working hours, and local communities shall be consulted on the proposed blasting times.

44. Noise levels reaching the communities from blasting activities shall not exceed 90 decibels.

Disposal of Unusable Elements

45. Unusable materials and construction elements such as electro-mechanical equipment, pipes, accessories and demolished structures will be disposed of in a manner approved by the SE. The Contractor has to agree with the SE which elements are to be surrendered to the Client’s premises, which will be recycled or reused, and which will be disposed of at approved landfill sites.

46. As far as possible, abandoned pipelines shall remain in place. Where for any reason no alternative alignment for the new pipeline is possible, the old pipes shall be safely removed and stored at a safe place to be agreed upon with the SE and the local authorities concerned.

47. AC-pipes as well as broken parts thereof have to be treated as hazardous material and disposed of as specified above.

48. Unsuitable and demolished elements shall be dismantled to a size fitting on ordinary trucks for transport.

Health and Safety

49. In advance of the construction work, the Contractor shall mount an awareness and hygiene campaign. Workers and local residents shall be sensitized on health risks particularly of AIDS.

50. Adequate road signs to warn pedestrians and motorists of construction activities, diversions, etc. shall be provided at appropriate points.

51. Construction vehicles shall not exceed maximum speed limit of 40km per hour.

Repair of Private Property

52. Should the Contractor, deliberately or accidentally, damage private property, he shall repair the property to the owner’s satisfaction and at his own cost. For each repair, the Contractor shall obtain from the owner a certificate that the damage has been made good satisfactorily in order to indemnify the Client from subsequent claims.
53. In cases where compensation for inconveniences, damage of crops etc. are claimed by the owner, the Client has to be informed by the Contractor through the SE. This compensation is in general settled under the responsibility of the Client before signing the Contract. In unforeseeable cases, the respective administrative entities of the Client will take care of compensation.

**Contractor’s Health, Safety and Environment Management Plan (HSE-MP)**

54. Within 6 weeks of signing the Contract, the Contractor shall prepare an EHS-MP to ensure the adequate management of the health, safety, environmental and social aspects of the works, including implementation of the requirements of these general conditions and any specific requirements of an EMP for the works. The Contractor’s EHS-MP will serve two main purposes:
   - For the Contractor, for internal purposes, to ensure that all measures are in place for adequate HSE management, and as an operational manual for his staff.
   - For the Client, supported where necessary by a SE, to ensure that the Contractor is fully prepared for the adequate management of the HSE aspects of the project, and as a basis for monitoring of the Contractor’s HSE performance.

55. The Contractor’s EHS-MP shall provide at least:
   - a description of procedures and methods for complying with these general environmental management conditions, and any specific conditions specified in an EMP;
   - a description of specific mitigation measures that will be implemented in order to minimize adverse impacts;
   - a description of all planned monitoring activities (e.g. sediment discharges from borrow areas) and the reporting thereof; and
   - the internal organizational, management and reporting mechanisms put in place for such.

56. The Contractor’s EHS-MP will be reviewed and approved by the Client before start of the works. This review should demonstrate if the Contractor’s EHS-MP covers all of the identified impacts, and has defined appropriate measures to counteract any potential impacts.

**HSE Reporting**

57. The Contractor shall prepare bi-weekly progress reports to the SE on compliance with these general conditions, the project EMP if any, and his own EHS-MP. An example format for a Contractor HSE report is given below. It is expected that the Contractor’s reports will include information on:
   - HSE management actions/measures taken, including approvals sought from local or national authorities;
   - Problems encountered in relation to HSE aspects (incidents, including delays, cost consequences, etc. as a result thereof);
   - Lack of compliance with contract requirements on the part of the Contractor;
   - Changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects; and
   - Observations, concerns raised and/or decisions taken with regard to HSE management during site meetings.

58. It is advisable that reporting of significant HSE incidents be done “as soon as practicable”. Such incident reporting shall therefore be done individually. Also, it is advisable that the Contractor keep his own records on health, safety and welfare of persons, and damage to property. It is advisable to include such records, as well as copies of incident reports, as appendixes to the bi-weekly reports. Example formats for an incident notification and detailed report are given below. Details of HSE performance will be reported to the Client through the SE’s reports to the Client.
Training of Contractor’s Personnel

59. The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these general conditions, any project EMP, and his own EHS-MP, and are able to fulfil their expected roles and functions. Specific training should be provided to those employees that have particular responsibilities associated with the implementation of the EHS-MP. General topics should be:

- HSE in general (working procedures);
- emergency procedures; and
- social and cultural aspects (awareness raising on social issues).

Cost of Compliance

60. It is expected that compliance with these conditions is already part of standard good workmanship and state of art as generally required under this Contract. The item “Compliance with Environmental Management Conditions” in the Bill of Quantities covers these costs. No other payments will be made to the Contractor for compliance with any request to avoid and/or mitigate an avoidable HSE impact.
Example Format: HSE Report

Contract:

Period of reporting:

HSE management actions/measures:
Summarize HSE management actions/measures taken during period of reporting, including planning and management activities (e.g. risk and impact assessments), HSE training, specific design and work measures taken, etc.

HSE incidents:
Report on any problems encountered in relation to HSE aspects, including its consequences (delays, costs) and corrective measures taken. Include relevant incident reports.

HSE compliance:
Report on compliance with Contract HSE conditions, including any cases of non-compliance.

Changes:
Report on any changes of assumptions, conditions, measures, designs and actual works in relation to HSE aspects.

Concerns and observations:
Report on any observations, concerns raised and/or decisions taken with regard to HSE management during site meetings and visits.

Signature (Name, Title Date):
Contractor Representative
Example Format: HSE Incident Notification

Provide within 24 hrs to the Supervising Engineer

Originators Reference No:
Date of Incident: Time:

Location of incident:

Name of Person(s) involved:

Employing Company:

Type of Incident:

Description of Incident:
Where, when, what, how, who, operation in progress at the time (only factual)

Immediate Action:
Immediate remedial action and actions taken to prevent reoccurrence or escalation

Signature (Name, Title, Date):
Contractor Representative
ANNEX 7

List of people and agencies contacted

Kaduna State Ministry of Education

1. Mr. Tom Mayaishi  Chairman PPT
2. Alhaji Ahmed Aliyu
3. Mr. Tanimu Abdullahi

Schools

Urban
Government Girls Secondary School, Barnawa, Kaduna
Mrs P.S. Bature - Principal

LGEA Barnawa II Primary School
Barnawa, Kaduna
Mrs Asabi Mohammed - Assistant School Head

Semi-Urban
Government Girls Secondary School
Dogon Bauchi, Zaria
Hajia Rabija Suleiman

Jafaru Primary School
Dogon-Bauchi, Zaria
Mr. Mohammed A. Yusuf

Government Secondary School
Rigachikun
Mr. Yusuf Abubakar - Principal

Rural
Government Secondary School,
Kallah, Kaduna State
Mr A.G. Magaji – Principal
Kano State Ministry of Education

1. Alhaji Sani Abba Sumaila   Chairman PPT
2. Alhaji Usman A. Maaji
3. Hajia Maimuna Khalil

Schools

Urban
Government Senior Secondary School,
Sabuwa Kofa, Kano
Mr. Abdulkhadir Iro - Principal

DanDago Primary School
Kano
Mr. Kabiru Adamu

Semi-Urban
Government Secondary School
Rano, Kano State
Alhaji Muh’d S. Maude - Principal

Government Girls Junior School
Rano, Kano State
Hajia Awa Balarabe Mohammed – School Head

Rural
Government Secondary School,
Dukawa, Kano State
Mr. Isa Shehu – Principal

Dukawa Primary School
Dukawa, Kano State
Mr. Wada Abba – School Head

Kwara State Ministry of Education
1. Mrs. K.A. Adeyemi   Chairperson PPT
2. Mr. J.K. Awolola
3. Mr. Saheed Tunde

Schools

**Urban**
Bishop Smith Secondary School,
Ilorin, Kwara State
Mr. Anafi B.S. – Vice Principal

Bishop Smith Primary School
Ilorin, Kwara State
None

Ilorin Grammar School
Ilorin, Kwara State
Mr. J. Omoniyi – Vice Principal

**Semi-Urban**
Oko-erin Primary School
Oko-erin, Ilorin
Mr. S. Popoola – Assistant Head

**Rural**
Community Secondary School,
Ganmo, Kwara State
Mr Alabi Oluyori – School Teacher