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# Environmental and Social Management Plan for the Proposed CEFTER Complex



**CENTRE FOR FOOD TECHNOLOGY AND RESEARCH**  
*BENUE STATE UNIVERSITY, MAKURDI*



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## List of Acronyms

ACE	African Higher Education Centre of Excellence
BMP	Best Management Practices
CEFTER	Centre for Food Technology and Research
CFRN	Constitution of the Federal Republic of Nigeria
EIA	Environmental Impact Assessment
ESMP	Environmental and Social Management Plan
FEPA	Federal Environmental Protection Agency
FME <sub>env</sub>	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

## **Executive Summary**

### **Background**

This report is the Environmental and Social Management Plan for proposed CEFTER complex project in Makurdi Benue State. The ESMP is developed to cover the design, construction, operation phases of a project. It details how impacts of the projects at various phases would be managed. It contains a monitoring framework for the determination of mitigation activities.

### **Project Description**

The planned complex comprises upgrading of an existing building and the construction of a new storey building containing lecture halls, offices and labs. The new building will contain 10 lectures halls of 50 person's capacity each, a 200 person's capacity multipurpose hall, 8 executive offices and 8 non executive offices, genitors and stores.

### **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)<sup>1</sup> 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 that guided process and development of mitigation measures, these include:

**Site visits/ Transect:** The consultant will visited the site using the transect method to take a view of the physical and social components of the environment of the site of the projects. This gave a background of the condition of the site and its surrounding.

**Survey:** A survey was conducted which involving the use of self administered questionnaires. The questionnaire was useful to generate primary data on the socio-economic characteristic of the site. The data was used in social impact analysis. This method is also useful to achieve stakeholder participation using the third party approach where information is generated through the third party (Canter, 2010).

**Review of relevant Literature:** Existing 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 enabled the anticipation of possible impacts of the project.

**Experts view:** Analysis on the impact of project was subjected to expert views. Various methods including stakeholder consultation was used.

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<sup>1</sup> Canter L. W. (2010). Environmental Impact Statement. McGraw-Hill, Inc, New York, 2<sup>nd</sup> Edition.

## Summary of Impacts and Mitigation Measures

S/N	Environmental attribute	Potential Impact	Mitigation Measures
1	Relocation of squatters/ loss of accruable income due to farming activities on the site and adjoining lands	Loss of accommodation and farm land	Conduct early awareness creation, Provide incentives for squatters 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
2	Accidents and delays, Increase in noise and vibration	Movement of equipment, and construction materials, Construction/ upgrading activities.	Use signposts, warning signs, barriers, and make site clearly visible, develop work schedule to suite local times and traffic patterns.
3	Air quality	Dust from rehabilitation activities and construction activities and emissions	Use water mist to suppress dust from. Provide covering for truck containers and observe national regulation for emission standards. Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust
4	Water Quality	Debris, leaks and waste water from construction and upgrading 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 streams and rivers.
5	Waste Management	Solid waste from construction and upgrading activities, Wastewater /hazardous waste management	Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. Waste should be properly sorted and disposed properly by licensed collectors
6	Pressure on existing services	Influx of students and staff of the CEFTER, Increase in human-police ratio	Provide safe water for use in the complex all the time. Make provision for cafeteria services for the CEFTER complex, Install adequate fire protection facilities with clearly indicated instructions, Improve on existing power supply by installation of a dedicated power transformer of adequate capacity for the complex, Provide adequate car parking space and Design a security strategy for the centre to include community members to benefit from existing self-help strategies in place.

## CHAPTER ONE

### 1.0 Introduction

The regional initiative of Africa Higher Education Centre of Excellence (ACE) was launched in 2013 to support change and improvement in human capital development within the region. The ACE project was successfully introduced in eight West and Central Africa countries with a US\$ 150 million investment approved IDA in April 2014. 19 ACEs were competitively selected in Benin, Burkina Faso, Cameroon, Ghana, Nigeria, Senegal, The Gambia, and Togo. In STEM, the fields covered include applied mathematics, environment and water engineering, application information technology, agriculture, material sciences and petroleum engineering. Projects were also selected in Health and Agriculture. The maximum grant awarded to each Centre of Excellence is US\$ 8 million.

In Nigeria, the Centre for Food Technology and Research (CEFTER), Benue State University, was selected for the control of agricultural post-harvest losses, in the process it will undertake the following sub-projects:

- Construction of CEFTER PG COMPLEX – this will encompass lecture rooms, offices and laboratories for research
- Upgrading of old building donated to the centre by the Benue State University

The new building will contain 10 lecture halls of 50 person's capacity each, a 200 person's capacity multipurpose hall, 8 executive offices and 8 non executive offices, generators and stores.

### 1.2 Rationale for ESMP

The ESMP is an action plan and covers the design, construction, operation phases of a project. It details how significant impacts from project initiation to closeout will be managed (Anyadiiegwu, 2012)<sup>2</sup>. It is an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction and operation, and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced (DEAT, 2004)<sup>3</sup>. It provides a delivery mechanism to address adverse impacts, to enhance project benefits and introduce standards of good practice to be adopted for all project activities.

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<sup>2</sup> ANYADIEGWU C.C (2012): "Overview of Environmental Impact Assessment of Oil and Gas Projects in Nigeria" *AFRREV STECH International Journal of Science and Technology Bahir Dar, Ethiopia* Vol.1, No. 3, pp. 66-80

<sup>3</sup> ENVIRONMENTAL PROTECTION AGENCY, AUSTRALIA (2005): *International Study on the Effectiveness of Environmental Assessment*. Canberra, Australia

The ESMP promotes the awareness and use of best practice environmental management by site operatives during construction and operative phases (Rizzolo, 2006)<sup>4</sup>. It provides a guide on the appropriate means of managing the environment during the various project activities as well as incorporating a community development plan indicating health, social and economic benefits that will accrue to the communities in the project area during the project lifecycle (SPDC, 2003, 2004)<sup>5</sup>. Specific guidelines are developed and provided to reflect these commitments with specific responsibilities assigned by regulators and organisations involved in ESMPs. Particular responsibilities are assigned at various levels for example, it is required specifically that the manager of the project or the line manager reviews adopts and signs the ESMP and is responsible for its implementation throughout the project's life cycle.

Therefore, 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 4.12 Environmental Assessment and involuntary settlement resulting from the proposed activities of the listed sub projects, 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 as social management and mitigation measures required to implement these sub-projects.

The ESMP would be utilized by the contractors, to be commissioned by CEFTER for the sub projects, 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.

As the proponents for the subprojects, it is CEFTER's objective to avoid, where practical unacceptable adverse environmental, social and/ or economic impacts. In the circumstance that an impact cannot be avoided, CEFTER and Projects Management (who will be responsible for the management of the upgrade and rehabilitation phase of the project) are committed to the implementation of appropriate mitigation measures. For clarity in the management structure however, Project Management will consult CEFTER on matters arising to environmental health and safety performance. Project Management will however have overall responsibility for planning, implementation, monitoring and enforcement of activities associated with this ESMP and environmental and health and safety performance.

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<sup>4</sup> RIZZOLO, J. (2006): *Environmental Management. Code of Practice for the Building and Construction Industry*. Ballymun Regeneration Ltd. - Health & Safety Management Unit: Document No.: 3-Po-CSM. Issue 1.0, pp. 78.

<sup>5</sup> Ibid





**Fig. 2 Location of the Project site in the New GRA Makurdi**

### **1.3 Organization of the report**

This report is organized in the following order,

Preliminary pages:

Chapter 1: Introduction

Chapter 2: Project Description

Chapter 3: Policy and Regulatory Framework

Chapter 4: Description of the Natural Environment

Chapter 5: Environmental and Social Management Plan (ESMP)

Chapter 6: Recommendations

## **Chapter Two**

### **Project Description**

The planned complex comprises upgrading of an existing building and the construction of a new storey building containing lecture halls, offices and labs. The new building will contain 10 lectures halls of 50 person's capacity each, a 200 person's capacity multipurpose hall, 8 executive offices and 8 non executive offices, genitors and stores. Implementation activities include the following: -

A) Site clearing and excavation of the foundations for the new building. This entails removal of unwanted vegetation from the site and excavation of the projects foundations. The few shrubs on the site would be cleared to pave way for excavation activities; the excavation of the site would not involve much machinery since the soil on site is light and well drained.

B) Civil works: Civil works involves: -

Transportation of construction materials to the site and disposal of the resulting flora waste using light machinery. Storage of the construction materials. Laying and construction of the foundations. Disposal of the existing debris/ materials. Removal of failed portions of the old building, formation and upgrading of parts of the old building within the existing structure.

C) Electrical works: Electrical works involve installation of the Power Distribution Box, control panel, and all power supplying cables and equipments.

D) Plumbing works: Installation of the underground and wall pipes of various sizes to convey good water, waste water and sludge.

## CHAPTE THREE

### **Policies, Regulatory and Legal Frameworks Guiding the Environmental and Social Management Plan (ESMP) of the Planned Centre for Food Technology and Research Complex**

Various policies and legal frameworks regulate environmental practices and provide for the development of ESMP as safeguard for the environment against projects and programs in Nigeria. Specifically, the 1999 Constitution of the Federal Republic of Nigeria (CFRN) provides the general thrust of the nation's environmental policy. In section 20 it provides thus; *The State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria.* Various other acts of the National assembly as well as the international conventions and treaties have been made and rectified to provide for the protection of the environment in Nigeria. These laws and policies form are the focus of this review for the purpose of the EMSP. The review is segmented into National policies, laws and regulations and international policies. Also, there are significant operational and safeguard policies of the World Bank which are focused on mitigating and protecting the people and their environment from adverse harm arising from projects or programs involving the World Bank. This review would cover these policies too.

#### **3.1 World Bank Safeguard Policies**

##### **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 CEFTER COMPLEX PROJECT

### **3.2 National Regulatory Bodies and Laws / Legislations relevant to Centre for Food Technology and Research.**

#### **3.2.1 Federal Regulatory Bodies**

- Federal Ministry of Agriculture and Rural Development (FMARD) (1966)
- Federal Ministry of Sciences and Technology (FMS&T)
- Federal Ministry of Environment (1999 Presidential Directive)
- The National Environmental Standards and Regulations Enforcement Agency (NESREA) Act No 25 of 2007
- National Agency for Food and Drug Administration and Control (NAFDAC) act no. 15,1993 15.
- Standards Organization of Nigeria Act No. 14 2015

#### **3.2.2 Federal Legislations**

- Land Use Act Cap 202 LFN 1990
- Environmental Impact Assessment Act 1992
- National Environmental Standards and Regulations Enforcement Agency (Establishments) Act of 2007
- Nigeria Urban and Regional Planning Decree 1992

### **3.3 The Institutional framework**

#### **3.3.1 The Federal Ministry of Agriculture and Rural Development (FMARD)**

The Federal Ministry of Agriculture and Rural Development (FMARD), is a Ministry of the Nigerian government that regulates agricultural research, agriculture and natural resources, forestry and veterinary research all over Nigeria through its agencies.

#### **3.3.2 Federal Ministry of Science and Technology (FMS&T) and Parastals**

### **The National Biotechnology Development Agency (NABDA) (2001).**

The Agency was established under the aegis of the Federal Ministry of Science and Technology to implement the policy that is aimed at promoting, coordinating, and setting research and development priority in biotechnology for Nigeria. Part of its specific mandates is to undertake research, development and innovation, promotion and deployment of appropriate biotechnologies for increased productivity and value chain development to enhance sustainable agriculture and food security.

### **3.3.4 Federal Ministry of Environment (1999 Presidential Directive)**

The Federal Environmental Protection agency (FEPA) was established by Decree No. 58 of 1988 and subsequently amended by Decree 59 of 1992 with further amendment by Decree 14 of 1999. FEPA was absorbed into the Federal Ministry of Environment (FMEnv) in 1999 by a presidential directive and its functions among others are now the responsibility of the new Ministry.

The FEPA act has now been repealed in the NESREA act No 25 of 2007

### **National Biosafety Management Agency Act, 2015**

This Act establishes the National Biosafety Management Agency charged with the responsibility for providing regulatory framework, institutional and administrative mechanism for safety measures in the application of modern bio-technology in Nigeria with the view to preventing any adverse effect on human health, animals, plants and environment.

### **The National Environmental Standards and Regulations Enforcement Agency (NESREA) Act No 25 of 2007**

The Act establishing the Agency creates provisions for the setting of air quality standards and atmospheric protection. The Act also prohibits the discharge of hazardous substances into the air or upon the land and waters of Nigeria or at the adjoining shorelines except where such discharge is permitted or authorized under any law in force in Nigeria. Some of these regulations include:

- The National Environmental (Sanitation and Wastes Control) Regulation S.I 28 of 2009;
- National Environmental (Noise Standard and Control Emission) Regulations, S.I No. 35 of 2009;

### 3.3.5 Benue State Ministry of Environment and Water Resources

The Benue State ministry of environment is established with the responsibility to oversee policy formulation and implementation in the environmental subsector. This is achieved through the following objectives:

- Policy formulation, and evaluation and advising of government.
- Environmental regulation and control of environmental hazards
- Lead in formulating standards and enforcement in all projects including donor funded projects within the state;

### 3.4 Implementation Framework

The framework for the implementation the ESMP would be based on the roles and responsibilities of the stakeholders outlined in the table below.

S/1	Stakeholder	Role and responsibility
1	CEFTER PIU	<ul style="list-style-type: none"><li>• Interface with relevant ministries in ensuring due diligence in project implementation</li><li>• Where infractions are identified, PIU will request contractors to amend and correct the violation.</li><li>• Receive and supervise the environmental report from the Independent Environmental Consultant (IEC),</li><li>• PIU's Safeguard Specialist will be in charge of review environmental report and recommend further actions.</li><li>• Cooperate with WB to periodically supervise contractors' activities.</li></ul>
2	Benue State Ministry of Environment	<ul style="list-style-type: none"><li>• The ministry will lead the compliance monitoring at the state level.</li><li>• Lead state level assessment and participate in external assessment and monitoring of ESMP implementation</li></ul>
3	Federal Ministry of Environment	<ul style="list-style-type: none"><li>• Lead initial site visits and advice on screening, scoping, review of draft ESMP report (in liaison with State Ministry of Environment),</li><li>• Receiving comments from stakeholders, public hearing/ review of the project proposals, and convening a technical decision-making panel arising from the public disclosures,</li></ul>
4	Other MDAs	<ul style="list-style-type: none"><li>• 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.</li><li>• During implementation, they may monitor specific parameters and enforce standard</li></ul>
5	World Bank	<ul style="list-style-type: none"><li>• Overall supervision and provision of technical support and guidance.</li><li>• Recommend additional measures for strengthening the management framework and implementation performance;</li><li>• Supervising the application and recommendations of sub- project ESMPs.</li></ul>
6	Safe Guard Unit	<ul style="list-style-type: none"><li>• Supervise the implementation to meet all standards and guidelines</li><li>• Ensure the involvement of all relevant stakeholders including CBOs and NGOs</li><li>• Conduct mitigation monitoring.</li></ul>
7	Works Contractor	<ul style="list-style-type: none"><li>• The Contractor is directly responsible for the implementation of the ESMP during construction phase of the project.</li></ul>

## **CHAPTER FOUR**

### **Description of Natural Environment**

#### **4.1 Climate and Meteorology**

The climatic condition of the area of influence of the sub project is influenced by two air masses: the warm moist south-westerly air mass and the warm dry north-easterly air mass. The south-westerly air mass is a rain bearing wind that brings about rainfall from the months of April to October. The dry north-easterly air mass blows over the region from November to March, thereby bringing about seasonal drought (Ologunorisa and Tersoo, 2006). Thus creating two seasons of rainy and dry respectively. 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°C and a maximum of 22.50C.

#### **4.2 Geology of the sub-project area**

The geology of Makurdi town is of cretaceous and consists of fluviodeltaic sediments with well-bedded sandstones which are of hydrogeological significance in terms of groundwater 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.

#### **4.3 Topography, Relief and Drainage**

Makurdi has low lying to moderately high plain topography. General surface elevation ranged between 95 – 130m above sea level. It is drained by River Benue and its tributaries tributaries which flew in southern direction and empties into the atlantic ocean after joining the Niger River to at Lokoja drainage pattern is generally dendritic.

#### **4.4 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. There

are also food crops farmed in undeveloped lands which include cassava, yam, sweet corn, beans and sweet potatoes. Others are vegetables and

## **4.5 Socio-Economic Analysis**

### **4.5.1 Gender Distribution**

Makurdi has a population of 226,198 a density of 323 persons per square kilometres as of 1991, the National Population Census data figures, has a population of 300, 377 with a density of over 400 persons per square kilometres as of the 2006 National population census data figures and the highest in the state. The project area has 52% male population and 48% female population.

### **4.5.2 Age 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.

### **4.5.3 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.



## **Chapter Five**

### **Environmental and Social Management Plan (ESMP)**

#### **3.1 Methods and techniques used in assessing environmental impacts of the project**

In order to assess the potential environmental impact of the project on the area of influence, the checklist approach method was used. The method is an effective tool recommended for low risk typology (Canter, 2010)<sup>6</sup> in the determination of impacts of the planned project. 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 site of the projects. This will give a background of the condition of the site and its surrounding.

#### **3.2 Methods and techniques used in assessing Social impacts of the project**

A survey was conducted 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.

**3.2.1 Review of Policies and Regulatory/ Legal Frameworks:** A review of all policies and Regulatory/ legal frameworks was conducted. It focused on relevant policies and regulatory /legal with scope to cover International, National and local instruments. Also specific instruments of the World Bank relevant to developmental initiatives involving the World Bank were reviewed. Also, relevant Literature and Existing 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 enabled the anticipation of possible impacts of the project.

**3.2.2 Experts view:** Analysis on the impact of projected shall be subjected to expert views. Various methods shall be used by experts to arrive at

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<sup>6</sup> Canter L. W. (2010). Environmental Impact Statement. McGraw-Hill, Inc, New York, 2<sup>nd</sup> Edition.

### **3.3 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, occurring within less sensitive environmental areas because the project is not sited within a sensitive environmental and short in duration for most impacts. They are generally manageable through the implementation of specific appropriate mitigation measures.

### **3.4 Identified Potential Impacts**

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

#### ***Positive Environmental Impacts***

- I. Reduction in the uncontrolled surface run off on the undeveloped land resulting into erosion of some parts of the area and adjoining streets.
- II. Rehabilitation of degraded adjoining street
- III. Reducing disaster risks in the project area
- IV. Improved environmental performance and governance

#### ***Positive Social Impacts***

- I. Provision of post graduate education in food technology
- II. Provision of admission and scholarship
- III. Provision of Employment generation
- IV. Improved economic activities
- V. Community development programmes
- VI. Increase opportunities for quality food production and marketing
- VII. Increase in social interactions
- VIII. Improved livelihood enhancing activities
- IX. Job creation opportunities.

The details of these impact and mitigation are presented in the table below;

## Environmental and Social Management Plan

Activity	Impact	Impact source	Mitigation
Site Acquisition	Relocation of squatters/ loss of accruable income due to farming activities on the site and adjoining lands	Squatters in the old building may have to relocate and some farmers who are taking advantage of the open land	<ol style="list-style-type: none"> <li>I. Conduct early awareness creation of intention to use the property for new purpose</li> <li>II. Provide incentives for squatters</li> <li>III. 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</li> </ol>
Site Clearing	loss of biodiversity	Removal flora and fauna	<ol style="list-style-type: none"> <li>I. Clearance of vegetation should be restricted to the absolute minimum, efforts should be made to replant removed trees in positions not needed for construction activities</li> <li>II. Equipment should be regularly washed down to avoid</li> </ol>

			<p>transporting seeds of invasive species or plant diseases</p> <p>III. Soil stabilization activities must be promoted</p>
Traffic/ Pedestrian Safety	Accidents and delays	<ul style="list-style-type: none"> <li>• Movement of equipment, vehicles and construction materials</li> </ul>	<p>I. In compliance with national regulations the contractor will insure that the rehabilitated site is properly secured and related traffic regulated. This includes but is not limited to;</p> <p>II. Signposting, warning signs, barriers, site will be clearly visible and the public warned of all potential hazards</p> <p>III. Traffic management system and staff training, especially for site access and near-site heavy traffic.</p> <p>IV. Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities</p>

			<p>during rush hours</p> <p>V. Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public.</p> <p>VI. Avoid the use of the 'Road safety junction' use alternative entry and exit routes by construction vehicles.</p> <p>VII. Slow vehicles carrying construction material within the project area down</p> <p>VIII. Regularly inspect and maintain all equipment</p>
Building/Upgrading work	Increase in noise and vibration	Construction/upgrading activities	<p>I. Develop working schedule for activities with high noise levels between 08:00am - 5:00pm</p> <p>II. During operations, the engine covers of generators, and other powered mechanical</p>

			<p>equipment shall be closed, and equipment placed as far away from residential areas as possible</p> <p>III. Selecting 'quiet' construction equipment and working methods</p> <p>IV. Keeping proper records of complaints in the complaints register</p>
	Air quality	Dust from rehabilitation activities and construction activities	<p>I. Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust</p> <p>II. During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site The surrounding environment (sidewalks, roads) shall be kept free of</p>

			<p>debris to minimize dust and accidents</p> <p>III. There will be no open burning of construction / waste material at the site</p> <p>IV. Prohibit transporting material with overloaded trucks to avoid fly offs</p> <p>V. Properly cover truck containers with plastic covers to avoid dust spreads</p>
	Water Quality	Debris, leaks and waste water from construction and upgrading activities	<p>I. 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 streams and rivers.</p>
	Waste Management	Solid waste from construction and upgrading activities	<p>I. Waste collection and disposal pathways and sites will be identified for all major waste types expected</p>

			<p>from demolition and construction activities.</p> <p>II. 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</p> <p>III. 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 (except asbestos)</p>
	Wastewater /hazardous waste management	Teaching and research experiments from the laboratories	<p>I. The approach to handling sanitary wastes and wastewater from building sites</p>



			<p>(installation or reconstruction) must be approved by the local authorities as applicable.</p> <p>II. Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment</p> <p>III. Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.</p> <p>IV. Paints with toxic ingredients or solvents or lead-based paints will not be used</p>
Erosion control and management	Development of drainages	Surface water runoff during heavy	<p>I. Control erosion pathway along</p>

		rain and due to poor drainage construction along two adjoining streets.	the site by constructing the drainages along the street bordering the site on the West (Wilson Enyi Street?) and on the East by Adoshe (private) Hospital.
Increased community economic activity rates	<ul style="list-style-type: none"> <li>• Recruitment of construction workforce</li> <li>• Increased patronage of goods sold by the community members</li> <li>• Increased diversification of local skills</li> </ul>		<p>I. Maximize local benefits of the operation particularly by favoring local procurement of goods, services and labor</p> <p>II. Actively attempt to fulfil local employment demand without fuelling unrealistic expectations of high employment and economic opportunities</p> <p>III. Labour recruitment should occur in an objective and transparent manner</p>
	<ul style="list-style-type: none"> <li>• Increase in human-police ratio</li> </ul>		<p>I. Design a security strategy for the centre to include</p>

			community members to benefit from existing self-help strategies in place.
	Pressure on existing WASH services	Increase in human population with the presence of construction workers	<p>I. The contractor shall provide safe drinking water for construction workers all the times</p> <p>II. The contractor shall provide safe mobile latrines for construction workers separated and clearly indicated according to gender with the waste collected by a licensed operator and managed offsite at licensed facility</p> <p>III. Provide information to construction workers on the use of the latrines.</p>

## 4.2 Capacity building requirements

The objective of the EMSP is to achieve a sustainable environment through the implementation of its recommendation during the life cycle of the proposed CEFTER Complex Project. To attain

this goal, capacity strengthening of responsible parties is required. This will guarantee an efficient and effective implementation.

During the ESMP development process, a basic interaction with officers of CEFTER and review of documents was carried out. This was followed with questions on issues of capacity and availability of specific skills as a way to determine the present level of capacity to implement the recommendations of the ESMP. This investigation revealed training needs for all those responsible for the management, implementation and operation of any aspect of the EMP to be adequately skilled for their role. These efforts will also be assisted by the implementation of technical assistance by an outside consultant. It is pertinent, therefore, to recommend the following topics and responsible persons and agencies for training.

<b>S/N</b>	<b>Proposed Training</b>	<b>Course Content</b>	<b>Proposed Schedule</b>	<b>Target audience</b>	<b>Duration</b>	<b>Estimated Cost/ Budget USD\$</b>
1	Principles and procedures for environmental and social management plan	What is ESMP? Principles of ESMP	Within the first four months of project's commencement	CEFTER Management Works Contractor Supervising Engineer Safeguard Officer	1 Day	8000
2	Fundamentals of environmental management	Components of Environmental management Approaches to Environmental management	Within the first six months of commencement of project.	CEFTER Management Works Contractor Supervising Engineer Safeguard Officer	1 Day	8000
3	Understanding Safeguard Policies of the World Bank and its linkages to projects and sub-projects	What are the World Bank Safeguard polices Safeguard Policies Relevant WB safeguard polices and their linkages to	Within the first six months of commencement of project	Safeguard Officer Environmental Officer NGOs Works contractor	1 day	5000

S/N	Proposed Training	Course Content	Proposed Schedule	Target audience	Duration	Estimated Cost/ Budget USD\$
		projects and sub-projects				
4	Compliance assessment, monitoring and follow-up	Fundamentals of an ESMP ESMP implementation and reporting Basic Environmental auditing	Yearly throughout the up to project close up	Safeguard officer Works contractor Supervising Engineer Environmental officer	1 day	10,000
5	Waste management	Types of waste Waste management planning Waste management pathway	With the first two months of project's commencement	Safeguard officer Works contractor Supervising Engineer	1 day	5000
6	Fuel and hazardous materials management;	Training on the manual on biological and hazardous waste management	Yearly	Works contractor s personnel Supervising Engineer Lab technologists	1	10,000
7	Community relations and public consultation procedures	Conflict management in development projects  Community mobilization and social inclusion	Quarterly	Safeguard officer Works contractor Supervising Engineer	1	5000
8	Introduction to Construction HSE	Overview of Health and Safety  Hazards in Construction	Before commencement of construction and weekly during	Construction workers Works contractor Supervising Engineer		

<b>S/N</b>	<b>Proposed Training</b>	<b>Course Content</b>	<b>Proposed Schedule</b>	<b>Target audience</b>	<b>Duration</b>	<b>Estimated Cost/ Budget USD\$</b>
		Incidents: Causation, Investigation & Reporting	construction			

## **Chapter Six**

### **Summary of Recommendations**

Generally, the study has indicated that the proposed project will not severely impact negatively on the existing environmental, social and health as well as safe conditions of the people, locally.

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 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
- Appropriate institutional framework has been drawn up to implement the mitigation measures and environmental management plan including the proposed monitoring programmes.

## **Annexes 1**

### **List of Persons Contacted**

<b>S/N</b>	<b>Name</b>	<b>Sex</b>	<b>Position</b>	<b>Phone number</b>
1	Ogo Onyeli Helen	F	House Head	08061151523
2	Josephine Antsa	F	Head of household	08168746029
3	Water first	M	Business owner	0032062147
4	Takur S.M. (Mrs)	F	Resident	0706633996
5	Foga Sesugh Zaphet	M	Resident	08166615323
6	Odisi Blessing	F	Community member	08105632294
7	Ogwuche Patience	F	Member	08065938262
8	Adache Blessing Ene	F	Resident	08102331206
9	Tertsea Patience	F	Resident	07033681040
10	Frank Ukonu	M	Resident	08062704787
11	Mr Grace Angereke	F	Head of household	08065363866
12	Mr Angus Aba	M	Head of household	07062610692
13	Mr Tordue Kpoghul	M	Head of household	08063595920
14	Mrs Sandra	F	Head of household	08059115413
15	Mrs Veren Iche	F	Head of household	08033121776
16	Dr Moses Ukeyima	M	Head of household	090750044372
17	Ahj Bala Mohammed	M	Head of Household	07031280102
18	Ali Anep	M	Head of Household	07030502260
19	Victoria Enyi	F	Member	08035990065
20	Alh Sule Musa	M	Head of household	08054047377
21	Surv. Isho Emberga J.	M	Head of household	0038120110
22	Siki M. Daniel	M	Member	07031213372
23	Abah Augustine O.	Male	Member	08058593473
24	Agbo Ochelume	Me	Head of household	08036188775
25	Victor T. Dzer	M	Member	08172473826
26	Agum Solomon	M	Member	08030750680
27	Isaac Yongo	M	Community Elder	08124037174



28	Benedict Faith	F	Member	09039537300
29	James Pauline	F	Member	08066681808
30	Abraham JOVE (FR)	M	Religious Leader	08067778979
31	Maj. J.T Utim	M	Head of household	08069778546
32	Rose Shankyula	F	Member	08038326451
33	Upah Odeh	M	Member	08032502942
34	Kpadoo Shitaver	F	Member	07069162048
35	Adoga Taylor	M	Member	08034688902

## **Annex 2:**

### **Summary of some relevant World Bank Environmental and Social Safeguard Policies**

This section focuses on the World Bank Environmental and Social Safeguard Policies as applicable for to the CEPTER Complex Project. These policies provide guidelines for the identification, preparation, and implementation of programs and projects. The following policies will be triggered and are relevant for consideration for the CEPTER Complex Project:

#### **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 CEPTER COMPLEX PROJECT

#### **Pest Management (OP 4.09)**

In assisting borrowers to manage pests that affect either agriculture or public health, the Bank supports a strategy that promotes the use of biological or environmental control methods and reduces reliance on synthetic chemical pesticides -- in other words, integrated pest management. The Bank may finance procurement of pesticides for agriculture when they are used as part of an integrated approach, or for public health when environmental control measures alone are not effective. However, the Bank does not finance procurement of any pesticides in WHO classes IA or IB, and it does not finance procurement of pesticides in class II unless the country has

adequate controls on their distribution, storage, handling and application. Pest control product screening is required in projects that finance such products. When a project involves procurement of pesticides or may result in increased pesticide use even when not procured under the project, pest management issues must be addressed as part of the environmental assessment process. Depending on the issues, the environmental management plan may need to include a pest management plan, as described in Annex C to BP 4.01.

### **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 Benue 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 CEFTER 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 an important water body that is used 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.

### **Annexe 3:**

#### **General Environmental Management Conditions for Construction Contracts/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.

## **Annex 4**

### **MINUTES OF THE STAKEHOLDERS' CONSULTATIVE MEETING ON THE DEVELOPMENT OF ESMP FOR THE PROPOSED CEFTER COMPLEX HELD ON 26<sup>TH</sup> SEPTEMBER 2017 IN MAKURDI**

1. Opening prayer
2. Introduction of Participants
3. Remarks by the Vice Chancellor
4. Remarks by the Centre leader (CEFTER)
5. Presentation of the CEFTER COMPLEX project to the participants
6. The role of stakeholders in the development of ESMP
7. Group work/ parallel sessions
8. Plenary/ Group presentation and remarks
9. Closing remarks
10. Closing prayer

#### **Prayer**

The opening prayer was led Rev. Fr Abraham Jov, a Catholic priest of the Congregation of the Holy Spirit (Holy Ghost fathers)

#### **Remarks by the Vice-Chancellor**

The Vice Chancellor Prof. Kembe was represented by the Centre leader Prof Adedzua he welcomed the participants to the meeting and emphasized the commitment of the University to the highest environmental standards. He maintained that the University is interested that the stakeholders' contribution would help identify impacts and mitigation measures of the project because they are directly to be affected by the project and their personal contribution would look at the specific issues so that at the project starts on a sound footing and the issues would have been addressed.

#### **Remarks by the Centre Leader**

The Centre leader also went ahead to present his welcome remarks to the participants in his capacity as the Centre Leader. He mentioned that under the World Bank practices, the ESMP is

necessary for environment responsibility. That the process was initiated as part of the necessary requirement for the World Bank's funded projects. He expressed expectation that the participation of the stakeholders would lead to the achievement of the goal of environmental responsibility.

## **Presentation of the subproject**

### **Project Description**

The planned complex comprises upgrading of an existing building and the construction of a new storey building containing lecture halls, offices and labs. The new building will contain 10 lectures halls of 50 person's capacity each, a 300 person's capacity multipurpose hall, 8 executive offices and 8 non executive offices, genitors and stores. Implementation activities include the following: -

A) Site clearing and excavation of the foundations for the new building. This entails removal of unwanted vegetation from the site and excavation of the projects foundations. The few shrubs on the site would be cleared to pave way for excavation activities; the excavation of the site would not involve much machinery since the soil on site is light and well drained.

B) **Civil works:** Civil works involves: -

Transportation of construction materials to the site and disposal of the resulting flora waste using light machinery. Storage of the construction materials. Laying and construction of the foundations. Disposal of the existing debris/ materials. Removal of failed portions of the old building, formation and upgrading of parts of the old building within the existing structure.

C) **Electrical works:** Electrical works involve installation of the Power Distribution Box, control panel, and all power supplying cables and equipments.

D) **Plumbing works:** Installation of the underground and wall pipes of various sizes to convey good water, waste water and sludge.

### **Remarks and discussion**

After the presentation of the projects' to the participants the following issues were raised:

- Would the size of the available land be enough for the project
- The number of toilets in the building is enough to serve the hygiene needs of the users

- The toilet design and other aspects of the project should be sensitive to PLWD
- The students asked for a demonstration kitchen to be included in the design of the building for demonstration activities.
- Details of the laboratory activities
- Car park facilities base on the design were identified as not enough

### **Presentation of the Role Stakeholders in the ESMP process**

The consultant presented on the role of stakeholder on the ESMP process. The presenter took time to explain the use of EIA and ESMP in environmental management. He emphasized the categorization of projects during projects screening and detailed issues of impact of the project and the need for stakeholders as the direct beneficiary of the project. He describe the stakeholders as Individuals or groups we have considered to have an interest in or might wish to influence activities of CEFTER COMPLEX.

You may also be referred to as “interested parties” who may have primary or secondary interest in the project. He explained that their participation in the process would;

- Individuals or groups we have considered to have an interest in or might wish to influence activities of CEFTER COMPLEX.
- You may also be referred to as “interested parties”
- Your interest may be primary or secondary.
- Information sharing and involvement.
- Generate different viewpoints of the proposed project.
- Identified concerns/ risks raised by the project and mitigation measures.
- Where possible point areas of conflict and ways to resolve them.
- Foster goodwill, trust and mutual respect.
- Raise the comfort level of decision –makers.
- Assure ourselves of sustainability of the project.
- 

### **REVIEW OF ESMP**

it was planned that the stakeholders would work in groups of parallel sessions and identify impact and mitigation but the stakeholders preferred to review in plenary the draft ESMP



presented by the consultant. This was done and issues were identified and mitigation measures mentioned. The table below represents the issues raised during the review.

<b>S/N</b>	<b>Environmental Issue Raised</b>	<b>Mitigation Suggested</b>	<b>Social issue Raised</b>	<b>Mitigation Suggested</b>
1	Erosion control	Control storm waters coming from the eastern end of the project site along Enyi street by constructing drainages on the adjoining streets	Raise of street food vending in the location	Make provision for cafeteria services in the complex to serve even the community
2	Congested street due to insufficient parking spaces	Expand the design to accommodate more parking spaces Develop the under used streets as a cooperative social responsibility and make may be used as alternative car parking spaces Regulate car use by implementing car parking tolls	Security challenges	Make provision for private security and provide armed security personnel at nights
3	Congestion due to the size of the land and the planned structure	Renovate the old building enough to take care of the other needs and remodel to maximize space and	Construction workers may practice open defecation	Make provision for makeshift (mobile) latrines during construction for

<b>S/N</b>	<b>Environmental Issue Raised</b>	<b>Mitigation Suggested</b>	<b>Social issue Raised</b>	<b>Mitigation Suggested</b>
		reduce congestion		all construction workers
4	High scale experiments may pollute the environment with chemicals	Sound Laboratory practices and hazardous waste management practices Students will also use the main campus laboratories	Non provision of kitchen for student demonstration in the design	Remodel to provide kitchen within the complex for students activities
5	Non provision of hand wash facilities in the design to serve hygiene needs	Remodel to provide for hand wash facilities along work environment path way	Design is not sensitive for use of latrines by PLWD	Remodel to make latrines sensitive to the needs of PLWD
6	Waste management issues during construction	Contractor to monitor and evacuate all waste away from the site		
7	Non provision of recycling facility for waste water on site	Waste to be collected by a licensed collector and managed at a licensed facility		





ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) OF THE PROPOSED CEFTER COMPLEX  
ATTENDANCE LIST OF STAKEHOLDERS CONSULTATIVE MEETING  
Tuesday 26<sup>th</sup> September, 2017

S/N	Name	Sex	Organization	Phone Number	Signature
1	Asebo Victor	male	Baigomint	0723864283	
2	AGEKA TERCOO	Male	MDF	0803476204	
3	TORRUAM, JAPHETH TERAME	MALE	MDF	07038527270	
4	Maj. J. T. UTM (rtd)	Male	NGRA	08069778546	
5	Uga Doushims	Female	Ben. St. Univ	07032423495	
6	Igbun Ogbene	Female	CEFTER	08033116421	
7	Prof D. K. Aledun	male	CEFTER	07036409502	
8	D. Benedict Iorzer Lake	Male	BSU	08053471512	
9	Prof. T. Gyase	Male	Resident NEWGR	08036157205	
10	Dr. John O. Odikun	Male	CEFTER	08067890672	

11	Fr. Abraham Jov CSP.	MALE	Holy Ghost Father	080677449779	<del>Abrah</del>
12	Dr. Barnabas Ikyo	MALE	CEFTER	0818569829	<del>Dr. Barnabas</del>
13	James Ake	MALE	SEC, BENGALUET	08100619668	<del>James</del>
14	DR MOSES UKEYIMA	MALE	CEFTER	09075004372	Ukeyima
15	Engr Agden, Jonah T.	MALE	BSUDB	0803875255	<del>Agden</del>
16	Dick STANLEY	MALE	BSUDB	07035853204	<del>Dick</del>
17	Oliver O. Ibya	Male	Security unit	07038646467	<del>Oliver</del>
18	Mrs Victoria F. Enyi	Female	Business org	07035990065	<del>Mrs Victoria</del>
19	TPL KACHINA ORFEGA	MALE	GNIS-U.D.B	08065607807	<del>Kachina</del>
20	Engr. Terhemba Ayber	Male	Phy. planning, BS4	07035505280	<del>Engr. Terhemba</del>
21	Arc Samson A.	✓	E.F. Project Ltd	08065005364	<del>Arc Samson</del>



Photos of at the Stakeholder Consultative meeting





Photos of at the Stakeholder Consultative meeting

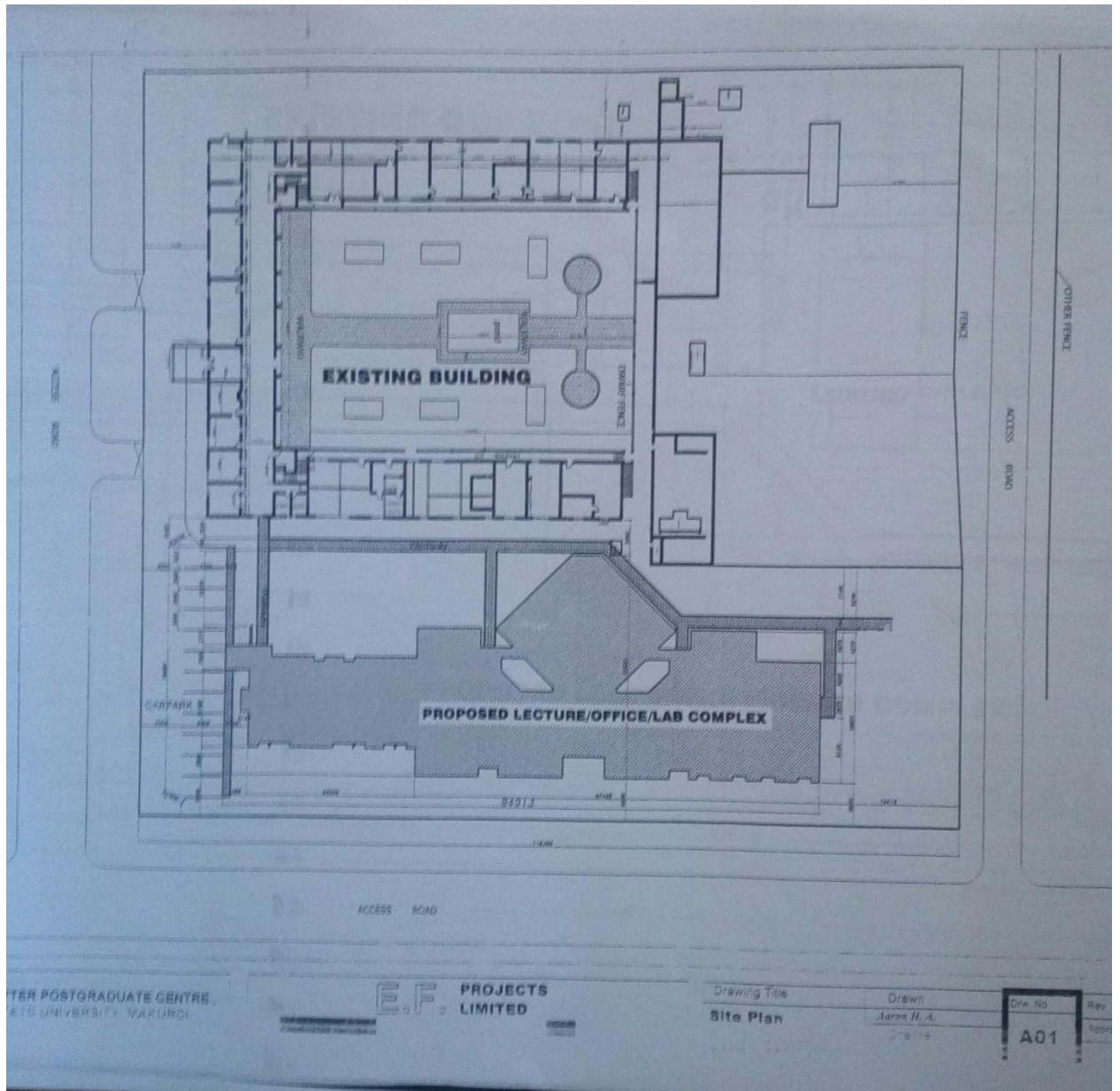


Figure 1. Layout plan of the proposed complex