THE WORLD BANK

AFRICAN CENTRE OF EXCELLENCE FOR DRUG RESEARCH, HERBAL MEDICINE DEVELOPMENT AND REGULATORY SCIENCE (ACEDHARS)

FINAL REPORT

FOR

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)
FOR THE PROPOSED CONSTRUCTION OF THE ACEDHARS BUILDING,
UNIVERSITY OF LAGOS, AKOKA

OCTOBER, 2022

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Acronyms and Abbreviations

ACHPR-	African Charter on Human and Peoples' Rights
ACRWC-	African Charter on the Rights and Welfare of the
CAT-	Convention against Torture
CBO-	Community Based Organization
CEDAW-	Convention on the Elimination of All Forms of Discrimination against Women
C-ESMP	Contractors Environmental and Social Management Plan
CoC-	Code of Conduct
CRA-	Child Right Act
CRC-	Convention on the Rights of the Child
CRPD-	Convention on the Rights of Persons with Disabilities
ESHS--	Environmental and Social Health and Safety
ESMF-	Environmental and Social Management Framework
ESMP-	Environmental and Social Management Plan
ESSU-	Environmental and Social Safeguard Unit
ESO	Environmental & Social Officer
FGD-	Focus Group Discussion
FMEnv-	Federal Ministry of Environment
FMF-	Federal Ministry of Finance
FPMU-	Federal Project Management Unit
GBV-	Gender Based Violence
GHGs-	Green House Gases
GRC-	Grievance Redress Committee
GRM-	Grievance Redress Mechanism
GRS-	Grievance Redress Service
HSE-	Health Safety and Environment
ICCPR-	International Covenant on Civil and Political Rights
LGAs-	Local Government Areas
NDHS-	Nigeria Demographic and Health Survey
NESREA-	National Environmental Standards and Regulations Enforcement Agency
NGO-	Non-Governmental Organization
OHS-	Occupational Health and Safety
PAP-	Project Affected Person
PC -	Project Coordinator
PCU	Project Coordination Unit
PIU-	Project Implementation Unit
PDO-	Project Development Objective
PIU-	Project Implementation Unit
PPE-	Personal Protection Equipment
RAP-	Resettlement Action Plan
RPF-	Resettlement Policy Framework
SEA-	Sexual Exploitation and Abuse
SPU-	State Project Unit
TA-	Technical Assistance
TC-	Technical Committee
WB-	World Bank

Executive Summary

ES 1 Introduction

The ACE (Africa Center of Excellence) Impact project was established with a development objective of improving the quality, quantity and development impact of postgraduate education in selected universities through regional specialization and collaboration.

The first ACE Impact Project is supporting 16 ACE centers (referred to as ACEs) and two Emerging Centers of Excellence (Emerging centers) across Burkina Faso, Djibouti, Ghana, Guinea and Senegal. Emerging centers are centers (non-ACE centers) that are selected through a non-competitive process to receive support to strengthen their programs mostly at the undergraduate and master's degree level in a priority field. The Second ACE Impact Project is supporting 23 ACE centers and three Emerging centers across Benin, Niger, Togo, The Gambia and Nigeria. In addition, the French Development Agency (*Agence Française de Développement*, AFD) will finance four ACEs from Cote d'Ivoire and a project implementation unit from within the Ministry of Higher Education of Cote d'Ivoire for national level coordination.

In Nigeria, the ACEDHARS was selected to develop skilled manpower in the utilization of spectroscopic and chromatographic techniques for drug development, Herbal Medicine, pharmacokinetics and drug quality assurance systems to close the skill gaps in toxicology, quality control and pharmacovigilance units of regulatory agencies, drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region. The actual investment for the project activities is $5m.

Methodology

This study commenced with a thorough planning of the environmental and social assessment that involved desk review of documentation (such as the project appraisal document (PAD), Engineering designs and the ESMF), in addition, field visits and stakeholder engagement and consultations were also carried out from 29thApril till 8th May 2022 to enable information gathering & data collection. To facilitate gathering of robust baseline information, environmental media samples of noise, air, water and soil were collected in project area.

ES2 Objectives of the ESMP

An ESMP is required for pre-construction, during construction and post construction phases to assess the environmental and social impacts, which trigger the World Bank's Safeguard Policies including Environmental Assessment OP 4.01 and Public Disclosure OP 17.60.

ES3 Project Description

The location of the ACEDHARS building is at Lat. 6°51' 4161N & Long. 3°39'6721E[1]. The construction of the ACEDHARS building will involve mobilization of equipment, materials and civil works. This ESMP is prepared to identify and address the adverse impacts associated with this proposed civil works under sub-component 1.2 of these development objectives.

ES4 institutional & legal framework for environmental management

The different laws and policies that are applicable to the operationalizing of this ESMP are the National Laws & Policies, State Laws & Policies, World Bank policies and the International treaties and conventions. These are presented in Chapter 1 of this report.

[1] Terms of Reference - TOR

ES5 World Bank Safeguard Policy Triggered

This ESMP has been prepared in compliance with the requirements of the Nigerian EIA laws and the World Bank Safeguard Policies OP 4.01 on Environmental Assessment and the OP 4.11 on physical cultural resources which have been specifically triggered.

ES 6 Safeguard instruments & public disclosure

ACEDHARS will publicly disclose this ESMP, in English, and Yoruba, the local language of Lagos Mainland LGA (where the ACEDHARS building will be situated). As may be required, copies will be made available and distributed with a letter accompanied to local government authorities concerned. This could be done by the following means disclosure by EA Department, Federal Ministry of Environment and publishing it on the project's website, the complete approved ESMP will be made available in easily accessible locations in or near the affected areas. Once disclosed in Nigeria, ACEDHARS will authorize the WB to disclose it on their external website.

ES7 Baseline Environmental & Social Information Environmental

Baseline environmental conditions show that the environmental sensitivities are traffic safety, dust, occupational health and safety concerns, public safety issues that would be encountered from the construction activities on this project. In addition, biophysical media test of surface water showed the presence of *e. coli, salmonella* and *shigella sp* and higher concentrations of Copper (Cu) & Manganese (Mn) than FMEnv acceptable limits, which indicates that surface water in the project area is not suitable for consumption. The social sensitivities would be from the disruptions in access to classrooms within the University of Lagos community, disruptions in mobility to and from public buildings in project area. Furthermore, the socio-economic survey was done in order to collect the baseline information from a sampling frame of individuals in and around the project area from which 51 respondents were selected and interviewed based on simple random sampling. Limitations in respondents was due to the currently on-going academic staff union strike in the university. Details of the socio-economic survey conducted are presented in this ESMP.

ES 8: Potential risks, impact and mitigation measures

The potential positive environmental and social impacts are listed as in Table 5 of this ESMP. These impacts include:

- Deterioration of local air quality due to the emission of dusts & release of Green House Gas emissions (drivers of global warming) from internal combustion engines of construction plant & equipment and alternative power generators
- High demand for power. Use of alternative sources such as generators to ensure steady supply
- Soil contamination
- Threat to community culture, safety and security due to presence of workers
- increasing incidents of crime and or violence and threats to the safety of community members
- Noise and vibration disturbances from operation of heavy-duty vehicles
- Child labour and school drop out
- Water contamination from oils & fuels
- Risk of GBV/SEA and VAC as a result of Labour Influx
- Occupational accidents and injuries to workers and risk to community health and safety
- Increase in spread of Communicable diseases, STDs such as HIV/AIDS and other STIs
- Public safety, road accidents leading to injuries and fatalities

ES 9: Grievance Redress Mechanism

The likelihood of disputes to occur during the sub-project implementation will be reduced because the proposed ACEDHARS project site is located within a university community

and also complementarily, consultations have already been carried out with some of the people in the project area. Nevertheless, in the event that grievances arise this redress mechanism has been prepared. A Grievance Redress Mechanism (GRM) is provided in section 6.6, which is anchored on the need to provide a forum locally to receive, hear and resolve disputes arising from construction activities and ESMP implementation in the best interest of all parties to forestall the lengthy process of litigation, which could affect the progress of project.

ES 10: Indicative Cost for Implementing ESMP

The environmental and social management actions is estimated at Eight Million, Three Hundred and Fifty-Three Thousand, Six Hundred Naira Only (₦8,353,600.00), and a Dollar equivalent of Twenty Thousand, One Hundred and Seventy-Seven Dollars Only ($20,177.00).

ES 11: Stakeholder Consultations

Consultation were conducted with relevant stakeholders with details in chapter 6. The Stakeholders Consultation meeting was carried out from April 29 till May 8, 2022 in and around the project area. Concerns centred mainly on involvement of community in labour work for future projects. Concerns were noted and responses provided by consultant as shown in Table ES1. Consultation with the stakeholders will continue throughout the life cycle of the project.

Table ES1: Issues & Concerns raised & how they were addressed

S/n	Issues raised during consultations	How they were addressed
Issues raised in social gatherings	Some persons showed concerns about dust pollution during construction.	The contractor will put necessary measures in place to mitigate this impact by use of water that will be sprinkled to reduce dust.
Issues raised during meetings with Women	Women feel discriminated as they are less involved in projects, and during employment they are not given as many opportunities as the men.	There will be better sensitization to enable the contractor offer equal opportunities to women, where possible.
Issues raised during meetings with Youths	The youths around the project area have expressed concern about employment opportunities during the project implementation.	Sourcing of local staff from the communities is part of the management plan for labour influx.

ES 12 Recommendation and Conclusion

This ESMP provides in detail the mitigation measures for identified potential adverse impact s and risks associated with the various phases of the project, and a monitoring program to ensure compliance.

The recommendations made include giving priority to skilled and unskilled workers from local communities in the workforce, ensuring that opinions of key stakeholders are integrated into the decisions and also for contractor to carry out adequate sensitization of the workforce towards ensuring that information on non potability of surface water in project area for consumption is disseminated and strictly followed. In concluding, with adequate application of mitigation measures the impacts will be avoided, reduced or mitigated, and in very few cases they may even be offset.

CHAPTER ONE: INTRODUCTION

1.1 Background

The Africa Higher Education Centers of Excellence (ACE) Project is a World Bank initiative in collaboration with governments of participating countries to support Higher Education institutions in specializing in Science, Technology, Engineering and Mathematics (STEM), Environment, Agriculture, applied Social Science / Education and Health. It is the first World Bank project aimed at the capacity building of higher education institutions in Africa.

The first phase (ACE I) was launched in 2014 with 22 Centers of Excellence in nine (9) West and Central African countries; Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Gambia, Ghana, Nigeria, Senegal and Togo. The Project aims to promote regional specialization among participating universities in areas that address specific common regional development challenges. It also aims to strengthen the capacities of these universities to deliver high quality training and applied research as well as meet the demand for skills required for Africa's development. The second phase (ACE II) was launched in East and Southern Africa with 24 centers across Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda and Zambia.

Based on the initial successes, the World Bank and the French Development Agency (AFD) in collaboration with the African governments, launched the ACE Impact Project in 2018 to strengthen post-graduate training and applied research in existing fields and support new fields that are essential for Africa's economic growth. There are 53 ACEs (25 new ones and 18 from ACE I); 5 Emerging Centers;1 "top up" center in Social Risk Management; and 5 Colleges and Schools of Engineering. The new areas include sustainable cities; sustainable power and energy; social sciences and education; transport; population health and policy; herbal medicine development and regulatory sciences; public health; applied informatics and communication; and pastoral production.

In Nigeria, the ACEDHARS was selected to develop skilled manpower in the utilization of spectroscopic and chromatographic techniques for drug development, Herbal Medicine, pharmacokinetics and drug quality assurance systems to close the skill gaps in toxicology, quality control and pharmacovigilance units of regulatory agencies, drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region. The actual investment for the project activities is $5m. Specifically, the following activities are the project focus:

i. Construction of new building to accommodate ACEDHARS building.
ii. Procure relevant equipment and facilities for ACEDHARS.
iii. Develop skilled manpower in the utilization of contemporary techniques for drug development.
iv. Herbal Medicine, pharmacokinetics and drug quality assurance systems
v. Engendering drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region
vi. Development of pharmacovigilance units of regulatory agencies
vii. Development of entrepreneurial skills for members

viii. Establish a university-affiliated Technical and Business Training and Mentoring Institute. in the center to bridge the enormous dearth of critical industry-level manpower.
ix. Invite Experts and visiting Professors to mentor Postgraduate students.
x. Improve faculty and students research capacity and expertise through outreach programs
xi. Increase subscription to selected databases and journals
Engage in patenting of research innovations among others

1.2 Rationale for this Study

An ESMP is required for pre-construction, during construction and post construction phases to assess the environmental and social impacts, which trigger the World Bank's Safeguard Policies including Environmental Assessment OP 4.01 and Public Disclosure OP 17.60. The project would have environmental and social impacts and the ESMP would proffer adequate mitigation measures for these identified impacts. It would also identify key roles and responsibilities in implementing the ESMP as well as identifying monitoring schedules and indicators. The ESMP is a requirement of the World Bank Safeguard Policies as well as the Nigeria EIA Act Cap E12 LFN 2004 on any construction that would have significant impact on the environment.

1.2.1 Scope of ESMP

The identified sub-project is classified as **category "B"** project according to the World Bank categorization and a category II project according to the FMEnv categorization. This means the potential impacts associated with this project are expected to be site specific, reversible and easily mitigated. This ESMP provides an overview of the environmental and social baseline conditions of the proposed sub-project site, summarizes the potential impacts associated with the proposed construction works and sets out the management measures required to mitigate any potential impacts in a sector specific Environmental & Social Management Plan (ESMP).

1.3 Applicable Environment and Social Safeguards issues

Nigerian EIA laws and the World Bank Environmental and Social Safeguard Policies have been triggered by the activities of this project due to the anticipated construction & civil works. Consequently, this ESMP has been prepared in compliance with the requirements of the Nigerian EIA laws and the World Bank Safeguard Policies OP 4.01 on Environmental Assessment and the OP 4.11 on physical cultural resources which have been specifically triggered.

1.4 Study Methodology

This study commenced with a thorough planning of the environmental and social assessment that involved desk review of documentation (such as the project appraisal document (PAD), Engineering designs and the ESMF etc.), in addition to field visits and stakeholder engagement and consultations that were also carried out from 29thApril till 8th May 2022 to enable information gathering & data collection. To further underpin the process for gathering of robust baseline information, environmental media samples of noise, air, water and soil were collected in project area. Complementarily, a socio-economic survey was also carried out and the approach adopted involved a combination of the following:

- Questionnaire administration for data collection on existing livelihood opportunities, income, gender characteristics, age profile, health, transport access
- Focus group discussion (FGD) was conducted to obtain information about the analysis of existing formal and informal grievance redress mechanisms, the fears and expectations of the people
- Key informant interviews to elicit in-depth information about community structure, norms and values, among others

This methodology has enabled the identification of environmental and social sensitivities associated with this sub project and has facilitated the preparation of mitigation measures aimed at eliminating or minimizing adverse environmental and social impacts of specific actions, projects or programs while also enhancing positive effects. The approach to mitigation has been to primarily engage the preventive principles of anticipated impacts based on well-known negative outcomes of project-environment interactions.

1.5 Applicable Laws and International Regulatory Framework

The Environmental & Social Management Framework (ESMF) provides a review of the applicable local laws, regulations, policies and procedures on land acquisition and resettlement. Essentially, here, the Nigeria EIA Act Cap E12 LFN 2004 on any construction that would have significant impact on the environment has guided the preparation of this ESMP. With regards to identification and categorization of the different types of impacts, the gaps between Nigerian law and OP 4.01 will be bridged by the measures already identified in the ESMF for the ACE. The relevant federal /State policies and legislations are presented in Table 1.

Table 1: Relevant Federal/State Policies, Legislations, Regulations & Guidelines

S/N	Policy Instrument	Year	Provisions
1	National Policy on the Environment	1989 revised 2016	Describes the conceptual framework and strategies for achieving the overall goal of sustainable development in Nigeria.
Legal/Regulatory Instrument			
2.	Environmental Impact Assessment (EIA) Act No. 86	1992	Provide guidelines for activities of developmental projects for which EIA is mandatory in Nigeria. The Act also stipulates the minimum content of an EIA as well as a schedule of projects, which require mandatory EIAs.
3.	Land Use Act	1978	The Act vests all land comprised in the territory of each state in the Federation in the Governor of the state and requires that such land shall be held in trust and administered for the use and common benefit of all Nigerians in accordance with the provisions of the Act.
4.	Forestry Act	1994	Provides for the preservation of forests and the setting up of forest reserves.

S/N	Policy Instrument	Year	Provisions
5.	Endangered Species Act	1985	Provides for the conservation and management of Nigeria's wildlife and the protection of some of her endangered species in danger of extinction as a result of over-exploitation
6.	FEPA/FMEnv EIA Procedural Guidelines	1995	The Procedural Guidelines indicate the steps to be followed in the EIA process from project conception to commissioning in order to ensure that the project is implemented with maximum consideration for the environment.
7.	National Guideline and Standard for Environmental Pollution Control	1991	Provide guidelines for management of pollution control measures
8.	S.I.15 National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations	1991	Regulates the legal framework for the effective control of the disposal of toxic and hazardous waste into any environment within the confines of Nigeria.
9.	Urban and Regional Planning Decree No. 88	1992	Planned development of urban areas (to include and manage waste on site).
10.	Workmen Compensation Act	1987 reviewed 2010	Occupational Health and Safety
11.	Child Rights Act	Act No. 26 of 2003	Best interests of a child are to be paramount in all actions and clearly states the rights of the child.
12.	Lagos State Environmental Law	2017	Making and enforcing environmental and health polices and laws

1.5.1 International Treaties and Conventions on Environment

Some of the international Treaties and Conventions on environment to which Nigeria is a party are summarized in Table 2.

Table 2: International Treaties and Conventions on Environment to which Nigeria is a Party

S/N	Treaties and Conventions	Year	Agreement
1.	The United Nations Environmental Guidance Principles	1972	Provide guidelines for protecting the integrity of the global environment and the development system
2.	Montreal Protocol on Substances that deplete the Ozone Layer	1987	An international treaty to eliminate Ozone depleting chemical production and consumption.

S/N	Treaties and Conventions	Year	Agreement
3.	United Nations Convention on Biological Diversity	1992	Places general obligations on countries to observe sustainable use and equitably share the plants and animals of the earth
4.	United Nations Framework Convention on Climate Change	1994	It calls on developed countries and economies to limit her emissions of the greenhouse gases which cause global warming
5.	Convention on International Trade in Endangered Species of Wild Fauna and Flora	1973	Restricts the trade of fauna and flora species termed as endangered Species
6.	Convention on Conservation of Migratory species of Wild animals (Bonn Convention)	1979	Stipulates actions for the conservation and management of migratory species including habitat conservation
7.	Vienna Convention for the Protection of the Ozone Layer	1985	Places general obligation on countries to make appropriate measures to protect human health and the environment against adverse effects resulting from human activities, which tend to modify the ozone layer.

1.5.2 Gender-Based Violence (GBV)

Nigeria has ratified or consented to the core international human rights treaties and is a party to the major regional human rights instrument which obliged States to respect, protect and fulfill human rights of all persons within the territory and subject to the jurisdiction of the State, without discrimination. Rape may violate several human rights obligations enshrined in the instruments ratified by Nigeria and is also a form of gender-based violence and manifestation of violence against women. As a State party to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the "Maputo Protocol"), Nigeria has made legally binding commitments to exercise due diligence to combat gender-based violence and discrimination.

1.5.2.1 International Treaties Relevant to GBV

- The International Covenant on Civil and Political Rights (ICCPR) (2004)
- The International Covenant on Economic, Social and Cultural Rights (ICESCR) (2004)
- The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) (1993)
- The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1984)
- The Convention on the Rights of the Child (CRC) (1990), and the Convention on the Rights of Persons with Disabilities (CRPD) (2012)

- International Convention on the Elimination of All Forms of Racial Discrimination (1976)

1.5.2.2 Regional Treaties Relevant to GBV

- The African Charter on Human and Peoples' Rights (ACHPR) (1982)
- The African Charter on the Rights and Welfare of the Child (ACRWC) (2007)
- The Protocol to the ACHPR on the Rights of Women in Africa (the "Maputo Protocol") (2007).

1.5.2.3 National Polices Relevant to GBV

- The National Action Plan for the Implementation of United Nations Security Council Resolution 1325 (2009)
- The National Gender Policy (2010)

1.5.3 International Treaties Relevant to Social Protection

Some relevant international treaties on social protection include:

- The International Covenant on Civil and Political Rights (ICCPR) (2004)
- The International Covenant on Economic, Social and Cultural Rights (ICESCR) (2004)
- The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT) (1993)
- The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1984)
- The Convention on the Rights of Persons with Disabilities (CRPD) (2012)
- International Convention on the Elimination of All Forms of Racial Discrimination (1976)

CHAPTER TWO: PROJECT DESCRIPTION

2.1 Description of the ACEDHARS

ACE centers aims to recruit a high-quality regional student body and work towards: producing a highly trained workforce with skills tailored to the needs of the sector(s) they serve; partnering with industry and sector stakeholders to identify regional needs; and disseminating research results both in international publications and through appropriate regional channels. The ACE center of the University of Lagos; ACEDHARS, is an interdisciplinary postgraduate education center offering M.Sc. and Ph.D. programs in Herbal Drug Standardization, Drug Development, Toxicology, Regulatory Science and Pharmacovigilance and it aims at developing skilled manpower in the utilization of spectroscopic and chromatographic techniques for drug development, Herbal Medicine, pharmacokinetics and drug quality assurance systems to close the skill gaps in toxicology, quality control and pharmacovigilance units of regulatory agencies, drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region. The center is poised to harness the abundant natural plant resources in the region into herbal products for sustainable utilization.

2.2 Project Components

The project components are:

Component 1: Establishing new Africa Centers of Excellence and scaling up well-performing existing Africa Centers of Excellence (ACEs) for development impact.

Sub-component 1.1 will establish new centers of excellence for skills and knowledge for development challenges.

Sub-component 1.2: Scaling up well-performing ACEs: This sub-component will provide additional funding and support to approximately 12 existing ACEs (currently supported through ACE I) to enable them to scale-up their activities.

Sub-component 1.3 Additional support to the best Engineering and Technology ACE institutions: Institutions will be selected to host an engineering and technology-focused ACE Impact center with capacity in other engineering and technology disciplines.

Component 2: Regional partnerships & scholarship. Component 2 seeks to expand the regional scope of impact of the ACEs funded under Component 1 by providing demand-side funding for partnering institutions and regional students to buy the training and services from the ACEs that are most relevant:

Component 3: Enhancing Regional Policymaking, Monitoring, and Facilitation. Component 3 will support regional policymaking for higher education and regional project monitoring and facilitation.

Consequently, this ESMP is prepared to identify and address the adverse impacts associated with this proposed civil works under sub-component 1.2 of these development objectives. The ACEDHARS in compliance with the

requirements of the Nigerian EIA laws and the World Bank Safeguard Policies OP 4.01 on Environmental Assessment which is triggered on this project.

2.3 Description of the Scope of Works

The activities that will be carried out according to the scope of works is presented in Table 3.

Table 3: Project activities by phases

Project Phases	Activities
Preconstruction Phase Activities	Preconstruction phase activities include among others: Establishing of site office Mobilization of workforce Removal of trees and vegetation Assessment of existing project location, selection of beneficiary institutions, field studies and environmental screening; Preparation of environmental and social screening reports; Statutory permitting activities from Lagos State Local Government Mainland Authorities/ACEDHARS
Construction Phase Activities	Construction phase activities include among others: Earthworks Groundworks Setting out Mobilization of equipment, materials and personnel to site Identification of storage area for construction material; Transportation and handling of materials and equipment; Civil & Construction Works on sub-structure and superstructure; Carpentry, roofing, plumbing & electrical activities Excavation of trenches and drainage Construction of waste bin bays (where applicable); and Disposal of construction waste/rubble and waste in general.
Operations and Maintenance Phase Activities	Operations and maintenance phase activities include: Housekeeping; Waste management (collection and disposal); Maintenance and repair works; and Materials management and storage (including personal protective equipment, etc.).
Demobilization Phase	Removal of construction equipment; Disposal of construction spoil and waste in general; Dismantling of temporary work camp of the contractor; and Waste management.

2.4 Description of proposed ACEDHARS Building site

The location of the proposed site is presented the satellite imagery of this building shown in Figure 1, while Figures 2, and 3 show the architectural design of the proposed building.

Figure 1: Satellite imagery of proposed ACEHDHARS building

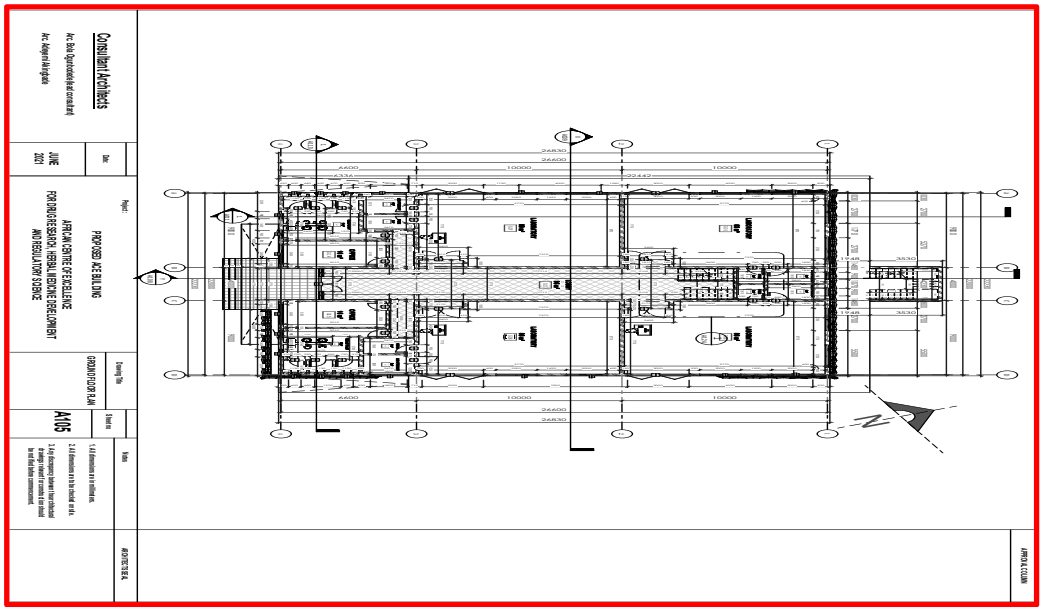

Figure 2: Ground floor plan of ACEHDHARS building

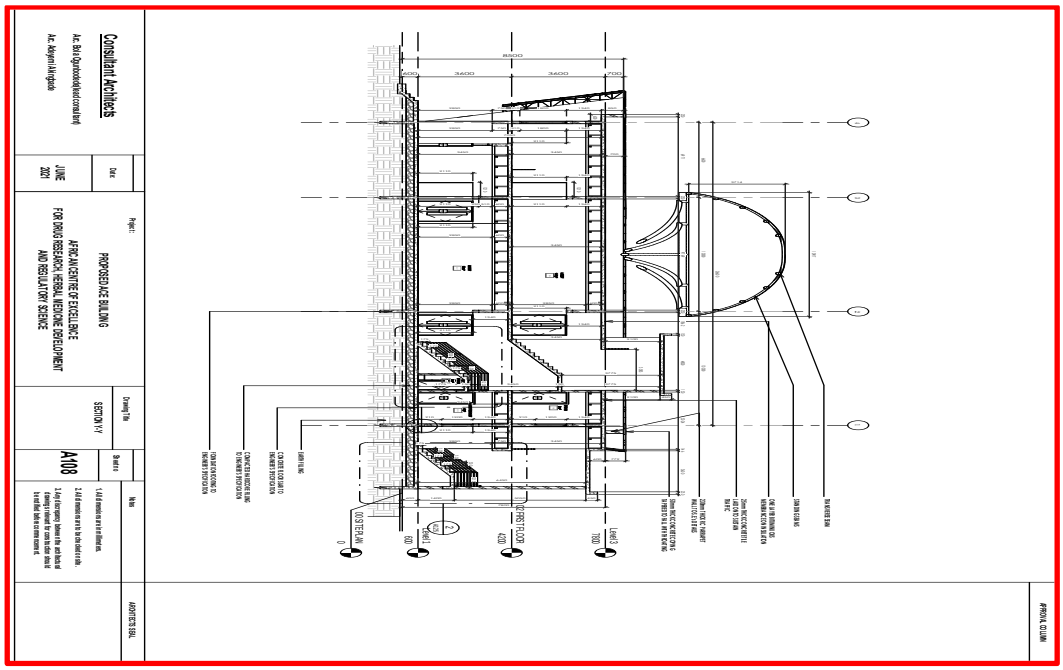

Figure 3: Section Y-Y design of ACEHDHARS building

2.3.2 Material Sourcing

Naturally occurring construction materials such as water, sand and aggregates are available in the project area and where applicable, approvals may be required for some of the materials, such as water, to be sourced from project area.

2.3.3 Staging Area and Base Camp

The ACEDHARS Headquarters is located between Lat. 6°51' 4161''N & Long. 3°39'6721E. The potential impacts that may be associated with the sighting and operation of the camp have been identified alongside mitigation measures and included in the ESMP.

CHAPTER THREE: BIOPHYSICAL & SOCIO-ECONOMIC CHARACTERISTICS

3.1 Location of the project area

The project area is in University of Lagos (Unilag), situated in Lagos State, Nigeria, West Africa. The State is located in the South Western geopolitical Zone of Nigeria and is bordered to the North by Kwara State, to the North East by Kogi State and to the South West and South East by Osun and Ondo States, respectively. Map of the University of Lagos, in the Lagos Mainland LGA, is presented in Figure 4 and the location of the proposed ACEDHARS building site at latitude Lat. 6°51' 4161''N & Long. 3°39'6721E in the Lagos Mainland LGA (Figure 5).

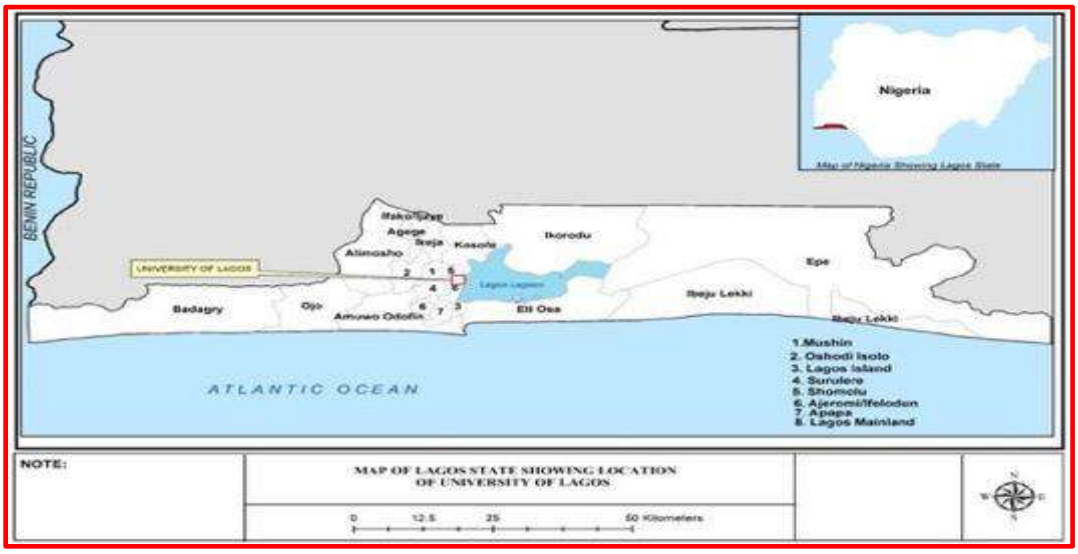

Figure 4: Map of Nigeria showing Lagos State
Source: Cartography & GIS section, INEC

Figure 5: Map of Lagos Mainland LGA showing University of Lagos
Source: Cartography & GIS section, INEC

3.2 Site Specific Environmental and Social Conditions

The site visit revealed some environmental and social features within the project area. These are highlighted in the Table 4 and Figure 6 show some of the pictures of project site.

Table 4: Baseline Environmental & Social Conditions of sub-projects

Location/ Community	Geo Coordinates	Description
ACEDHARS Project Site	6°51'4161N 3°39'6721E	**Environmental**
		Safety (HSE) Removal of trees and vegetation can cause incidents and accidents in the workplace if not properly carried out
		Waste Generation of debris and construction waste from project site
		Drainage Potential siltation of nearby drainage basin from deposits of eroded material from work site.
		Vegetation Removal of vegetation and bush clearing triggering potential erosion issues
		Social
		Disruption in utilities Removal of water pipes and potential disruption in supply.

Figure 6: Pictures of ACEDHARS HQ project site

3.3 Overview of ACEDHARS Physical Environment

The proposed ACEDHARS site is located inside the University of Lagos Akoka campus. This site has a land area of 1554.639 sqm; the proposed building area is 624.676 sqm; area of unbuilt space is 929.963sqm. The proposed site is behind the engineering building and bordered by a road (Tafawa Balewa way) and Botany departments Jathrophat Research farm by the drainage. It lies on the south-east end of the campus and stretches toward the Lagos Lagoon.

3.3.1 Climate

The Climate of the ACEDHARS project area is tropical and is hot for a major part of the year with a dry season between November and March, while the rainy season is from April till October making the weather a wet one for about

half the time. Climate is largely influenced by two wind systems, the southwesterly (SW) monsoon winds and the northeasterly winds.

3.3.2 Temperature

Temperature in the project area exerts considerable impact on the micro-climatic regimes. These areas experience a tropical climate largely influenced by the two dominant air masses of the dry wind from the Sahara and the wet from the Atlantic Ocean. Diurnal temperatures are high with an average temperature of 26.7 °C[2]. The lowest mean is recorded in January, and the highest is recorded in the month of June.

3.3.3 Rainfall

Rainfall is the single most important element for defining the climatic seasons of Lagos. Hence, the project area has two dominant seasons; the rainy season (April to October) and in recent times, a not too distinct dry season (November to March). Also, the climate is largely influenced by the close proximity of the project area to the Atlantic Ocean which is evident in the climatic conditions experienced.

3.3.4 Drainage

The project area is dominated by swamp forest vegetation and wetlands comprising of fresh water and mangrove. Water and wetlands cover about 40% of the total landmass of the state. (Soladoye and Ajibade, 2014). To the North & south-east of the campus lies the brackish Lagos Lagoon water supporting terrestrial habitat while the west of the campus lies the fresh water where the soil is very rich and support this kind of freshwater swamp vegetation (Nodaza et al 2014). The water table is high as a result of this coastal environment. Run-off from heavy rainfall drains directly into these water bodies.

3.4 Biological Environment

3.4.1 Flora

Flora in the project area is consistent with vegetation of the lowland tropical rainforest. Some the trees identified here includes *Annona nuricata* (soursop), *Persea Americana* (avocado tree.), *Bambusa volgaris* (bamboo plant). The grasses seen are *Penicum sabalbidum*, Ipomoea aquatic, *Penicum maximum* and Sledges. The crops that occupy the farm closest to the site are *Manihot esculenta* (cassava plant), *Musa paradisiaca* (plantain), *Vernonia amygdalina* (bitter leaf plant), *Colocasia esculenta* (cocoyam) and *Dioscorea villosa* (wild yam, Esuru).

3.4.2 Fauna

Fauna observed in the project area comprised mainly of birds (pigeons, kingfishers), bats, rats, squirrels and mona monkeys (*Cercopithecus mona*).

3.5 Environmental Quality Assessment

This section contains the results of analysis of one-season environmental media samples; two soil samples for topsoil and subsoil, and two water samples for surface water & groundwater, obtained from project site, thereafter tested to determine air, soil & water quality comprising results of analysis of air, soil and water samples taken. Samples were collected on the 2nd of May 2022 and

[2] Climate Data.Org

subsequent analysis of samples were undertaken at the laboratory of the Lagos State Environmental Protection Agency (LASEPA) as presented in Annex 13.

3.5.1 Air quality

Air quality assessment was conducted using MSA ALTAIR® 5x Multi Gas detector. All values of major air quality parameters were within FMEnv limits. The air quality levels from samples taken at five locations each for the samples taken from the project area were assessed and the outcome of the air quality tests showed that values were below the FMEnv standards for all the parameters considered (SPM, CO, NO_2, PPM, VOC).

3.5.2 Water quality

The direct sampling techniques were applied for collection of water samples inside new 500ml sample bottle containers washed with distilled water & stored in sample bag at the laboratory as preparation for the sample collection. At the site, surface water was collected by submerging the sample bottle in surface water, (fully immersed in water to avoid air bubbles in the bottle) to collect the water. Sample bottles were labelled accordingly, while ground water was sampled by placing the prepared sample bottle directly from water taps connected to a borehole.

Determination of trace elements and heavy metals were done on the digest using Flame Atomic Absorption Spectrophotometer (FAAS) with Air/ Acetylene flame. For the non-metals and anions analysis, water was filtered through 0.45 microns filter, appropriate reagent added to specify measured volume of water. Analysis for anions were done using LAMBDAXL/XLS model UV-VS Spectrophotometer.

3.5.3 Soil quality

Grab samples of Topsoil were collected using a new shovel to avoid contamination from previous sites. Topsoil was collected between 1 – 15cm depth while sub soil was collected at depth of between 15 – 30cm. The grabbed sample of soil using shovel were wrapped in black polyethene bag, labelled accordingly. Samples were subsequently air dried at room temperature for two weeks. Stones and other extraneous constituents were picked out with hand and the soil samples were then crushed with mortar and pestle. Crushed soil samples were wrapped in foil paper, labelled and stored in desiccator while the analysis began immediately. Soil extract were obtained through leaching of measured quantity required for determining specific soil parameter. Extractable cations were determined using Flame Atomic Absorption Spectrophotometer (FAAS). Dispersion and Hydrometer test methods were used for the particle size analysis. The summary of the biophysical assessment carried out is presented in Table 5.

Table 5: Baseline biophysical assessment of project area

Environmental Legislation	Compliance review within FMEnv Limits			Baseline environmental assessment
	Applicability due to	Yes	No	
Air Quality. (i)Environmental Impact Assessment (EIA) Act No. 86	Emissions of dust and suspended particulate	**X**		*Concentrations of particulate range from 6mg/ml to 4mg/m^3, CO

Environmental Legislation	Compliance review within FMEnv Limits			Baseline environmental assessment
	Applicability due to	**Yes**	**No**	
(ii)The National Environmental Standards and Regulations Enforcement Agency Act 2007 (NESREA Act) (Air Quality Control) Regulations, S.I. No. 64, 2014. (iii)National Air Quality Standard Decree No. 59 of 1991	matter in project area			ranges from 2-9ppm, which was within acceptable limits.
Noise (i)NESREA National Environmental (Quarrying & Blasting) Regulations, S.I. No. 33, 2013. (ii)National Environmental (Noise Standards and Control) Regulations S.I. No. 35, 2009.	Noise from use of from use of generators and vehicular traffic in project area.	**X**		*The average noise levels taken in the project area showed mean noise values was 31.37 dB (A), which is still below the FMEnv limit.
Soil Quality (i)Environmental Impact Assessment (EIA) Act No. 86 (ii)The National Guidelines and Standards for Environmental Pollution Control in Nigeria (1991)	Soil in project area.	**X**		*ECEC value for topsoil is higher than FMEnv value of 5.0 cmol/kg while that of sub soil is below the maximum value specify for FMEnv. *Microorganism in the soil within the proposed site were all below the FMEnv maximum limit
Water Quality (i)Environmental Impact Assessment (EIA) Act No. 8. (ii)National Environmental (Groundwater and Surface Water Control) Regulations, S.I. No. 22, 2011	Physico-chemical characteristics of water in project area.		**X**	*DO, TDS and COD levels in water were all below FMEnv limits. * E. Coli spp. was absent in ground water and present in surface water *Salmonella spp. was absent in ground water and present in surface water. *Shigella spp. was absent in ground water and present in surface water.

Source: Field survey, May 2022

3.5 Social Environment

The socio-economic study was for collection of baseline data within the targeted areas, thereby enabling the social assessment of intervention beneficiaries, potentially project affected populations/communities and identify potential project affected persons.

3.5.1 Population

Lagos Mainland LGA is made up of Ebute Metta, Mushin, Surulere & Yaba and the population of Lagos Mainland LGA is put at 479,842 inhabitants.

3.5.2 Poverty & Inequality in Project Area

The National Bureau of Statistics (NBS) in 2019 reported a poverty headcount rate of 4.5 with a poverty gap index of 0.67 for the project area.

3.5.3 Adult Literacy Level

According to the National Literacy Survey of 2010, the project area has the highest adult literacy level in Nigeria. Literacy levels in English stood at 80.5 and 87.7 percent for other languages, while youth literacy was even higher at 95.1 and 96.5 percent, respectively.

3.5.4 Ethnic Composition

The project area consists mostly of people of Yoruba origin, which in turn have three sub-ethnic groups:

- The Awori in Lagos (Eko), Ikeja and parts of Badagry Division
- The Ogu in Badagry
- The Ijebu in Ikorodu and Epe Divisions respectively, with pockets of Lagos Awori population in the coastal areas

3.5.5 Description of the Socio-economic Environment

Socio-economic survey was done in order to collect the baseline information from a sampling frame of individuals in and around the project area from which 51 respondents were selected and interviewed based on simple random sampling. Limitations in respondents was due to the academic staff union strike currently on going in the university.

To achieve the objectives of the study the approach adopted involved a combination of the following:

- Questionnaire administration for data collection on existing livelihood opportunities, income, gender characteristics, age profile, health, transport access
- Focus group discussion (FGD) was conducted to obtain information about the analysis of existing formal and informal grievance redress mechanisms, the fears and expectations of the people
- Key informant interviews to elicit in-depth information about community structure, norms and values, among others

A summary of socio-economic survey carried out in the project areas is summarized in the Table 6.

Table 6: Socioeconomic characteristics of Project Area

Description	Category	No	Percentage	Remarks
Age	18-30	14	28.0	This reveals that more than half of the persons interviewed are in the productive age band of between 18-50yrs (65%) and so offers a labour pool from which contractors can source for workers for the sub-projects.
	31-50	19	37.0	
	51-70	17	33.0	
	71+	1	2.0	
Length of Stay in Community	From Birth	27	54.0	This implies that with 85.7% of respondents have lived in the project area for over 10 years;
	Above 15 years	15	29.0	

Description	Category	No	Percentage	Remarks
	10-14 years	2	44.0	there is every tendency that they will be familiar with environmental and social challenges facing their communities.
	5-9 years	5	10.0	
	Below 5 years	2	3.0	
Occupation	Public sector	13	25.0	This suggests that two-thirds (75%) are either farmers, traders or self-employed and this sub-project will boost the local and national economy by creating opportunities for suppliers & vendors
	Fishermen	1	2.0	
	Farmers	2	4.0	
	Self employed	32	64.0	
	Traders	3	5.0	
Income Level (weekly)	Below 500	10	20.0	This implies that an improvement in the local economy will further enhance the earning capacity & income of persons in the project area.
	500-900	8	15.0	
	1000-5000	12	24.0	
	6000-10000	5	9.0	
	11,000 +	16	32.0	
Household Size	10+	22	44.0	Almost all the families interviewed (95%) have a size larger than 4+. This implies that the sub-project will have significant impact on the persons in these family units.
	7-9	15	30.0	
	4-6	11	21.0	
	1-3	3	5.0	
Educational Level	Tertiary	11	22.0	Over half of the persons interviewed have formal education (76%), while approximately fraction (5%) have Islamic studies background and therefore consultation strategy for this construction work will take this into consideration when planning future engagements.
	WASC/SSCE	8	15.0	
	Higher Certificate	12	24.0	
	Primary Studies	5	10.0	
	Islamic school	3	5.0	
	FSLC/non-formal	12	24.0	

Source: Field Survey, April 2022

CHAPTER FOUR: ASSESSMENT OF THE POTENTIAL E&S IMPACTS

4.0 Impacts Assessment Methodology

To ensure environmental and social performance of the entire sub-project, this impact assessment methodology focuses on the tools if impact identification, impact prediction and the mitigation of potential adverse impacts identified associated with the various phases of the project. Identified impacts that would be associated with this intervention have been classified to occur in four (4) phases for the lifespan of the works.

The phases include:

- Preconstruction phase
- Construction phase
- Operational and Maintenance phase
- Demobilization phase

4.1 Screening of environmental & social impacts

The objective of screening is to determine the appropriate level of environmental and social impact assessment and management for a proposed subproject. The Environmental and Social screening process characterizes sub-projects and activities that will require thorough environmental review to prevent/mitigate negative environmental impacts or those which will provide opportunities to enhance positive impacts. The World Bank's safeguard policies emphasize preference for preventive measures over mitigation or compensatory measures, whenever feasible (Para 2, OP 4.01). Specifically, the mitigation hierarchy embraces a 4-step process, outlined as follows:

Step I: Anticipate and avoid risks and impacts;
Step II: Where avoidance is not possible, minimize risks and impacts;
Step III: Once risks and impacts have been minimized, mitigate; and
Step IV: Where residual risks or impacts remain, compensate for or offset, as appropriate.

This potential site for the ACEDHARS building intervention have been screened for Environmental and Social (E&S) impacts prior to approval. The screening process included a robust assessment of the project to determine:

1. The appropriate project categorization EA;
2. Applicable World Bank environmental and social safeguards;
3. Potential for environmental and social liability; and
4. Cultural or other sensitivities

Potential negative environmental impacts as captured in the ESMF[3] shows E&S risks between low to moderate levels to include mainly impacts on air quality, soil quality, noise levels, water quality, waste, security and occupational health and safety (OHS), while social impacts include risks of labour influx, child labour, sexual exploitation and abuse and GBV. These are identified with appropriate mitigation measures proffered in the next chapter of this report.

4.2 Potential Impact of the proposed project activities

The rehabilitation work on the ACEDHARS building sub-project will have environmental and social impacts, which may be negative or positive. Some of the potential positive and negative impacts are discussed in the subsequent sections.

[3] ACE Impact ESMF Chapter V (page 14), Table 1 (page 18)

4.2.1 Identification of Potential Positive Impacts

In the course of the E&S assessment carried out for building construction, both positive and negative dimensions of project-attributable impacts were identified. A detailed impact analysis is useful for the purpose of optimizing project benefits and reducing harmful impacts of interventions. Provided in Table 7 are the positive impacts associated with this building intervention. The potential positive environmental impacts are as shown in Table 7.

Table 7: Potentially Positive Impacts

No.	Phase	Impact	Key receptor(s)	Evaluation
1.	Pre-construction/ Construction/ Operations phase (entire project lifecycle)	Stakeholders' engagement	Neighboring communities, LGA and national economy	Improvement in public perception of the ACEDHARS project and enhancing of public knowledge on advantages of drug development process.
2.	Construction (works) phase	Slow down potential erosion in the project area	University community	The proposed project when completed will deliver these benefits: *Reduce erosion forces of in the area as it abuts the lagoon thereby contributing to decrease in long-term slope instability
3.	Construction (works) phase	Employment generation	Community members	*The proposed construction sub-project activities will create employment opportunities for skilled and unskilled labour during the construction and operational phases. Also, there are indirect employment opportunities such as food vendors, petty traders and suppliers of raw materials for construction. During the operational phase, job opportunities will be created for maintenance workers and suppliers, waste management companies, etc.
4.	Operation phase	Develop skilled manpower in utilization of spectroscopic and chromatographic techniques for drug development, Herbal Medicine, pharmacokinetics and	National economy/health sector	Closing of skill gaps in toxicology, quality control and pharmacovigilance units of regulatory agencies, drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region. Promote awareness on the environmental and social issues of project activities, respect for the environment and the key principles of sustainable development

No.	Phase	Impact	Key receptor(s)	Evaluation
		drug quality assurance systems		
5.	Operations phase	Improvement in local university environment and national economy	Neighboring communities, LGA and national economy	*The creation of direct and indirect job opportunities during the construction and operational phases of the project will boost the local university and national economy *Increased opportunities for easy inter-state movement and business development.
6.	Operations phase	Improvement in management of resources	Neighboring communities, State Government, MDAs	Provision of a lead way to drive the State Government towards ensuring improved infrastructure
7.	Operations phase	Capacity building and strengthening of institutions	State Government, MDAs	Capacity building through: Strengthening of facility rehabilitation works and supervision systems of personnel involved in sub-project activities, including improvement in institutional responsibilities for construction and maintenance. Transfer of skills

4.2.2 Potential Adverse Environmental Impacts

Implementation of this sub-project would exert some negative impacts on the social and physical environment within the community, in which they are implemented. The potentially adverse impacts that would result from the project are expected to be site-specific, non-cumulative, low to moderate in risk and relatively easy to mitigate to acceptable levels. The type of E&S risks and impacts have already been established in the checklist provided in Table 1 of the ACE ESMF (E&S risks and mitigating measures)[4] and have guided the process of identifying the adverse impacts associated with this sub-project, which are presented in Table 8.

Table 8: Potential Adverse Environmental & Social Impacts

Potential Adverse Impacts			
Environmental		**Social Impacts**	
Environmental Parameters	**Impact**	**Social Parameters**	**Impact**
air quality – Air quality deterioration	Deterioration of local air quality due to the emission of dusts & release of Green House Gas emissions (drivers of global	**Siting of Staging area**	Unauthorized movements of construction workers, construction equipment, machinery and heavy-duty vehicles (during and after working hours)

[4] ESMF section V7, page 18.

Dust	warming) from internal combustion engines of construction plant & equipment	**Power demand staging area/site office**	High demand for power. Use of alternative sources such as generators to ensure steady supply
soil quality	Soil contamination Loss of vegetation, removal of trees and shrubs and habitat destruction	**Labour influx**	Threat to community culture, safety and security due to presence of workers increasing incidents of crime and or violence and threats to the safety of community members
noise levels	Noise and vibration disturbances from operation of heavy-duty vehicles	**Child Labour**	Child labour and school drop out
water quality	Water contamination from oils & fuels	**GBV**	Risk of GBV/SEA and VAC as a result of Labour Influx
Occupational health and safety	Occupational accidents and injuries to workers and risk to community health and safety	**STDs, HIV/AIDS, STIs**	Increase in spread of Communicable diseases, STDs such as HIV/AIDS and other STIs
Public Health and Safety	Public safety, road accidents leading to injuries and fatalities		
Waste	Generation of construction waste including spoils, debris and concrete	**COVID-19**	spread and transmission of COVID-19

CHAPTER FIVE: ENVIRONMENTAL IMPACT MITIGATION AND MONITORING PLAN

5.1 Background

The project is envisaged to be of significant benefit to the beneficiaries, Lagos State and the country at large. The scale of the subproject is such that severe negative impacts are not anticipated. The negative environmental and social impacts will be localized in spatial extent, short in duration and can be reduced or minimized through compliance with the implementation of the appropriate mitigation measures contained in Table 9.

Table 9: Environmental and Social Management and Monitoring Plan

No	Project Activity	Potential Impact	Proposed Mitigation Measures/ Actions	Responsibility for mitigation	Cost of Mitigation (NGN)	Parameters to be Measured	Method of Measurement	Performance Indicator	Frequency & Location of Monitoring	Responsibility for Monitoring	Cost of Monitoring (NGN)
I. Pre-Construction Phase											
A. Environmental											
1.	Mobilization of equipment for ACEDHARS HQ construction works Use of P&E in the construction phase	Deterioration of local air quality due to the generation of dust & emissions from machines & equipment Noise and vibration Traffic congestion and risk of road traffic around project site.	Maintain equipment & machinery to manufacturers' specifications by regular servicing to reduce carbon emissions. Use water to wet active areas for dust suppression. Conduct regular visual inspection of dust pollution and ensure appropriate intervention if dust levels are high. Train drivers/ workers on proper operation of vehicles and equipment to include fuel efficiency and anti-idling. Ensure no burning of waste on sites Use of tarpaulins to cover trucks transporting earth materials or spoils Ensure rehabilitation of disturbed areas once completed Select and use vehicles/equipment with lower sound power levels. Install suitable mufflers on engine exhausts and compressor components. Enforce appropriate speed limit to reduce vehicle noise levels. Restrict noise-generating activities strictly to normal working hours (i.e. 9am – 5pm).	Contractor	500,000	Air quality parameters (CO, NO_2, SO_2, CO_2, SPM) Maintenance records Driver's training records Usage of appropriate PPE Noise level test (Not to exceed 80dB(A) for 8 hours working period	In-situ measurement. Visual observation of records & interviews	FMEnv permissible limit Noise level at sensitive receptors not to exceed FMEnv	Weekly in the surrounding communities Weekly at Construction site and nearby communities	Environmental & Social Safeguard Officers, Lagos State Ministry of Environment (LSME)	600,000 25,000

		Public safety, road accidents leading to injuries and fatalities	*Ensure road traffic signages and signalers are on duty to prevent over speeding			Usage of appropriate PPE	In situ measurement	recommended level (90 dBA) for an 8-hour period			
2	Site clearing for staging area Mobilization of Machinery, Plant & Equipment Use of tools – saws, hammers, cutting discs, blades etc.	Occupational accidents and injuries to workers and risk to community health and safety Exposure to and transmission of COVID-19	Develop and implement a project specific Occupational Health and Safety Plan (OHSP). *Provision of adequate first aid, first aiders, PPE, signage (English and Yoruba languages). Restriction of unauthorized access to all areas of high-risk activities Provision of specific personnel training on worksite OHS management. Refer to annex 15. Prepare Instructions manual for Welding works Provide welding goggles & gloves as minimum PPE for welding work Adequate safety signage on construction sites should be installed to alert community/drivers/pedestrians *Ensure implementation of the government established and SPIU preparedness & Response protocols on COVID-19 (Annex 16) by: *Follow all existing COVID-19 protocols *Establish worker's camp and provide all basic amenities (water, sanitation etc.). Prohibit workers from unauthorized access to community	Contractor	280,000 300,000 340,000	Preparation of OHSP Training of employee Employee use of PPE	Visual observation; and Biodiversity survey	Available number and diversity of plant species within baseline conditions Implement Traffic management plan	Weekly at construction area	Environmental & Social Safeguard Officers Lagos State Ministry of Environment (LSME) Lagos State COVID-19 task force Lagos State Ministry of Health (LSMH)	25,000

6.	Site clearing for staging area Mobilization of equipment for ACEDHARS HQ construction works Supply of materials – blocks, sand, wood, planks etc.	Landscape disruption and visual intrusion	Restrict removal of vegetation and trees to the area of need only. Protect all vegetation not required to be removed against damage; Undertake quick re vegetation of exposed soils with indigenous plant species once construction is completed. Ensure staging area site considered is in a place jointly agreed between ACEDHARS PIU and community Restrict removal of vegetation and trees to the area of need only. Protect all vegetation not required to be removed against damage. Ensure rehabilitation of disturbed areas once completed to restore the visual and landscape integrity of the area.	Contractor	300,000	Clearly defined boundaries of protected areas Evidence of re-vegetation	Visual observation; and Biodiversity survey	Available number and diversity of plant species within baseline conditions Site restoration and zero no of materials & equipment on site after construction	Monthly at construction area	Environmental Safeguards & Social Safeguards Officer	60,000
B. Social											
7.	Preparation of Staging areas	Increased security risks due to storage of materials and equipment on site	Deploy competent security personnel to secure project site. Provide adequate training of security personnel. Share information related to site security arrangements with the Police and vigilante security (if any).	Contractor	440,000	No of security personnel engaged	Records and Interviews	Zero security incidents	Monthly at Construction site and surrounding communities	Environmental & Social Safeguard officers of PIU Local Vigilante Police	72,000

8.	Labour influx for employment on project	Threat to community culture, safety and security due to presence of workers	This labour influx approach from mobilization into construction phase Ensure community have priority opportunity to employment for skilled and semi-skilled work Promote equal opportunities for employment for all (both male & female) Develop an induction program including a code of conduct for all workers. The code of conduct will address the following aspect: Respect for local residents; Disciplinary measures and sanctions (e.g. dismissal) for infringement of the code of conduct and/or company rules; Commitment / policy to cooperate with law enforcement agencies investigating perpetrators of crimes including gender-based violence. Ensure contractor staff are informed of legal consequences of child labour to discourage practice	Contractor	250,000	Workers manual, employment codes etc. Level of awareness of local culture by migrant workers. Grievance Redress System Presence of security personnel	Visual observation and interviews	Community perception and level of satisfaction.	Monthly at Construction site and surrounding communities	Social Safeguards Officer – PIU Lagos LGA Police	30,000
II. Construction Phase											
A. Environmental Issues											
9.	Power demand/ Use of generators for alternative power supply Sourcing of materials	Public safety, emissions of Carbon monoxide Public safety, road accidents leading to injuries and fatalities	*Develop and implement a project specific Occupational Health and Safety Plan (OHSP) *Ensure QA/QC control is established on inspection of materials, which are to be of best quality to prevent defective outcomes on construction sites *Ensure generator or welding equipment is operated by dedicated trained personnel *Mandatory use of minimum PPE for use of welding equipment	Engineering Consultant/ Ministry of Works & Transport Environmental Safeguards	120,000	Availability of an Occupational Health and Safety Plan (OHSP). Availability of QA/QC plan for the works	Procurement planning procedures		Daily at project site	Environmental & Social Safeguard Officers	10,000

				Specialist							
10.	Use of site office	Sanitation issues and public health impacts	Provide trash bins on site for temporary storage of domestic waste such as lubricant containers, drinking water sachets and carrier bags/packaging materials. Dispose all construction and domestic waste at the approved dumpsites and in the approved manner. Ensure access to toilets for construction crew or provide temporary toilets (mobile toilets) for use where there are no existing ones. Ensure mobile toilets/sanitary provisions are provided to reflect gender types.	Contractor/ Engineering Consultant Environmental Safeguards Specialist	140,000	Presence of functional sanitary facilities on site Waste vendor licenses Waste evacuation documentation	Visual Observation Interview	National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations 1991.	Weekly at Project Site	Lagos State Ministry of Environment (LSME) Lagos State Environmental Protection Agency (LASEPA)	8,000
11.	Use of tools for Construction of ACEDHARS HQ (saws, hammers etc.), Operation of Machinery & Equipment Movement of	Occupational accidents and injuries to workers and risk to community health and safety	Develop and implement a project specific Occupational Health and Safety Plan (OHSP). OHSP to include but not limited to: Prohibition of drug and alcohol use by workers while on the job. Provision of adequate first aid, first aiders, PPE, signage (English and Yoruba languages). Use only trained personnel for welding & metal bending activities Restriction of unauthorized access to all areas of high-risk activities Adequate safety signage on construction sites should be installed to alert community/drivers/pedestrians	Contractor	130,000	OHSP developed No of trained first Aiders Usage of appropriate PPE Usage of signage and demarcations	Visual observation	Compliance with Factory Act, 1990 Compliance with ISO 14001 Occupational Health & Safety Standards	Monthly at Construction Site	Environmental & Social Safeguards Officer	8,000

	materials										
12.	Construction of ACEDHARS HQ	Generation of construction waste including spoils, debris and concrete	Implement a site-specific Waste Management Plan (WMP – Annex 10) to include the following: Ensure segregation of waste to facilitate reuse and recycling opportunities. Ensure no burning of waste on site. Ensure usage of LAGOS WAMA approved waste vendor for waste evacuation, processing & disposal.	Contractor	80,000	*Contractor's WMP *Evidence of waste segregation *Waste vendor licenses and waste evacuation documentation	Visual Observation Interview	National Environmental Protection (Management of Solid and Hazardous Wastes) Regulation 1991.	Weekly at Project Site	Environmental & Social Safeguards Officer LAGOS WAMA	6,000
B. Social Issues											
13.	Construction of ACEDHARS HQ	Increase in spread of Communicable diseases, STDs such as HIV/AIDS and other STIs	Ensure access into construction site is restricted Free HIV testing kits Provision of condoms Vaccinating workers against common and locally prevalent diseases; Monitoring of local population health data, in particular for transmissible diseases. Implementation of HIV/AIDS education program; Information campaigns on STDs among the workers and local community in collaboration with relevant HIV/AIDS management organizations in Lagos State.	Lagos State Ministry of Health	240,000	Evidence of inclusion in the bid advert and contractor Records of training and awareness conducted and evidence of GBV track protocol prepared	Records inspection	Documentation	Check and evaluate during bid evaluation Once annually	Social Safeguards Officer - PIU Supervision consultant and GBV Specialist	12,000

14.	Construction of ACEDHARS HQ	Risk of GBV/SEA and VAC as a result of Labour Influx	Commitment / policy to cooperate with law enforcement agencies investigating perpetrators of gender-based violence; Provision of opportunities for workers to regularly return to their families; Provision of opportunities for workers to take advantage of entertainment opportunities away from rural host communities. Capacity building for local law enforcement and the Lagos State ministry of Women Affairs and child development to act on GBV complaints; Company's code of conduct for prevention of GBV and VAC; Manager's code of conduct for prevention of GBV and VAC Individual's code of conduct for prevention of GBV and VAC	Contractor Contractor	230,000	Evidence of inclusion in the bid advert and contract Records of training and awareness conducted and evidence of GBV track protocols	Records inspection	Documentation	Check and evaluate during bid evaluation Once annually	Social Safeguards Officer - PIU Supervision consultant and GBV Specialist Lagos State ministry of Women Affairs and child development	25,000
C. Operational Phase											
15.	Operation of facilities	Public health and safety	*Ensure engineering design properly designates access to and for disabled *Ensure these access routes and gangways are free of obstruction at all times *Ensure provision of washing station to prevent transmission of COVID19. *Promote regular cleaning of toilets to prevent risk of nosocomial infections (infection risk) to users *Ensure proper signages to prevent risk of accidents	Contractor	250,000	absence of obstructions	Visual Observation Interview	National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations 1991.	Weekly at Project Site	Environmental & Social Safeguards Officer - PCU Supervision consultant and GBV Specialist Lagos WAMA	36,000
Social Issues											

16.	Pits on site from excavation work	Public health concerns from formation of stagnant pools for mosquito larvae breeding	*Ensure filling out of all dugout pits to prevent water stagnation. *Ensure current system can handle improved drainage (prevent runoff erosion/ reservoir overflow) *Develop and implement plan to deal with impacts *Ensure all trenches or excavations made during the construction works do not collect stagnant water, which could breed mosquitoes.	Contractor	No additional costs	Evidence of Occurrence Reported incidence of flooding/ reduced drainage capacity during construction	Complaints received; resolution documented	PIU Safeguard Specialist	Quarterly At the beginning of the Maintenance -	PIU Engineering Consultant	No additional cost
17.	Interactions between Contractors and community	Child labor and school drop out	Ensuring that children and minors are not employed directly or indirectly on the project by having in place an auditable & verifiable employment process mandating provision of identification to demonstrate date of birth (DoB) Enforcement of legislation on child labor Ensure periodic meetings with vulnerable groups to ensure they are not marginalized	Contractor	244,000	Recruitment Reports of contractor	Complaints	Child Rights Act 2003	Monthly	Lagos Social Safeguards Officer	8,000
D. Demobilization											
I. **Environmental Issues**											
18.	Demobilization of camp facilities, plant & equipment	Risks of occupational accidents and injuries to workers.	Develop & implement a project specific Occupational Health and Safety Plan (OHSP) to include but not limited to: Prohibition of drug and alcohol use by workers while on the job. Provision of adequate first aid, first aiders, PPE, signage (English and Yoruba languages). Restriction of unauthorized access to all areas of high-risk activities. Provision of specific personnel training on worksite OHS management	Contractor	400,000	OHSP developed Usage of appropriate PPE Usage of signage and demarcations	Visual observation	Compliance with Factory Act, 1990	Monthly at Construction Site	Lagos State MWR	
19.		Waste management	* Ensure that any remaining metal or pvc pipes, or other waste streams created during Maintenance activities and waste generated during decommissioning activities are collected	Contractor	250,000	Availability and proper use of PPEs -Availability and proper	Records on frequency and		Weekly	Contractor/ Engineering Consultant PIU/Social	88,000

			from the project sites and properly disposed before handing over the project.			use of warning signs	location of waste disposal site of domestic and construction waste			Safeguards Specialist	
Sub-Total Mitigation			**5,094,200.00**		**Sub-Total Monitoring**					**500,000.00**	

5.2 Roles & Responsibilities for monitoring the implementation of ESMP

The successful implementation of this ESMP depends on the commitment and capacity of various institutions and stakeholders to implement the ESMP effectively. Thus, the arrangement as well as the roles and responsibilities of the institutions and persons that will be involved in the implementation, monitoring and review of the ESMP are presented in Table 10.

Table 10: Institutional Arrangement for ESMP Implementation

S/N	Category	Roles & Responsibilities
1	**Federal Ministry of Environment**	• Approve disclosure of ESMP in country • Environmental monitoring to ensure compliance with country standards
2	**Lagos State Ministry of Environment**	• Environmental monitoring and compliance overseer at the State level • Site assessment and monitoring of ESMP implementation. • Making and enforcing environmental and health polices and laws
3	**PCU**	• Ensuring approval of fund for Environmental and Social safeguards unit and M&E implementation and monitoring functions; • Ensure that the ESMP is disclosed to the public • Responsible for coordination to ensure that parties to implementation carry out their responsibilities as and when due. • Ensure that World Bank safeguards policies and country standards are adhered to by contractor and workers through supervision and funding of mitigation measures/ESMP
4	**Environmental & Social Safeguard Units**	<u>Environmental Safeguards Officer</u> ▪ Carry out supervision functions during construction to ensure that contractor and workers adhere to mitigation measures and other relevant recommendations in the ESMP; ▪ Collate environmental baseline data on relevant environmental characteristics for monitoring and auditing ▪ Ensure that project activities are implemented in accordance with good practices and guidelines set out in the site specific ESMP; ▪ Identify and liaise with all stakeholders involved in environment related issues in the project; and be responsible for the overall monitoring of mitigation measures and the impacts of the project during implementation. ▪ Review the performance of the project through an assessment of the periodic environmental and social monitoring reports; provide a summary of the same to the Project Manager, and initiate necessary follow-up actions ▪ Provide support and assistance to the State Government Agencies and the World Bank to supervise the implementation. <u>Social Safeguards</u> ▪ Coordinate and ensures the implementation of the social aspects of the ESMP ▪ Identify and liaise with all stakeholders involved in social related issues in the project; ▪ Conduct impact evaluation and beneficiary's assessment; and

S/N	Category	Roles & Responsibilities
		▪ Establish partnerships & liaise with organizations, Community Based Organizations (CBOs), Civil Society Organizations (CSOs). ▪ Supervise the Grievance Redress Committee (GRC) which is in charge of handling and addressing grievances/complaints;
5	**Contractor**	• Compliance to BOQ specification in procurement of material and construction • Implement ESMP during project implementation • Develop C-ESMP • Ensuring staff good behaviour/practices including the use of PPEs and zero gender violence • Compliance to BOQ specification in procurement of material and construction • Hire Safeguards personnel implement ESMP during project implementation • Mitigate environmental and social Impacts • Implementation of code of conduct for all staff • Preparation of work plans for environmental and social management in line with the ESMP • Ensure any changes during construction process that may have a significant environmental and social impact are communicated to ESO in time and managed accordingly. • Maintain records and report timely environmental incidents as well as corrective and preventive actions taken • Supervision of implementation of all the measures and preparation of required Monitoring report • Ensure that the safety officer conducts a Job Hazard Analysis (JHA) prior to the commencement of work to identify the hazards associated with the job activities • Ensure all contractors and workers sign the Code of Conduct (CoC) and are routinely trained on the contents of the CoC • Provide adequate basic amenities and PPEs to workers and ensure that the PPEs are worn by workers during work. • Prepare and maintain records and all required reporting data as stipulated by the ESMP, for submission to the Supervising Consultant
6.	**Supervising Consultant**	• Supervise the implementation of the ESMP by the Contractors; • Review the Contractors Environmental and Social Implementation Plans (CESMP) to ensure compliance with the ESMP • Review site-specific environmental enhancement/mitigation designs worked out by the Contractor. • Develop of good practice construction guidelines to assist the contractors in implementing ESMPs. • Prepare and submit regular environmental monitoring and implementation progress reports. • Continuous interaction with the Engineer/ESSU regarding the implementation of the environmental/social provisions in the ESMP • Provides an independent oversight ensuring contractor adhere strictly to the engineering specifications and provide frequent reports on contractor/ Client's compliance • Preparation and implementation of the Environmental and Social Monitoring Plan during construction

S/N	Category	Roles & Responsibilities
		• Supervision of contractor performance of implementation of the Construction and Work Camp Management Plan • Hire Safeguards personnel implement ESMP • Thorough supervision of the mitigation of the environmental and Social impacts such as labour influx and GBV Reporting any incidents or non-compliance with the ESMP to the PCU • Ensuring adequate training and education of all staff involved in environmental supervision • Making recommendations to the PCU regarding ESMP performance as part of an overall commitment to continuous improvement • Supervise contractor performance of implementation of the Construction Campsite/Staging area Camp Management Plan/CESMP • Prepare monthly safeguards report including recommendations to the PCU regarding ESMP performance as part of an overall commitment to continuous improvement
7	**Lagos State Environmental Protection Agency**	• Inspection of project premises in order to ensure strict compliance with sanitation and waste management standards in the state. • Collaboration with other MDAs at the State and Federal level, NGOs and Donor Agencies in environmental protection and management especially in areas of waste recycling etc.
8	**Lagos Mainland LGA**	• Provision of oversight function across project within its jurisdiction for ESMP compliance. • Monitoring of activities related to public health, sanitation, waste management amongst others.
9	**Affected Community and Public**	• Promote environmental awareness. • Review environmental and social performance report made available by PCU. • Provide comments, advice and/or complaints on issues of nonconformity. • Attend public meetings organized by the PCU to disseminate information and receive feedback. • Identify issues that could derail the project and support project mitigation measures and awareness campaigns.
10	**CDA**	• Ensure community participation by mobilizing, sensitizing community members;
11	**NGOs/CSOs**	• Assisting in their respective ways to ensure effective response actions, conducting scientific researches alongside government groups to evolve and devise sustainable environmental strategies and techniques.
12	**World Bank**	• Overall supervision and provision of technical support and guidance. • Disclosure of this ESMP at World Bank external site • Oversight mission to monitor PCU's implementation and performance of ESMP

The ACEDHARS and any institution participating in the implementation, will not issue a Request for Proposal (RFP) of any activity without the construction phase's Environmental and Social Management Plan (ESMP) inserted in, and will not authorize the works to commence before the contractor's ESMP (C-ESMP) has been approved and integrated into the overall planning of the works.

5.3 Capacity Building for Implementation of ESMP and Permit Conditions

A preliminary assessment indicates that the capacity of the PCU for implementing this ESMP will require strengthening, especially in the area of implementation and monitoring, therefore requiring strengthening in order to close these gaps.

Consequently, a training Workshop will be organized to guide the implementation of the ESMP and topical areas of discussion would include the Permit Schedule, World Bank's Safeguards Policy triggered and environmental management. The training on the ESMP implementations will include the Code of conduct for contractor and his/her labour force, public health and safety issues, occupational health, Grievance Redress Mechanism for the project, ESMP monitoring and reporting. The capacity building will also involve sensitization of workers on issues such as child sexual exploitation, labour influx, Gender Based Violence, HIV/AIDS and their mitigation measures.

The capacity building plan proposed to achieve this is provided in Tables 11 and 12.

Table 11: Capacity building plan for implementation of the ESMP & permit conditions

Activity	Target Group/Participants	Timeline/ Duration	Proposed Facilitator	Cost NGN
*Training Workshop on implementation of ESMP, Permit Schedule *World Bank Safeguards Policy triggered and environmental management. *Construction works safeguard requirements	*Engineering Consultant -Resident Engineer, Clerk of Works *Project Coordinator, Works Engineer, Planning Officer, Finance Officer Safeguard Officers *Contractor, contractor workers, Manager, Foreman, Engineers	Prior to resumption/ commencement of construction works. (1/2 day)	Environmental Safeguards Specialist/ Consultant	150,000
*Sensitization of workers on child sexual exploitation and HIV/AIDS, labour influx, Gender Based Violence, and their mitigation measures.		Prior to resumption/ commencement of construction works. (1/2 day)	Social Safeguards Specialist/ Consultant	100,000
*Induction on occupational and public health and safety (OHS) requirements of the works and environmental management *Training on Contractor's, manager's and Worker's Code of Conduct understanding	All construction/ contractor workers	Prior to commencement of construction works. (1/2 day)	Lead Contractor/ Engineering Consultant/ HSE-OHS Consultant	100,000
*Risk assessment on construction work on ACEDHARS HQ buildings *Conducting Health and Safety Assessments	All construction/ contractor workers	Prior to commencement of construction works. (1/2 day)		150,000

Activity	Target Group/Participants	Timeline/ Duration	Proposed Facilitator	Cost NGN
*Developing and implementing mitigation measures				
Total				**₦500,000.00**

Table 12: Description of cost breakdown

Description	Cost (NGN)
Professional fee for 1 Consultant for 2 days	100,000.00
Rent/Hiring of facility (for 2-day training)	100,000.00
Feeding of participants - tea break	50,000.00
Feeding of participants (2 days)	100,000.00
Workshop Materials	150,000.00
Total	**₦500,000.00**

5.4 Institutional Responsibilities for Monitoring

The objectives of monitoring and evaluation for the ESMP are as follows:

- To alert the PCU by providing timely information about the success or otherwise of the environmental management process outlined in the ESMP. This will ensure continuous improvement in the environmental and social management process of the ACEDHARS even after the project is concluded.

- It will determine where gaps may exist between implementation targets and actual project accomplishments.

5.5 Implementation Schedule

The activities related to environmental management and monitoring must be integrated in the overall construction schedule. The project implementation phase is estimated for 3 months for the construction activities. The implementation schedule is presented in Table 13.

Table 13: Implementation Schedule

S/N	Activity Description	Responsible	Timelines										Operations Phase
			Weeks (Pre-construction)				Months (Construction)						
			1	2	3	4	1	2	3	4	5	6	
1.	Clearance and Formal Disclosure of ESMP	PCU											
2.	Inclusion of E&S Requirements in bid documents	PCU											
3.	Allocating Budget for ESMP	PCU											
4.	Appointing Support Staff for ESMP	PCU											
5.	Review & Approval of Contractor's E&S Plans	PCU											
6.	Finalization of Engineering Designs	PCU/ Consultant											
7.	Mobilization to site Site Clearing	Contractor											
8.	Construction Phase	Contractor											
9.	Implementation of Mitigation	PCU/ Contractor											
10.	Supervising ESMP Implementation	PCU											
11.	Monitoring & Reporting on ESMP Implementation	PCU/ MDAs											
12.	Environmental and Social Training	E&S Consultant											
13.	Environmental and Social Auditing	PCU/SME /Consultant											
14.	Decommissioning Phase	PCU/SME /Contractor											
15.	Operations Phase	PCU/SME /Contractor											

5.6 Measures for Non-compliance to the ESMP

If the Contractor was, or is, failing to perform any ESHS obligations or work under the Contract, the value of this work or obligation, as determined by the Project Manager, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Project Manager, may be withheld until rectification or replacement has been completed. In case of recurrence, the Resident Engineer (supervision) may decide other appropriate measure as contained in the contract including advising the client to call the Performance Security.

Failure to perform includes, but is not limited to the following:

a) failure to comply with any ESHS obligations or work described in the Works' Requirements which may include: working outside site boundaries, excessive dust, failure to keep public roads in a safe usable condition, damage to offsite vegetation, pollution of water courses from oils or sedimentation, contamination of land e.g. from oils, human waste, damage to archeology or cultural heritage features, air pollution as a result of unauthorized and/or inefficient combustion;
b) failure to regularly review C-ESMP and/or update it in a timely manner to address emerging ESHS issues, or anticipated risks or impacts;
c) failure to implement the C-ESMP e.g. failure to provide required training or sensitization;
d) failing to have appropriate consents/permits prior to undertaking Works or related activities;
e) failure to submit ESHS report/s (as described in Appendix C), or failure to submit such reports in a timely manner;
f) failure to implement remediation as instructed by the Engineer within the specified timeframe (e.g. remediation addressing non-compliance/s).
g) A written notification from the resident engineer 10 days after the agreed date for the submission of the monthly environmental reports if there is no written explanation submitted by the environmental officer of the contractor.
h) Failure to submit a declaration of methods for the operations that request it, the Resident Engineer shall immediately suspend activities that are occurring without this approved document.
i) The contractor shall be financially penalized if his workers at the workplace do not have their personal protective equipment (gloves, jackets, boots, etc.).
j) The contractors shall be penalized by a written note if they do not comply with the methodology approved for the work. In case of recurrence, the Resident Engineer may decide other appropriate measure as contained in the contract including advising the client to call the Performance Security.

5.7 Estimated Budget for ESMP Implementation

The environmental and social management actions is estimated at Eight Million, Three Hundred and Fifty-Three Thousand, Six Hundred Naira Only (₦8,353,600.00), and a Dollar equivalent of Twenty Thousand, One Hundred and Seventy-Seven Dollars Only ($20,177.00). This is as shown in Table 14.

Table 14: ESMP Budget

S/n	ESMP Expectation Items	Responsibility	Cost Estimate	
			Naira (₦)	USD ($)
1	**Mitigation (See Table 7)**	Contractor/ Supervising Consultant/PCU Safeguards Unit	5,094,200.00	12,275.00
2	**Monitoring (See Table 7)**	PCU M& E Unit/ Safeguards Unit	500,000.00	1,205.00
3	**Capacity Building (See Table 9)**	Lead Contractor/ Engineering Consultant/ HSE-OHS Consultant/SPCU Safeguards Unit	500,000.00	1,205.00
4	**Grievance Redress Mechanism**	PCU Social Safeguards Officer	250,000.00	602.00
5	**Consultations**	PCU Social Safeguards Unit	250,000.00	602.00
6	**Disclosure**	PCU/State MoEnv. /FMEnv/W-Bank	1,000,000.00	2,410.00
Sub-Total			**7,594,200.00**	**18,343.00**
8	Contingency (10% of Sub-total)		759,420.00	1,834.00
Grand Total			**8,353,620.00**	**20,177.00**

Currency Unit = Nigerian Naira
($1.00 =N414 CBN rate of May 5, 2022

CHAPTER SIX: STAKEHOLDER CONSULTATIONS

6.1 Introduction

Stakeholder participation during project planning, design and implementation is widely recognized as an integral part of environmental and social management for projects. It is a two-way flow of information and dialogue between project proponents and stakeholders, which are specifically aimed at developing ideas that can help shape project design, resolve conflicts at an early stage, assist in implementing solutions and monitor ongoing activities.

6.2 Objectives of Consultation

The main objective of the consultations with stakeholders is to discuss the proposed project's environmental and social implications and to identify alternatives for consideration. Specifically, the consultations seek to achieve the following objectives:

- To provide some information about the proposed project;
- To provide opportunities for stakeholders to discuss their concerns and offer recommendations;
- To gain insight on the role of each stakeholder in the implementation of the environmental and social safeguards as well as structures in place for the management of the proposed facilities;
- To provide and discuss with stakeholders the alternatives considered to reduce anticipated impacts;
- To identify and verify significance of environmental, social and health impacts; and
- To inform the process of developing appropriate mitigation and management options.

6.3 Stakeholder Consultation Strategy and Plan

Stakeholder consultation is a process and would continue through the ESMP study stages to its implementation. The stakeholder engagement process involved the following:

- Identification of key stakeholders that will be consulted as presented in Table 15.
- Determine type of consultation approach (key informant interviews, Focus Group Discussions etc.)
- Initiation of consultation that would continue through the lifecycle of the sub-project
- Incorporation of stakeholder concerns into the project design or implementation process

6.4 Stakeholders Consulted

Key stakeholders to the ACEDHARS building construction sub-project were identified for consultations and these included stakeholders from the Project Implementation Unit, Lagos State Ministry of Environment, University of Lagos waste managers, Lagos State Waste Management Agency. Vulnerable groups in the project areas were identified and these include:

- Children & Youths
- Men and women
- Physically challenged individuals

6.5 Outcome of Stakeholder Consultations carried out during ESMP Preparation

The Stakeholders Consultation meetings were carried out on April 29th, 2022 in and around the project area. Concerns centred mainly on when the civil works will likely commence as

Table 15: Stakeholders Engagement Strategy

No.	Activity	Identified Stakeholders	Focus of Consultation/ Engagement	Timelines/ Frequency	Forms of communication	Facilitator
1	Preparation of ESMP	ACEDHARS Project Coordinating Unit Federal Ministry of Environment State Ministry of Environment Community and Community Based Organizations FMF World Bank	Large scale forum Key stakeholders' interviews Mapping of community interests and concerns Communities need to know what the project is all about.	Throughout the ESMP study period	Focus Group Discussion/workshops Phone calls One on one interview Distribution of pamphlets Public meetings Newspapers/magazines	ACEDHARS
2	Site preparation prior to construction work	PCU Contractor Supervising Engineers Consultant FME	Information Disclosure at Federal Ministry of Environment, State Ministry of Environment and Local Government level.	Two weeks prior to construction	Through Radio and Newspapers	
3	Start of construction activities	PCU Contractors Supervising Engineers Consultant Suppliers Businessmen NGOs/vulnerable groups Communities	Affected Communities Government Officials World Bank	Throughout the construction period	Phone calls Newspapers Radios Pamphlets One on One	ACEDHARS FMF WORLD BANK
4	End of construction & Decommissioning of construction equipment & machinery	PCU Government Officials Affected Communities World Bank	Government Officials Affected Communities	Decommissioning phase	Phone calls Televisions Radios Newspapers Emails Pamphlets	Government Officials/Lagos State government ACEDHARS
5	Commissioning and handing over renovated ACEDHARS HQ	Government Officials PCU Beneficiary Communities	Government Officials Benefitting Communities	Prior to operation of the facility	Newspapers Television Radio	ACEDHARS
6	Operation and maintenance of renovated	Beneficiary Communities	Beneficiary Communities	During operation and	One on one Workshops/FGD Television	ACEDHARS

No.	Activity	Identified Stakeholders	Focus of Consultation/ Engagement	Timelines/ Frequency	Forms of communication	Facilitator
	ACEDHARS HQ			maintenance period	Radio	
		ACEDHARS	Beneficiary Communities	3 times a week	Visits	ACEDHARS
		ACEDHARS Government Officials Other Communities	Beneficiary Communities	Fortnightly	Visits	
			Beneficiary Communities	3 times a week	Visits	
			Beneficiary communities	3 times a week	Visits	
		NGOs/CBOs	Beneficiary Communities	Once a term	Visits	
		World Bank	Beneficiary communities	Once a term	Visits	ACEDHARS

well as involvement of people in the community as skilled and unskilled part of the labour force during the civil works. Other issues discussed are presented in Table 16, while Figure 7 shows the pictures of stakeholder engagements held in project area.

Table 16: Concerns raised and how they were addressed

S/n	Issues raised during consultations	How they were addressed
Issues raised in social gatherings	Some persons showed concerns about likelihood of dust pollution during construction.	The contractor will put necessary measures in place to mitigate this impact by use of water that will be sprinkled to reduce dust.
Issues raised during meetings with Women	Women feel discriminated as they are less involved in projects, and during employment they are not given as many opportunities as the men.	There will be better sensitization to enable the contractor offer equal opportunities to women, where possible.
Issues raised during meetings with Youths	The youths around the project area have expressed concern about employment opportunities during the project implementation.	Sourcing of local staff from the communities is part of the management plan to address concerns regarding labour influx.

Consultation meetings

Consultation meetings held in mammy market

Key Informant Interviews Held in project area

Figure 7: Stakeholders Engagement

6.6 Grievance Redress Mechanism

To ensure social accountability, inclusion, sustainability and transparency in the implementation activities, the Center shall establish a mechanism to receive and act on complains and grievances by beneficiaries or stakeholders regarding the activities being conducted by the ACEDHARS. Grievance mechanisms are increasingly important for development projects where ongoing risks or adverse impacts are anticipated. For the proposed subprojects, grievances are likely to arise due to the following:

- Delay in civil works;
- Conflict between construction workers and community members;
- Unmanaged expectations;
- Lack of information about the project

6.6.1 Grievance Redress Committee

A three level Grievance Redress Mechanism shall be established for the ACEDHARS with Grievance Redress Committees constituted at the State, Lagos Mainland LGA & Akoka Village/Community levels to receive and ensure satisfactory resolution of grievances.

6.6.2 Grievance Redress Process

All the grievances will be channeled via the Grievance redress committee for each sub project at the sector level. A Grievance form will be filled by persons affected by the project with the Grievance Redress Committee, which will act on it within 10 working days on receipt. If no understanding or amicable solution is reached, or the affected person does not receive a response from the local Grievance Redress Committee within 15 working days, the affected person can appeal to a designated office in the PCU, which should act on the complaint/grievance within 15 working days of its filing. The flow-chart for the appeal process is presented in Figure 8.

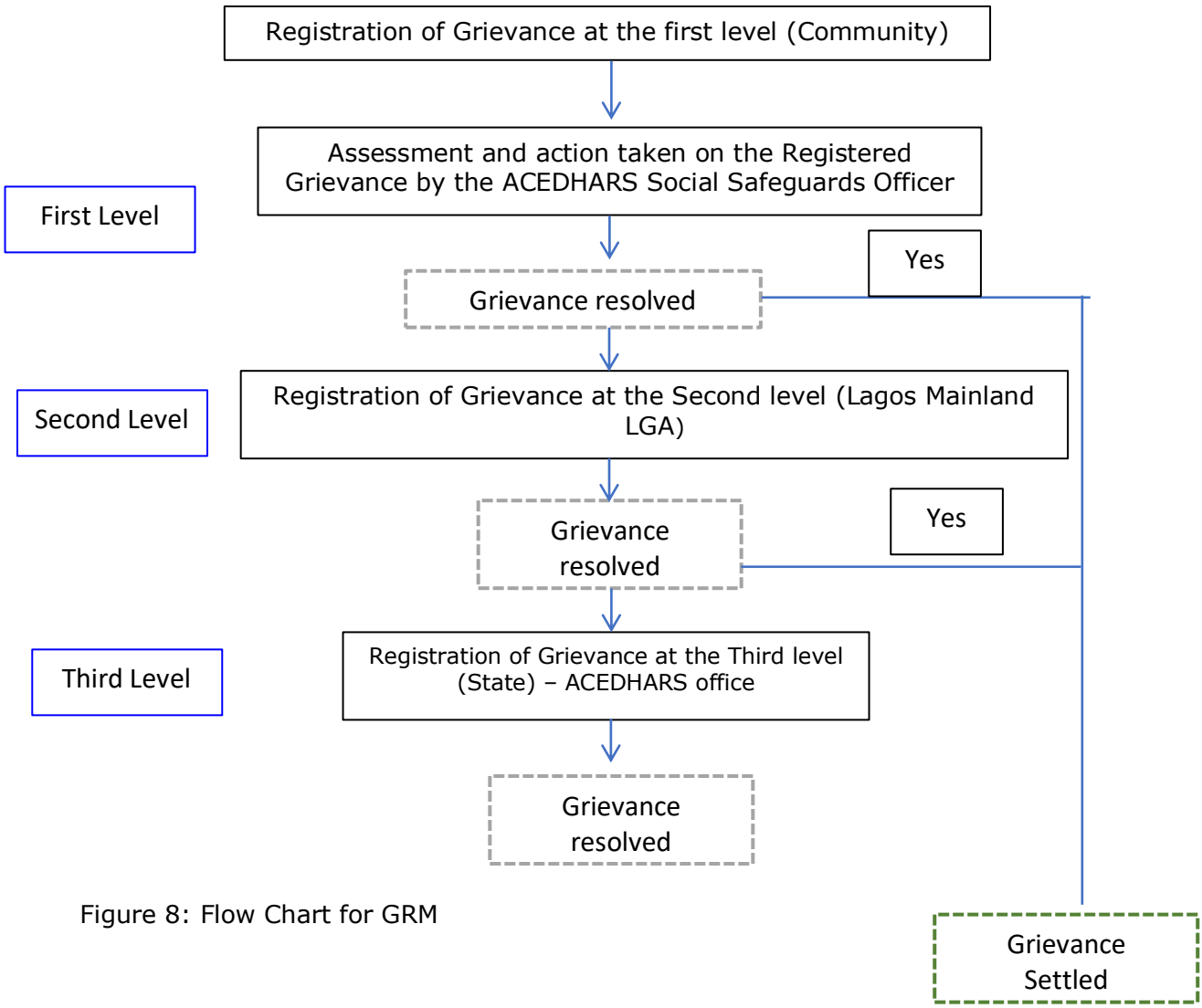

Figure 8: Flow Chart for GRM

CHAPTER SEVEN: RECOMMENDATIONS & CONCLUSIONS

7.0 Conclusion & Recommendations

This chapter presents recommendations to be undertaken by the PCU to enhance the achievement of these environmental and social safeguards, while also providing a conclusion to this ESMP report.

7.1 Recommendations

This ACEDHARS headquarters building construction sub-project with the associated activities outlined in this ESMP, will have highly beneficial impacts that would contribute to closing the health & wellness gap within our communities, and also scaling up of living conditions, through which social cohesion can be improved.

This construction & civil works of the headquarters of the ACEDHARS will lead to some limited adverse environmental and social impacts which will largely be localized in spatial extent, short term and occurring within less sensitive environmental areas and shall be managed through the application of the appropriate mitigation measures stated in the ESMP matrix table, which would be included in bidding document, the contractor's agreement, good practices, adequate supervision and enforcement during project implementation. Consequently, there is no major environmental or social issue to impede the implementation of the proposed project.

Nonetheless, some additional recommendations that will enhance the overall sustainability of the project are:

- priority should be given to local workers in the immediate vicinity to help stimulate local socioeconomic activities, improve livelihood and poverty reduction in the affected communities.
- Based on the consultations with stakeholders (Table 20), the SPIU/Contractor should ensure equal opportunities for both gender in terms of employment
- ensure opinion of persons living in and around the university of Lagos community is given priority in appropriation of mitigation measures as they must be more familiar with likely immediate project impacts.
- all bare and exposed soils should be re-vegetated with native vegetation immediately to prevent triggers to erosion
- the PIU should ensure that the relevant sections of the ESMP should be made available to contractors.
- Contractor should ensure all workers are made aware that the surface water quality is unsuitable for consumption to prevent any trigger of health problems.

7.2 Conclusion

The ESMP has provided in detail the mitigation measures for identified potential adverse impacts and risks associated with the various phases of the project, and a monitoring program to ensure compliance. In concluding, with adequate application of mitigation measures, the cost for which this ESMP has provided, the impacts will be avoided, reduced, mitigated or offset.

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Annex 1: Terms of Reference

1.0 INTRODUCTION

ACEDHARS is an interdisciplinary postgraduate education center offering M.Sc. and Ph.D. programs in Herbal Drug Standardization, Drug Development, Toxicology, Regulatory Science and Pharmacovigilance. The ACEDHARS aims at developing skilled manpower in the utilization of spectroscopic and chromatographic techniques for drug development, Herbal Medicine, pharmacokinetics and drug quality assurance systems to close the skill gaps in toxicology, quality control and pharmacovigilance units of regulatory agencies, drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region. The center is poised to harness the abundant natural plant resources in the region into herbal products for sustainable utilization.

All postgraduate lecturers in the University of Lagos who are teaching and conducting research in areas relevant to the theme of the Center have the privilege to choose to be seconded as academic members (faculty) of the Center. All technologists in participating departments who are currently in charge of the use and maintenance of existing equipment are seconded as members of the Center, All administrative officers (Core team) of the Center are seconded to the Center by the Vice Chancellor based on the expertise required at the Center except the Project Manager who is deplored fully to serve in the Center. An administrative staff can be an academic staff of the University with a required administrative expertise and may not perform academic role in the Center. Each member of the Center reports all activities performed in the Center through the Annual Performance and Evaluation Report Form processed through their primary assigned unit in the University. The University duly rewards these activities as part of service to the University following University regulation. At the ACEDHARS, the primary departments of academic members, in this case - Departments of Biochemistry, Botany, Chemistry, Pharmaceutical Chemistry, Pharmacognosy and Pharmacology are regarded as participating departments in the Center. The departments established at the Center based on interdisciplinary curricula, in this case – Departments of Herbal Drug Standardization, Drug Development, Toxicology, Regulatory Science and Pharmacovigilance, are secondary departments of academic members and are regarded as Center departments. This is following the regulation of the University that every Center must run its own programs through its own departments. Each academic member is assigned to a department and a research group where the member would be most active based on area of specialization. However, a member can participate in more than one department based on relevance of specialization to the program of the department. A member of the Center loses the right to be a member when such person ceases to conduct research within the theme of the Center or ceases to be a staff of the University of Lagos. Any academic member who has been found culpable in the delay of the graduation of a student by the Education Committee of the Center, ceases to be an academic member of the Center. On its own part, the Center reward the efforts and dedication of its members by improving the work environment, providing tools for better delivery of tasks and honing their skills.

Each academic member is assigned to a department and a research group where the member would be most active based on area of specialization. However, a member can participate in more than one department based on relevance of specialization to the program of the department. A member of the Center loses the right to be a member when such person ceases to conduct research within the theme of the Center or ceases to be a staff of the University of Lagos. Any academic member who has been found culpable in the delay of the graduation of a student, by the Education Committee of the Center, ceases to be an academic member of the Center. All administrative officers of the Center are seconded to the Center by the Vice Chancellor based on the expertise required at the Center except the Project Manager who is deplored fully to serve in the Center. An administrative staff can be an academic staff of the University with a required administrative expertise and may not perform academic role in the Center. Each member of the Center reports all activities performed in the Center through the Annual Performance and Evaluation Report Form processed through their primary assigned unit in the University. The University duly rewards these activities as part of service to the University following University regulations. On its own part, the Center rewards the efforts and dedication of its members by improving the work environment, providing tools for better delivery of tasks and honing the skills of both academic and administrative members.

University of Lagos, ACEDHARS was selected to develop skilled manpower in the utilization of spectroscopic and chromatographic techniques for drug development, Herbal Medicine, pharmacokinetics and drug quality

assurance systems to close the skill gaps in toxicology, quality control and pharmacovigilance units of regulatory agencies, engender drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region. Specifically, the following activities are the project focus:

i. Construction of new building to accommodate ACEDHARS building.
ii. Procure relevant equipment and facilities for ACEDHARS.
iii. Develop skilled manpower in the utilization of contemporary techniques for drug development.
iv. Herbal Medicine, pharmacokinetics and drug quality assurance systems
v. Engendering drug research institutes, pharmaceutical industries, herbal product industries, healthcare facilities and traditional medicine centers in the region
vi. Development of pharmacovigilance units of regulatory agencies
vii. Development of entrepreneurial skills for members
viii. Establish a university-affiliated Technical and Business Training and Mentoring Institute. in the center to bridge the enormous dearth of critical industry-level manpower.
ix. Invite Experts and visiting Professors to mentor Postgraduate students.
x. Improve faculty and students research capacity and expertise through outreach programs
xi. Increase subscription to selected databases and journals
xii. Engage in patenting of research innovations among others.

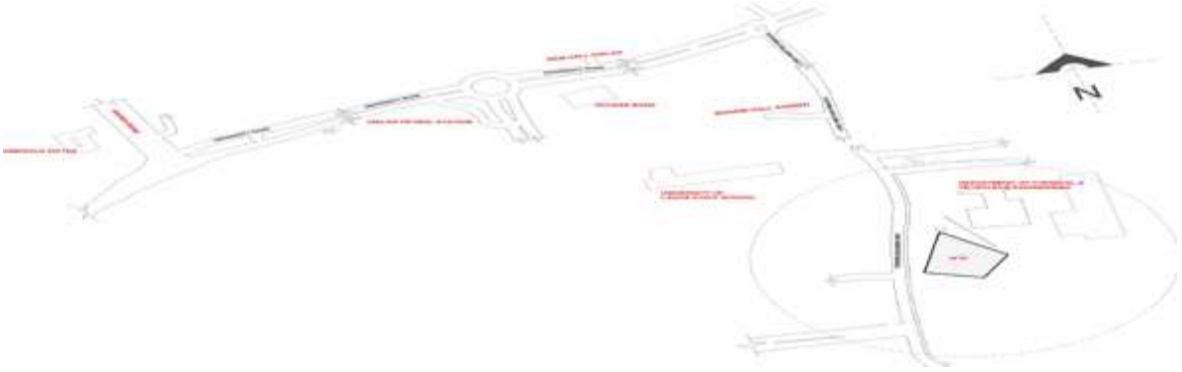
In compliance with the requirements of the Nigerian EIA laws and the World Bank Safeguard Policies OP 4.01 on Environmental Assessment which is triggered on this project due to anticipated civil works including construction of new buildings, University of Lagos, ACEDHARS project is proposing to award a contract to conduct of an Environmental and Social Management Plan (ESMP) which will identify all environmental and social impacts associated with this proposed subproject and also propose corresponding mitigation measures to address all identified environmental and social impacts.

The proposed ESMP will provide an overview of the current environmental and social baseline conditions of the proposed project site, identify potential impacts associated with the proposed construction, engineering design and equipping of ACEDHARS, It will also set out the management measures as well as monitoring responsibilities required to mitigate identified potential impacts. These ESMPs are to be utilized by the contractors, to be commissioned by ACEDHARS and will form the basis of site-specific management plans that will be prepared by the contractors as part of their construction methodology prior to commencement of civil works.

As the proponent for the project, it is ACEDHARS's objective to avoid, where practical, unacceptable adverse environmental, social and/or economic impacts. In the circumstance that an impact cannot be avoided, ACEDHARS Project Management (who will be responsible for the management of the construction and equipping phase of the project) are committed to the implementation of appropriate mitigation measures. For clarity in the management structure however, the safeguard officer will pay attention to matters relating to environmental health and safety performance.

2.0 PROJECT LOCATION AND DESCRIPTION

The University of Lagos has its main campus in Akoka, Yaba, and Lagos. It is largely surrounded by the scenic view of the Lagos lagoon on 802 acres of land in Akoka, North Eastern part of Yaba. The proposed project site of ACEDHARS is bounded at the north by Akoka and Ilaje communities. It is bounded at the east by the Lagos lagoon. It is bounded at the west by University of Lagos Women Society School and at the South by Staff quarters. The proposed ACEDHARS site is globally located at Lat. 6.514161 and Long. 3.396721. The site has a land area of 1554.639 sqm; the proposed building area is 624.676 sqm; area of unbuilt space is 929.963sqm; percentage of built space is 40.18%; percentage of unbuilt space is 59.82%; number of floors is 2; number of unit is 1; has an escape staircase with ramp for disabled and equipment.



Location Map of the proposed project site

Imagery depicting the Proposed Site

3.0 OBJECTIVES OF THE CONSULTANCY

The objective of the study is to prepare an environmental and social management plan (ESMP) for the proposed construction and equipping the ACEDHARS. The ESMP should consist of a well-documented set of mitigation, monitoring, and institutional actions to be taken during and after construction to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. It should also include the measures needed to implement these actions, addressing the adequacy of the monitoring and institutional arrangements at the proposed site.

4.0 SCOPE OF WORK

The Consultant will work in close collaboration with the architectural design and engineering design consultants and the PIU and will consider the technical variants of the proposed activities and in return, inform the technical design consultants of any major constraint or recommendation that may arise due to the social and environmental situation on ground. The Consultant will consider the proposed activities, (as listed under the introduction) and other activities that would be carried out within the project location. The consultant will assess natural resources and infrastructure potentially affected spots during project implementation and operation and select the management strategies needed to ensure that environmental and social risks/impacts are appropriately mitigated.

The core tasks for the ESMPs shall include:

- Review the existing ESMF, architectural and engineering design prepared for the ACEDHARS Project;
- Review institutional assessment and framework for environmental and social management as it relates to this project.
- Determine the current biophysical and socio-economic baseline of the proposed project site and identify how these can impact on the proposed project.

- Assess the potential environmental and social impacts related to proposed construction and equipping ACEDHARS and recommend adequate mitigation measures, including costs estimation.
- Identify responsibilities and actors for the implementation of proposed mitigation measures
- Assess the capacity available to implement the proposed mitigation measures and suggest recommendation(s) to fill identified gaps in terms of training and capacity building with estimated costs.
- Carry out consultations with identified primary and secondary stakeholders in order to obtain their views about the sub-project and shall convey to them the objectives of the project. S/he shall also communicate to them anticipated environmental and social impacts, proposed mitigations measures. Considerations shall be given to gender concerns, identified vulnerable individuals/groups including widows to have their inputs and concerns heard. Make Recommendations from this consultation which will be included in the final ESMP report.
- Develop an Environmental and Social Management Plan (ESMP) for the proposed work. The ESMP should underline
    (i) the potential environmental and social impacts resulting from construction activities
    (ii) the proposed mitigation measures;
    (iii) the institutional responsibilities for implementation;
    (iv) the monitoring indicators;
    (v) the institutional responsibilities for monitoring and implementation of mitigation measures;
    (vi) the costs of activities; and
    (vii) the calendar of implementation.
- Develop a Grievance Redress Mechanism (GRM) which shall leverage on the existing grievance redress system in the proposed project area.

5.0 ESMP STRUCTURE

The ESMP Report shall be presented in a concise format and should not be more than 50 pages (including appendixes) containing all studies, processes, analyses, tests and recommendations for the proposed intervention. The report shall focus on the findings, conclusions and any recommended actions, supported by summaries of the data collected and citations for any references used. The ESMP report will include and not limited to the following as applicable:

Preliminary pages

- Cover page
- Table of contents
- List of acronyms and their definitions
- Executive Summary

Chapter 1: Introduction

- Background
- Rationale for ESMP
- Scope of the ESMP
- Discussion of the World Bank safeguard policies triggered by the Project and the proposed sub-project activity
- Applicable Environmental and Social Laws and Regulations

Chapter 2: Project Description

- Description of the proposed construction of ACEDHARS
- Project Activities and Schedules
- Relevant Maps, Architectural and engineering designs for proposed construction activities.

Chapter 3: Biophysical and Socio-Economic Characteristics

- Overview of the Project Area
- Biophysical Environment of the Project Area
- Socioeconomic of the Project Area
- Implication of baseline on the Proposed project activities
- Description of the area of influence and environmental and social baseline conditions

Chapter 4: Assessment of Potential Adverse Environmental and Social Impacts.

- Methods and techniques used in assessing and analyzing the environmental and social impacts of the proposed construction.
- Discussion of the potentially significant adverse environmental and social impacts of the proposed construction.

Chapter 5: Environmental and Social Management Plan (ESMP), including:

- Identification of positive impacts

- Identification of negative impacts
- Environmental and Social Management Table (ESMP table)
- Roles and Responsibilities
- Capacity Building
- Institutional responsibilities for monitoring and implementation of mitigation;
- Monitoring and Reporting
- Implementation Schedule
- Contractual Measures
- Measures for Non-Compliance with the ESMP
- Cost Estimates for ESMP Implementation
- Monitoring indicators;

Chapter 6: Consultation with Stakeholders

- This chapter shall summarize the actions undertaken to consult the groups affected by the construction. The detailed record of the consultation meetings shall be presented in annex to the ESMP.

Chapter 7: Summary and Recommendations

Annexes

Annex 1: Terms of Reference
Annex 2: Sample of Questionnaire for socioeconomics
Annex 3: List of participants in consultations and summaries of consultations and pictures
Annex 4: General Environmental and Social Management Conditions for Construction Contracts
Annex 5: Project Occupational Health and Safety (OHS) Plan
Annex 6: Company Code of Conduct on Preventing Gender Based Violence and Violence Against Children
Annex 7: Manager's Code of Conduct on Preventing Gender Based Violence and Violence against Children
Annex 8: Individual Code of Conduct on Preventing Gender Based Violence and Violence against Children
Annex 9: Waste Management Plan
Annex 10: Traffic Management Plan

The main text of the ESMP should focus on findings, conclusions and recommended actions, supported by summaries of data collected and citations for any references used in interpreting those data. It should provide a description of the specialist studies undertaken and the report should include a bibliography, maps, photographs, diagrams and any other diagrammatic representation needed to facilitate understanding of the main text, detailed data should be presented in annexes or a separate volume. Unpublished documents used in the assessment should also be included or referenced in an appendix and the location of the originals of such documents indicated.

6.0 DELIVERABLES AND TIMING

- **Inception report:** The inception report shall be submitted a week after commencement of work.
- **Interim report:** An interim report of the ESMP will be submitted for comments between the third and fourth week after commencement of work. It will identify all the areas, the mitigation measures, and the environmental and social issues associated with the construction, as well as the adequacy of the monitoring.
- **Draft Final Report**: A draft final report will be submitted between the sixth and seventh week after making inputs to comments of the draft final ESMP.
- **Final report:** The final ESMP Report will take into account all comments and will be submitted at the eighth week of work.

Activities	Week 1	Weeks 3 and 4	Weeks 6 and 7	Weeks 8
Submission of Inception Report	X			
Submission of Interim Report		X		
Submission of Draft Final			X	
Submission of Final Report				X

7.0 REMUNERATION AND PAYMENT TERMS

The successful consultant would be paid in accordance with an agreed schedule of deliverables, on the agreed rate of professional fee and reimbursable expenses, subject to satisfactory performance, timely receipt and approval of deliverables.

Payment Schedule

Deliverable	Schedule	Payment
Submission of Inception Report	Week 1	20%
Submission of Interim Report	Weeks 3 & 4	30%
Submission of Draft Final	Weeks 6 & 7	30%
Submission of Final Report	Weeks 8	20%

8.0 QUALIFICATIONS

The Consultant should possess at least a Masters' Degree in any of Social Sciences, Environmental Sciences/Management, Environmental Engineering or related fields with minimum of 5 years' experience preparing ESMP for projects or relevant Impact studies for projects such as TIA, EIA etc. S/he should possess at least a professional certificate appropriate for understanding both the environmental and/or social management implications with planning, design, construction, operation and/or monitoring. The consultant must be someone who has expertise in World Bank's format and guidelines for writing ESMP with excellent communication skills. It is highly desirable that the consultant have experience with working with international development institutions like the World Bank and/or infrastructure related projects.

9.0 CLIENT INPUT

The PIU shall provide to the consultant all relevant reports/documents such as Environmental and Social Management Framework (ESMF) Project Appraisal Document (PAD), Architectural and Engineering designs of the proposed center among others.

10.0 PROFESSIONALISM

The consultant will carry out the above assignment in accordance with the highest standard of professional and ethical competence and integrity having due regards to the nature and purpose of the assignment. At all times and for all purposes, the consultant shall regard strictly confidential all knowledge and information not within public domain which may be acquired in the course of carrying out this assignment and shall not be directly or indirectly disclosed to any person whatsoever, except with the written permission of the ACEDHARS PIU. The consultant shall declare any conflict of interests that may arise in the course of carrying out this assignment.

B. FORMAT OF CURRICULUM VITAE (CV)

Name : _____

Complete address :

Profession : ___

Date of Birth : .

Years of professional experience : ____ Nationality : _

Membership in Professional Societies : _____

Detailed Tasks Assigned : ____

Key Qualifications :

[*Give an outline of your experience and training most pertinent to tasks on assignment. Describe degree of responsibility you held on relevant previous assignments and give dates and locations. One page should be sufficient.*]

Education :

[*Summarize college/university and other specialized education, giving names of schools, dates attended, and degrees obtained. A page or less should be sufficient.*]

Employment Record :

[*Starting with present position, list in reverse order every employment held. List all positions held since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.*]

Languages :

[*For each language indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.*]

Certification :

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

_____ Date : __
[*Signature of consultant*] *Day/Month/Year*

Full Name of Candidate :

C. PROPOSAL
[*Location*, *Date*]

To : [*Name and address of Procuring Entity*]

Mr/Mrs. :

I, the undersigned, offer to provide the consulting services for [*Title of consulting services*] in accordance with your Letter of Invitation dated [*Date*].

My fees are [net of taxes, estimated at…, as applicable]

I hereby submit my Proposal, which includes this Technical and Financial Proposal.

I understand that you are not bound to accept any Proposal you receive.

I remain,

Yours Truly,

Name of the Consultant :

Address :

D. OBSERVATIONS AND SUGGESTIONS

1.

2.

3.

4.

STANDARD CONTRACT FOR
INDIVUAL CONSULTING SERVICES
Lump-sum payments

CONTRACT

THIS CONTRACT ("*Contract*") is entered into this **[***insert date***]** by and between [*insert name of Procuring Entity*] ("*the Client*") having its principal place of business at [*insert place of business of Procuring Entity*] and [*insert name of consultant*] ("*the Consultant*") having his principal office located at [insert principle place of business of the consultant].

WHEREAS, the Client wishes to have the Consultant performing the services hereinafter referred to, and

WHEREAS, the Consultant is willing to perform these services,

Now THEREFORE THE PARTIES hereby agree as follows :

1. Services :

(*a*) The Consultant shall perform the services specified in Annex A, "*Terms of Reference and Scope of Services*," which is made an integral part of this Contract ("*the Services*").

(*b*) The Consultant shall provide the reports listed in Annex B, "*Consultant's Reporting Obligations*," within the time periods listed in such Annex,

(*c*) The Lump-sum Amount and Reimbursables are listed in Annex C.

2. Term :

The contract shall come into effect [on the date that the advance payment has been received by the Consultant – as applicable] [on the following date agreed between the Procuring Entity and the Consultant : [*insert date*]. The Consultant shall perform the Services during the period [*insert period*] or any other period as may be subsequently agreed by the parties in writing.

3. Payment

A. *Lump-sum Amount and Reimbursables*

For Services rendered pursuant to Annex A, the Client shall pay the Consultant an amount not to exceed an amount of [*insert amount*]. This amount has been established based on the understanding that it includes all of the Consultant's costs and profits as well as any tax obligation that may be imposed on the Consultant. The payments made under the Contract consist of the Consultant's remuneration as defined in sub-paragraph B below and of the reimbursable expenditures as defined in sub-paragraph C below.

B. *Remuneration*

The Client shall pay the Consultant for Services rendered in accordance with the Schedule agreed and specified in Annex C.

C. *Reimbursables*

The Client shall pay the Consultant for reimbursable expenses, which shall consist of and be limited to :

(*i*) normal and customary expenditures for official travel, accommodation, printing, and telephone charges. Official travel will be reimbursed at the cost of less than first class travel and will need to be authorized by the Client's coordinator;

(*ii*) such other expenses as approved in advance by the Client's coordinator.

D. *Payment Conditions*

The Consultant shall receive an Advance Payment of [*insert amount in agreed currency*] to cover travel and subsistence expenses, which shall be subtracted from the reimbursables.

Payments for the services shall be made in [*insert type of currency*] within 30 days following submission of invoices in duplicate to the Coordinator designated in paragraph 4.

4. Project Administration

A. *Coordinator*

The Client designates Mr./Mrs. [*insert name*] as the Client's Coordinator. The Coordinator shall be responsible for the coordination of activities under the Contract, for receiving and approving invoices for payment, and for acceptance of the deliverables by the Client.

B. *Records and Accounts*

The Consultant shall keep accurate and systematic records and accounts in respect of the Services, which will clearly identify all charges and expenses. The Client reserves the right to audit, or to nominate a reputable accounting firm to audit the Consultant's records relating to amounts claimed under this Contract during its term and any extension, and for a period of three months thereafter.

5. The Consultant undertakes to perform the Services with the highest standards of professional and ethical competence and integrity. The Consultant shall promptly replace any employees assigned under this Contract that the Client considers unsatisfactory.

6. The Consultants shall not, during the term of this Contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this Contract or the Client's business or operations without the prior written consent of the Client.

7. Any studies, reports or other material, graphic, software or otherwise, prepared by the Consultant for the Client under the Contract shall belong to and remain the property of the Client. The Consultant may retain a copy of such documents and software.

8. The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, shall be disqualified from providing goods, works or services (other than the Services or any continuation thereof) for any project resulting from or closely related to the Services.

9. The Consultant will be responsible for taking out any appropriate insurance coverage.

10. The Consultant shall not assign this Contract or Subcontract any portion of it without the Client's prior written consent.

11. The Contract shall be governed by the laws of [insert name of the Beneficiary's country]**, a**nd the language of the Contract shall be [insert language].

12. Any dispute arising out of this Contract, which cannot be amicably settled between the parties, shall be referred to adjudication/arbitration in accordance with the laws of the Client's country [or as otherwise agreed].

13. This contract may be terminated by either party on a 30 day's written notice. During such period, the Consultant shall complete ongoing tasks till the mutually agreed date of termination and the Coordinator shall ensure payment for such tasks and reimbursables – as well as requests for payments already submitted but not yet paid - in accordance with paragraph 3 above.

For the Client *The Consultant*

Signed by _____ *Signed by* _____

Title : _____ *Title* : _____

LIST OF ANNEXES

Annex A : Terms of Reference and Scope of Services, including Work Program.

Annex B : Consultant's Reporting Obligations.

Annex C : Lump-sum Amount and Reimbursables.

Annex A

TERMS OF REFERENCE

[Description of Services]

Terms of Reference

The Terms of Reference normally contain the following sections :

(*a*) Background to the Services Required ;
(*b*) Objectives of the Services Required ;
(*c*) Scope of the Services Required ;

(*d*) Training (where appropriate) ;

(*e*) Reports and Time Schedule ;

(*f*) Data, Local Services, Personnel and Facilities to be provided by the Client ;

(*g*) Indicative Work Programme and Location(s) of the various Activities to be carried out by the Consultant.

[*The Client should provide in clear terms what is required of the Consultant. The actual requirements will then be discussed and agreed during the Negotiations stage and the final agreed Requirements will be incorporated as Annex A to the Contract Agreement*].

Activity Schedule

Activity (Work) ***periods***

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th

ANNEX B
CONSULTANTS REPORTING REQUIREMENTS

Reports **Date**

1. Inception Report

2. Progress Reports
   a) First Progress Report
   b) Second Progress Report

3. Draft Final Report

4. Final Report

ANNEX C

REMUNERATION FOR THE SERVICES

(1) *Remuneration*

The Lump-sum amount is :

Payment shall be made according to the following schedule :

(*Note* : *This is a sample payment provision and should be specifically drafted for each contract depending on the type of deliverables*).

- Ten (10) percent of the Contract Price shall be paid on the commencement date.
- Ten (10) percent of the lump-sum amount shall be paid upon submission of the inception report.
- Thirty (30) percent of the lump-sum amount shall be paid upon submission of the interim report.
- Forty (40) percent of the lump-sum amount shall be paid upon submission of the draft final report.
- Ten (10) percent of the lump-sum amount shall be paid upon approval of the final report.

Annex 2: Questionnaire

AFRICAN CENTER OF EXCELLENCE FOR DRUG RESEARCH, HERBAL MEDICINE DEVELOPMENT AND REGULATORY SCIENCE (ACEDHARS)

Questionnaire for the Preparation of Safeguard Instruments (ESMP) for ACEDHARS

This questionnaire which is expected to take about 20 minutes to complete is aimed at eliciting your view/opinion on the social and environmental implications of the ACEDHARS *project activities in your community. Your input would assist in the preparation of an Environmental and Social Management Plan (ESMP) that would enable the PCU to manage the various project activities in a manner that guarantees socio-environmental sustainability of the project.*

My name is ……
……
……..
DATE:……Questionnaire No……
Community:…….
LGA:……GPS Location:……..
Please simply tick (x) or write in brief detail where appropriate
SECTION A: BIO-DATA
Name: ……..

Phone Number:……
Address(optional): ……
Age (years): <18 ☐ 18-30 ☐ 30-50 ☐ 50-70 ☐ bove 70 ☐

Sex: Male ☐ Female ☐

What is your religion: Christian ☐ Muslim ☐ Pagan ☐ traditionalist ☐
Others ☐

Marital Status: Single ☐ Married ☐ Separated/Divorcee ☐

No. of children: Non 1-3 ☐ 4-6 ☐ 6-8 ☐ Above 8 ☐
Level of education: ( ) No formal educ. ( ) Govt. Secondary ( ) Secondary ( ) Tertiary ( ) others (specify) …….

What do you do for a living (your Govt. secondary occupation/nature of business)?

( ) Self-employed ( ) fisherman ( ) hunter ( ) public sector ( ) Others (specify)……

11. How long have you been resident in this community?
( ) Since birth ( ) above 15 years ( ) 10 – 15 years ( ) 5 – 10 years ( ) below 5 years
12. What are the transportation means to this community?
( ) Car/bus ( ) motorcycle ( ) bicycle ( ) lorry ( ) others
13. Please give your weekly( ) or monthly ( ) earnings

Below N500 ( ) N500 – N1000 ( ) N1000 – N5000 ( ) N5000 – N7000 ( ) N7000 – N10,000 above 10,000 ( )

SECTION B

11. What is your general opinion of this project?

……

12. How do you think the project will affect the community? How will it affect the individual families?

……

Pls explain the benefits or negative impacts of this project in the community? …….

How do you seek redress when there is a grievance among people in this community? ……

Do you have any concerns about labour influx into the community when the project commences?

……
……

How far or how close is the nearest market?

……
……

Please describe the leadership structure in this community

……
……..

Please describe the health care facilities in this village. Where is the nearest hospital located?

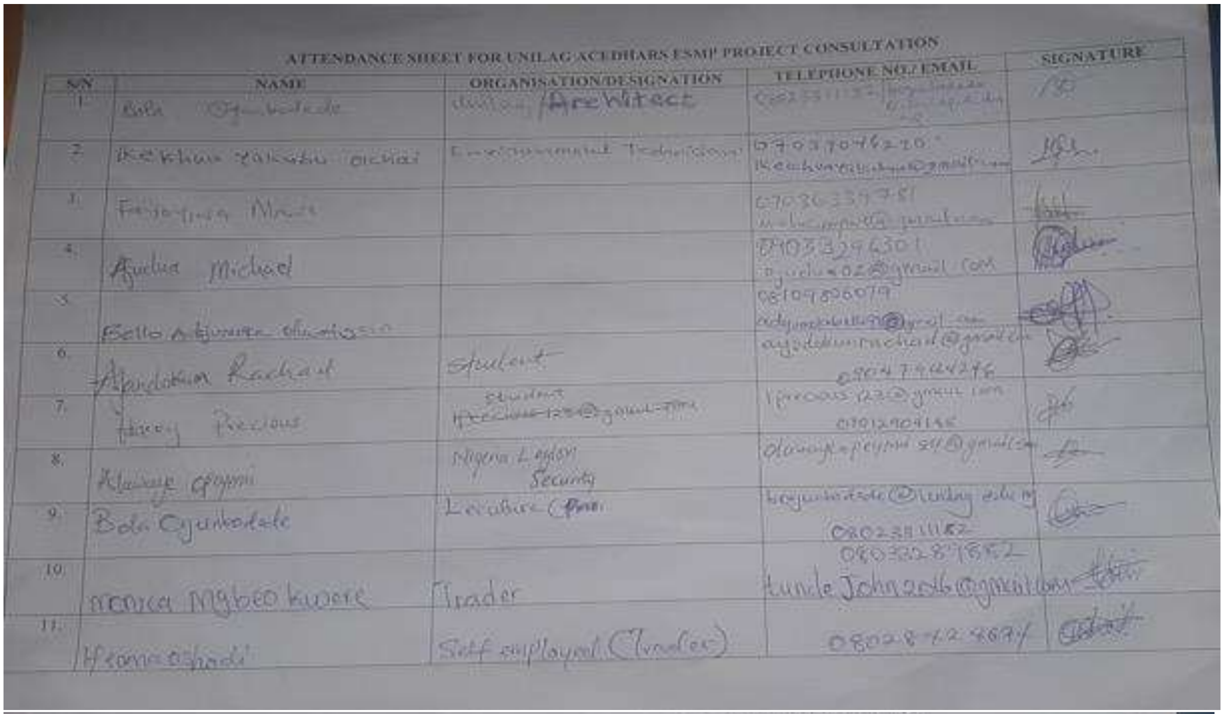
……
.

19. Have you had any instances of gender-based violence in your community? If yes, please explain……..

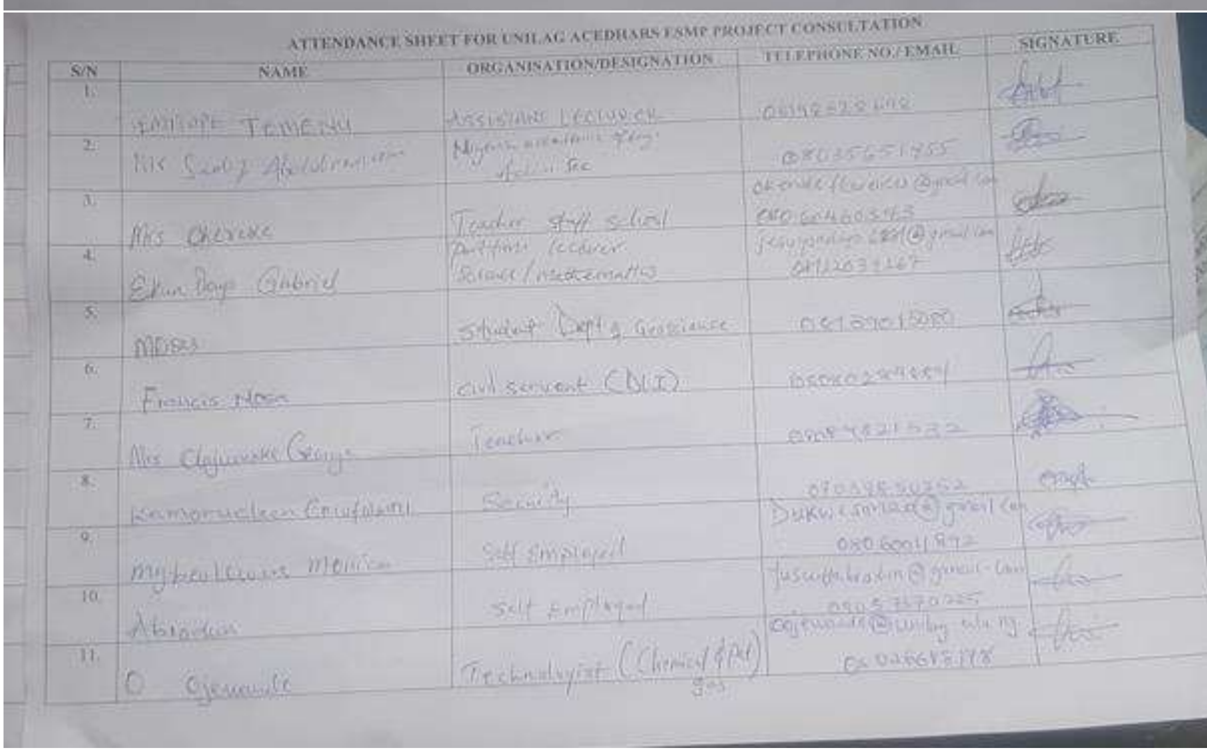
Annex 3: List of persons consulted

s/n	Name of person consulted	contact	Email
1	Bola Ogunbodede	08023311132	
2	Ikehkua Yakubu	07039046290	
3	Fayoyiwa Maria	07036339781	
4	Ajudua Michael	09033296301	
5	Bello Adejumoke Oluwatoyin	08109806079	
6	Ajandokun Rachael	09047944246	
7	Harry Precious	07012904148	
8	Alawaye Apeyemi		Olawayeapeyemis4@gmail.com
9	Mr. Ogunbodede		bogunbodede@unilag.edu.ng
10	Monica Mgboekere	08033289882	tundejohn2016@gmail.com
11	Ifeoma Oshodi	08028424674	
12	Sadiq Abdulraman	08035651455	
13	Mrs Okereke	08060460343	
14	Ekundayo Gabriel	08122039267	
15	Mr Moses	08139015080	
16	Francis Nosa	08080284884	
17	Mrs Olajumoke George	08084821532	
18	Kamoruleen Eniofolami	07039850252	
19	Mgeolicious Monica	08060011892	Dukwuson20@gmail.com
20	O. Ojewande	08026648178	oojewande@unilag.edu.ng
21	Mr Yusuf Abiodun	09057570225	yusuffabiodun@gmail.com

Attendance for Consultation Meeting


ATTENDANCE SHEET FOR UNILAG ACEDHARS ESMP PROJECT CONSULTATION

S/N	NAME	ORGANISATION/DESIGNATION	TELEPHONE NO./ EMAIL	SIGNATURE
1.	Bola Ogunbodede	[illegible] Architect	[illegible]	
2.	Kekhua Yakubu Michael	Environmental Technician	07037046220 [illegible]	
3.	[illegible]		07036339781 [illegible]	
4.	Ajulua Michael		09033296301 [illegible]	
5.	Bello Adejumon Oluwatosin		08109896079 [illegible]	
6.	Ajadokun Rachael	Student	ajadokunrachael@gmail.com 08047424246	
7.	Harry Precious	Student	[illegible] 07012909145	
8.	[illegible]	Nigeria Legion Security	[illegible]	
9.	Bola Ogunbodede	Lecturer [illegible]	[illegible] 08023811182	
10.	Monica Mgbeokwere	Trader	08032287852 tundeJohn2016@gmail.com	
11.	Ifeoma Oshodi	Self employed (Trader)	08028422467	


ATTENDANCE SHEET FOR UNILAG ACEDHARS ESMP PROJECT CONSULTATION

S/N	NAME	ORGANISATION/DESIGNATION	TELEPHONE NO./ EMAIL	SIGNATURE
1.	[illegible]	Assistant Lecturer	[illegible]	
2.	Mr Sadiq Abdulrahman	Nigerian [illegible]	08035651755	
3.	Mrs Okereke	Teacher Staff School	[illegible]	
4.	Ekun Dayo Gabriel	Part-time lecturer Science/Mathematics	[illegible]	
5.	Moses	Student Dept of Geoscience	[illegible]	
6.	Francis Moses	Civil servant (DLI)	[illegible]	
7.	Mrs Olajumoke George	Teacher	[illegible]	
8.	[illegible]	Security	[illegible]	
9.	Mgbeokwere Monica	Self employed	[illegible]	
10.	Abraham	Self employed	[illegible]	
11.	O Ojesanmi	Technologist (Chemical & Pet)	[illegible]	

Annex 4: General Environmental Management Conditions for Maintenance/Maintenance Contracts

General

1. In addition to these general conditions, the Contractor shall comply with any specific Environmental and Social Management Plan (ESMP) for the works he is responsible for. The Contractor shall inform himself about such an ESMP and prepare his work strategy and plan to fully take into account relevant provisions of that ESMP. If the Contractor fails to implement the approved EMP after written instruction by the Supervising Engineer (SE) to fulfil 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 maintenance 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 maintenance 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 archaeological 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 fulfilment of the measures aimed at protecting such historical or archaeological resources.

(g) Discourage maintenance 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 maintenance and site offices.

(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 bonded in order to contain spillage. All waste containers, litter and any other waste generated during the Maintenance shall be collected and disposed 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 of appropriately at designated sites or be re-used 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. Maintenance/maintenance 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 Maintenance 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 the general conditions, and any applicable ESMP, 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 maintenance.
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 maintenance/Maintenance 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. Re-vegetate 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 downstream and maintains the ecological balance of the river system.

36. No maintenance/Maintenance 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 Maintenance 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 maintenance/Maintenance work, the Contractor shall mount an awareness and hygiene campaign. Workers and local residents shall be sensitized on health risks particularly of Cholera, tetanus and Hepatitis.

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

51. Maintenance/Maintenance 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 Environment, Health and Safety Management Plan (EHS-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 EHS 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 EHS aspects of the project, and as a basis for monitoring of the Contractor's EHS 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.

EHS Reporting

57. The Contractor shall prepare bi-weekly progress reports to the SE on compliance with these general conditions, the project ESMP if any, and his own EHS-MP. An example format for a Contractor EHS report is given below. It is expected that the Contractor's reports will include information on:

EHS management actions/measures taken, including approvals sought from local or national authorities;

Problems encountered in relation to EHS 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 EHS aspects; and

Observations, concerns raised and/or decisions taken with regard to EHS management during site meetings.

Training of Contractor's Personnel

58. 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:

EHS in general (working procedures);

Emergency procedures; and

Social and cultural aspects (raise awareness on social issues).

Cost of Compliance

59. 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 this cost. No other payments will be made to the Contractor for compliance with any request to avoid and/or mitigate an avoidable EHS impact.

Annex 6: Sample Individual Company Code of Conduct for Gender Based Violence

Company's Code of Conduct

Preventing Gender Based Violence and Violence Against Children

The company is committed to creating and maintaining an environment in which gender-based violence (GBV) and violence against children (VAC) have no place, and where they will not be tolerated by any employee, associate, or representative of the company. Therefore, in order to ensure that all those engaged in the project are aware of this commitment, and in order to prevent, be aware of, and respond to any allegations of GBV and VAC, the company commits to the following core principles and minimum standards of behavior that will apply to all company employees, associates, and representatives including sub-contractors, without exception:

The company—and therefore all employees, associates, and representatives—commit to treating women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status. Acts of GBV and VAC are in violation of this commitment.

Demeaning, threatening, harassing, abusive, culturally inappropriate, or sexually provocative language and behavior are prohibited among all company employees, associates, and its representatives.

Acts of GBV or VAC constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment. All forms of GBV and VAC, including grooming are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or at worker's homes.

In addition to company sanctions, legal prosecution of those who commit acts of GBV or VAC will be pursued if appropriate.

Sexual contact or activity with children under 18—including through digital media—is prohibited. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.

Sexual favors—for instance, making promises or favorable treatment dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior are prohibited.

Unless there is full consent5 by all parties involved in the sexual act, sexual interactions between the company's employees (at any level) and members of the communities surrounding the workplace are prohibited. This includes relationships involving the withholding/promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered "non-consensual" within the scope of this Code.

All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of GBV and/or VAC by a fellow worker, whether in the same company or not. Reports must be made in accordance with GBV and VAC Allegation Procedures.

Managers are required to report suspected or actual acts of GBV and/or VAC as they have a responsibility to uphold company commitments and hold their direct reports responsible.

To ensure that the above principles are implemented effectively the company commits to ensuring that:

All managers sign the 'Manager's Code of Conduct' detailing their responsibilities for implementing the company's commitments and enforcing the responsibilities in the 'Individual Code of Conduct'.

All employees sign the project's 'Individual Code of Conduct' confirming their agreement not to engage in activities resulting in GBV or VAC.

Displaying the Company and Individual Codes of Conduct prominently and in clear view at workers' camps, offices, and in in public areas of the work space. Examples of areas include waiting, rest and lobby areas of sites, canteen areas, health clinics.

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5 Consent is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even in the event that national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

Ensure that posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.
An appropriate person is nominated as the company's 'Focal Point' for addressing GBV and VAC issues, including representing the company on the GBV and VAC Compliance Team (GCCT) which is comprised of representatives from the client, contractor(s), the supervision consultant, and local service provider(s).
Ensuring that an effective Action Plan is developed in consultation with the GCCT which includes as a minimum:
GBV and VAC Allegation Procedure to report GBV and VAC issues through the project Grievance Redress Mechanism (GRM);
Accountability Measures to protect confidentiality of all involved; and,
Response Protocol applicable to GBV and VAC survivors and perpetrators.
That the company effectively implements the Action Plan, providing feedback to the GCCT for improvements and updates as appropriate.
All employees attend an induction training course prior to commencing work on site to ensure they are familiar with the company's commitments and the project's GBV and VAC Codes of Conduct.
All employees attend a mandatory training course once a month for the duration of the contract starting from the first induction training prior to commencement of work to reinforce the understanding of the project's GBV and VAC Code of Conduct.
I do hereby acknowledge that I have read the foregoing Company Code of Conduct, and on behalf of the company agree to comply with the standards contained therein. I understand my role and responsibilities to prevent and respond to GBV and VAC. I understand that any action inconsistent with this Company Code of Conduct or failure to take action mandated by this Company Code of Conduct may result in disciplinary action.

Company name: _____

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Annex 7: Manager's Code of Conduct

Preventing Gender Based Violence and Violence Against Children

Managers at all levels have particular responsibilities to uphold the company's commitment to preventing and addressing GBV and VAC. This means that managers have an acute responsibility to create and maintain an environment that prevents GBV and VAC. Managers need to support and promote the implementation of the Company Code of Conduct. To that end, managers must adhere this Manager's Code of Conduct and also sign the Individual Code of Conduct. This commits them to supporting and developing systems that facilitate the implementation of the Action Plan and maintain a GBV-free and VAC-free environment at the workplace and in the local community. These responsibilities include but are not limited to:

Implementation

To ensure maximum effectiveness of the Company and Individual Codes of Conduct:

Prominently displaying the Company and Individual Codes of Conduct in clear view at workers' camps, offices, and in in public areas of the workspace. Examples of areas include waiting, rest and lobby areas of sites, canteen areas, health clinics.

Ensuring all posted and distributed copies of the Company and Individual Codes of Conduct are translated into the appropriate language of use in the work site areas as well as for any international staff in their native language.

Verbally and in writing explain the Company and Individual Codes of Conduct to all staff.

Ensure that:

All direct reports sign the 'Individual Code of Conduct', including acknowledgment that they have read and agree with the Code of Conduct.

Staff lists and signed copies of the Individual Code of Conduct are provided to the GCCT and the client.

Participate in training and ensure that staff also participate as outlined below.

Staff are familiar with the Grievance Redress Mechanism (GRM) and that they can use it to anonymously report concerns of GBV or VAC incidents.

Staff are encouraged to report suspected or actual GBV or VAC through the GRM by raising awareness about GBV and VAC issues, emphasizing the staff's responsibility to the Company and the country hosting their employment, and emphasizing the respect for confidentiality.

In compliance with applicable laws and to the best of your abilities, prevent perpetrators of sexual exploitation and abuse from being hired, re-hired or deployed. Use background and criminal reference checks for all employees.

Ensure that when engaging in partnership, sub-contractor or similar agreements, these agreements:

Incorporate the GBV and VAC Codes of Conduct as an attachment.

Include the appropriate language requiring such contracting entities and individuals, and their employees and volunteers, to comply with the Individual Codes of Conduct.

expressly state that the failure of those entities or individuals, as appropriate, to take preventive measures against GBV and VAC, to investigate allegations thereof, or to take corrective actions when GBV or VAC has occurred, shall constitute grounds for sanctions and penalties in accordance with the Individual Codes of Conduct.

Provide support and resources to the GCCT to create and disseminate internal sensitization initiatives through the awareness-raising strategy under the Action Plan.

Ensure that any GBV or VAC issue warranting police action is reported to the client and the World Bank immediately.

Training

All managers are required to attend an induction manager training course prior to commencing work on site to ensure that they are familiar with their roles and responsibilities in upholding the GBV and VAC Codes of Conduct. This training will be separate from the induction training course

required of all employees and will provide managers with the necessary understanding and technical support needed to begin to develop the Action Plan for addressing GBV and VAC issues.
Ensure that time is provided during work hours and that staff attend the mandatory project facilitated induction training on GBV and VAC required of all employees prior to commencing work on site.
Ensure that staff attend the monthly mandatory refresher training course required of all employees to combat increased risk of GBV and VAC during civil works.
Managers are required to attend and assist with the project facilitated monthly training courses for all employees. Managers will be required to introduce the trainings and announce the self-evaluations.
Collect satisfaction surveys to evaluate training experiences and provide advice on improving the effectiveness of training.
Response
Managers will be required to provide input to the GBV and VAC Allegation Procedures and Response Protocol developed by the GCCT as part of the final cleared Action Plan.
Once adopted by the Company, managers will uphold the Accountability Measures set forth in the Action Plan to maintain the confidentiality of all employees who report or (allegedly) perpetrate incidences of GBV and VAC (unless a breach of confidentiality is required to protect persons or property from serious harm or where required by law).
If a manager develops concerns or suspicions regarding any form of GBV or VAC by one of his/her direct reports, or by an employee working for another contractor on the same work site, s/he is required to report the case using the GRM.
Once a sanction has been determined, the relevant manager(s) is/are expected to be personally responsible for ensuring that the measure is effectively enforced, within a maximum timeframe of 14 days from the date on which the decision to sanction was made.
Managers failing to report or comply with such provision can in turn be subject to disciplinary measures, to be determined and enacted by the company's CEO, Managing Director or equivalent highest-ranking manager. Those measures may include:
Informal warning.
Formal warning.
Additional Training.
Loss of up to one week's salary.
Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
Termination of employment.
Ultimately, failure to effectively respond to GBV and VAC cases on the work site by the company's managers or CEO may provide grounds for legal actions by authorities.
I do hereby acknowledge that I have read the foregoing Manager's Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV and VAC. I understand that any action inconsistent with this Manager's Code of Conduct or failure to take action mandated by this Manager's Code of Conduct may result in disciplinary action.

Signature: _____
Printed Name: _____
Title: _____
Date: _____

Annex 8: Individual Code of Conduct

Preventing Gender Based Violence and Violence Against Children

I, _____, acknowledge that preventing gender-based violence (GBV) and violence against children (VAC) is important. The company considers that GBV or VAC activities constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. All forms of GBV or VAC are unacceptable be it on the work site, the work site surroundings, or at worker's camps. Prosecution of those who commit GBV or VAC may be pursued if appropriate.

I agree that while working on the project I will:

Consent to police background check.

Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.

Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.

Not participate in sexual contact or activity with children—including grooming or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse.

Not engage in sexual favors—for instance, making promises or favorable treatment dependent on sexual acts—or other forms of humiliating, degrading or exploitative behavior.

Unless there is the full consent6 by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex—such sexual activity is considered "non-consensual" within the scope of this Code.

Attend and actively partake in training courses related to HIV/AIDS, GBV and VAC as requested by my employer.

Consider reporting through the GRM or to my manager any suspected or actual GBV or VAC by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.

With regard to children under the age of 18:

Wherever possible, ensure that another adult is present when working in the proximity of children.

Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.

Not sleep close to unsupervised children unless absolutely necessary, in which case I must obtain my supervisor's permission, and ensure that another adult is present if possible.

Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass children or to access child pornography through any medium (see also "Use of children's images for work related purposes" below).

Refrain from physical punishment or discipline of children.

Refrain from hiring children for domestic or other labor which is inappropriate given their age or developmental stage, which interferes with their time available for education and recreational activities, or which places them at significant risk of injury.

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6 Consent is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained through the use of threats, force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even in the event that national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.

Comply with all relevant local legislation, including labor laws in relation to child labor.

Use of children's images for work related purposes

When photographing or filming a child for work related purposes, I must:

Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
Ensure images are honest representations of the context and the facts.
Ensure file labels do not reveal identifying information about a child when sending images electronically.

Sanctions

I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

Informal warning.
Formal warning.
Additional Training.
Loss of up to one week's salary.
Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
Termination of employment.
Report to the police if warranted.

I understand that it is my responsibility to avoid actions or behaviors that could be construed as GBV or VAC or breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to GBV and VAC. I understand that any action inconsistent with this Individual Code of Conduct or failure to take action mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Annex 9: Contingency and Emergency Response Plan (Sample)

Introduction

An emergency is best described as a serious situation or unforeseen crisis that happens unexpectedly and requires or demands immediate/necessary action. This is often associated with danger. Therefore, this plan has been prepared to establish a process that has been adopted by our organization to respond to any emergency situation. This plan has the following fundamental objectives are:

To ensure that we can identify how to prepare for an emergency
Provide a checklist of actions that would enable our work team prepare to handle such emergencies

The objective

The aim of this plan is therefore to examine a series of steps in the process, which is designed to ensure that any situation that necessitated that the status of emergency be apportioned, be managed in a manner that would ameliorate this condition.

Thus, this plan provides guidelines on the best approach that would be engaged by employees of the Contractor company in emergency situations, which may be as a consequence of the following:

Medical (health)
Safety
Environmental
Security
Any other types of emergencies

Emergency Response Team (ERT)

An emergency response team will be constituted for the project. These will be the group of persons that would have the responsibility of managing this emergency plan in a manner that would ensure the goals of this plan are achieved. For this reason, the members of the ERT are:

Managing Director (or representative)
HSEQ Officer
Project Engineer
Supervisor
Support members (headmen from units – civil, mechanical, electrical etc.)
Supervising Consultant representative
SPIU representative

Emergency Response Centre (ERC)

Due to the temporary nature of the facilities that would be utilized as site office, for intervention projects, the site office will also be converted into the Emergency Response Centre (ERC), in cases of emergency. Therefore, appropriate communication equipment shall be available in the office, to ensure that the channels of contact are available, at all times.

In the minimum our ERC will have:
A computer system with internet facilities available

A telephone
A public address system

Activation of this Emergency Response Centre

The individual that receives the information that could potentially necessitate an emergency response should immediately convey the information to the Project Engineer.

Jointly, the project engineer and the Safety officer will review the situation/information, following which the managing director will be contacted (if not on site).

The managing director will hereafter take the decision of the gravity of the situation, following which it may be necessary to constitute an ERT and convert the site office into the ERC.

Core ERT and support members will be represented once the ERC is activated.

Checklist of Emergency Response Actions

These actions shall be implemented immediately the ERC is activated:

S/n	Actions
1.	Verify status of emergency and likely exposure of other personnel to risk, ensure ERT members are fully equipped in emergency response equipment
2.	Locate and account for all personnel on site (muster point) and if appropriate, implement the evacuation procedure, if necessary. Review decision on need to establish contact with family of personnel involved in emergency
3.	Establish and maintain close contact with relevant authorities related or connected to the resolving of this emergency. e.g. in case of medical emergency, a hospital, security emergencies will require a contact with government law enforcement agencies – police etc.
4.	Inform supervising consultant & SPIU representative as promptly as possible in order to establish interface link with Client
5.	Transmit any information update or changes in situation status to emergency focal group; the managing director and members of the ERT and determine if there is a need to shut down critical on going operational activities
6.	Depending on the type of emergency, any necessary follow up action should be determined and promptly acted upon, as may be required e.g. medical emergencies may require evacuation, environmental emergencies may require containment, safety emergencies may require prompt cordoning off of area etc.
7.	Internal Communication channel with other personnel should be kept open, by means of public address system or telecommunication (walkie talkies) and updates provided to forestall any likely re-occurrences, where possible
8.	Examine cross-cutting impact of emergency on liability issues and operational continuity. e.g. media involvement in security emergencies
9.	Undertake an assessment of risk to review other potential liabilities and deploy mitigation measures, where necessary. e.g. workmen compensation insurances in case of accident emergencies
10.	Review all cost implications of emergency response actions and make necessary budgetary provisions
11.	Provide the SPIU with updates immediately additional information is received.

Accident reporting

This accident report would be factual, free from hearsay, assumptions, gossips and / or preliminary conclusions. The report shall be duly signed by the Project engineer. The SPIU shall be briefed about the accident in writing within 24 Hours.

Timing of investigation
The investigation should be carried out as soon as possible after the accident. The quality of evidence can deteriorate rapidly with time and delayed investigation are usually not as conclusive as those performed with dispatch. A prompt investigation is a good demonstration of management concern for safety.

Scope of Investigation
The scope of the investigation can be divided into four areas:
Personnel
Technique
The Environment
Organization

In each of these areas, actions of omission may be identified which could be a factor contributing to the accident or subsequent injury, damage or loss.

Establishment of the fact
In establishing the fact(s) of an accident, we would consider the followings as necessary factors:

Background information that would be considered,
the procedure for this type of operations
command structure
the person involved

Facts collection
Facts collection shall include but not limited to topography, weather, warning signs /notices, condition of the equipment, housekeeping, before interview can be conducted.

ACCIDENT REPORT AND INVESTIGATION
(Standard report form)

Date: ---------- Time: ----------/AM/PM

Location: ---------- Department: ----------

Supervisor: ----------

Name of Victim: ----------

Nationality: ---------- Address: ----------

Marital Status: ---------- Occupation:----------

Date of Birth: ---------- Experience (years):----------

Equipment/tools being used when accident occurred:----------

Description of accident:----------

Name of Witness (if any): ----------

Conditions during accident: weather- dry, rain, clear, dusk, dark etc.

Unsafe acts, actions and conditions (Please describe):----------
---

Report verification by:

Name: ----------Date: ----------

Annex 10: Waste Management Plan

1.1 Objectives/Purpose of the Waste Management Plan

The overall objective of this exercise is to support the ESMP to identify the types of general waste generated, characterize the waste streams under the project and to prepare a Waste Management Plan to identify impacts of the waste that shall be generated over the life cycle of this sub-project and proffer mitigation measures.

1.2 Rationale for WMP

As the specific sub-projects have been determined, the screening of the rehabilitation/construction of ACEDHARS building has shown that environmental & social impacts are site specific and the sub-projects are classified as **Category B** according to the World Bank categorization & category II, according to the FMEnv.

The different categories of construction waste stream from the construction phase and the operational phase of the lifecycle of sub-project has necessitated that this Waste Management Plan (WMP) be prepared to complement the Environmental and Social Management Plan (ESMP). This WMP is guided by the following fundamental principles:

Duty of Care principle: Any person or organization generating or handling waste is morally bound by responsibility to manage or to handle the waste generated.

Precautionary principle: the principle implies that there is a social responsibility to protect the public from exposure to harm, when scientific investigation has found a plausible risk. This obligates the waste handlers or operators to have in place a proper collection & disposal processes and also ensure personal protection is provided for personnel.

Cradle to Grave Responsibility: Parties that generate waste are generally responsible for the management of such waste from the point of generation up to the final disposal.

Polluters must pay principle waste producers are legally and financially responsible for the environmentally sound and effective disposal of their waste.

3.0 Waste characterization

The general waste streams from the construction of the ACEDHARS building are:

- Construction waste
- Domestic waste
- Sanitary waste

3.1.1 Construction Waste

The construction waste is the unwanted material produced directly or indirectly from the construction activities undertaken on this sub-project. It will primarily comprise the vegetation; tree stumps & shrubs grasses, hedges from site clearing activities and they can easily be re-cycled and also the non-biodegradable concrete rubble, blocks, iron for rebars, cement bags and wood. The shrubs and hedges can be shredded and cut into

smaller bits as mulch which can be spread at the base of trees and plants on campus, which would contribute to suppressing weed growth and retaining soil moisture.

3.1.2. Domestic Waste Streams

This domestic waste streams include the biodegradable waste, which comprises waste such as food, wastewater, and non-biodegradable items such as bottles, plastics etc. from the site office.

3.1.3 Sanitary waste

Sanitary waste comprises the biodegradable waste such as human feaces, urine, vomit and non-healthcare waste that would be generated from the work site.

The characterization of the different types of waste in the operations phase of this ACEDHARS building is as shown in figure 1.

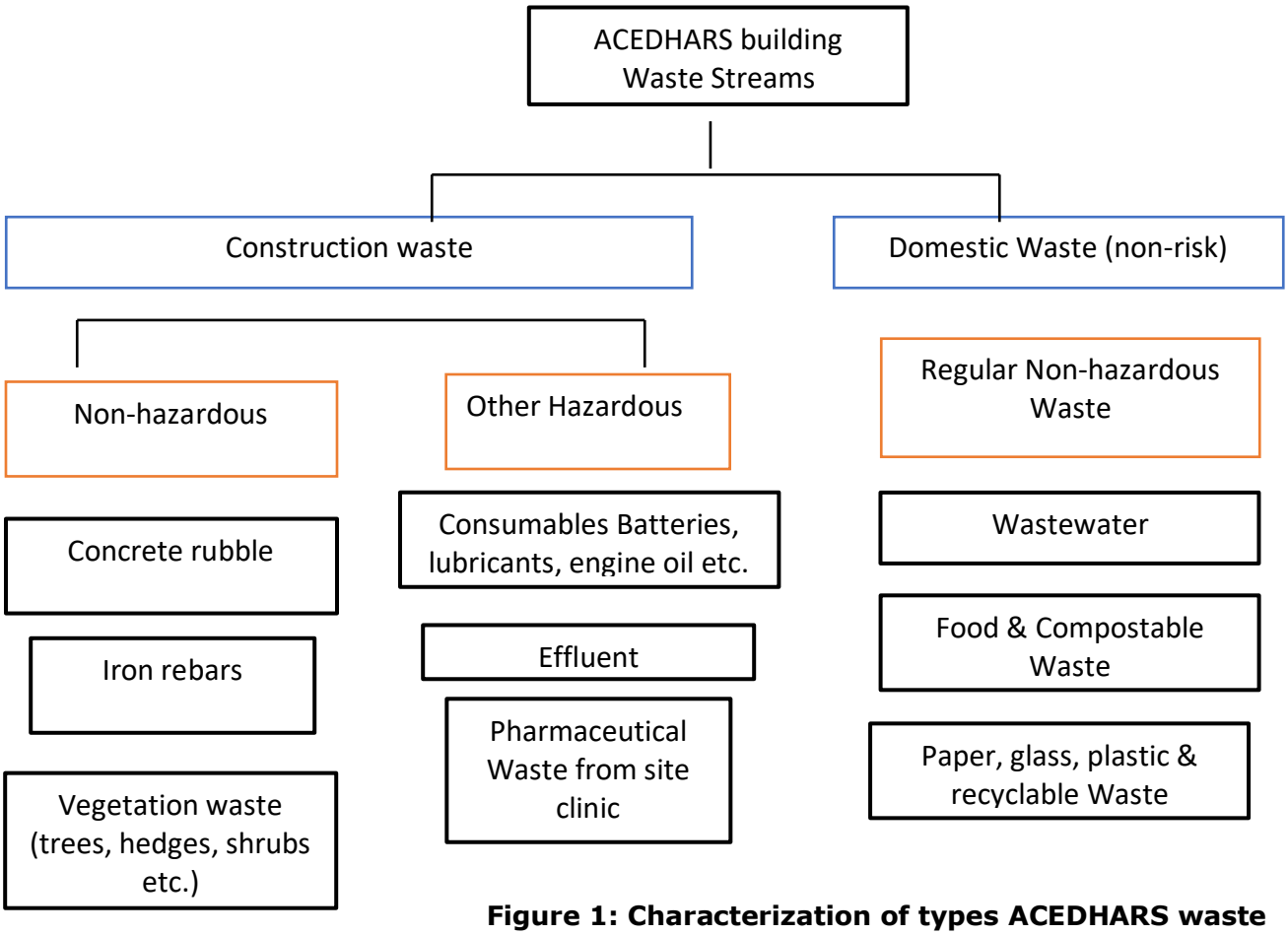

Figure 1: Characterization of types ACEDHARS waste

3.3 Waste Management System

It is important that to ensure that the actual management of waste on this sub-project

involves the process of Identification; segregation/ containerization; storage; transportation; treatment; and disposal. The process that will guide waste management for the ACEDHARS building site is shown in Table 3.

Table 317: Waste Management Process

Key steps	Definition
Identification	Identification and classification on waste material
Segregation/ Containerization	Segregation at the source based on categories: • Hazardous waste – lubricant oils, batteries & effluent • General waste (food scraps, paper, plastics Sorting the waste into color-coded plastic bags or containers
On-Site Storage	Separate storage facilities (temporary before waste is transported to treatment facility) Packaging and labelling
Transportation	Using specific containers and designated vehicles to transport waste to landfill or incinerating site
Off-site Storage	Storage at landfill or incinerating site

3.3.1 Waste Segregation

Segregation is the process of separating different types of waste and keeping them isolated from each other. This process should be done correctly at the point of generation. Segregation of waste relies on designated staff to correctly identify waste according to its category. Correct segregation ensures that the correct treatment and disposal of waste occurs. Identify waste according to category (Never re-sort infectious waste. If general waste and infectious waste are mixed by accident infectious waste). Some of the segregation practices for the different categories of waste are:

3.3.2 Disposal

Methodology for disposal of waste would be by:
Preventing or reducing waste – a conscious decision would be inculcated among the workers & authorities to ensure approach to the use of materials is controlled so that waste generation is avoided. Construction waste will be further re-used on site, where possible.
Recycling - this would be carried out to transform waste into products that can make it re-usable through a process of industrial processing. For example, paper, glass and plastics would be segregated at source and arrangements can be made with manufacturers (e.g. Nigerian Bottling Company) or LGA to return empty bottles.
Composting – this would be adopted for de-composting of organic waste. A pit would be prepared into which biodegradable was would be disposed. The nutrient rich compost can be used as plant manure.
Landfill disposal – this is a site for the disposal of waste materials by burial. This would be carried out for the non-hazardous/non-risk waste types. The landfills in Lagos around the Ojota axis will be destination for this type of waste.

The waste management approach for the ACEDHARS building sub-project is presented in Table 4, while cost of implementing the Waste Management requirements in this ESMP is contained in Table 5.

Table 418: Waste Management approach

Type of Waste		Waste management			
		Reduce	Reuse	recycle	Disposal
Construction waste (vegetation, concrete, iron bars etc.)		Rubble and concrete waste comprising concrete and rebars will be further broken down into hardcore	Hardcore generated can be re-used as building material, while re-bars can be used in formwork.	Vegetation waste (shrubs, trees and grass) will be shredded into smaller bits and used as mulching material which will be applied to plants.	Any remaining waste that cannot be recycled or re-used is sent to Ojota landfill
Domestic waste	Effluent/ wastewater	Introduce practise of 'use of water only when necessary' approach to reducing water use.	Provide on-site water treatment plant	Use for watering of plants, vegetable or farms around the project site.	Treat with chlorine to remove contaminants before discharge
	(Food, vegetables etc.)	NA	Waste segregation will encourage collection of bottles and plastics which can be returned to owner bottling companies for reuse/refilling.	Compostable waste (food etc.) should be taken to the designated compost site to create manure which can be applied to trees/plants on campus.	Non compostable waste should be taken to an incinerator in collaboration with LAWMA.
Sanitary waste (human and animal faeces, syringes, sanitary pads, sputum, urine etc.)		NA	NA	NA	Dispose in collaboration with LAWMA. Method of disposal will depend on type of material, this can be deep buried, incinerated, or pit burned.

Table 519: Waste Management Plan					
No	**Project Activity**	**Potential Impact**	**Proposed Mitigation Measures/ Actions**	**Responsibility for mitigation**	**Cost (NGN)**
I. Pre-Construction Phase					
10.	Use of Site Office	Generation of sanitary waste	Ensure provision of sanitary facilities on site for workers and enforce usage. Ensure usage of waste management agency approved waste vendor for waste evacuation & disposal.	Contractor	300,000
17.	Movement of plant & equipment to and from staging area to site	Soil contamination	Develop and implement a site-specific Waste Management Plan (WMP) Prepare and implement an Emergency Response Plan to respond to incident of spillage. Ensure fuel storage tanks are installed in a bonded area and checked daily. Ensure regular maintenance of vehicles to avoid leaks of oil. Prevent unregulated dumping of fuel waste Ensure local communities are sensitized on need to avoid tampering with waste bins	Contractor	250,000
19.	Use of site office	Sanitation issues and public health impacts	Provide trash bins on site for temporary storage of domestic waste such as lubricant containers, drinking water sachets and carrier bags/packaging materials. Dispose all construction and domestic waste at the approved dumpsites and in the approved manner. Ensure all trenches or excavations made during the construction works do not collect stagnant water, which could breed mosquitoes. Ensure access to toilets for construction crew or provide temporary toilets (mobile toilets) for use where there are no existing ones. Ensure mobile toilets/sanitary provisions are provided to reflect gender types.	Contractor/ Engineering Consultant Environmental Safeguards Specialist	350,000

			Ensure regular toolbox meetings are held among contractor workers to offer awareness on transmission of contagious or communicable diseases.		
21.	Construction work activities	Generation of construction waste including spoils, debris and concrete	Develop and implement a site-specific Waste Management Plan (WMP) to include the following: Ensure segregation of waste to facilitate reuse and recycling opportunities. Ensure no burning of waste on site. Ensure usage of WAMA approved waste vendor for waste evacuation, processing & disposal.	Contractor	200,000
24.	Operation of site office prior to demobilization of facilities	Generation of sanitary waste from site office	Ensure provision of sanitary facilities on site for workers and enforce usage. Ensure usage of approved waste vendor for waste evacuation & disposal.	Contractor	400,000
25.	Commissioning of library & buildings	Generation of construction waste and debris	Develop and implement a site-specific Waste Management Plan (WMP) to include the following: Ensure segregation of waste to facilitate reuse and recycling opportunities. Site visit at the completion of project to ensure no waste is left behind.	Contractor	Part of Maintenance cost
29.	All decommissioning activities	Waste management	* Re-vegetate areas around Maintenance equipment sites to restore the landscape. * Ensure that any remaining metal or pvc pipes, or other waste streams created during Maintenance activities and waste generated during decommissioning activities are collected from the project sites and properly disposed before handing over the project.	Contractor	250,000

Annex 11: Project Traffic Management Plan (Sample)

1. Introduction
This Traffic Management Plan describes procedures and protocols for site access, traffic routing and management, and contractor company guidelines with respect to vehicle and employee transportation in delivering their obligations on this intervention project. Public, employee and contractor safety is the primary goal of this plan. It is vital that the Contractor recognizes that the traffic within the project area will be dynamic throughout the course of execution of this works and the safety of other road users is absolutely essential during this time.

2. General Site Access
In the interest of site security and public safety, access to operational areas or locations where heavy-duty machinery would be operated in related to the execution of this contract will be restricted to authorized site personnel through the usage of signs and gates where appropriate. Facilities that potentially present danger to persons or wildlife such as the electrical substation, equipment staging area and site office will be fenced or barricaded as appropriate to prevent general access.

3. Traffic Management
All traffic on routes to and from the site will be radio controlled. Where this is not possible, signage will be installed at appropriate locations in order to warn the public along these routes.
In the event that temporary closure occurs, access to the sites will be further restricted through the use of fences and gates as appropriate. Access to work areas such as temporary excavated places, or confined spaces where work is ongoing will be securely blocked by means of a temporary but robust barrier or barricade. Buildings and ancillary facilities will be locked and secured. A number of additional general measures related to site access, road management and public safety and construction events notification are presented here:

Private employee off-road vehicles or private transport buses will be prohibited from entry into the site.
Signage will be posted near all construction sites.
Notifications will be provided for activities that would be carried out over the weekend or public holiday periods. These would be disseminated through existing social institutions such as the village or district heads of communities, Local Government Councilors and NGO's or CBO's
Speed limit maintained at 10 km/hr speed limit within or near the communities;
Install reverse alarm fitted on all trucks, heavy duty equipment and off road vehicles
Employ or engage the use of a minimum of two flagmen around excavated areas, one for traffic approach and one to direct traffic away from the sites
In accordance with the Occupational Health and Safety Regulations for public roads, use of flashing devices/trafficators on all vehicles/machinery and equipment that will cross, travel on or may otherwise pose a risk to users of public roads.

4. Employee Transportation
To the extent possible employees will use buses provided by the contractor as transportation to and from the site, thereby reducing overall vehicle traffic. Project vehicles or will be utilized by staff, only when necessary.

5. Speed Limits
Speed limits will be enforced to and from the site and signage(s) shall be posted along the access and site roads (maximum 40 km/hr, reduced to 20 km/hr at blind corners and bridge crossings. Traffic along other access roads will be radio

controlled for safety and speed control. Furthermore, employees and contractors will be educated on safety including traffic protocols and speed limits during mandatory orientation. Routine traffic inspections and/or speed indicator signs will be used to encourage safe and responsible driving.

6. Communications And Notification Protocols

It is anticipated that the intervention project will require only single-lane temporary closures. Signage warnings of construction activities on the roads will be placed at appropriate distances from the construction site, in consultation with SPIU, Ministry of Transports, department of Highways & Public Works. For significant work activity (those requiring more than one day to complete), written notification will be distributed to residents and the SPIU, Ministry of Transport, department of Highways & Public Works will be notified. A public notice would be posted at multiple locations in the metropolis to communicate to residents any new activities that may be occurring or scheduled. Contact information for the Contractors senior management will be included in this notice and any concerns regarding the intervention work/project or traffic management can be forwarded through this notification system.

7. Traffic Routing and Volumes

Alternative traffic routing shall be mapped out and provided in the event that there will be complete closure of the road due to this intervention work activity. Traffic officers and appropriate road diversion signage(s) shall be deployed to ensure diversions routes are properly identified and traffic is directed along the mapped route. The flagmen shall be properly kitted in their Personal Protective Equipment (PPE), such as reflector vests and safety boots, to ensure that safety on the job is given due priority.

8. Reporting

Records on traffic management and implementation of this plan should be kept and updated by the contractor as evidence of ongoing mitigation compliance, which will be submitted to SPIU as part of routine reports on progress of work.

Annex 12: Laboratory Results of Environmental Studies

LAGOS STATE ENVIRONMENTAL PROTECTION AGENNCY

LABORATORY SERVICE DEPARTMENT

LASEPA BUILDING ALAUSA IKEJA

CLIENT: SADA AFRITECH INTERNATIONAL

Physico-chemical properties of water and soil within a propose site for construction in UNILAG Akoka campus.

DATE: 11TH MAY, 2022.

Soil ID	particle distribution %							PH	PH	Cmol/kg.						µS/cm	g/cm³
	Sand	Silt	Clay	TC	OC	TN	MC	H_2O	$CaCl_2$	Ca	Na	Mg	K	EA	ECEC	EC	BD
TS	84.54	8.60	6.96	S	38.3	125	7.41	6.01	5.90	30.31	75.58	52.11	64.56	1.93	10.14	57	1.75
SS	87.21	10.30	2.49	S	21.7	182	13.0	6.70	6.31	17.16	51.43	21.88	30.70	2.01	2.61	43	1.70

H_2O ID	parameters (PPM)																
	°C	PH	TDS	$CaCO_3$	Cl^-	SO_4^{2-}	PO_4^{2-}	NO_4^{2-}	NO_3^-	Cd	Pb	Zn	Fe	Mg	Ca	Na	K
GW	27.5	6.72	289	22.81	33.60	16.11	11.24	4.59	ND	ND	ND	2.86	6.55	1.90	5.17	0.38	8.61
SW	25.8	7.89	253	56.12	37.06	26.51	8.71	8.10	3.11	0.33	4.65	16.34	9.18	5.61	12.23	8.60	12.85

Soil ID	Parameters (mg/kg)									(CFU)			
	AvP	Zn	Fe	Mn	Cu	Pb	Cd	As	TPH	HB	HF	HUB	HUF
TS	1.64	7.30	94.66	57.61	5.70	6.07	ND	ND	2.65	$<5.8X10^1$	$3.6X10^1$	$3.1X10^1$	$2.9X10^1$
SS	0.73	4.25	43.52	16.12	2.13	2.13	ND	ND	0.63	$4.0X10^1$	$2.5X10^1$	$2.3X10^1$	$1.8X10^1$

H_2O ID	parameters (PPM)										
	EC	Cu	Mn	NUT	DO	COD	BOD_5	MPN	E.coli	Samonella spp.	Shigella spp.
GW	352	0.96	0.038	1.96	3.15	9.60	0.74	210	Absent	Absent	Absent
SW	643	3.84	1.64	15.10	4.61	48	12	512	Present	present	present

TS: Topsoil.

SS: subsoil.

GW: Ground water.

SW: surface water.

Annex 13: Occupational Health & Safety Plan

The objectives of this occupational health and safety plan are to:
- Significantly reducing the number of workplace injuries; and
- Promote an attitude of safe work practices among employees

This shall be carried out by undertaking the implementation of these specific plans:

Health Plan

- All employees are required to undergo a pre-employment medical test by a medical practitioner of the company's choice and at the company's expense. Confirmation of medical fitness is a prerequisite to employment confirmation.

- Every member of Staff shall be allowed unlimited access to the Company medical practitioner. Any complaint of ill health must be treated with priority and the employee shall be immediately referred to the Clinic, for proper medical attention.

- Select and Train one of our site personnel in the administration of First Aid.

- A first aid box shall be provided for minor injuries, cuts and burns sustained by employees while at work while major injuries must be immediately referred to the hospital for attention.

Safety Plan
The Contractor shall undertake to provide:
- Well-maintained plant and safe systems of Work
- Undertake to provide relevant personal protective equipment (PPE) for all personnel that would be working on the construction site
- Suitable arrangements for the safe use, handling, storage and transport of articles and substances.
- Adequate information, instruction, training and supervision to enable work to be carried out safely.
- Safe premises and workspaces, including access to and egress from them
- Maintain safe working environments with adequate welfare facilities.
- Have in place a safety officer to coordinate all procedures, activities and work practices in the workplace according to this plan.

Annex 14: COVID-19 Guidelines

Some of the COVID-19 guidelines are:

This generic guidance provides a guide for this project on adequate precautions to prevent and/or minimize an outbreak of COVID 19, and actions to take in the event of such an outbreak.
Suggestions on how to do this are set out below:

- The PIU, either directly or through the Supervising Engineer, should request details in writing from the main Contractor of the measures being taken to manage covid-19 related risks.
- The PIU should require the Contractor to convene regular meetings with the project health and safety specialists and medical staff (and where appropriate the local health authorities), and to take their advice in designing and implementing any agreed measures.
- Where possible, a senior person should be identified as a focal point to deal with COVID-19 issues. This can be a work supervisor or a health and safety specialist. This person can be responsible for coordinating preparation of the site and making sure that the measures taken are communicated to the workers, those entering the site and the local community. It is also advisable to designate at least one back-up person; in case the focal point becomes ill; that person should be aware of the arrangements that are in place.

Workers should be encouraged to use the existing project grievance mechanism to report concerns relating to COVID-19, preparations being made by the project

These guidelines will be communicated to general labour workforce during staff trainings & toolbox meeting s to ensure that all employees are aware of steps to take regarding COVID-19:

Protect yourself and those around you:

- Keep physical distance of at least 1 metre from others, even if they don't appear to be sick. Avoid crowds and close contact.
- Wear a properly fitted mask when physical distancing is not possible and in poorly ventilated settings.
- Clean your hands frequently with alcohol-based hand rub or soap and water.
- Cover your mouth and nose with a bent elbow or tissue when you cough or sneeze. Dispose of used tissues immediately and clean hands regularly.
- If you develop symptoms or test positive for COVID-19, self-isolate until you recover.

Make your environment safer

The risks of getting COVID-19 are higher in crowded and inadequately ventilated spaces where infected people spend long periods of time together in close proximity.
Outbreaks have been reported in places where people have gather, often in crowded indoor settings and where they talk loudly, shout, breathe heavily or sing such as restaurants, choir practices, fitness classes, nightclubs, offices and places of worship.
To make your environment as safe as possible:

- Avoid the 3Cs: spaces that are **c**losed, **c**rowded or involve **c**lose contact.
- Meet people outside. Outdoor gatherings are safer than indoor ones, particularly if indoor spaces are small and without outdoor air coming in.
- If you can't avoid crowded or indoor settings, take these precautions:
    - Open a window to increase the amount of natural ventilation when indoors.
    - Wear a mask (see above for more details).

Keep good hygiene

By following good respiratory hygiene you protect the people around you from viruses that cause colds, flu and COVID-19.
To ensure good hygiene you should:

- Regularly and thoroughly clean your hands with either an alcohol-based hand rub or soap and water. This eliminates germs that may be on your hands, including viruses.

- Cover your mouth and nose with your bent elbow or a tissue when you cough or sneeze. Dispose of the used tissue immediately into a closed bin and wash your hands.
- Clean and disinfect surfaces frequently, especially those which are regularly touched, such as door handles, faucets and phone screens.

What to do if you feel unwell

If you feel unwell, here's what to do.

- If you have a fever, cough and difficulty breathing, seek medical attention immediately. Call by telephone first and follow the directions of your local health authority.
- Know the full range of symptoms of COVID-19. The most common symptoms of COVID-19 are fever, dry cough, tiredness and loss of taste or smell. Less common symptoms include aches and pains, headache, sore throat, red or irritated eyes, diarrhoea, a skin rash or discoloration of fingers or toes.
- Stay home and self-isolate for 10 days from symptom onset, plus three days after symptoms cease. Call your health care provider or hotline for advice. Have someone bring you supplies. If you need to leave your house or have someone near you, wear a properly fitted mask to avoid infecting others.
- Keep up to date on the latest information from trusted sources, such as WHO or your local and national health authorities. Local and national authorities and public health units are best placed to advise on what people in your area should be doing to protect themselves.

Annex 15: Chance Find Procedure

Identification and Assessment
For Cultural Heritage Management (CHM) under the ACEDHARS, Inventory will always be a key management tool in the area of **identification and assessment**. The extent to which inventories are prepared will depend on criteria adopted by the ACE Center and in lines with requirements or guidelines by the WB.

The principal best practice in assessing cultural heritage issues around roads to be rehabilitated under the ACEDHARS is to have a thematic and individual value assessment procedure in place, so as to justify long-term conservation of an asset. The aim of an identification and assessment process should be not only the identification of places, but also the establishment of a hierarchy of significant places under a thematic system.

Best Practice Inputs

1. The ACEDHARS should have a standard inventory form, also available as a Standard Operating Procedure (SOP).
2. Inventory should be updated as new information comes to light, or as new technology is introduced e.g. GPS plotting of sites.
3. Inventory is thematically linked and has the primary aim of revealing a hierarchy of significant places under a variety of relevant themes.
4. Inventory work focuses on geographic areas or themes where there is little recorded inventory and a potential threat exists to unrecorded sites.
5. Each road project area has assessment criteria and an assessment process, both of which have been endorsed by the Centers Safeguard Unit and WB.
6. The ACEDHARS center should maintain a CHM database containing all information relating to history and management of CHM assets with cross-reference to other state inventories.
7. Assessment of significance of heritage places by an external CHM specialist should be a prerequisite for major capital expenditure on any CHM asset.

Allocating Resources
Best Practice inputs/Indicators
1. There should be provision for access to a capital works budget for CHM catch up maintenance.
2. The ACEDHARS Center should plan for an ongoing core funding base for cyclical maintenance of CHM assets within each institution responsible for CHM and the reflection of this responsibility in the expected outputs.
3. Ensure risk management actions for CHM emergencies.
4. Prioritization of resource allocation to places on a thematic significance basis. This should be founded on an understanding of the history of land under management and broader state or national themes.
5. The proportion of CHM staff /institutional responsibilities to CHM assets managed should be similar to the proportion of staff to assets in other functional areas within the organization.
6. Identification of core competencies for CHM staff/institutional responsibilities and competency-based recruitment procedures including assessment of competencies by a CHM specialist.
7. The Center should ensure that training in core CHM competencies are integrated into ACEDHARS training programs. (Including instruction in broad CHM principles and specific standard operating procedures)
8. Development of a suite of partnership tools to expand CHM management options e.g. Local government management, community participation.

9. Regular analysis of CHM assets to ensure that each asset is managed by the ACEDHARS with the best expertise, resources, motivation and local presence to effectively conserve that place, and to present the place if it is appropriate to do so.
10. Comprehensive guidelines and programs to promote and support active community involvement in CHM.
11. All leases on CHM assets include provision for specific ongoing works funded by lessee.
12. Revenue generated from CHM should be retained for CHM without a corresponding drop in budget funding, in order to encourage sustainable management.

Protection

1. The ACEDHARS should ensure that the process of acquiring places with a range of conservation or heritage values (natural, historic and indigenous) should take into account all the identified values and provide for their future management.
2. If the Center considers acquisition is not an option, or is unnecessary, then other options including reserving, listing on a state heritage register, voluntary conservation agreement, covenanting, gazetting or referral to another relevant authority are pursued, with the co-operation of the owner.
3. The ACEDHARS risk management strategy addresses the need for staff training and appropriate checks and balances to minimize the threat to CHM assets by in-house staff.

Conservation

1. Conservation of places of cultural significance should be done according to a plan – a conservation management plan (CMP).
6. The breadth and detail of CMPs are commensurate with the needs of the place.
7. Shorter CMPs for individual sites, tailored to specific circumstances, should be prepared where; there is urgency to do the work, or the issues are simple and the vision statement for the place dictates action, or the plan forms part of a broader management plan.
8. Broad management plans or 'historic area plans' are prepared for larger land areas with predominantly historic values or places with multiple, geographically linked heritage assets. Work specifications or shorter CMPs are then prepared for each identified heritage asset in the area.
9. All CMPs are signed off by, at the minimum, by the Centers Safeguard Unit (or their equivalent) to ensure organizational 'buy-in'.
10. Properly costed work specifications, together with plans, must be are prepared to relevant industry standards
11. Provision is made for a CHM specialist to inspect progress and ensure that work is proceeding according to the plan and that all work is supervised and conducted by skilled conservation practitioners or tradespeople.
12. Where sites have a multiplicity of values (e.g. natural and cultural as well as historic), then an overarching integrated management plan is prepared for that place. Cultural heritage is a component of such a plan.

Monitoring

Physical monitoring of sites of cultural heritage will require synergized involvement attention by several relevant state and national agencies e.g. State Ministry for Culture and Tourism.

Best Practice Inputs/Indicators

The ACEDHARS Center should ensure:

1. The use of a formal asset management and monitoring system for CHM assets.
2. Annual reporting of agreed performance measures
3. Auditing of CHM to ensure management objectives are met

4. Integration of heritage places into organizational asset management systems.
5. A process existing for consistently reviewing plans, quality of planning and those who prepare them.
6. Establishment of a register of contract CHM specialists that is regularly reviewed on the basis of existing contractors' work, allows for the addition of new contractors and is open to public inspection.
7. Long term monitoring of the condition of cultural heritage places
8. Regular meetings of ACEDHARS Center Staff and CHM specialists as a means of monitoring progress towards best practice and assisting agencies to set higher levels of best practice.
9. Ongoing market research to measure effectiveness of presentation in interpreting specific places, raising awareness of cultural heritage conservation and encouraging appropriate growth in visitor numbers.
10. A CHM strategy/policy document which is published and subject to public consultation and scrutiny
11. Monitoring of visitor numbers at all actively managed places

Annex 16: Site office & Staging Areas

To ensure ease of coordination of operations, a site office and campsite may be established for this sub-project, while the contractor will be required to identify a staging area for plant & equipment that will be in conformity with the requirements of this ESMP.

The location for the establishment of the contractor's and the Resident Engineer's camps and sites should be determined in consultation between the Resident Engineer, the ACEDHARS center coordinating unit and the local communities, taking into account the following considerations:

- Be located outside the protection zone of watercourses (100 m) and wetlands;
- Be located within an acceptable distance from existing residential areas;
- Not located in areas with intact vegetation;
- The contractor must first obtain the necessary licenses and consents from the relevant local government actors or from the owner of the needed area;
- Although it is the contractor's decision, it is recommended that whenever possible the camps should be handed over to the administrative or community authorities for future use;
- The contractor must submit for the prior approval of the Resident Engineer, the implementation design and other project structures and specifications related to the camps and sites that are intended to be built;
- The contractor shall take all necessary measures and precautions to ensure that the execution of the works is carried out in accordance with environmental, social, legal and regulatory requirements, including those set out in this document;
- The contractor shall take all measures and precautions to avoid any disturbance in the local communities and among the users of the university of Lagos learning environment, as a result of the project execution;
- The contractor shall, whenever possible, apply measures to reduce or eliminate any sources of disturbances;
- The contractor shall follow the provisions of this document, as well as the applicable legislation and standards, during the use, operation and maintenance of the camps and sites, in particular with regard to water supply and sanitation, solid waste management, handling and storage of dangerous substances, etc., and
- The areas occupied by the camps and sites must be recovered at the end of the project, when the contractor is demobilized, through the replacement of previously existing conditions, unless other uses are intended.