ENVIRONMENTAL AND SOCIAL MANAGMENT PLAN FOR CEFTER FOOD TECHNOLOGY INNOVATION COMPLEX (CEFTIC)

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List of Acronyms and their definitions

ACE	African Higher Education Centre of Excellence
BMP	Best Management Practices
CEFTER	Centre for Food Technology and Research
CEFTIC	CEFTER Food Technology Innovation Complex
CFRN	Constitution of the Federal Republic of Nigeria
EIA	Environmental Impact Assessment
ESMP	Environmental and Social Management Plan
FEPA	Federal Environmental Protection Agency
FMEnv	Federal Ministry of Environment
FMARD	Federal Ministry of Agriculture and Rural Development
FMS&T	Federal Ministry of Science and Technology
ICT	Information Communication Technology
NGN	Nigerian Naira
PG	Post Graduate
SDG	Sustainable Development Goals
STEM	Science Technology and Mathematics
TOR	Terms of Reference
US	United States of America
WASH	Water Sanitation and Hygiene

i Executive Summary

Background

Project Description

The proposed activities associated with the project will involve construction of two factory buildings, car park, an admin building, a security post and male and female toilets. The planned construction will be completed within 18 months. Associated structure and work expected

include, foundation laying, plumbing, electrical fittings, soak away, universal access to all buildings including toilets, roofing, landscaping, etc to accommodate the factory and all factory activities. The factory buildings will be divided into sections and equipped with processing machines for various agro-based products. **Implementation activities include the following: -** A) Site clearing and excavation of the foundations; B) Civil works: Civil works involves;C) Mechanical works and Electrical works;D) Plumbing works

Methodology for the Assessment and Development of the ESMP.

This study used the checklist approach which is an effective tool recommended for low risk typology (Canter, 2010) in the determination of impacts of the planned project. However, to achieve a comprehensive and effective ESMP, there was a triangulation of methods to gather and compile data to generate information hat guided process and development of mitigation measures, these include: a) **Site visits/ Transect** used the transect method to take a view of the physical and social components of the environment; b) **Survey:** useful to generate primary data on the socio-economic characteristic of the site; c) **Desk review** was useful to review regulatory/ legal frameworks and other relevant literature d) **Experts view**; Analysis on the impact of project was subjected to expert views; e) **Stakeholder consultation** wa**s** used to acquire the views of various stakeholders

Finding and recommendations

Generally, the study has indicated that the proposed project will not significantly impact negatively on the existing localenvironmental, social and health as well as safe conditions.

From the foregoing, the recommendations include the following:

- Carry the community along during project implementation and mobilize them to provide community security for personnel working on site
- Construction works should be carried out in out in an environmentally sustainable and socially responsible and inclusive manner
- Potential environmental and social impacts of sufficient magnitude that could interrupt the execution of the project were not detected. Although, there were few negative environmental and social impacts that may potentially occur due to the activities associated with the proposed works at both the construction and operational phase but adequate mitigation measures have been provided to address them;
- The proposed intervention work is most desirable because of the obvious environmental and socio-economic benefits. These far out-weigh the negative environmental and social impacts that could arise in the course of implementation

Chapter 1: Introduction

- **Introduction to the ACE Project**

The African Higher EducaitonCentres 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 1) was launched in 2014 with 22 Centres of Excellence in nine (9) West and Central African countries. The success of the project gave rise to the a second phase as ACE Impact Project (ACE II) in 2018. The new areas include sustainable cities; sustainable power and energy; social sciences and education; transport; population health and policy; herbal medicine development and regulatory science; public health; applied informatics and communication; and pastoral production. The second phase (ACE II) also included new selected centers in Nigeria totaling 17.

1.2 Description of the proposed construction activities

Under ACE Impact, the Centre for Food Technology and Research (CEFTER) plans to establish CEFTER FOOD TECHNOLOGY INNOVATION COMPLEX (CEFTIC) where students will be trained in modern intensive food processing techniques with focus on controlling post-harvest losses which is the core mandate of the Centre. The factory will be developed in two sections.

- The technology modelling, design and fabrication section,
- The food processing technology section.

- **Rationale for ESMP**

In compliance with the requirement of the Nigeria EIA laws and the World Bank Environmental and Social Safeguard Policies by which the CEFTER projects will trigger OP 4.01 and 4.11 on Environmental Assessment and Physical Cultural resources respectively. The Centre for Food and Technology and Research, has awarded the contract for the conduct of an Environmental and Social Management Plan (ESMP) to identify the environmental and social impacts as well as the mitigation measures required to implement this sub-project.

- **Methodology**

The development of the ESMP involved extensive mix of methods including field study of the project's area of influence and evaluation of impacts using standard technics. The checklist approach was adopted in the determination of impacts of the planned project, it is an effective tool recommended for low risk typology (Canter, 2010). However, a combination other methods were also used to enhance the process of identifying impacts and the development of mitigation measures, these included:

- **Site visits/ Transect**: The transect method involves visit of the project site and community to take a view of the physical and social components of the environment of the site of the projects. This was useful in observing the geo-physical features of the site and its surrounding.
- **Survey:** A survey was conducted involving the use of self-administered questionnaires. The questionnaire was used to generate primary data on the socio-economic baseline of the project site and used in social impact analysis. This method also served as additional

opportunity for stakeholder participation described as third party approach where information is generated through the third party (Canter, 2010).

- **Desk Review.** Existing regulatory frameworks and publications on the environmental and social impact of activities to be carried out in the construction and implementation process of the project were reviewed. This was useful in anticipating the impacts of the project and the development of effective mitigation measures.
- **Experts view**: Analysis of the impact of the project shall be subjected to expert views. Various methods shall be used by experts to arrive at appropriate mitigation measures.
- **Public consultation**: This was used to acquire the views of various stakeholders and their concerns on the project.

Chapter 2: Project Description

The proposed activities associated with the project will involve construction of two factory buildings, car park, an admin building, a security post and male and female toilets. The planned construction will be completed within 18 months. Associated structure and work expected include, foundation laying, plumbing, electrical fittings, soak away, universal access to all buildings including toilets, roofing, landscaping, etc to accommodate the factory and all factory activities. The factory buildings will be divided into sections and equipped with processing machines for various agro-based products. The complex will have the following pilot processing sections;

- Yam, cassava and potatoes (tuber) processing
- Water treatment plant
- Yoghurt processing
- Bakery (bread and biscuit)
- Tomatoes and pepper paste processing
- Vegetable oil processing
- Rice processing
- Orange juice processing
- Animal feed production
- Fruits and grain sorting
- Food analysis laboratory
- Offices

- Technology incubation center

Chapter 3: Biophysical and Socio Economic Characteristics of Project Area

3.1 Climate and Meteorology

The area of influence experiences two seasons the dry season beginning from November and ending in April and the raining season beginning from April to Novemeber.The mean annual rainfall total is 1190 mm and ranges from 775-1792 mm. The mean monthly relative humidity varies from 43% in January to 81% in July-August period. Temperatures are generally high throughout the year, with February and March occurring as the hottest months. Temperature of the area varies from a daily of 40^{o}Cand a maximum of 22.50C.

2.2 Geology of the sub-project area

The geology of Makurdi town is of cretaceous and consists of fluviodeltaicsediments with well-bedded sandstones which are of hydrogeological significance in terms ofgroundwater yield and exploitation (Kogbe et al., 1978). It is characterize undulating terrain with gentle slopes, and provides evidence of sparse vegetative cover sandy, clayey silt derived from sandy stones and shale.

2.3 Topography, Relief and Drainage

Makurdihas low lying to moderately high plain topography. General surfaceelevation ranged between 95 – 130m above sea level. It is drained by River Benue and its tributaries which flow in southern direction and empties into the Atlantic ocean after joining the Niger River to at Lokojadrainage pattern is generally dendritic.

2.4 Vegetation

The vegetation of the area of influence of the sub project is consistent with the guinea savannah. It is generally consist of grasses, shrubs and herbs. Some of these are economic trees and broad spectrum of varieties of ecstatic trees planted within fenced houses and along fences to beautify the houses. Some economic trees observed in the area include, oil palm, mango and citrus.

2.5 Socio-Economic Analysis

2.5.1 Gender Distribution

Age distribution within the community is estimated as 18% being young below 20 years and 82% above 20 years. Further analysis shows that about 62% of the population of the project community is between 20-49 years old. Only 1% of the population is above 70 years.

2.5.3 Economic activities

The project area is dominated by people who are engaged in formal jobs working with the public or private. They have 100% formal education and 80% tertiary education attainment. There are very few economic activities located at the place including 2 provision stores, one tailoring

centre, water processing factory and dry cleaning and hair dressing services. There are a few hotels within 500-700 meters offering recreational services for the community.

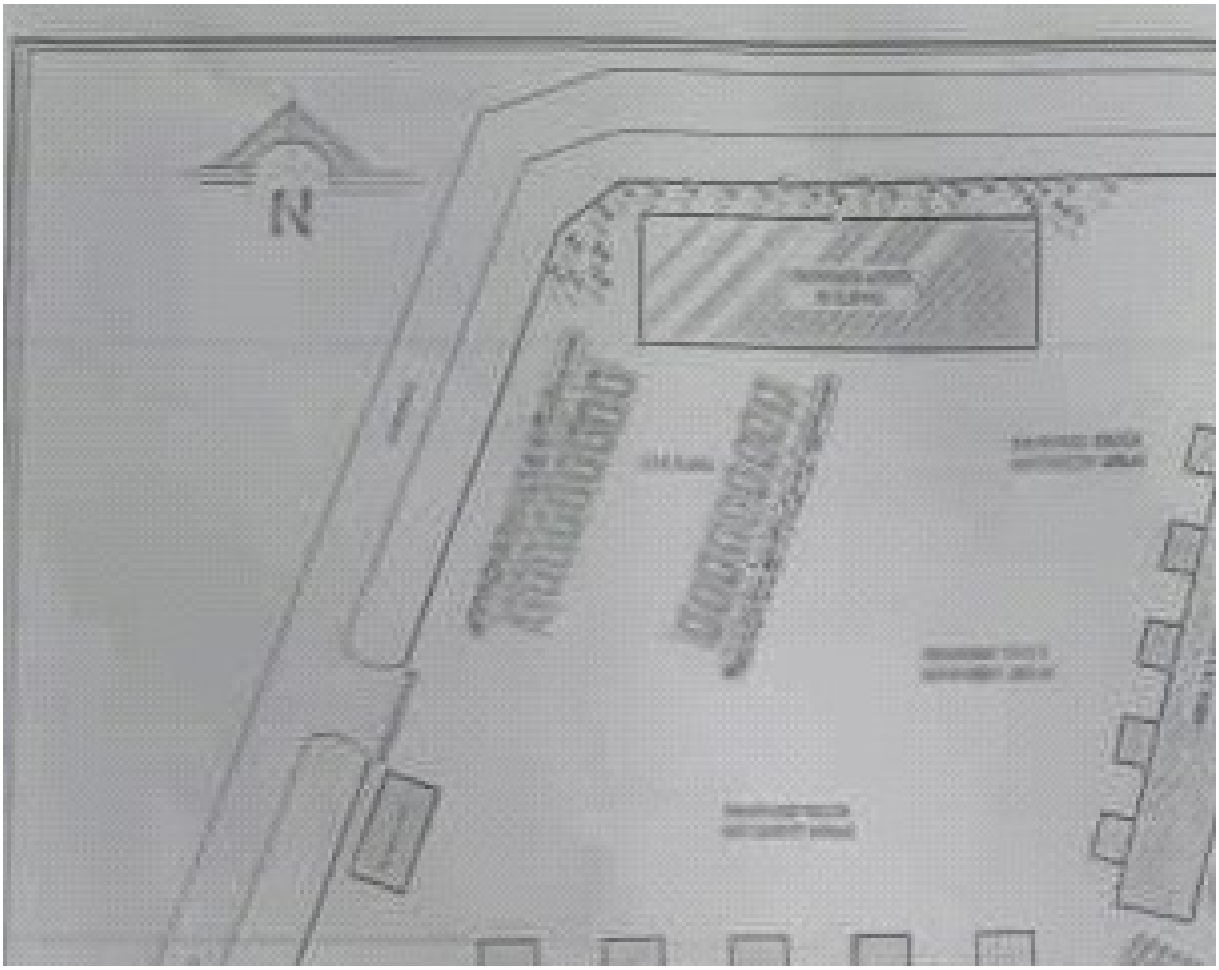


Fig. 1 Project layout

Chapter 4: Assessment of Potential Adverse Environmental and Social Impacts

4.1 Methods and techniques used in assessing environmental impacts of the project

The potential environmental impact of the project on the area of influence was assessed usingchecklist approach. The method is effective tool recommended for low risk typology (Canter, 2010). It involves the use of a checklist to relate the project activities to the components of the environment based on the existing environmental conditions. It includes site visits/ transect to take a view of the physical and social components of the environment of the project's site. The observed baseline conditions are then logically matched on the checklist on a decision is taken.

4.2 Methods and techniques used in assessing Social impacts of the project

A survey wasconducted to assess the social impact of the project on the community. A questionnaire was used to acquire socio –demographic data to of the community. The questionnaire was administered on all households within 300 meters radius from the project site. The questionnaire was useful in generate primary data on the socio-economic characteristic of the site. A total of 67 household were surveyed and the data was used in determining the socio-demographic characteristics and socio-economic characteristics of the community.

4.3 Potential Adverse Environmental and Social Impact

The proposed project is expected to have positive and negative impacts on the project community. It would have high positive environmental and social impacts within its area of influence as it would provide opportunity for industrial linked training, improved food quality, reduce post harvest waste and increase income of farmers, support agricultural value chain development and provide job opportunities and livelihood sources for many people, lead in capacity development and generate manpower for especially for local industrial development.

In terms of the negative environmental and social impacts, it is expected that they would be largely localized in spatial extent owing size of the project and its location within less sensitive environmental areas. They could be generally contained through the implementation of specific appropriate mitigation measures.

4.4 Identified Potential Impacts

The project is envisaged to give rise to numerous positive impacts, and they include:

Table1. Positive Environmental Impacts

No	**Impact**	**Key receptor**	**Evaluation**
1	Improvement in environmental performance of the project area	Community	Reduction in the uncontrolled surface run off on the undeveloped land resulting into erosion of some parts of the area. Rehabilitation of degraded adjoining street Reducing disaster risks in the project area Improved environmental performance and governance

Table 2. Positive Social Impacts

No	**Impact**	**Key**	**Evaluation**

		receptor	
1	Provision of practical post graduate education in food technology	Community	Reduction in the uncontrolled surface run off on the undeveloped land resulting into erosion of some parts of the area. Rehabilitation of degraded adjoining street Reducing disaster risks in the project area
2	Creating opportunity for innovation in food technology	Community	Reduction in post-harvest losses and development of the agricultural value chain
3	Human capital development in food processing	Community	Enhance capacity in food processing and expanding entrepreneurial opportunities
4	Employment generation	Community	Creating employment opportunity and expanding livelihood sources
	Improved economic activities	Community	Create opportunities for commence by developing food products

Table 3. Negative Impacts

Description	**Impact Source**	**Impact**
Environmental	Mobilization of materials and machines	Accidents and delays
	Site clearing and excavation of foundation for construction work	Loss of Biodiversity Air degradation and water with dust and gases
	Demolition/Construction activities	Generation of waste, dust, sediments flowing into waster Increase in noise and vibration
	Installation of machines	Increase in noise and vibration, waste generation
	Operation	Waste generation Erosion and overflow of drainages Increase in water stress Soil pollution, odours and
Social	Site acquisition	Displacement of famers who taking advantage of the empty land
	Labour influx	Pressure on existing facilities and services, GBV, Public Health

The details of these impact and mitigation are presented in Chapter 5;

S/N	Activity	Impact	Mitigation measure	Indicator	Mode of measurement	Cost of mitigation	Monitoring indicator	Frequency	Cost (NGN)	Responsibility
Pre-Construction phase										
	Site Acquisition	loss of accruable income due to displacement of farming activities on the site	Conduct early awareness creation of intention to use the property for new purpose Schedule take off of project and land acquisition with due regard for crop cycles of major crops for opportunist farmers on the site to minimize impacts on livelihoods		Visual observation	50,000	Farmers contacted Works begin off faming season	Once	50,000	CEFTER Safeguard officer
Construction phase										
	Mobilization of materials	Accidents and delays	In compliance with national regulations the contractor will ensure that the site is properly secured and related traffic regulated. This includes but is not limited to; Signposting, warning signs, barriers, site will be clearly visible and the public warned of all potential hazards Traffic management system and staff training, especially for site access and near-site heavy traffic. Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours Active traffic							

			management by trained and visible staff at the site, if required for safe and convenient passage for the public. Avoid driving against traffic to quickly access the project site from the express road. Vehicles must use the U-turn at the airport junction to access the site. Slow vehicles carrying construction material within the project area down Regularly inspect and maintain all equipment Improve the quality of the major access road to sit especially by filling up the depressed junction, expanding width and leveling sides to prevent accidents and delays.							
		Degrading of air quality with dust and gases due to movement of heavy duty trucks	Spread dusty path with water and ensure adequate maintenance and servicing of trucks to reduced emission of gases	Federal Ministry of Environment safety levels	On-site measurement of air quality and visual observation	50,000	Air quality parameters and vehicle maintenance records	Weekly	100,000	Environmental officer Benue State Ministry of Environment
		Noise and vibration	Select and use vehicles/equipment with lower sound	Noise must not exceed recommended	On-site measurement	40,000	Noise levels and workers using	daily	100,000	Safeguard officer Benue State

			power levels. Install suitable mufflers on engine exhausts and compressor components. Enforce appropriate speed limit to reduce vehicle noise levels.	limits by the Federal Ministry of Environment (90 dBA) for an 8 hour period			PPE			Ministry of Environment
		Supply of poor quality materials with potential to cause structural failure	Ensure appropriate materials are recommended and suppliers adhere strictly to the recommendations	Supplied materials must fit design specifications	Quality control test Add specification to plan		Failure due to quality of material	Before procurement and supply	50,000	Safeguard officer
Construction Phase										
	Site Clearing	loss of biodiversity	Clearance of vegetation should be restricted to portions required for construction while protecting the a, efforts should be replant vegetation (suitable local species) in appropriate positions within the facility Equipment should be regularly washed down to avoid transporting seeds of invasive species or plant diseases Soil stabilization activities must be promoted	Design clearly indicating areas required for construction	Visual observation	50,000	Protected vegetation and replanted local species	Monthly	200,000	Contractor Safeguard officer

		Erosion and over flow of drainages	Control erosion pathway along the site by constructing the drainages along the street bordering the site on the North and West	Engineering design	Observation		Availability of drainages Community statements	Quarterly	120,000	Safeguard officer
	Influx of workers	COVID-19 transmission	Apply NCDC recommended protocol in the site including use of minimum PPE and washing of hands by workers on site and regular check of body temperature	Implement COVID-19 safeguard and response plan	Site observation	300,000	Availability of COVID-19 prevention equipment and use of hand washing; records of temperature checks	Daily	50,000	Contractor
		Increased community economic activity rates	Maximize local benefits of the operation particularly by favoring local procurement of goods, services and labor Actively attempt to fulfil local employment demand without fuelling unrealistic expectations of high employment and economic opportunities Labour recruitment should occur in an objective and transparent manner		On-site Assessment	No extra cost	List of employees Community members doing business	Weekly	50,000	Contractor
		Pressure on existing Water Sanitation and Hygiene (WASH) services	The contractor shall provide safe drinking water for construction workers all the times The contractor shall provide safe mobile latrines for		On-site assessment	250,000	Availability of latrines and licensed operator	Monthly	100,000	Safeguard officer Benue State Ministry of Environment

			construction workers separated and clearly indicated according to gender with the waste collected by a licensed operator and managed offsite at licensed facility Provide information to construction workers on the use of the latrines.							
		Security challenges due to increase in human-police ratio	Use competent personnel to provide security Design a security strategy for the complex to include community members and concerns of the Nigeria Air Force which has its Tactical Command Headquarters around the project site	Community perception	Interviews	200,000	No. of incidences	Weekly	100,000	Safeguard officer
		Gender Based Violence and Violence against Children	Commitment / policy to cooperate with law enforcement agencies investigating perpetrators of gender-based violence; Information and awareness raising campaigns for community members, specifically women and girls; Enforcement of laws on sexual	Work policy Benue State policy on violence against all persons Violence Against All Persons Law And Benue State Child Protection Law.	Community perception, interviews and observations	150,000	Availability of work policy	weekly	100,000	Safeguard officer Contractor

			violence and human trafficking. Include in the bid document and also in the contract the need for contractor to draft and sign the following: 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 Community and workers' training and community sensitization on GBV/VAC;							
	Building work	Increase in noise and vibration	Develop working schedule for activities with high noise levels between 08:00am - 5:00pm During operations, the engine covers of generators, and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as	Recommended limits by the Federal Ministry of Environment (90 dBA) for an 8 hour period	On-site measurement	40,000	Noise levels and workers using PPE	daily	100,000	Ministry of Environment and Safeguard officer

			possible Select 'quiet' construction equipment and working methods Use ear protection for workers Keep proper records of complaints in the complaints register							
		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. - Use only trained personnel - Restriction of unauthorized access to all areas of high-risk activities - Provision of specific personnel training on worksite OHS management	Compliance with Factory Act, 1990 Compliance with ISO 14001 Occupational Health & Safety Standards	On-site assessment	300,000	Availability of project OHSP, trained first Aiders Usage of appropriate PPE Usage of signage	Weekly	150,000	Contractor
		Degrading of air quality by the discharge of dust	Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or	Federal Ministry of Environment safety levels	On-site measurement of air quality and visual observation	50,000	Air quality parameters and vehicle maintenance records	Weekly	100,000	Environmental officer Benue State Ministry of Environment

			installing dust screen enclosures at site The surrounding environment shall be kept free of debris to minimize dust and accidents There will be no open burning of construction / waste material at the site Prohibit transporting material with overloaded trucks to avoid fly offs Properly cover truck containers with plastic covers to avoid dust spreads Heavy machines should be maintained to good standard							
		Pollution of water by debris and oil leaks from construction activities	Establish appropriate erosion and sediment control measures such as e.g. silt traps/ fences to prevent sediment from moving off site and causing excessive turbidity in nearby water bodies. Paints with toxic ingredients or solvents or lead-based paints will not be used	Permissible water quality standards by the Federal Ministry of Environment	On-site Measurement and Observation	200,000	Water parameters	Bi-weekly	100,000	Benue State Ministry of Environment and Safeguard Officer
		Solid Waste	Waste collection and disposal pathways and sites will be identified for all major waste	National regulation for waste handling	Visual observation	160,000	Use of license waste collectors, Availability of	Weekly	150,000	Safeguard officer

			types expected from demolition and construction activities. Demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers and disposed properly by licensed collectors The records of waste disposal will be maintained as proof for proper management as designed. Whenever feasible the contractor will reuse and recycle appropriate and viable materials				type-coded waste collection containe r s			
	Installation of equipment	Increase in noise and vibration	During operations, the engine covers of generators, and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible Selecting 'quiet' equipment and working methods Keeping proper records of complaints in the complaints register	Noise levels must not exceed permissible limits by the Federal Ministry of Environment	On-site measurement	150,000	Register of Complaints Records of measurement	Monthly	100,000	Safeguard officer Benue State Ministry of Environment
Operation Phase										

Crosscutting impacts										
	Study Laboratories	Chemical/ hazardous waste management	Temporarily storage on site of all hazardous or Chemical substances will be in safe containers labeled with details of composition, properties and handling information The containers of hazardous substances shall be placed in a leak-proof container to prevent spillage and leaching The wastes shall be transported by specially licensed carriers and disposed in a licensed facility.	National guidelines for management of Chemical and hazardous waste	Observation	400,000	Availability of waste collection equipment and service provider	Quarterly	80,000	Safeguard officer Benue State Ministry of Environment
		Biological Waste	In compliance with national regulations the contractor will insure that research laboratories facilities include sufficient infrastructure for biological waste handling and disposal; this includes and not limited to: Special facilities for segregated biological waste (including soiled instruments “sharps”, and plant tissue or fluids) from other waste disposal; Appropriate	National guideline for biological waste	On-site assessment	4000,000	Presence of biological waste management facilities and service provider	Quarterly	300,000	Safeguard officer Benue State Ministry of Environment

			storage facilities Use special puncture resistant containers/boxes for sharps							
		Deterioration of air quality due to odours	Efforts to reduce odour problems using ventilation systems. Use extractors and odour controlling equipment to reduce odours during cooking and baking Maintaining good housekeeping within the factory at all times and adopt good cleaning and work practices. Store waste in closed waste handling receptacles.	Public perception	Perceiving on site Interview community members.	200,000	Availability of odour control equipment	Monthly	150,000	Safeguard officer
		Large energy demand and use	Use energy efficient technology Use of rice husk from the milling section as clean fuel instead of coal and diesel in boilers. Recovery of energy by using heat exchangers for cooling. Improve on existing power supply by installation of a dedicated power transformer of adequate capacity for the complex. Utilization of steam and steam condensate in	Engineering design	Factory assessment	150,000	Production process	During supply of equipment and quarterly	100,000	Safeguard officer

			the pre-heating process to minimize the energy requirements and develop and energy efficiency production line Use of natural gas or liquefied petroleum gas (LPG) for heating of baking oven and boilers.							
		Use of large volumes of water for factory processes impacting water quality/ stress	Reduce the amount of water use in production (technology choice and conservation) Provide water to nearby community that are impacted by excessive water withdrawal Reuse of treated wastewater (separated from storm water systems) to the extent possible.	Community perception	Interview in the community					
		Wastewater /hazardous waste management	The approach to handling sanitary wastes and wastewater from food processing equipment must be approved by the local authorities as applicable. Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal	National guidelines for handling waste water	On-site assessment	400,000	Availability of a licensed waste handler	Bi-monthly	120,000	Safeguard officer Benue State Ministry of Environment

			quality criteria set out by national guidelines on effluent quality and wastewater treatment							
		Pollution to soil and water	Lubricants should be stored in containers / dedicated enclosures with a sealed floor Fuel tanks should be located in dedicated areas with a sealed floor Change of lubricant should be conducted in dedicated areas with sealed floor Discharge of used oil properly at used oil facility							
		Noise and Vibration	During operations, the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible	Federal ministry of environment presumable level	On-site measurement	150,000	Measurement records	Monthly	100,000	Safeguard
	Demobilization of work force									
	Social Economic impacts	Changes in local economics, reduction in working opportunities	Introduce money management capacity building sessions for local members employed by the project so even after project closure, standards of living and local economies may remain high	Community perception	Community assessment using interview	200,000	Conduct capacity building sessions	Once	200,000	Safeguard officer

			and upbeat.							

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

The Environmental and Social Management Plan is presented in the table below showing;Activities, identified adverse impacts, mitigation measures and corresponding indicator(s). Mode of measurement, corresponding cost of mitigation, monitoring indicators, frequency, cost, as well as responsibilities for implementing these measures.

5.1 Institutional responsibilities for monitoring and implementation of mitigation

Table 5. Responsibilities

S/1	Stakeholder	Role and responsibility
1	CEFTER PIU	• Interface with relevant ministries in ensuring due diligence in project implementation • Where infractions are identified, PIU will request contractors to amend and correct the violation. • Receive and supervise the environmental report from the Independent Environmental Consultant (IEC), • PIU's Safeguard Specialist will be in charge of review environmental report and recommend further actions. • Cooperate with WB to periodically supervise contractors' activities.
2	Benue State Ministry of Environment	• The ministry will lead the compliance monitoring at the state level. • Lead state level assessment and participate in external assessment and monitoring of ESMP implementation
3	Other MDAs	• Depending on the area of interest and level of concern in a sector that is affected by the project, particular MDA would liaise, participate in the assessment process and review of the ESMP, provide input and may be required to issue consent where needed. • During implementation, they may monitor specific parameters and enforce standard
4	Federal Ministry of Environment	• Lead initial site visits and advice on screening, scoping, review of draft ESMP report (in liaison with State Ministry of Environment), • Receiving comments from stakeholders, public hearing/ review of the project proposals, and convening a technical decision-making panel arising from the public disclosures,
5	Safe Guard Unit	• Supervise the implementation to meet all standards and guidelines • Ensure the involvement of all relevant stakeholders including CBOs and NGOs • Conduct mitigation monitoring.
6	Works Contractor	• The Contractor is directly responsible for the implementation of the ESMP during

		construction phase of the project.
7	World Bank	• Overall supervision and provision of technical support and guidance. • Recommend additional measures for strengthening the management framework and implementation performance; • Supervising the application and recommendations of sub- project ESMPs.
8	Consulting Supervisor	Supervise the implementation of the ESMP by the Contractors; Review the Contractors Environmental and Social Implementation Plans (CESMP) to ensure compliance with the ESMP
10	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.
11	Affected Community	Promote environmental awareness. Review environmental and social performance report made available by PMU. Provide comments, advice and/or complaints on issues of nonconformity. Attend public meetings organized by the PMU to disseminate information and receive feedback. Identify issues that could derail the project and support project mitigation measures and awareness campaigns.

- Monitoring and Reporting

S/N	Report prepared by	Submitted to	Frequency
1	Contractor	Implementation supervision Consultant	The Contractor is obliged to report (immediately of certain aspects and monthly with respect to a wider range of aspects) to the implementation supervisor
2	Implementation Supervision Consultant	Safeguard Officer	The implementation supervision Consultant is required to report (immediately or monthly) to the safeguard Officer every weekly and monthly
3	Community	Safeguard Officer	When the community has any complaint about the subproject safeguards implementation
4	Safeguard Officer	CEFTER Leader	As required by the ESMP framework
5	CEFTER leader	Benue State Ministry of Environment	CEFTER leader will submitted specific reports to the ministry as it may be necessary to fulfil their oversight
6	CEFTER leader	World Bank	Periodic report to the WB as required in the project operational guide

- Implementation Schedule

Table 6. Schedule of implementation

S/N	Activity Description	Responsibility	Months																	Operation phase
			Pre-Construction phase				Construction phase													
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
1	Clearance and Formal Disclosure of ESMP																			
2	Inclusion of E&S Requirements in bid documents																			
3	Allocating Budget for ESMP	CEFTER																		

4	Appointing Support Staff for ESMP	CEFTER																		
5	Review & Approval of Contractor's E&S Plans	CEFTER																		
6	Finalization of Engineering Designs	CEFTER																		
7	Mobilization to site	Contractor																		
8	Site Clearing	Contractor																		
9	Construction Phase	Contractor																		
10	Implementation of Mitigation	Contractor /Safeguard Officer																		
11	Supervising ESMP Implementation	Safeguard Officer																		

5.4 Contractual Measures

This ESMP shall be included or otherwise referred to in the construction bidding documents and appended to construction contracts. The technical specifications of the bid documents will clearly state that contractor will comply with the mitigation measures provided in ESMP. The contractor shall ensure adequate budget to meet all provisions of ESMP in the bidding documents. The technical specifications of the bid documents will clearly state that contractor will need to comply with the Mitigation measures as provided in this ESMP.

5.5 Measures for Non- Compliance with ESMP

Payments to contractors will be linked to environmental and social performance, measured by completion of the prescribed environmental and social mitigation measures.. For any non-compliance causing damages or material harm to the natural environment, public or private property or resources, the contractor will be required to either remediate/rectify any such damages in a timeframe specified by and agreed with the engineer, or pay CEFTER for the cost (as assessed by CEFTER) of contracting a third party to carry out the remediation work.

5.6 Cost Estimate for ESMP Implementation

The environmental and social management actions is estimated at Thirteen Million, Sixty Hundred and Eighty Thousand Naira Only (**NGN13,680,000.00**).

Table 7 Cost of Mitigation

S/n	Item	Cost Estimate (NGN)
1	Mitigation	9,940,000
2	Monitoring	3,390,000
10	Total	13,680,000

5.7 Grievance Redress Mechanism (GRM)

A three level Grievance Redress Mechanism will be established for the CEFTIC Project with Grievance Redress Committees constituted at the University, CEFTER & Village/Community levels to receive, and ensure satisfactory resolution of grievances. These are:

University

- Deputy Vice-Chancellor Admin- Chairman
- Director of Works Chairman
- Environmental safeguards Officer Member
- University PRO
- Representative of NGOs Members
- CEFTER admin officer- Secretary

The Grievance Redress Committee at CEFTER LEVEL:

- CEFTER Leader
- Safeguard Officer
- Representatives of Local CSOs
- Admin officer - Secretary

The GRC at Village/Community Level comprises:

- Community Chairman
- Village Head Member
- Reps of CSOs "
- Religious Leader
- Community elders "

The main functions of the Committee are spelt out below:

- Receive grievances from member of the public;
- Evaluate grievances from affected persons concerning the application to them of the Entitlement Policy;
- Recommend to the Safeguard officer, CEFTER as the case may be, solutions to such grievances from affected persons;
- Communicate the decisions to the Claimants;
- Ensure that all notices, forms, and other documentation required by aggrieved persons are made available in Local language understood by people
- Make provision for complainants to submit claims without fear of retribution.

Grievance Redress Process

(i)Receive and register a complaint
(ii)Screen and assess the complaint
(iii)Formulate a response (within a specified time frame)
(iv)Select a resolution approach
(v)Implement the approach
(vi)Settle the issues
(vii)Track and evaluate results

(viii)Appeals process
(ix)Monitoring and reporting to project management to detect systemic problems;
(x) Learn from the experience and communicate back to all parties involved.

Expectation when Grievances arise

When local people present a grievance, they generally expect to receive one or more of the following: acknowledgement of their problem, an honest response to questions/issues brought forward, an apology, adequate compensation, modification of the conduct that caused the grievance and some other fair remedies.

In voicing their concerns, they also expect to be heard and taken seriously. Therefore, the company, contractors, or government officials must convince people that they can voice grievances and work to resolve them without retribution.

Chapter 6: Consultation with Stakeholders

Two levels of stakeholder consultation were used in this study. First was during the socio-economic data gathering. A second phase of the stakeholders' involvement was through a stakeholder's consultative meeting. A detailed stakeholder analysis was conducted by the consultant with support of the CEFTER safeguard officer and the Centre deputy leader. The process helped to generated a list of critical stakeholders who were invited to a stakeholders meeting. The general response of the stakeholders across all the levels of consultation was that the project was a welcome development. They expressed appreciation for the having the project close to them in the hope that it will bring opportunities to their community. However, it was recommended that the community structure must be recognized in any engagements involving the community. Suggestions were made for mitigation measures and were properly captured in mitigation plan. The project is sited an existing property belonging to the university and there is no issues with acquisition of land.

Chapter 7: Summary and Recommendations

7.0 Summary

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

7.1 Conclusion

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

7.2 Recommendations

Generally, the study has indicated that the proposed project will not significantly impact negatively on the existing local environmental, social and health as well as safe conditions.
From the foregoing, the recommendations include the following:

- Carry the community along during project implementation and mobilize them to provide community security for personnel working on site
- Construction works should be carried out in out in an environmentally sustainable and socially responsible and inclusive manner
- Potential environmental and social impacts of sufficient magnitude that could interrupt the execution of the project were not detected. Although, there were few negative environmental and social impacts that may potentially occur due to the activities associated with the proposed works at both the construction and operational phase but adequate mitigation measures have been provided to address them;
- The proposed intervention work is most desirable because of the obvious environmental and socio-economic benefits. These far out-weigh the negative environmental and social impacts that could arise in the course of implementation

Annexes2 : TOR

DRAFT TERMS OF REFERENCE TO ENGAGE A CONSULTANT TO PREPARE AN ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) FOR THE CONSTRUCTIONOF CEFTER FOOD TECHNOLOGY INNOVATION COMPLEX (CEFTIC) BENUE STATE UNIVERSITY MAKURDI

A. INTRODUCTION AND 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.

Based on the initial successes, the World Bank and the French Development Agency (AFD) in collaboration with the African governments, launched the Second ACE Impact Project (ACE II) in 2018 across East and Southern Africa with 24 centers across Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda and Zambia 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 43 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. The second phase (ACE II) also included new selected centers in Nigeria totalling 17.

Under ACE Impact, the Centre for Food Technology And Research (CEFTER) plans to establish **CEFTER FOOD TECHNOLOGY INNOVATION COMPLEX (CEFTIC)** where students will be trained in modern intensive food processing techniques with focus on controlling post harvest losses which is the core mandate of the Centre. The factory will be developed in two sections:

1. The technology modelling, design and fabrication section,

2. The food processing technology section.

CEFTER has had challenges getting standard food industries within Nigeria that have modern food processing facilities for our students work experience and practicals, so the complex will be equipped with modern processing facilities like brewing, canning, bottling, corking, milling, drying, and sealing. It will be a source of internally generated revenue (IGR) for the center and a research hub for student's practical experience. The complex will have the following pilot processing sections:

- Yam, cassava and potatoes (tuber) processing
- Water treatment plant
- Yoghurt processing
- Bakery (bread and biscuit)
- Tomatoes and pepper paste processing
- Vegetable oil processing
- Rice processing

- Orange juice Processing
- Animal feed production
- Fruits and grain sorting
- Food analysis laboratory
- Offices
- Technology incubation Centre

This project entails the construction of a complex that contains various sections equiped with the various machines for processing of various agricultural products

In compliance with the requirements of the Nigerian EIA Act CAP. E12 L.F.N. 2004 and the World Bank, Safeguard Policies the Centre for Food Technology And Research, Benue State University is proposing to award a contract for the conduct of an Environmental and Social Management Plan (ESMP).

The ESMP will provide an overview of the environmental and social baseline conditions of the proposed project, summarise the potential impacts associated with the proposed construction works and set out the management measures including implementation and responsibilities required to mitigate any potential risks and impacts associated with the activities of the factory.

In addition, the ESMP will be utilised by the contractor, to be commissioned by CEFTER for the sub-project, 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 works commencing also taking into cognisance the COVID 19 pandemic and the different measures used in preventing its spread.

B. RATIONALE FOR THE STUDY

The proposed project will involve construction of a new building to accommodate the factory. Activities associated with the project such as, foundation excavation, cement works, de-vegetation, waste generation etc, will pose negative environmental and social risks/impacts due to the nature of works. Some of the potential negative impacts that would arise during the construction works will include: generation of hazardous, non-hazardous waste, noise/air pollution, vibrations, accident from movement of equipment and materials to site, occupational health & safety risks, risks associated with labour influx (security threat, gender based violence in particular Sexual Exploitation and Abuse due to labour influx, increase in sexually transmitted infections and diseases), grievance and disturbance to physical and cultural resources among others. All these trigger the World Bank's OperationalPolicy(OP) on Environmental Assessment

(OP 4.01) and Physical Cultural and Resources (OP 4.11). In addition, the Nigeria EIA Act mandates that any construction that would have significant impact on the environment must be subjected to an environmental assessment prior to commencement of the civil works.

In meeting the requirements of the World Bank Safeguard Policies and the Nigerian EIA Act CAP. E12 L.F.N. 2004, CEFTER, is proposing to engage an experienced consultant who would conduct an Environmental and Social Management Plan (ESMP) to identify the environmental and social impacts associated with this project as well as to proffer mitigation measures to address potential negative impacts.

C. OBJECTIVES OF THE CONSULTANCY

The objective of the study is to prepare an Environmental and Social Management Plan (ESMP) for the proposed **CEFTER FOOD TECHNOLOGY INNOVATION COMPLEX (CEFTIC)**
The ESMP will provide an overview of the environmental and social baseline conditions of the proposed sub-project, summarize the potential impacts associated with the proposed construction works, and set out the management measures required to mitigate potential adverse impacts in a series of sector specific Environmental and Social Management Plans (ESMPs).

The ESMP will be utilized by the contractor(s) to be commissioned by the CEFTER in preparation of the required Contractor's ESMP (C-ESMP). which will form the basis of the site-specific management plan, prior to commencement of civil works.

The ESMP will be used by the contractor to address all Occupational Health and Safety (OHS) issues and community health and safety issues associated with the proposed construction work.

D. DISCRIPTION OF THE PROPOSED SUB-PROJECT ACTIVITIES

The proposed activitiesassociated with the project will involve construction of two factory buildings, car park, an admin building, a security post and male and female toilets. Associated structures and works expected include foundation laying, plumbing, electrical fittings, soak away, universal access to all buildings including toilets, roofing, landscaping, etc to accommodate the factory and all factory activities. Thusthe need to access the level of impacts, and propose mitigation measures is necessary.

The construction works will be implemented on the land Benue State University Management have donated to CEFTER such there will be no involuntary resettlement, acquisition of land, relocation, compensation, loss of physical and economic assets, and /or loss of livelihoods as thr project by design cannot finance such activities.

E. SCOPE OF WORK:

The consultant will be mandated to prepare an Environmental and Social Management Plan (ESMP) of the subproject in accordance with national procedures for EIA and World Bank Safeguard Policies that were triggered under the Project. To do this, the Consultant should refer directly to the results of the analyses and recommendations of the Project's Environmental and Social Management Framework (ESMF).

This document should be prepared with a level of detail sufficiently precise to be included in the tender for construction companies, in order to allow a correct estimate of the costs of these activities and to be part of the specifications of the successful bidder.

The core tasks of the consultant shall include

- Prepare a complete ESMP
- Provide a baseline description of the characteristics of the environment in which the activities of the sub-project will take place.
- Highlight the major constraints that need to be taken into account when preparing the land, construction and during operation.
- Conduct a detailed risk analysis.
- Evaluate the potential environmental and social impacts due to sub-project activities.
    - Determine the significance of positive and negative impacts, direct and indirect impacts and immediate and long-term impacts associated with the sub-project
    - Identify risk mitigation measures.
    - Consider the potential impacts of a project on physical cultural resources and follow the required procedures.
- Analyze alternative options.
- Identify work supervision mechanisms
- Define the framework of information, consultation and public participation.
- Present institutional arrangements for implementation of the ESMP as well as reporting systems
- Describe the arrangements for handling complaints and resolving potential conflicts

CONSULTATIONS:

The consultant should carry out consultations with identified primary and secondary stakeholdersin order to obtain their views about the sub-subject. These consultations shall occur during the preparation of the ESMP to identify key environmental and social issues and impacts, and after completion of the draft ESMP to obtain comments from stakeholders on the proposed mitigation/enhancement measures.

ETHICAL REQUIREMENTS

Before undertaking any activity, the Consultant will ensure that She/He understands all ethical considerations related to gender based violence (GBV) (in particular Sexual Exploitation and Abuse [SEA]). The consultant should not collect any primary data and should NOT conduct interview or research using SEA survivors and will only make use of secondary sources and data. The objective of this is to minimize harm to women and children

F. ESMP Structures

The ESMP Report shall be presented in a concise format and should not be more than 20 pages 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 the following topics:

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

Chapter 1: Introduction

- Introduction to the ACE Project and description of the proposed construction activities
- Rationale for ESMP
- Methodology

Chapter 2: Project Description
- Project Activities and Schedules including expected duration of the construction works

Chapter 3: Biophysical and Socio Economic Characteristics of project area

- Relevant Maps and engineering designs for proposed construction 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 analysing the environmental and social impacts of the proposed construction.
- Discussion of the positive and negative potentially significant adverse environmental and social impacts of the proposed construction.

Chapter 5: Environmental and Social Management Plan (ESMP), including:
- ESMP table highlighting Activities, identified adverse impacts, mitigation measures and corresponding indicator(s). Mode of measurement, corresponding cost of mitigation, monitoring indicators, frequency, cost, as well as responsibilities for implementing these measures.
- Institutional responsibilities for monitoring and implementation of mitigation
- Monitoring and Reporting
- Implementation schedule
- Contractual Measures
- Measures for Non-Compliance with ESMP
- Cost Estimate for ESMP Implementation

- GrievanceRedress Mechanism (GRM)

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: References
Annex 2: Terms of References
Annex 3: List of persons met in consultations and summaries of meetings
Annex 4: Summary of World Bank Safeguard Policies
Annex 5: General Environmental Management Conditions for Construction/Civil Works
Annex 6: Project Occupational Health and Safety (OHS) plan
Annex 7: Company Code of Conduct on Preventing Gender Based Violence and Violence against Children
Annex 8: Manager's Code of Conduct on Preventing Gender Based Violence and Violence against Children
Annex 9: Individual Code of Conduct on Preventing Gender Based Violence and Violence against Children

Annex 10: Waste Management Plan
Annex 11: Workers Campsite Management Plan
Annex 12: SafeguardGuidanceOn Covid-19 Consideration In construction/Civil works projects

Annex 13: Photos

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.

G. DELIVERABLES AND TIMING:

Inception report: The inception report shall be submitted a week after submission of action plan/commencement of work.

Draft report: A draft ESMP will be submitted for comments between the second and third 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: A draft final will be submitted after making inputs to comments of the draft ESMP.

Final report: The final ESMP Report will take into account all comments and will be submitted four weeks after commencement of work

H. EXPECTED WORK PRODUCT AND DELIVERABLES

Table 1: The study will be completed within 4 weeks.

Activities	Week 1	Week3	Week4	Week5
Submission of Inception Report	X			
Submission of Draft Report		X		
Submission of Draft Final			X	
Submission of Final Report				X

I. RENUMERATION AND PAYMENT SCHEDULES

The consultant will be paid based on negotiations with the ACENPEE but shall not exceed 1% of the entire project value.

Table 2: Payment Schedule

S/N	**Deliverable**	**Schedule**	**Payment**	
1	Inception Report	1 week (after contract signing)	20%	
2	Draft Report	2 to 3 weeks (after contract signing)	40%	
3	Final Report	4 weeks (after contract signing)	40%	

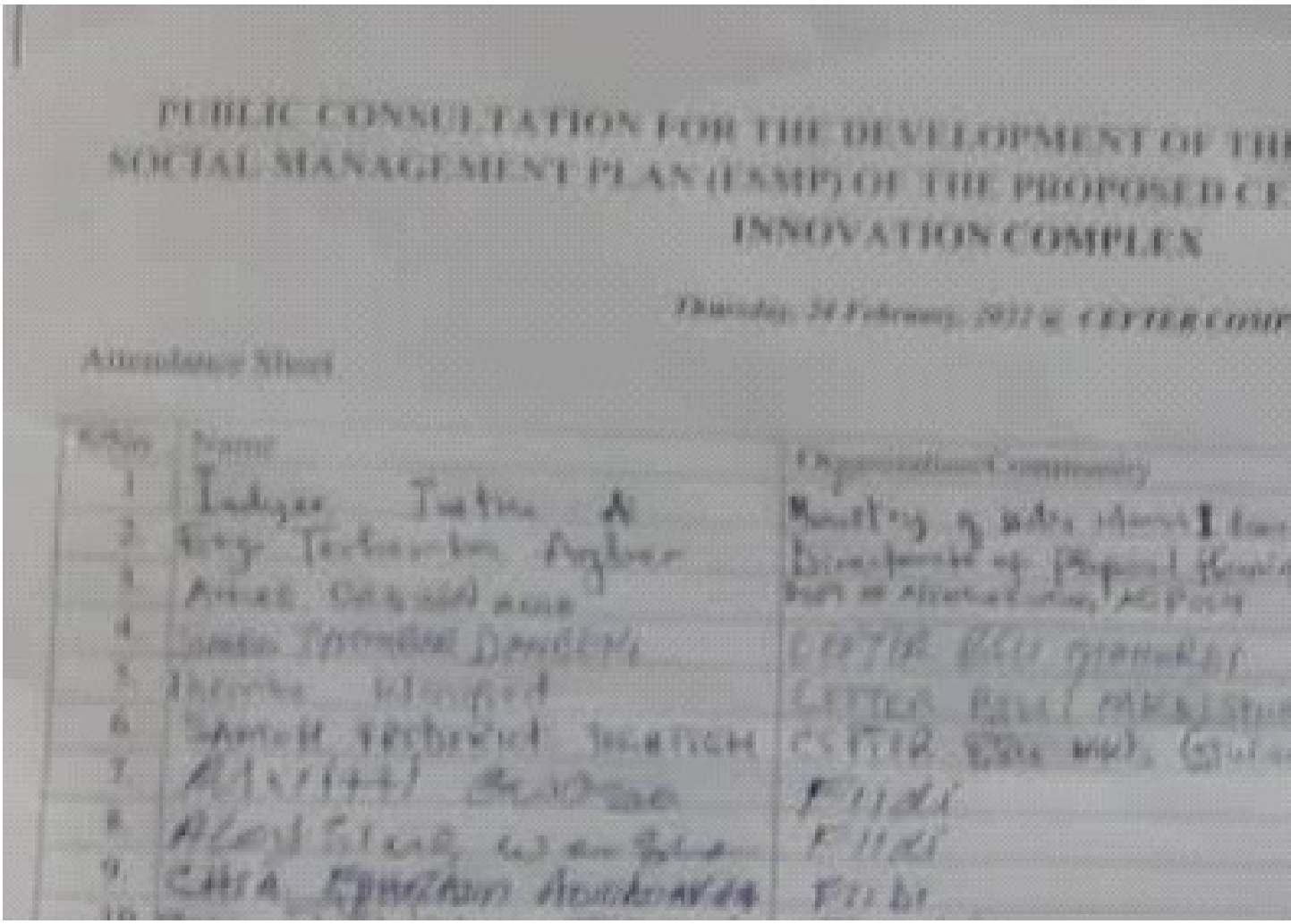
J. QUALIFICATIONS OF THE CONSULTANT

- University degree at the Master's level (or equivalent), specialization in environmental sciences or geography or agronomy or development studies or affiliated disciplines.
- At least 5 years of experience conducting environmental studies or environmental assessment of projects or implementing environmental initiatives.
- It is highly desirable that the consultant have experience with working with international development institutions like the World Bank, and on infrastructure related projects.

K. CLIENT IMPUTS

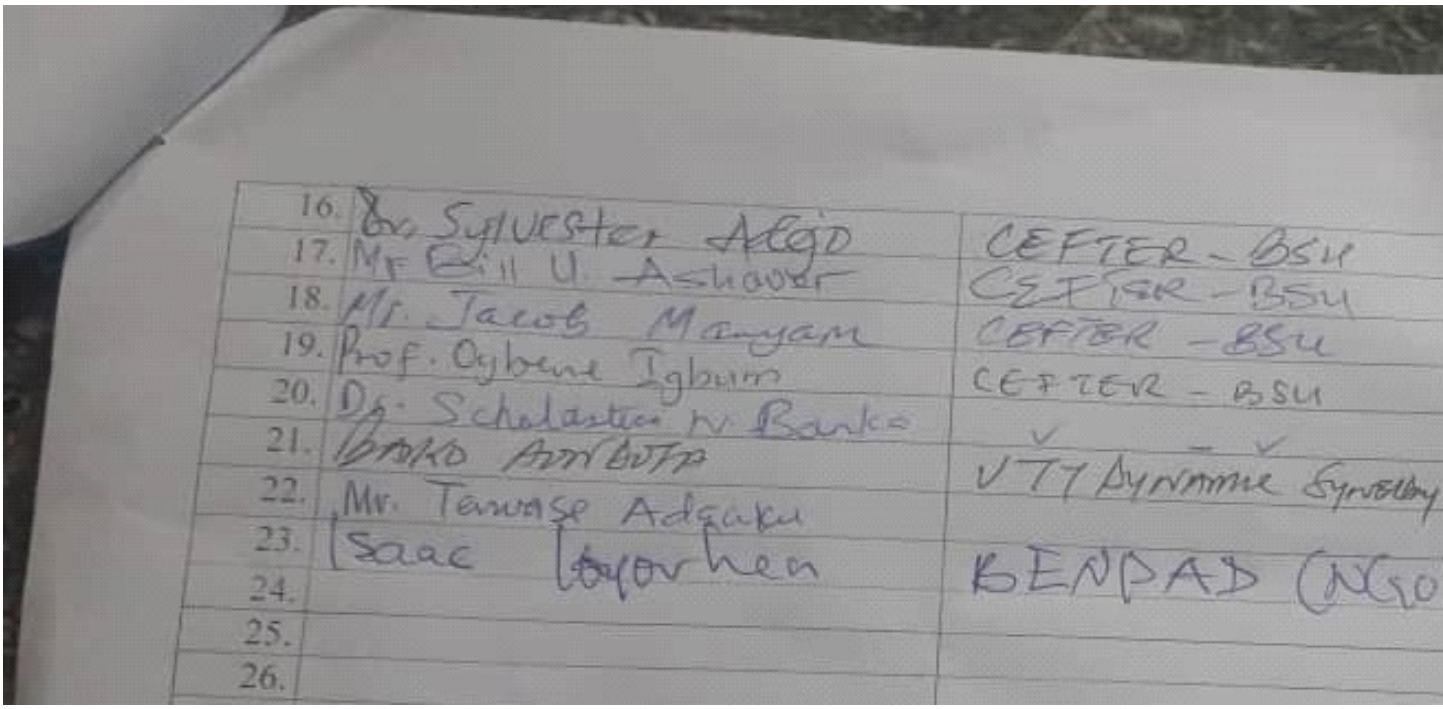
CEFTER shall provide to the consultant all relevant/supportive environment reports/documents previously carried out. Land survey report and the interpretation, soil suitability tests and meteorological reports would amongst others be inclusive.

Annex 3: List of persons met in consultations and summary of meetings



PUBLIC CONSULTATION FOR THE DEVELOPMENT OF THE
SOCIAL MANAGEMENT PLAN (ESMP) OF THE PROPOSED CE
INNOVATION COMPLEX

Attendance Sheet



16.	Dr. Sylvester Atigo	CEFTER - BSU
17.	Mr Bill U. Ashover	CEFTER - BSU
18.	Mr. Jacob Manyam	CEFTER - BSU
19.	Prof. Ogbeni Igbum	CEFTER - BSU
20.	Dr. Scholastica N. Banka	
21.	[illegible]	VTT Dynamic Synergy
22.	Mr. Tawase Adgaku	
23.	Isaac Loyorhen	BENPAD (NGO
24.		
25.		
26.		

Annex 4: Summary of World Bank Safeguard Policies

This section focuses on the World Bank Environmental and Social Safeguard Policies as applicable for to the CEFTIC Complex Project. The following policies will be triggered and are relevant to the subproject:

Environmental Assessment (EA) (OP/BP 4.01)

Environmental Assessment is used in the World Bank to identify, avoid, and mitigate the potential negative environmental and social impacts associated with Bank's lending operations early- on in the project cycle. In World Bank operations, the purpose of Environmental Assessment is to improve decision making, to ensure that project options under consideration are sound and sustainable, and that potentially affected people have been properly consulted and their concerns addressed. This policy is triggered if a project is likely to have potential adverse environmental and social risks and impacts in its area of influence. The EA has various tools that can be used, including amongst others Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan (ESMP). The selection of EA instruments to be

used for a particular project is made through the Environmental and Social Screening process; all projects proposed for World Bank financing are to be screened, and are categorized according to their potential environmental and social impacts as preliminarily assessed during the screening process. Efforts have been made to identify some potential adverse environmental and social impacts of the CEFTIC COMPLEX PROJECT

Projects on International Waterways (OP/BP 7.50)

The River Benue originates from Cameroon and runs through Benue, it passes through Makurdi as the major river that drains Makurdi and Benue at large. It joins the Niger River at Lokoja, the Niger is a major river in West Africa, and the river runs in a crescent through Mali, Niger, on the border with Benin and through Nigeria, discharging through the Niger Delta into the Gulf of Guinea in the Atlantic Ocean. This policy will apply for the CEFTIC COMPLEX PROJECT due to the premise that both the Benue and Niger Rivers are shared amongst the other countries other than Nigeria. This policy relates to the relations between the riparian states. Therefore, the Bank attaches great importance to the riparian making appropriate agreements or arrangements for the entire waterway, or parts thereof, and stands ready to assist in this regard. This project is being undertaken in international waters thus the policy is triggered. The Niger River is a source of food, water and drainage for five nations of West Africa.

Physical Cultural Heritage OP 4.11

This policy addresses physical cultural resources, which are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. The project in itself will not be implemented in any culturally sensitive site. Sites of cultural significance will be avoided. In the case of a chance find, cultural artifacts will be collected and secured. Physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a people's cultural identity and practices.

Annex 5: General environmental management conditions for construction/civil works

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

- Installation of the work site on areas far enough from water points, houses and sensitive areas.

- Sanitary equipment and installations
- Site regulation (what is allowed and not allowed on work sites)
- Compliance with laws, rules and other permits
- Good Hygiene and security on work sites
- Protect neighbouring properties
- Ensure the permanence of the traffic and access of neighbouring populations during the works to avoid hindrance to traffic
- Protect staff working on work sites
- Soil, surface and groundwater protection: avoid any wastewater discharge, oil spill and discharge of any type of pollutants on soils, in surface or ground waters, in sewers, drainage ditches or into the sea.
- Protect the environment against exhaust fuels and oils
- Protect the environment against dust and other solid residues
- Waste management: install containers to collect the wastes generated next to the areas of activity.
- Degradation/demolition: inform and raise the awareness of the populations before any activity of degradation of goods.
- Use a quarry of materials according to the mining code requirements
- Compensation planting in case of deforestation or tree felling
- No waste slash and burn on site
- Speed limitation of work site engines and cars
- Allow the access of Public and emergency services
- Parking and displacements of machines

- Footbridges and access of neighbours
- Signalling of works
- Respect of cultural sites
- Dispose safely of asbestos
- Consider impacts such as noise, dust, and safety concerns on the surrounding population and schedule construction activities accordingly;
- Protect soil surfaces during construction and re-vegetate or physically stabilize erodible surfaces;
- Ensure proper drainage;
- Prevent standing water in open construction pits, quarries or fill areas to avoid potential contamination of the water table and the development of a habitat for disease-carrying insects;
- Select construction materials sustainably, particularly wood;
- Control and clean the construction site daily;
- During construction, control dust by using water or through other means;
- Provide adequate waste disposal and sanitation services at the construction site;
- Dispose of oil and solid waste materials appropriately.
- Preserve natural habitats along streams, steep slopes, and ecologically sensitive areas;
- Develop maintenance and reclamation plans and restore vegetation and habitat.
- Sound use of chemicals for termite control during the construction phase.

Annex6: Project Occupational Health and Safety (OHS) plan

A. Overview

This section describes the Environmental, Social, Health and Safety (ESHS) requirements under the Works Contract. These requirements are to be implemented in accordance with site-specific Environmental and Social Management Plan (ESMP) for the works. The bidder shall prepare its bid to 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 ESMP. The bidder shall address these requirements in its ESHS Management Plans and Implementation Plans and plan to fully take into account specific site ESHS considerations. If there is failure to implement these ESHS requirements in the course of executing the works contract, the employer reserves the right to arrange through the Engineer for execution of the missing action by a third party on account of the Contractor.

B. Pre-Bid Environment, Social, Health & Safety Considerations

Prior to bid preparation, the bidder is expected to assess the Environment; Health & Safety plan specific to the requirements for the Work being bided for, taking into account the size and nature of the project as well as the nature and extent of potential Environmental, Social Health and Safety risks.

The Company's assessment must include:

A ''**Hazard Assessment''** of potential hazards associated with the Projects being bidded for and formulated prevention control measures to address the identified hazards;

List of equipment and resources required to perform the work in a manner that fulfils ESHS requirements of the works;

Qualifications of Employees with the knowledge and skills to be used in performing the work in line with ESHS requirements;

An understanding of the obligations expected of the Company in order to comply with the applicable Environment, Social, Health & Safety Acts, Regulations and procedures;

A planned schedule for Environment, Social, Health & Safety inspections of the contract sites and facilities;

Plan for reviewing, recording and reporting of Environment, Health & Safety related events that may arise in the Course of the Projects;

Plan for reviewing Environment, Health & Safety performance measurement activities; and

C.1 Minimum Environmental, Social, Health and Safety outcomes

The bidder is expected to demonstrate capacity to produce sound ESHS results in the course of implementing the works in this contract. In general the ESHS measures to be planned shall include shall include, but not limited to, those which will produce the following ESHS outcomes:

1. **Reduction of Pollution Impacts:** All works must be planned and implemented to minimize the effect of dust and noxious gases on the surrounding environment resulting from earth mixing sites, asphalt mixing sites, earth moving activities e.t.c. to ensure safety, health and the protection of workers and communities living in the vicinity of project activities. All works must be

planned and implemented to minimize noise levels emanating from machinery, vehicles and noisy construction activities (e.g. excavation, blasting) for the safety, health and protection of workers within the vicinity of high noise levels and nearby communities. All works must be planned and implemented to prevent oils, lubricants and wastewater used or produced during the execution of works from entering into rivers, streams and channels

2. **Restoration of Water Flow Regimes**: All works must be planned and implemented in a manner that ensures that pre-existing water flow regimes in rivers and streams is maintained and/or re-established where they are disrupted due to works such as dredging, river training e.t.c to be carried out.

3. **Conservation of Natural Resources**: All works must be planned and implemented to prevent and minimize the impacts of quarrying, earth borrowing, piling and building of temporary construction camps and access roads on the biophysical environment including protected areas and arable lands; local communities and their settlements. Such impacts shall be remedied to acceptable standards. 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 shall be avoided.

4. **Ensure adequate Waste Management:** All works must be planned and implemented to ensure that construction and other solid waste generated on all construction sites, site yards and workers' camps are properly disposed. Sewage and wastewater from construction camps must also be satisfactorily managed through the provision of proper sanitation facilities on all premises under the works contract

5. **Reduce impact of construction activities on vehicular traffic, pedestrian movement and access within project corridors**: All works must be planned and implemented to offset temporary disruptions to vehicular traffic and human movement. Temporary access facilities (roads, footbridges) shall be done in consultation with the local community especially in important or sensitive environments. They shall also be optimized to guarantee safety and protect users from freak accidents. Traffic management shall be inclusive of all relevant communal, local, state and federal institutions.

6. **Ensure safety of workers and community residents:** All works must be planned and implemented in a way that protects workers and residents of project areas from adverse impacts on their health and wellness. Work areas shall be cordoned off to prevent freak accidents. Workers shall use personal protective equipment such as safety boots, reflective jackets etc. Adequate road signs to warn pedestrians and motorists of construction activities, diversions, etc. shall be provided at appropriate points.

7. **Community Health and Safety:** All works must be planned and implemented in a way that guarantees the control of the spread of communicable diseases attributable to project staff: Workers and local residents shall be sensitized on health risks particularly of AIDS. Stagnant water in uncovered borrow pits shall be treated in the best way to avoid creating possible breeding grounds for mosquitoes, Work yards shall be organized in a way that prevents breeding of disease vectors.

8. **Prohibition of all Forms of Forced of Harmful Child Labour**

The Bidder shall not employ "forced or compulsory labor" in any form. "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty. In the course of the works contract, the firm shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

9. **Improving capacity for implementation of ESHS on Works Contract**: The Contractor shall provide sufficient training to his own personnel to ensure that they are all aware of the relevant aspects of these ESHS requirements, project ESIA/ESMP, and his own ESHS-MSIPs 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 ESHS-MSIPs.

General topics should be: EHS in general (working procedures); emergency procedures; and social and cultural aspects (awareness raising on social issues)

10. **Reduction of impacts of incoming workers:** The works contract shall be planned and implemented in a way that reduces the temporary and permanent effects of incoming personnel into project beneficiary communitiesi.eLabour Influx Impacts. Measures that will reduce conflict with host communities, reduce pressure on resources, reduce inflations of prices and promote social harmony will be required by the works contractor.

11. **Avoidance of Gender Based Violence (GBV), Sexual Exploitation and Abuse (SEA) and Violence Against Children (VAC):** The works contract shall be planned and implemented in a way that addresses the risk of Gender Based Violence GBV (with zero tolerance), all forms of Sexual Exploitation and Abuse (SEA), Violence Against Children (VAC), Alcohol and Substance abuse. The Bidder shall develop plans to mitigate such social risks at project execution sites. The Codes of Conduct and Action Plan for Preventing Gender Based Violence (GBV) and Violence Against Children (VAC) shall clearly define obligations on all project staff (including sub-contractors and day workers) with regard to implementing the project's environmental, social, health and safety (ESHS) and help prevent, report and address GBV and VAC within the work site and in its immediate surrounding communities

C.2 Other requirements that build on employer responsibilities

12. Avoidance of Impacts on Private Property: Except otherwise addressed by a Resettlement Plan implemented by the employer, the bidder's plan must not include deliberate or accidental damage to private property. Such unplanned damage shall demand repair of the property to the owner's satisfaction and at the contractor's 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 employer from subsequent claims. In cases where compensation for inconveniences, land acquisition, damage of crops etc. are claimed by owner, the Employer has to be informed by the Contractor through the SE. This compensation is in general settled under

the responsibility of the Employer before signing the Contract. In unforeseeable cases, the respective administrative entities of the Employer will take care of compensation.

13. Protection of cultural heritage: Upon discovery of ancient heritage, relics or anything that might or believed to be of cultural importance during the execution of works, the procedure for implementing the works contract is required to immediately report such findings through the process established by the employer aimed at protecting such cultural resources.

D. Contractor's Environment and Social Management Plan (C-ESMP)

Within 6 weeks of signing the Contract, the successful bidder shall prepare a C-ESMP to ensure the adequate management of the environmental, social, health and safety (ESHS) aspects of the works, including implementation of the requirements of these ESHS requirements and any specific requirements of an Environmental and Social Management Plan (ESMP) and Resettlement Action Plan (RAP) for the works. The Contractor's ESMP (C-ESMP) will serve two main purposes:

For the Contractor, for internal purposes, to ensure that all measures are in place for adequate EHS management,

As an operational manual for staff.

To ensure that the Contractor is fully prepared for the adequate management of the ESHS aspects of the project, and as a basis for monitoring of the Contractor's EHS performance.

The Contractor's ESMP 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.

The Contractor's ESHS-MP will be reviewed and approved by the Client before start of the works.It is expected to be reviewed every six months and every review will be reviewed and approved by the Employer. This review would ascertain that the Contractor's ESMP covers all of the identified impacts, and has defined appropriate measures to counteract any potential impacts.

ESHS Payment Requirements

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.

OR

The bidder will cost the delivery of the ESHS requirements as a subsidiary obligation covered under the prices quoted for other Bill of Quantity items. However, provisional sums will be set aside for specific activities such as ESMP Trainings, HIV counselling services/SEA awareness and sensitization as mandatory ESHS outcomes.

Incorporation of Environmental and Social Requirements into Contract Management

The findings of the environmental and social assessment will need to be mainstreamed into the entire process for managing the BRT project. The requirements include the following;

Pre-Award Considerations

Evaluation of the capacity of project bidders for implementation of ESHS requirements: The project proponent will undertake a due diligence on the capacity of potential contractors for the faithful execution of the ESHS requirements of the project. This shall include

A review of the Environmental, Social, health & Safety (ESHS) policy of bidding firms;

Due diligence of the circumstances necessitating the suspension or termination of previous contracts on the basis of non-compliance with ESHS requirements of contracts

A review of the academic qualifications and experiences of key staff proposed to man key ESHS implementation functions by bidding firms

Inclusion of a statement of ESHS requirements into bidding and contract documents: The findings of the environmental and social assessment undertaken will be inserted into the bidding documents in a systematic manner. This will include;

A statement of the outcomes of properly implemented ESHS measures (sampled included in annex)

An inclusion of particular conditions of contract or specific contract provisions to furnish specific considerations such as regulatory limits, target periods to General Conditions of Contract (GCCs) provisions.

Management Strategies and Plans for Identified ESHS Issues: Based on the environmental and social assessment which have been reduced into a concise statement of ESHS requirements of the project, the project proponent will request bidders to propose Management Strategies and Plans to address ESHS issues as part of their bids. The strategies will demonstrate the capacity and knowledge of the bidder to manage the identified risks, if successful

Making provision in the Bill of Quantities (BoQ) of the project: This provision can be made in form of measured work items (in case of engineering mitigation measures) OR lump sum provisions (where the contractor is expected to propose costs based on his methodology) OR provisional sums (in case of mitigation measures which have been studies and costed by the client.

Inclusion of Supervisory Responsibility on ESHS issues into Terms of Reference of Supervision Firm: The proponent will include the qualifications, experience and responsibilities of E&S experts into the Terms of Reference of the Supervision Consultant's team.

Construction Phase

Development Contractors ESMP: The proponent shall request the successful bidder to develop a detailed costed Contractors ESMP based on the Management Strategies and Plans earlier detailed in the bids submitted. The C-ESMP will also contain all sub-plans stated in the environmental and social assessment carried out by the proponent such as the GBV Action Plan, Labour management procedures (LMP) manual, Traffic Management Plan, Occupational Health

Management Plan etc with specific details reflecting approved implementation methodology will be prepared and submitted for approval by the contractor.

Mobilization of ESHS Personnel: The contractor shall ensure that all personnel that are to implement the measures described in client's E&S assessment and C-ESMP are available before construction works are initiated.

Training of on-site personnel: The personnel required for all construction and construction support services will be trained on the E&S requirements of the contract before works are launched.

Routine Monitoring of E&S Performance of Contracts: The monitoring plan described in this assessment will be implemented as scheduled. Data on identified monitoring indicators and other indicators that may be considered necessary will be collected by the various responsible persons.

Update of Contractors ESMP: In view of the dynamic nature of social risks of projects, the C-ESMP shall be reviewed and submitted for approval every six (6) months.

Annex 7: Company Code of Conduct for Preventing Gender Based Violence and Violence against Children

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 consent17 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 work place 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.

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 8: Manager's Code of Conduct for Preventing Gender Based Violence and Violence against Children

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 work space. 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 9: Individual Code of Conduct for Preventing Gender Based Violence and Violence against Children

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 consent18 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.
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 10: Waste Management Plan

During the construction stage, the Contractor shall prepare a Waste Management Plan beforecommencement of project works. The Plan shall include:

Water and Wastewater

- A review of the preliminary site drainage design prepared during the detailed design.
- An update of the preliminary design based on the actual construction program and sitespecific conditions (e.g. the geographical conditions, location of slopes and the nature ofconstruction work).
- Detailed design including drawings, location maps, specifications of drainage collectionchannels and wastewater treatment facilities.
- Proposed discharge locations and treatment standards.
- A detailed implementation program of the proposed drainage system.
- As part of the design of the site drainage system, surface runoff within the constructionsite shall be diverted in order to avoid flushing away soil material and the water is treatedby device such as sediment trap before discharge.
- Domestic sewage from site offices, toilets and kitchen shall either be collected by alicensed waste collector or treated by on-site treatment facilities. Discharge of treatedwastewater must comply with the discharge limits according to Vietnamese legislation.
- A Wastewater treatment device such as a sediment tank can be installed near each ofthe constructions activities that may generate wastewater. Alternatively, sedimentationponds can be constructed on-site to settle out excessive suspended solids (SS) beforedischarging into a discharge outlet.
- Retaining walls and sandbags barriers shall be constructed surrounding the bored pilingmachine in order to trap bentonite and wastewater within the piling location. Thecollected spent bentonite or the wastewater shall be pumped for treatment beforedischarge.
- Prior to the rainy season, all exposed surfaces and slopes shall be properly covered orlandscaping shall be provided to minimize run-off of sediment laden. Slope protectioncan be carried out in sequence to construction and in advance of the rainy season.
- Drainage control devices such as sediment traps shall be installed at each dischargeoutlet, and they shall be cleaned regularly, and
- Chemical toilets can be provided on each work site employing 5 workers or more.
- At least one toilet shall be installed per 25 workers. Domestic sewage collected from thesite office and chemical toilets shall be cleaned up on regular basis. Only licensed wastecollectors shall be employed for this disposal. The sludge shall be treated according tothe requirements of the Contractor’s Waste Management Plan.

Solid Wastes

- Waste such as those listed below are expected due to construction activities:

- Surplus excavated materials requiring disposal due to earth moving activities and slopecutting.
- Disposal of used lumber for trenching works, scaffolding steel material, site hoarding,packaging materials, containers of fuel, lubricant and paint.
- Waste generated by demolition of existing houses / buildings affected by the project orbreaking of existing concrete surfaces.
- Waste from on-site wastewater treatment facility (e.g. treatment of bentonite fromtunneling works by sedimentation process), and
- Domestic waste generated by construction workers, construction campsite and otherfacilities.
- The above wastes must be properly controlled through the implementation of the followingmeasures:
- Minimize the production of waste that must be treated or eliminated.
- Identify and classify the type of waste generated. If hazardous or chemical wastes aregenerated, proper procedures must be taken regarding their storage, collection,transportation and disposal. (See Emergency Plan for Hazardous Materials andChemical Waste Management Plan).
- Identify and demarcate disposal areas clearly indicating the specific materials that canbe deposited in each, and
- Control placement of all construction waste (including earth cuts) to approved disposalsites (>300 m from rivers, streams, lakes, or wetlands). Collect and recycle and disposewhere necessary in authorized areas all of garbage, metals, used oils, and excessmaterial generated during construction, incorporating recycling systems and theseparation of materials.
- The Contractor shall make a commitment to waste recycling and re-use methods inconsideration of the following;
- A method statement on waste recycling, re-use and minimization of waste generation.
- Excavated material shall be re-used on-site or the nearby road segment / other projectsfar as possible in order to minimize the quantity of material to be disposed of.
- Recyclable materials such as wooden plates for trench works, steel, scaffolding material,site holding, packaging material, etc. shall be collected and separated on-site from otherwaste sources. Collected recyclable material shall be re-used for other projects or soldto waste collector for recycling, and
- Collected waste shall be disposed of properly through a licensed waste collector.

Pollution Prevention Plan

Emergency Plan for Hazardous Materials

- If the construction site is expected to have or suspected of having hazardous materials(chemicals, asbestos, hydrocarbons, or other similar hazardous materials), the Contractor willbe required to prepare a Hazardous Waste Management Plan and Emergency Response Planto be approved by the Environmental Supervisor. Removal and

disposal of existing hazardouswastes in project sites should only be performed by specially trained personnel followingnational or provincial requirements, or internationally recognized procedures.

The Contractor shall:

- Make the Hazardous Waste Management Plan available to all persons involved inoperations and transport activities;
- Hazardous waste (or chemical waste) shall be properly stored, handled and disposed ofin accordance with the local legislative requirements. Hazardous waste shall be stored atdesigned location and warning signs shall be posted;
- Inform the Environmental Supervisor, or Construction Supervisor of any accidental spill
- or incident in accordance with the plan;
- Prepare a companion Emergency Response Plan outlining all procedures to beundertaken in the event of a spilled or unplanned release;
- Initiate a remedial action following any spill or incident; and
- Provide a report explaining the reasons for the spill or incident, remedial action taken,consequences/damage from the spill, and proposed corrective actions. The EmergencyPlan for Hazardous Materials shall be subsequently updated and submitted to the PEOfor no objection.

Chemical Waste

- During construction there will be a potential for pollution to adjacent habitat areas andwatercourses caused by chemical wastes such as spent waste oil, spent lubricant,contaminated soil material due to leakage of hydraulic oil, fuel from construction plant orvehicles, etc.
- The following measures shall be put into place in order to minimize the damage caused bychemical waste:
- All refueling of heavy equipment and machinery shall be undertaken by a service vehicleto prevent any spillage or contamination by chemical wastes such as maintenance oils,lubricants, etc.
- All the fuel and hazardous material storage shall be adequately enclosed to prevent anyspillage problems;
- Storm water runoff from open workshops, repair areas, and enclosed storage areas shallbe collected and treated in hydrocarbon separation pits/tanks before discharge to drainsand waterways.

Maintenance of Construction Equipment

The Contractor shall:

- Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakesor wetlands). Fuel storage shall be located in proper areas and approved by the PEO.

Ensure that all equipment maintenance activities, including oil changes, are conductedwithin demarcated maintenance areas; never dispose spent oils on the ground, in watercourses, drainage canals or in sewer systems, and

- All spills and collected petroleum products shall be disposed of in accordance withstandard environmental procedures/guidelines. Fuel storage and refilling areas shall belocated at least 100m from all cross drainage structures and important water bodies oras directed by the PEO.

Reservoir Clearing and Salvage

Clearing of Construction Areas

Areas proposed for clearing shall be included in the Vegetation Clearing and Salvage Plan. Only those proposed areas shall be cleared in accordance with the Plan and approved by the Engineering Supervisor. The Vegetation Clearing and Salvage Plan shall consider the existing usage of the project land to allow its existing usage to continue as long as is practicable, without interference with the Contractor's activities. Vegetation shall not be disturbed in those areas not submitted with the Plan.

The Contractor shall also arrange to coordinate with local communities as part of the Livelihoods Development Plan to clear the reservoir area.

The following measures shall be implemented:

Landscape, Visual impacts and Re-vegetation

- The requirement of compensatory planting shall be included in the design and projectcontract. A Master Landscaping Plan and requirements of ecological monitoring orsurvey during different stages of the project shall be prepared during the design stagethat shall be implemented during the construction and maintained during operation.
- Facilities and structures shall be located according to the terrain and geographical features of the project site.
- Restoration, of cleared areas such as disposal areas, stockpiles areas, working platforms andany areas temporarily occupied during construction of the project works shall beaccomplished using landscaping, adequate drainage and re-vegetation.
- Existing trees and plants within the construction boundaries shall be tagged to indicatewhether the trees are to be retained transplanted or removed. Transplantation of existingtrees affected by the project works shall be carried out prior to the commencement ofconstruction.
- Excavations shall avoid damage to the root systems. Mitigation measures are alsorequired to prevent damage to trunks and branches of trees around the site.
- Temporary hoarding barriers shall be of a recessive visual appearance in both color andform.
- Upon completion of the construction, the affected areas shall be immediately restored totheir original condition, including the footpathand re-establishment of disturbe vegetation.

- At the highly visually sensitive zones, construction may be scheduled where possible atthe low tourist seasons.
- Construction trucks shall operate at night when possible and kept cleaned and coveredwhen shipping bulk materials.
- Construction sites shall be surrounded with fence if located at the scenery zones toavoid direct visual sights of the construction sites.
- There shall not be construction camps in scenic areas.
- Random disposal of solid waste in scenic areas shall be strictly prohibited.
- All mixing stations and concrete batching plants shall not be located inscenic areas.
- Use the existing roads as access road if possible to minimize the need for new accessroads which lead to damage existing landforms and vegetation.
- Spoil heaps and excavated slopes shall be re-profiled to stable batters, and grassed toprevent erosion.
- Topsoil stripped from the work areas shall be used for landscaping works, and

  Site Restoration
- Various activities to be carried out for site restoration are:
- The construction campsite shall be grassed and trees cut replaced with saplings ofsimilar tree species.
- All affected areas shall be landscaped and any necessary remedial works shall beundertaken without delay, including grassing.
- Drains shall be cleared of debris and culverts checked for clear flowpaths.
- All sites shall be cleaned of debris and all excess materials properly disposed.
- Oil and fuel contaminated soil shall be removed and transported and buried in wastedisposal areas.
- Saplings planted shall be handed over to the community or the CEFTER for furthermaintenance and watering.

Annex 11: Workers Campsite Management Plan

The objectives of the Camp Management Plan are:

Avoid or reduce negative impacts on the community and maintain constructive relationships between local communities and workers' camps; and

Establish standards on worker welfare and living conditions at the camps that provide a healthy, safe and comfortable environment.

Legal Requirements and Grievances

- The Contractor is required to operate within the parameters of the Nigeria Labour Law and the International Labour Organization guidelines.

- The World Bank Performance Standards are applicable to CEFTER and its sub projects. Furthermore, the Grievance Redress Mechanism contained in this ESMF is required to be adhered to by the Contractor.
- Contractor personnel shall conduct regular safety walks and an HSE committee will track performance against requirements stipulated in this plan.
- The Contractor will also have its grievance mechanism developed for the project.
- Additionally, Contractor would be required to sign and acknowledge the Code of Conduct and agree to abide by its provisions.

Management and Monitoring

The Contractor shall develop a Contractor Plan which shall, as a minimum, incorporate the camp management measures. Since the workers will not be camped but be working and closing every day. The Contractor is responsible for developing area or site-specific procedures for the monitoring program (where necessary) based upon the final design details of the infrastructure

Annex 12: Safeguard Guidance on Covid-19 Consideration in construction/civil works projects

1. Conduct off-site safety trainings to ensure all employees are aware of the job hazards. The emphasis of this training is on the COVID19 awareness.
2. Contractor is to carry out screening of personnel to determine if any of them is sick or showing any COVID19 related symptoms before any of them is allowed into the work site.
3. Proper education of workforce and enforcement of social distancing protocols on site. Effective social distancing practices must be included in the training plan prior to deployment of the workforce to site.
4. Education should include use of tools; Tools and equipment are not to be shared, where possible. Touch points on tools should be properly wiped down with disinfectant prior to hand over to next shift.
5. Workers are to be encouraged to wash hands comprehensively for at least 30 seconds immediately they are about to enter the worksite.
6. In addition, the following social distancing practices can be included in the workers camp:
   a. Break time can be staggered so that not all workers will be away to the canteen or eating area at the same time
   b. Use of the bathrooms and toilets need to be staggered to prevent crowding.
   c. Work hours can also be staggered to ensure no overcrowding
   d. Provision of entry and exit points from workers camp and site to ensure minimum contact during shift change.
   e. Prevention of visits from family and friends from workers camp and work site
   f. Improve access control to and from the workers camp and works site. Consider the use of personal identification cards that should be presented to grant access.
7. Education and enforcement of handwashing, sanitizing and other hygienic practices.
8. A record of who is on the work site and when needs to be available and with the shift supervisor at all times. This is so that in the event of a worker contracting COVID19, these records will be utilized to inform those who may have come into contact with this person (contact tracing).

9. Contractor to create an isolation area within the sick bay that can offer initial response.
10. Sick bay and health officers in the workers camp are to have the phone numbers and contact details of NCDC for confirmed cases that require evacuation from site.
11. Contractor should ensure the regular disinfecting and cleaning of the following surfaces several times a day; tables, chairs, doorknobs, Light switches, phones, toilets, taps and sinks.
12. Remind workforce of need to follow the protocols, especially washing of hands and to keep common areas and tools, clean.
13. When departing the worksite, workers are to:
a. Wash hands properly before departing site
b. Retain PPE on site
c. Maintain social distancing as you depart

Annex 13: Photos stakeholders meeting with representatives from Urban Development Board, Makurdi, Ministry of Water Resources, the Host Community, Civil Society Organizations, BSU Community etc.