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Ghana

Ministry of Education

Africa Centers of Excellence for Development Impact/ ACE Impact

GHANA

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

Prepared by the Association of African Universities

Revised version

28 November 2018

Table of contents

List of Tables

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Currency equivalence (Exchange Rate Effective May 16, 2018)**:**
Ghanaian Cedi (GHS) 4.57= 1US$

List of acronyms and abbreviations

AAU	Association of African Universities
ACE	Africa Center of Excellence
CHRAJ	Commission on Human Rights and Administrative Justice
ECOWAS	Economic Community of West African States
EIA	Environmental Impact Assessment
EPA	Environment Protection Agency
ESFS	Environmental and Social Data Sheet
ESIS	Environmental and Social Information Sheet (ESIS)
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GECCA	Ghana Environmental Conventions Coordinating Authority
GHG	Greenhouse gas
GRM	Grievance Redress Mechanism (at the EPA)
IDA	International Development Assistance
MESTI	Ministry of Environment, Science, Technology and Innovation
MoE	Ministry of Education
NADMO	National Disaster Management Organisation
NCC	National Commission on Culture
NCTE	National Council of Tertiary Education
NEAP	National Environmental Action Plan
NGO	Non-governmental organizations
OP	Operational policy
PER	Preliminary Environmental Assessment
RFU	Regional Facilitation Unit
SSF	Simplified Screening Form
ToR	Terms of Reference
W-ESMP	Worksite-Environmental and social Management Plan
WB	World Bank

The Association of African Universities (AAU), in charge of implementing the ACE Impact Project, is the apex organization and forum for consultation, exchange of information and co-operation among institutions of higher education in Africa.

It represents the voice of higher education in Africa on regional and international bodies and supports networking by institutions of higher education in teaching, research, information exchange and dissemination.

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EXECUTIVE SUMMARY

I. PURPOSE AND OBJECTIVES OF THE ESMF

The ***Environmental and Social Management Framework (ESMF)*** of the *Africa Excellence Centers for Development Impact Project* was prepared in Ghana by the *Association of African Universities* (AAU)on behalf of the Ministry of Education. It aims to provide a general view of the environmental and social conditions under which the Project is implemented.

Since the exact locations of the intervention sites of the Project are not yet known, thisESMF has been preparedby the borrower to provide the standard procedure and institutional arrangements for environmental and social screening, categorization and approval of sub-projects as well as guidelines for the preparation, implementation and monitoring of the site specific environmental work (such as simplified Environmental and Social Impact Assessments/Environmental Management Plans (ESIAs/EMPs) or environmental measures). These site-specific instruments include environmental clauses to be inserted in contractors' bidding documents.

II. DESCRIPTION OFTHE PROJECT

The Project Development Objective is to improve the quality, quantity and development impact of postgraduate education in selected universities through regional specialization and collaboration.
The project has three components:

- ***Component 1***aims to build and strengthen the capacity of competitively selected ACE Impact centers based in higher education institutions across West and Central Africa.
- ***Component 2*** seeks to expand the regional scope of impact of the ACEs funded under Component 1 by providing demand-side funding for partnering institutions and regional students to buy the training and services from the ACEs.
- ***Component 3*** will fund, through a Regional IDA grant of US$10 million to the Association of African Universities (AAU), the facilitation of the ACE Impact project's regional activities and support to centers under the project.

The total Project budget for activities in Ghana is approximately USD ***60 million*** **-** a credit from the International Development Association (IDA).

The ***Association of African Universities (AAU)*** will be responsible for implementation support of Components 1 and 2 (as well as the overall regional facilitation of ACE Impact).

A small project team, established within the ***National Council of Tertiary Education*** (NCTE) at the Ministry of Education, will facilitate implementation of the ACE Impact project in Ghana.

III. POLITICAL, INSTITUTIONAL AND LEGAL FRAMEWORK

InGhana, the protection of the environment constitutes a priority axis of the sustainable development policy. The ACE Impact Project will strictly adhere toand follow the political, legal and regulatory frameworks forGhanaian environmental management.

Policy framework

The key environmental policies and legal framework and procedures considered as relevant under the ACE Impact are the following:

- ***The Ghana National Environmental Policy***, 2014 updated the National Environmental Action Plan (NEAP), to ensure sound management of resources and the environment and to avoid any exploitation of these resources in a manner that might cause irreparable damage

to the environment. The *Policy Statement* seeks, among other things, to institute and implement the concept of sustainable development by *requiring prior environmental impact assessments*of new investments and developments that would be deemed to affect the quality of the environment.

- ***The 1999 National Environmental Sanitation Policy*** aims to developand maintaining a clean, safe and pleasant physical environment in all human settlements
- ***The 2004 Cultural Policy of Ghana***stipulates that special attention be given to the preservation of national heritage.

Ghana is linked to the international community through ***bilateral and multilateral cooperation agreements*** and has ratified almost all international conventions related to environmental issues. The *Ghana Environmental Conventions Coordinating Authority (GECCA)* was established to consolidate oversight and coordination of all international environmentalconventions to which Ghana is party.

Institutional framework

The Ministry of Environment, Science, Technology and Innovation (MESTI) has, among other missions, the mandate to: ensure the establishment of the regulatory framework and setting of standards to govern the activities of science and technology and the management of the environment for sustainable development; and ensure effective environmental management and governance.

- The ***Environment Protection Agency (EPA***) regulates Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) procedures. The trust of the Agency's overall approach includes compliance promotion to facilitate good environmental practice and to seek co-operation and collaboration from those whose activities could potentially injure the environment.
  EPA has a ***Grievance Redress Mechanism (GRM*)**, which is a system that assists the Agency's clients and the general public to resolve environment related complaints and grievances in a timely, effective and efficient manner.

The National Commission on Culture (NCC) is in charge of implementing the cultural policy on physical cultural resources, which requiresthe preservation of national heritage.

➔ ***Civil society and the media*** play a strong role in environmental awareness, and in influencing to the extent possible, the decision-making process related to environmental issues. Non-governmental organizations (NGOs) have been increasingly involved in project implementation, in public debate, in hearings/consultations on EA, and also in monitoring compliance with environmental laws. The media have contributed to increased awareness and to changes in behavior.

Legal framework

Ghana has a number of legal instruments aimed at protecting the environment. Whole or partial sections of these policies relate directly to construction works:

- ***The 1999 Environmental Assessment Regulations,*** or Legislative Instrument (LI) 1652, include procedures for compliance with environmental assessment (EA) requirements.
- The ***1995 Environmental Impact Assessment Procedures,*** which provide guidance on complying with the EA requirements of the EPA Act, describe in detail the stepwise EA process, from registration of activities to the issuance of the environmental permitting decision.

Procedures for environmental management

The Environmental Impact Assessment (EIA) Proceduresare recognized and applied in Ghana to development projects as well as other undertakings as an environmental permitting pre-requisite and a major environmental management tool. The existing proceduresare a requirement to screen and evaluate all developments, undertakings, projects and programs, which have the potential to give rise to significant environmental impacts. Potential impacts on ***physical cultural resources*** are to be taken into account at several stages in the EIA process.

World Bank safeguards policy

The World Bank Environmental and Social Safeguards Guidelines and Operational Policies enable the integration of environmental and social considerations into the development, planning and execution of development projects. These policies are designed to: (i) protect the environment and society from the potential negative effects of projects, plans, programs and policies; (ii) reduce and manage the risks associated with implementation of project activities; and (iii) assist in better decision-making to ensure sustainability of activities.

➔ ***The ACE Impact project is classified as "category B",*** because its adverse effects on the population or areas of environmental importance are ***limited, site-specific, and likely reversible,*** and mitigation measures can be more ***easily designed/implemented***.

Among all the World Bank environmental and social safeguard policies, ***two Operational Policies (OPs) and Bank Procedures (BPs) are triggered*** under the ACE Impact Project, namely:

- ***OP/BP 4.01 Environmental Assessment***, which covers impacts on the environment, human health and safety, physical cultural resources, and global transboundary and environmental issues. OP 4.01 is triggered because the Project is likely to have environmental risks and impacts on its area of influence. This policy requires that environmental and social consequences be identified early in the project cycle and considered in the selection, location, planning, and design of the project. The objective is to minimize, prevent, reduce, or compensate for adverse impacts and thereby maximize positive impacts, and include processes for mitigation and management of environmental and social impacts during the project cycle.
- ***OP/BP 4.11 Cultural Physical Resources***, which provides cultural heritage guidelines to avoid or mitigate adverse impacts of development projects. This policy applies to: (i) any project involving major excavation, demolition, earthworks, flooding or other environmental modifications; (ii) any project located on or near a site recognized as cultural property; (iii) any project designed to support the management or conservation of physical cultural property. As part of the ACE ImpactProject, this will also concern buildings of historical value and which would be the subject of rehabilitation works.

No other operational policies of the World Bank are triggered under Project ACE Impact.[1]

Under the Project, the following will also be used: (i) the World Bank Group's *Environmental, Health and Safety Guidelines***;** (ii) the 2010 *Access to Information Policy* for wide dissemination of all

[1] The other policies are the following: *OP 4.04 Natural Habitats*, which does not allow the financing of projects degrading or converting critical natural habitats; *OP 4.12 Involuntary resettlement,* which covers an impact on individuals or small businesses, with loss of housing or shelter, loss of income or, in some cases, expropriation of private land and physical displacement of dwellings or shelters. *OP 4.09, Pest Management;OP 4.10: Indigenous Peoples*; *OP 4.36: Forests*; *OP 4.37 Safety of Dams*; *OP 7.50 International Waterways*; and *OP 7.60, Disputed Areas*

information concerning the nature and objectives of a project; and the World Bank Group G*uidelines on Labor Influx*.

Comparing national procedures and World Bank policies

In general, there is great ***convergence of views and similarity*** between Ghana's environmental and social management system and that of the World Bank. All laws, regulations and instruments governing investments and activities in the natural resources sector are generally consistent with the Bank procedures. There are only ***minor gaps / differences*** interms of explicit arrangements (for example, for disclosure of documents in form and language).

➔ If policy discrepancy exists in some domains, ***World Bank policies will override*** national policies and regulations.

Other relevant laws and policies

- According to the ***1998 Children's Act***, the minimum age for admission of a child to employment is fifteen years (eighteen years for hazardous works). Building companies operating under the ACE Impact Project will strictly respect this legislation.
- Ghana is among the few countries in Africa that have taken affirmative action in favor of ***marginalized groups*** (more particularly for the inclusion and participation of persons with disabilities in society). The facilities to be built or rehabilitated under the ACE Impact Project will strictly respect the related legislation***.***

IV. ENVIRONMENTAL AND SOCIAL EVALUATION OF THE PROJECT

Typology of the activities of the Project

The Centers of Excellence to be built or rehabilitatedhave not yet been selected. However, the main work that will likely be undertaken under the ACE ImpactProject and that may have an environmental and social impact is as follows:

- Construction of new buildings or other facilities within the current boundaries of university campuses,
- Extension of current buildings and facilities
- Rehabilitation of old buildings and facilities, including repair of recent buildings that do not meet current standards.

General environmental and social impacts

Overall, in relation to these activities work, all the negative or harmful environmental impacts that are likely to be generated by the Project will be ***limited in time and space***.

➔ The activities planned under the Project ***exclude any form of land or property acquisitionor resettlement or physical displacement of populations*** (works will be done in land belonging to the participating universities).

General positive impacts

The Project will have ***many positive effects***, which should be sustained over the long term. *In general,* it will help fight poverty and boost shared prosperity, as well as encourage investment in knowledge and skills in all sub-sectors of education. Promising investments will be made in regional infrastructure and economic integration, with a focus on initiatives to produce highly qualified human resources for priority growth sectors. *More specifically*, the Project will promote awareness among all national stakeholders about the environmental and social issues of Project activities and respect for the environment and key principles of sustainable development.

Risks or negative impacts during the pre-construction phase

During the pre-construction phase (preparation of the bidding documents), the main risk is neglect of the environmental and social aspects and their low consideration during the technical studies and / or the preparation of unsatisfactory environmental studies. This risk can be compounded if the information aspects and public participation are not taken into account. Furthermore, site selection could include some potential environmental and social concerns and impacts: for example, in the siting of works on sections of campuses where they could conflict with adjoining land use outside the campus land, or on areas prone to soil erosion or damage.

Key mitigation measures for these risks will be: (i) public and stakeholder consultation during site selection and preparation and validation of studies; (ii) quality control and implementation of validation procedures for environmental studies and their dissemination; and (iii) regular supervision of the building sites by environmental experts (in addition to the control of the relevant national institutions in relation to contractual specifications).

- The effects of ***climate change*** will be taken into account in the choice of materials, the overall design of buildings and the technological options for construction (e.g., energy efficiency). The building will be in consonance with local climatic, environmental, and meteorological conditions and will incorporate proper ventilation and provision of sunshine, air movement, and maximum usage of daylight.
- ***Location and design of new buildings*** should also take into account site-specific risks (such as location near gullies which are prone to flooding and erosion; near water bodies and designated forests etc.).
- ***Sourcing of construction materials*** should be considered, especially given the risk of contractors using non-registered quarries, illegal sand-mining or creating new quarries through illegal extractions
- The design of the buildings under ACE Impact will take into account ***the gender dimension,*** especially in relation to the provision of a sufficient number of separate men's and women's washrooms (with the installation of lavatories, washbasins and urinals, etc.).
- All facilities, whether to be built or rehabilitated, will be properly designed in strict compliance with national standards for the protection and promotion of ***persons with disabilities***, by removing barriers for their inclusion and improving their accessibility to physical infrastructure.

Risks or negative impacts at the construction phase

Construction phase risks and impacts at the construction phase will be site specific. Despite the fact that they are manageable and small, this phase will have ***low to moderate impacts*** and could be a source of inconvenience for workers and all those living or working on university campuses. Of these impacts, the most important are:

Air quality, noise, water and sanitation, waste

- Pollution and nuisance (noise, dust) due to the construction of facilities.
- Occasional forms of pollution generated in construction sites by waste.
- Solid and liquid waste from construction sites.
- Impact of some works on sources of drinking water.
- Damage to some underground networks and even temporary suspension of certain services (water, electricity, etc.).
- Emissions of greenhouse gas (GHG) related to the exhaust gases of construction vehicles, as well as olfactory nuisances, health risks and pollution.

Vegetation and soils

- Uprooting of trees and cutting of shrubs made necessary by certain activities, with reduction of green spaces.
- Risks of localized soil degradation, despite the fact that washout works will be limited in depth.
- Certain forms of soil erosion due to the construction activities.
- Risk of subsidence and landslides due to possible excavation work.
- Risks of floods, without the adoption of soil waterproofing techniques.

Hygiene, health and safety of workers, residents and users

- Accidents caused by construction machinery traffic and possible non-compliance with safety instructions.
- Risk of accidents around unreported excavations and open trenches, unmarked and poorly lit.
- Safety of university campus users due to poor organization of work sites and work areas.
- Accidents of workers (scaffolding falls, misuse of equipment, electrocutions, etc.).

Natural risks

- Some of the proposed developments could be affected by the risks associated with the effects of climate change (in particular, the risks associated with floods caused by heavy rains).

Risks of conflicts between the workers and local populations

- The works may have impacts on university campuses, with the likely restriction of vehicle and pedestrian traffic in the vicinity of construction sites, noise and dust-related inconvenience, space congestion caused by building materials, construction and construction waste, not to mention negative impacts due to the transformation of the landscape.

    - To avoid social tension, it is desirable to recruit a ***local workforce.***
    - Although it is expected that selected contractors would recruit a local workforce, it can be expected that ***skilled and unskilled workers*** may be brought in for temporary periods from outside the community. This would potentially increase risks of sexual harassment, prostitution and underage sex on vulnerable sections of the local population, especially women and minors.

Physical cultural resources

- Some historic buildings may be affected by the work and some excavations may reveal archaeological and cultural remains.

Risks or negative impacts during the maintenance phase

During theoccupancy and maintenance phase, project activities should not pose any particular environmental or social problems. Potential negative impacts might generally be due to: inadequate design; lack of a system for the collection and transfer of waste, in particular domestic waste; a possible lack of an effective, regulatory and adapted sanitation system; lack of regular maintenance procedures; insufficient enforcement of security measures; and lack of appropriate measures for people with disabilities.

Appropriate measures of the ***National Building Regulations*** will be strictly respected, mainly in terms of fires or explosions, with the installation of smoke detectors, extinguishers, and alarm devices.

- In compliance with national regulations, building companies working under the ACE Impact Project will be required ***to regularly monitorcompliance*** with safety and health standards, and to periodically carry out measurements, analyses and assessments of environmental conditions and, where appropriate, undertake collective or individual protection measures to prevent damage to the safety and health of workers.

Different measures (identified in this report) will be planned to reduce the potential impacts during implementation of the various activities planned under the ACE Impact Project:

- *Normative measures* to be complied with by the sub-project promoter and its contractors (companies carrying out the works), in accordance with national regulations and World Bank OP 4.01; and OP.4.11.
- *Mitigation measures* to reduce potential negative environmental and social effects.

V. ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCEDURES

Under the ACE Impact Project, all the activities (sub-projects) must be subjected to *an environmental and social screening*, a procedure aimed to:

- Determine thenature and the extent of their anticipated adverse environmental and social impacts;
- Define the most appropriate backup tool, depending on the nature and extent of these impacts;
- Establish and implement appropriate mitigation measures.

Harmonizing national and World Bank procedures

Under the ACE Impact Project, the following sub-projects will be considered ***ineligible:***

- ***World Bank Category A sub-projects***, which may have very negative, diverse, irreversible environmental and social impacts.
- Sub-projects for which the World Bank operational policies are not triggered.

In terms of Ghanaien procedures *(*in compliance with the *1995 Environmental Impact Assessment Procedures)*:

- ***The Environment Protection Agency (EPA***) will:
  - Supervise all procedures for compliance with EA requirements and provide guidance on complying with them, particularly the *screening process* (allowing EPA to determine whether a proposed activity should be subjected to further assessment, and if so, the level of assessment that will be required);
  - Assess the ***Environmental Assessment Registration Form EA1*** prepared by a promoter to register the sub-project with EPA.
  - Based on the information gathered during the screening process, the ***EPA officers*** would visit the proposed project sites to assess the adequacy of the information provided and also the appropriateness/suitability of the selected site, and they would decide whether to give approval at this stage or require further analysis in the form of either a ***Preliminary Environmental Assessment (PER)*** or an ***Environmental Impact Assessment*** (EIA).

In terms of World Bank requirements (in compliance with POs 4.01 and 4.11)***:***

- An***Environmental and Social Information Sheet (ESIS)*** will be drawn up, to complement– if needed -the *Environmental Assessment Preliminary Registration Form****.***
- The screening processwould be complemented by the parallel preparation of a ***Simplified Screening Form (SSF)*** (its template is provided in this ESMF) to make it possible, among other things, to determine from the outset – in a direct and concise way - the scope and level of potential negative environmental and social impacts of any activity (*high, substantial, moderate* or *low impact*), as well as definethe social management tool which is required.
- For subprojects whose environmental and social impact will be considered ***low***, a simple ***Environmental and Social Information Sheet (ESIS)*** will be drawn up (to

complement the PER). This will include appropriate measures to be eventually integrated into the Contractor's technical specification. For subprojects whose environmental and social impact will be considered ***low***, a simple ***Environmental and Social Information Sheet (ESIS)*** will be drawn up (to complement the PER). This will include appropriate measures to be eventually integrated into the Contract's Technical specifications.

- For sub-projects whose environmental and social impacts will be considered as***moderate***, an***Environmental and Social Management Plan (ESMP)*** will be preparedin compliance with World Bank Operational Policies 4.01 and 4.11,even if - because of the nature of the works - national procedures do not require the preparation of a PER or of an EIA(this ESMF provides ToR and outline of the a site-specific ESMP).The ESMP will include appropriate measures to be eventually integrated into the Contractor's Technical specifications.
- Key elements of the ESMP will be included in the ***Worksite-ESMP***to be eventually prepared by the contractor. The outline of this document as well as an indicative list of environmental measures to be taken by the contractor are provided in this report.

Publicconsultations with key stakeholder will be held throughout the process.

Under the ACE Impact Project, an adequate***Grievance Redress Mechanisms*** will be set up at the level of each participating university (E-system). Within this system, all environmental and social related complaints and grievanceswill be addressed in a timely, effective and efficient manner.

VI. ENVIRONMENTAL AND SOCIAL MONITORING AND CONTROL

Environmental and Social monitoring and control is a crucial component of the ESMF during project implementation. The system aims to describe: (i) the elements to be monitored; (ii) monitoring methods and tools; (iii) the responsibilities for monitoring and reporting; and (iv) the periodicity of monitoring.

Environmental and social internal monitoring is carried out by the Project's Safeguard expert with the aim of ensuring that environmental and social safeguards are respected. This monitoring will concretely include: (i) the inclusion of the mitigation measures recommended in the sub-project; (ii) the compliance oversight during the building activities; and (iii) the monitoring of environmental and social management measures in implementation of different activities.

- The ***National Safeguards expert***will be assisted by the ***Regional Safeguard Consultant*** at the *Regional Facilitation Unit (RFU)* (based in Accra, Ghana), whose role is to ensure consistent implementation and monitoringof safeguards measures in all the countries under the ACE Impact Project.

The ***external environmental and social monitoring***, carried out by EPA at its discretion, is intended to ensure compliance with national regulations on environmental and social protection and to verify the quality of implementation of environmental protection measures.

VII. ACTION PLAN: MAIN RECOMMENDATIONS

The main recommendations of the ESMF's Action Plan of the ACE Impact Projectin Ghana are the following :

(i) ***Environmental and social screening***: By Project effectiveness, each participating university must have prepared the description of its subproject (facilities to be built or rehabilitated). This will enable the Project's safeguards expert, in collaboration with EPA, to move quickly to the next steps on environmental and social safeguards. This process will be updated each year as the annual work plan is prepared.

(ii) ***Qualified personnel:*** Each participating university will use the services of a qualified person (appointed or recruited), who will be in charge of implementing the safeguards measures, including monitoring, surveillance, control and evaluation of risk mitigation measures, and keeping the partnership links with EPA throughout the project.

(iii) ***Operational Manual***: The Project's*Operational Manual* must include a section on the basic safeguards principles and regulatory measures, indicating in particular:

- Subprojects' screening procedures;
- The respective responsibilities of different stakeholders (such as, issuance ofenvironmental permit bythe national environmental agency or preparation of complete Worksite-ESMP, including a Safety and Hygiene Plan, by the contractors).
- Mechanisms to control and monitor environmental & social indicators.
- Costs of environmental and social safeguards.

(iv) ***Information, sensitization and training on environmental and social management (ESM) issues:*** : Information and sensitization sessions on ESM will be provided to all the stakeholders involved in implementation of the Project, including the building companies (contractors).

  - Within the context of the *Impact boot camp* that, prior to Project effectiveness, the AAU will organizefor all university teams, special sessions will focus on environmental and social safeguards issues and the key elements of the ESMF.

(v) ***Grievance redress mechanism:*** Under the regional e-system for grievances management, which will be created within each participating university / center, a special section will concern all environmental and social safeguards-related grievances.

> ***Once it has been discussed, approved and validated by all stakeholders, this Action Plan will be binding.***

VIII. BUDGET

The budgeting for implementation of the ESMF will be done at two levels:

- ***At the national level: each participating university*** will have a budget of a maximum of ***USD 50,000*** to cover costs of technical measures related to environmental and social assessment procedures, including various capacity building initiatives and preparation and monitoring of ESIAs / ESMPs for sub-projects.

- ***At the regional level***: the AAU will reserve ***USD 200,000*** for the regional safeguard consultant, national and regional disclosures, and associated missions/workshops

All costs on ESM related to environmental and social risk mitigation measures will be included in the budgets of the individual sub-projects.

VIII. PUBLIC CONSULTATIONS

The consultation meeting for Ghana was held at the World Bank office in Accra on **Monday October 22, 2018 from 11:00 a.m. to 3:30 p.m.**

The participants were from tertiary institutions that would potentially benefit from support under the ACE Impact Project including the University of Cape Coast (Central Region); University of Development Studies (Northern Region); University of Ghana (Greater Accra Region); and the Kwame Nkrumah University of Science and Technology (Ashanti Region).

The key recommendations included the following:

a. The need for continuous dissemination of the ESMF and its requirements to other stakeholders especially to civil works contractors who may be executing works under the project.
b. Stakeholder communities and the general public should have knowledge about the ESMF to afford potential project affected persons the opportunity to have their voice heard.

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I. PRESENTATION AND PURPOSE OF THE ESMF

I.1 Purpose of the ESMF

1. The ***Environmental and Social Management Framework (ESMF)*** of the Africa Excellence Centers for Development Impact Project was prepared in Ghana by the *Association of African Universities* (AAU)on behalf of the *Ministry of Education* (MoE). It aims to provide a general view of the environmental and social conditions under which the Project is implemented.

2. Since the exact locations of the intervention sites of the Project are not yet known, thisESMF has been preparedby the borrower to provide the standard procedure and institutional arrangements for environmental and social screening, categorization and approval of sub-projects as well as guidelines for the preparation, implementation and monitoring of the site specific environmental work (such as simplified Environmental and Social Impact Assessments/Environmental Management Plans (ESIAs/EMPs) or environmental measures). These site-specific instruments include environmental clauses to be inserted in contractors' bidding documents.

3. The ***main specific objectives*** of the ESMF are as follows

- Integrate environmental and social issues into project planning.
- Present the legal framework of social and environmental management in Ghana.
- Identify the main state and non-state institutions involved.
- Establish a framework to identify, analyze and evaluate the potential environmental and social impacts of the activities planned under the project.
- Define the methodology for subproject screening and required social and environmental safeguards.
- Identify the main risk mitigation measures.
- Clarify the roles and responsibilities of the stakeholders and define the monitoring and surveillance framework for implementation of the ESMF.
- Determine budget implications for environmental and social project management.

I.2Timetable

4. The preparation of the ESMF will involve the holding of a national public consultation with representatives of key stakeholders to present and discuss the analyzes and recommendations of the draft document. The minutes of the public consultation will be presented in Annex 8.

5. The final version of the ESMF, incorporating most of these comments and the minutes of the public consultation, will be prepared and published on the website of the Ministry of Educationof Ghana and the World Bank external website.

6. The publication and disclosure of the ESMF must imperatively be completed before the evaluation of the Project.

7. Printed paper versions of the ESMF will be available at the Ministry of Education.

II. PROJECT DESCRIPTION

II.1 Project Development Objective

8. The Project Development Objective is to improve the quality, quantity and development impact of postgraduate education in selected universities through regional specialization and collaboration.

II.2 Components

9. **Component 1: Establishing new Africa Centers of Excellence and scaling up well-performing existing Africa Centers of Excellence for development impact.** This componentaims to build and strengthen the capacity of competitively selected ACE Impact centers based in higher education institutions across West and Central Africa.

- **Sub-component 1.1 will establish new centers of excellence for skills and knowledge for development challenges.** About 30 centers will be competitively selected based on pre-established selection criteria to receive funding from ACE IMPACT.
- **Sub-component 1.2: Scaling up well-performing ACEs:** This sub-component will provide additional funding and support to approximately 12 existing ACEs (currently supported through ACE I) to enable them to scale-up their activities.
- **Sub-component 1.3 Additional support to the best Engineering and Technology ACE institutions:** Institutions will be selected to host an engineering and technology-focused ACE Impact center with capacity in other engineering and technology disciplines.

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

- **Sub-component 2.1** will support regional institutional partnerships between higher education institutions and the ACEs (under component 1 of the proposed project) to strengthen the capacity of the higher education institutions.
- **Sub-component 2.2** will finance two types of regional scholarships to support primarily the training of the next generation of faculty for higher education institutions in the region.

11. Component 3: Enhancing Regional Policymaking, Monitoring, and Facilitation**. Component 3 will support regional policymaking for higher education and regional project monitoring and facilitation.** Component 3 will fund, through a Regional IDA grant of US$10 million to the Association of African Universities (AAU), the facilitation of the ACE Impact project's regional activities and support to centers under the project.

II.3 Institutional arrangements

12. The ***Association of African Universities (AAU)*** will be responsible for implementation support of Components 1 and 2 (as well as the overall regional facilitation of ACE Impact).

13. A small project team will be in place at the ***National Council of Tertiary Education*** (NCTE), at the Ministry of Education, to facilitate implementation of the Ghanaian elements of the ACE Impact Project (this is necessary due to the larger number of centers that Ghana will host which will require a consolidated facilitation at the national level).

14. ***Key Institutional Challenges*** in Ghana include the following:

- ***Strengthening environmental governance*** to ensure that natural resources contribute to greater wealth and sustainable growth. It is critical to ensure that (a) these sectors optimally contribute to future growth, and (b) economic growth does not come at the cost of environmental degradation. Getting the most from natural resources implies: better regulation and management, and less wasteful utilization, of natural resources; more effective capture of the economic value of the resource; better collection of revenues; and higher levels of reinvestment and savings.

- ***Enabling environment*** to define and implement policy, regulatory, and institutional measures aimed toreduce vulnerability of the poor in both rural and urban areas.

- ***Coordination and policy dialogue*** to strengthen the partnership between different government agencies, local communities and different stakeholders on issues related to environment, a cross-cutting issue. Ministries, departments, and agencies in all the natural resource and environment sectors face common challenges. It has become clear that developing collaborative cross-sectoral approaches to address these common issues will be more useful and efficient than dealing with them separately in each sector.

II.4 Budget

15. The total Project Budget for activities in Ghana is approximately ***USD 60 million,*** on the basis of a credit from the International Development Association (IDA).

III. Biophysical and Socio-economic environment

16. After the identification of the participating universities, the biophysical and the socio-environmental context of the sites will eventually be described and analyzed in ascreening checklist or in the Environmental and Social Management Plans (ESMPs), which will be eventually prepared.

17. A country of just under 30 million people, Ghana recently made the transition into lower middle income status and has achieved many of the same education successes as other countries in this bracket, such as considerably expanding access to basic education.The Ghanaian population is made up of various ethnic groups with the Akans constituting the largest group (48%), followed by the Mole-Dagbani (17%), Ewe (14%), and others. The most widely practised religion is Christianity, with Christians making up just over 70% of the population, followed by Muslims who make up 18%, traditional religions at 5%, and others. While English is the official language in Ghana, there are a number of other language groups with at least 69 individual languages. The Ashanti, Eastern, and Greater Accra regions make up 50% of the population, while Upper East is the least populated region, with just 2% of the total population. As of 2015, 40% of the population was under 14 years old, 55% were between 15-64 years old, and just 1.9% were over 65 years. The number of school age children 4 – 18 years old are projected to grow at just over 2% per year for the next four years, dropping to a 1.9% growth rate in 2025 and a 1.7% growth rate in 2030.[1]

18. Ghana lies between longitudes 3° 15’ W and 1° 12’ E, and latitude 4° 44’and 11° 15’ N. The country is bordered on the East by the Republic of Togo, the West by Cote d’Ivoire, the North by Burkina Faso and the South by the Gulf of Guinea.

19. The total land area of Ghana is 238,533 km^2 with an Exclusive Economic Zone (EEZ) of 110,000 km^2 of the sea, forming the territorial area of Ghana. Ghana has a coastline of 550km^2. The country is under the influence of the tropical humid climatic conditions and experiences two major seasons, namely the rainy season and dry season, brought about by the harmattan, a dry dusty wind that blows along the northwest coast of Africa. The mean minimum rainfall is 900mm/annum occurring around the Southeastern part of Ghana (Accra-Aflao) while the mean maximum rainfall is about 2000mm/annum, occurring in the southwestern portions (Axim). Mean minimum temperature ranges from 21°C - 23°C and mean maximum temperature is from 30°C - 35°C. The mean annual evapotranspiration rate is low in southern Ghana (80mm) and higher in the north (190mm). There are six vegetation zones in Ghana. These are the Savannah (Sudan, Guinea and Coastal), Forest-Savannah Transitional Zone, The Semi-Deciduous Forest Zone, and the Rain Forest Zone. Human activities and natural pressures have considerably changed the natural vegetation.

20. Ghana is divided into six ecological zones namely; Sudan Savannah, Guinea Savannah, Forest Savannah Transition, Semi-Deciduous Rainforest, High Rainforest and Coastal Savannah. Ghana presents different rainfall regimes along the country from the coast in the south to the Sahelian region in north. These regimes are mainly defined by the north- and south-ward movement of the Inter-Tropical Convergence Zone (ITCZ), which brings the African monsoon, giving rise to the uni- and bi-modal distribution characteristic of the northern and southern part of the country, respectively.

[1] Source: Ministry of Education, Ghana. *Education strategic Plan Z018-20130.*

21. As in much of coastal West Africa, Ghana has experienced significant pressure on natural resources over the past 75 years. The 2005 Ghana Natural Resources Management and Growth Sustainability Economic and Sector Work (ESW) evaluated the economic costs to totaling US$516 million of lost productivity due to damage to five types of natural assets: agricultural land, forest and savanna woodlands, coastal fisheries and wetlands, wildlife, and Lake Volta.

22. The government of Ghana has given high priority to improved environmental management in its development programs, including in forest and mining operations.

III. POLITICAL, LEGAL AND INSTITUTIONAL CONTEXTS

23. InGhana, the protection of the environment constitutes a priority axis of the sustainable development policy. The ACE ImpactProject will strictly adhere toand follow the political, legal and regulatory frameworks of Ghanaianenvironmental management.

24. This chapter provides an overview of the relevant policies, laws and regulations specifically addressing sectors relevant to the activities of the ACE Impactproject, and focuses on the environmental legislation, policies, frameworks and procedures that are likely to be applicable to

III.1PolicyFramework

25. The key environmental policies and legal framework and procedures considered as relevant under the ACE Impactare the following:

- ***The Ghana's National Environmental Policy***, formulated in the ***National Environmental Action Plan (***NEAP) of 1993, aims at ensuring a sound management of resources and the environment and to avoid any exploitation of these resources in a manner that might cause irreparable damage to the environment. The policy endorses the preventive approach to environmental management and emphasizes the need to promote socio-economic development within the context of prescribed acceptable environmental standards and safeguards.
    - The ***Policy Statement*** seeks, among other things, to institute and implement the concept of sustainable development by ***requiring prior environmental impact assessments*** of new investments and developments that would be deemed to affect the quality of the environment.

- **The National Climate Change Policy** provides strategic direction and coordinates issues of climate change in Ghana. The three objectives of the Policy are (1) effective adaptation, (2) social development and (3) mitigation. To address the adaptation issues in Ghana, four thematic areas have been identified. These are (1) energy and infrastructure, (2) natural resources management, (3) agriculture and food security, and (4) disaster preparedness and response.

- ***The 1999 National Environmental Sanitation Policy*** aims at developing and maintaining a clean, safe and pleasant physical environment in all human settlements, to promote the social, economic and physical well-being of all sections of the population. The principal components of environmental sanitation identified in the policy include, among others: collection and sanitary disposal of wastes; inspection and enforcement of sanitary regulations; and monitoring the observance of environmental standards.

- ***The 2004 Cultural Policy of Ghana*** provides that special attention be given to the preservation of traditional sacred groves, monuments, artistic treasures held in chiefs' palaces, mausoleums, private homes and all objects of high artistic value. It requires the State to enact and review legislation to protect all cultural assets, to protect the rights of indigenous owners of cultural heritage, and to vest in itself ownership, protection and preservation rights of rare and monumental heritage objects. The *Constitution* itself enjoins the Stateto preserve and protect places of historical interest and artifacts.

III.2 International conventions

26. Ghana is linked to the international community through bilateral and multilateral cooperation agreements and has ratified almost all international conventions related to environmental issues (including the *Vienna Convention on the Protection of the Ozone Layer*, 2001; the *United Nations Framework Convention on Climate Change (UNFCCC),* 1994; the *Convention on Biological Diversity (Biodiversity Treaty)* 1993; the *Convention on Combating Desertification* (1996); and the *Environmental Modification Treaty*, 1997). Furthermore, Ghana ratified the *World Heritage Convention*in 1975. As such, it strives through implementation of development strategies, to observe international standards in terms of indicators of socio-economic development.

27. The ***Ghana Environmental Conventions Coordinating Authority (GECCA)*** was established to consolidate oversight and coordination of all international environmentalconventions to which Ghana is party.

III.3Institutional Framework

28. ***The Ministry of Environment, Science, Technology and Innovation (MESTI)*** has, among other missions, the mandate to: ensure the establishment of the regulatory framework and setting of standards to govern the activities of science and technology and the management of the environment for sustainable development; and ensure effective environmental management and governance.

- The ***Environment Protection Agency (EPA***) was establishedto regulate *Environmental Impact Assessment* (EIA) procedures in the planning and execution of development projects, including compliance in respect of existing projects. The trust of the Agency's overall approach includes compliance promotion to facilitate good environmental practice and to seek co-operation and collaboration from those whose activities could potentially injure the environment.[1]

  The basic objectives of the EIA system are: to integrate environmental management and economic decisions at the earliest stages of planning an undertaking or investment; to provide avenues for the involvement of the public, sub-project promoters, private and government agencies in the assessment and review of proposed undertakings, among others; and to ensure compliance with any required environmental impact assessment procedures in the planning and execution of development projects, including compliance in respect of existing projects.

  Public consultation is inherent in the EA process from screening to permit issuance: the concerns of the public, if any, and in particular concerns of immediate residents of the project site, must be taken into account at the screening stage.

  EPA has a ***Grievance Redress Mechanism (GRM*)**, which is a system that assists the Agency's clients and the general public to resolve environmental related complaints and grievances in a timely, effective and efficient manner. The goal of the GRM is to make the Agency more accessible and ensure that complaints and grievances from the public are promptly analyzed and resolved in a timely and satisfactory manner.

29. ***The National Commission on Culture (NCC)*** is in charge of implementing the cultural policy on physical cultural resources, which requiresthe preservation of monuments, all forts and castles,

[1]There is an average of six professional staff at each of the ten EPA Regional offices (from disciplines including agricultural economy, natural resource management, landscape architecture, biology, geology, population and family life, geography, social science, chemistry, education, mining engineering and law). These regional offices receive EA applications and take the lead role within EPA in responding to complaints, investigating and prosecuting violations such as developments that fail to follow procedures in LI 1652, and they make field inspections and monitoring visits.

designated shrines, mosques, church buildings, old city walls and gates, cultural sites, palaces, public and private buildings of historical significance and monumental sculptures. These are required to be protected from neglect, desecration and/or destruction. Under the policy, the NCC - in collaboration with the EPA - is required to identify heritage sites of Ghana and collect, collate and store indigenous beliefs and practices associated with them.

30. ***Civil society and the media*** play a strong role in environmental awareness, and in influencing to the extent possible, the decision-making process related to environmental issues. Ghana has Non-governmental organizations (NGOs) actively participating in the environmental arena, on issues ranging from public awareness and environmental education to waste collection and community self-help programs. NGOs have been increasingly involved in project implementation, in public debate, in hearings/consultations on EA, and also in monitoring compliance with environmental laws. The media have contributed to increased awareness and to changes in behavior.

Ministry of Education

The ***Ministry of Education (MOE)***, established under the Civil Service Law 1993 and the PNDC Law 327, is mandated to provide relevant education to all Ghanaians as a vehicle for human growth and national development.

The goal of the MOE is to formulate and implement policies that would ensure quality and accessible education to all Ghanaians to meet the needs of the labour market; and accelerate the acquisition of requisite skills to achieve human development, good health, poverty reduction, national integration and international recognition and to create an honest, creative and responsible citizenship.

Its ***vision*** is to prepare and equip all Ghanaians with relevant education and skills to promote socio-economic development and national orientation. Its ***mission*** is to provide relevant education with emphasis on science, information, communication and technology to equip individuals for self-actualization and peaceful coexistence as well as skills for the workplace for national development

At the tertiary level, the ***National Council for Tertiary Education (NCTE)***–which will facilitate implementation of the ACE Impact project in Ghana - is the key coordination agency. The Tertiary Education sector is expected to produce cadres of highly qualified individuals to support economic and social development in Ghana. Ghana has eight states and at least 11 private universities.

III.4Legal framework

31. According to the ***1992 Constitution*** of the fourth Republic of Ghana, citizens of Ghana are required to protect and safeguard the environment: this is a constitutional requirement which applies to all construction stakeholders, large and small and must be applied in all sectors, both private and public.

32. Ghana has a number of legal instruments for protecting the environment.[2] Whole or partial sections of these regulations relate directly to construction works.

[2] Such as the following : Environmental Protection Agency- Guideline; Environmental Sanitation Policy; National Action Programme to Combat Drought and Desertification; National Water Policy; etc

- ***The 1999 Environmental Assessment Regulations,*** or Legislative Instrument (LI) 1652, include the procedures for compliance with EA requirements. They consist of thirty Regulations and five Schedules detailing the procedures to be followed in the EA process.

- The ***1995 Environmental Impact Assessment Procedures*** aim to provide guidance on complying with the EA requirements of the EPA Act. Schedule 1 of LI 1652 provides the list of undertakings that require registration with EPA and issuance of an environment permit. Schedule 2 lists undertakings for which EIS is mandatory (it is also required for any proposed undertaking or development to be located in any of the areas broadly defined as environmentally sensitive)

  EIA procedures also describe in detail the stepwise EA process, including: *registration* of any activity with EPA; *screening* (allowing EPA to determine whether a proposed activity should be subjected to further assessment, and if so, the level of assessment that will be required); issuance of environmental permit; type of environmental assessment report required, i.e. *Preliminary Environmental Report (PER*), *Scoping Report* or *Environmental Impact Statement* (EIS); and, finally the issuance of an*Environmental Permitting Decision (EPD).*

The schedule for the Electrical and Electronic Waste under Act 917 provides guidance for the manufacture and importation of electrical or electronic equipment. Section 20 (2) of the Act stipulates that a manuafacturer of electrical or electronic equipment or an importer of new electrical or electronic equipment shall pay an advance eco levy in respect of electrical or electronic equipment specified in the Fifth Schedule that is manufactured in or imported into the country.

The Land Use and Spatial Planning Act seeks to provide sustainable land development of human settlements through a decentralized planning system, to ensure judicious use of land in order to improve quality of life, promote health and safety in respect of human settlements and to regulate national, regional, district and local spatial planning, and generally to provide for spatial aspects of socio economic development and for related matters.

The Factories, offices and Shops Act 1970, Act 328 mandates the Factories Inspectorate Department under the Ministry of Employment and Social Welfare to register any undertaken such as factories, offices and shops and ensure that internationally accepted standards of providing safety, health and welfare of persons are adhered to.

The National Building Regulations, LI 1630 provides guidance and standards to any person who intends to erect any building; or make any structural alteration to any building; or execute any works or install any fittings in connection with any building.

The policy on National Commission on Culture seeks of documenting and promoting Ghana's traditional cultural values, ensure the growth and development of the Country's cultural institutions and make them relevant to human development, democratic governance and national integration. The policy also seeks to enhance Ghanaian cultural life and develop cultural programmes to contribute to the nation's human development and material progress through heritage preservation, conservation, promotion and the use of traditional modern arts and crafts to create wealth and alleviate poverty.

33. Under LI 1652, potential impacts on ***physical cultural resources*** are to be taken into account at several stages in the EA process – in screening proposed undertakings and scoping, preparing, consulting on and reviewing reports.

34. In terms of Labour, ***the 2003 Labour Act*** amended and consolidatedprevious laws relating to Labour and employers. Under Part XV (Occupational Health, Safety and Environment), the Act explicitly indicates that it is the duty of an employer to ensure that ***every worker works under satisfactory, safe and healthy conditions***.

III.5Procedures for environmental management

35. ***The Environmental Impact Assessment (EIA) Procedures*** (1999) are recognized and applied in Ghana to development projects as well as other undertakings as an environmental permitting pre-requisite and a major environmental management tool. The existing proceduresare a requirement to screen and evaluate all developments, undertakings, projects and programs, which have the potential to give rise to significant environmental impacts. They describe undertakings requiring registration and issuance of environmental permit.

- A main objective of the EIA process is to provide enough relevant information to enable the *Environmental Protection Agency*(EPA)to set an appropriate level of assessment of any proposed undertaking, investment or program for the assessment for the necessary review and to facilitate the decision-making process for EIA approval.
- The information may be gathered through an environmental impact assessment study and published in an Environmental Impact Statement (EIS), Preliminary Environmental Report (PER), or by completing anEnvironmental Assessment Preliminary Registration, Form EA1 or EA2, depending ***on the complexity, nature, and location*** of the proposed undertaking.[3]

III.6World Bank safeguards policy

36. The World Bank ***Environmental and Social Safeguards Guidelines and Operational Policies*** enable the integration of environmental and social considerations into the development, planning and execution of development projects. These policies are designed to: (i) protect the environment and society from the potential negative effects of projects, plans, programs and policies; (ii) reduce and manage the risks associated with implementation of project activities; and (iii) assist in better decision-making to ensure sustainability of activities. The Bank Environmental and Social Safeguard Policies provide guidance to the World Bank on the process, scope and extent of environmental and social assessment required for project evaluation.

37. Every project is subject to a preliminary environmental and social review based on the type, location, degree of sensitivity, scale, nature and extent of its potential environmental and social impacts, which is class in one of the following categories:

- ***Category A:*** Project that is likely to have very negative, nerve, diverse or unprecedented impacts on the environment.
- ***Category B:*** Project whose adverse effects on the population or areas of environmental importance (land, forests, and other natural habitats, etc.) are moderate.
- ***Category C:*** Project whose likelihood of negative environmental impacts is considered minimal or zero.

➔ ***The ACE Impact Project is classified as "category B",*** because its adverse effects on the population or areas of environmental importance are ***limited, site-specific, and***

[3] See Annex 1 for the EPA schedule for guidance.

likely reversible, and mitigation measures can be more ***easily designed/implemented***.

38. Among all the World Bank environmental and social safeguard policies, ***two Operational Policies (OPs) and Bank Procedures (BPs) are triggered under the ACE Impact Project***, namely:

- ***OP 4.01 Environmental Assessment***, which covers impacts on the environment (air, water and land), human health and safety, physical cultural resources, and global transboundary and environmental issues. OP 4.01 is triggered because the Project is likely to have environmental risks and impacts on its area of influence. This policy requires that environmental and social consequences be identified early in the project cycle and considered in the selection, location, planning, and design of the project to minimize, prevent, reduce, or compensate for adverse impacts and thereby maximize positive impacts and include processesfor mitigation and management of environmental and social impacts during the project cycle.
- ***OP 4.11 Cultural Physical Resources***, which provides cultural heritage guidelines to avoid or mitigate adverse impacts of development projects. This policy applies to the following projects: (i) any project involving major excavation, demolition, earthworks, flooding or other environmental modifications; (ii) any project located on or near a site recognized as cultural property; (iii) any project designed to support the management or conservation of physical cultural property. As part of the ACE Impactproject, this will also concern buildings of historical value and which would be the subject of rehabilitation works. The construction companies will follow key procedures of the *Cultural Heritage in Environmental Assessment. Environmental assessment Sourcebook* (1994), prepared by the World Bank.[4]

39. ***No other operational policies of the World Bank will be triggered under Project ACE Impact***. It is recalled that these are the following policies: *OP 4.04 Natural Habitats*, which does not allow the financing of projects degrading or converting critical natural habitats; *OP 4.12 Involuntary resettlement,* which covers an impact on individuals or small businesses, with loss of housing or shelter, loss of income or, in some cases, expropriation of private land and physical displacement of dwellings or shelters. *OP 4.09, Pest Management; OP 4.10: Indigenous Peoples*; *OP 4.36: Forests*; *OP 4.37 Safety of Dams*; *OP 7.50 International Waterways*; and *OP 7.60 Disputed Areas*.

40. However, under the ACE Impact Projectthe following will also be used:

- The World Bank Group's *Environmental, Health and Safety Guidelines***.**
- The 2010 *Access to Information Policy*for wide dissemination of all information concerning the nature and objectives of a project.
- The World Bank Group G*uidelines on Labor Influx*.[5]

III.7Comparing national procedures and World Bank policies

41. In general, there is great ***convergence of views and similarity*** between Ghana's environmental and social management system and that of the World Bank. All laws, regulations and instruments governing investments and activities in the natural resources sector are generally consistent with the Bank procedures. There are ***only minor gaps / differences*** interms of explicit arrangements (for example, for disclosure of documents in form and language). Recent WB assessments have pointed out the quality of the interactions existing between EPA and World Bank regulations, the EPA having demonstrated willingness and ability to undertake in-depth, technically-sound reviews and provided

[4]See Annex 2.

[5] See Annex 3 for excerpts of these guidelines.

authoritative guidance, and used conditionality effectively in administering the environmental permitting process.

➔ If policy discrepancy exists in some domains, ***World Bank policies will override*** national policies and regulations.

III.8Other relevant policies

42. According to the ***1998 Children's Act*** (Part V on Employment of children), the minimum age for admission of a child to employment is fifteen years (eighteen years for hazardous works). The program on the elimination of child labor was instituted in Ghana in 2000. Since then, several steps have been taken to withdraw or prevent children from engaging in child labor. In line with these efforts, a legal framework and a *National Plan of Action* (NPA) has been developed to guide the prevention or fight against child labor.

➔ Building companies operating under the ACE ImpactProject ***will strictly adhere to this legislation.***

III.9National arrangements for persons with reduced mobility

43. Ghana is among the few countries in Africa that have taken affirmative action in favor of marginalized groups at a higher level with a focus on persons with disabilities. These efforts have resulted in laws and policies promoting equality, inclusion and participation of persons with disabilities in society.More specifically, the national legislation recognizes the formal rights of persons with disabilities or those with limited mobility to access public buildings and buildings open to the public. The ***1996 National Disability Policy***, leading to the passage on the National Disability Law, Act 715 of 2006, aims to promote equal opportunities, enhance, empower and seek the protection of the rights of persons with disabilities irrespective of gender, age, or type of disability. Among other things, this concern ***the accessibility of disabled people to public building and facilities***.

➔ The facilities to be built or rehabilitated under the ACE ImpactProject will ***strictly adhere to this legislation.***

III.10Constitutional appeal bodies

44. The Constitution provided for the office of Ombudsman, who, appointed by the President, may investigate any action taken or omitted to be taken by or on behalf of the administration. However, the ***Commission on Human Rights and Administrative Justice (CHRAJ),*** which subsequently absorbed the position of the Ombudsman, was established in 1993 under the 1992 Constitution of Ghana by Act 456. CHRAJ is the national institution for the protection and promotion of fundamental rights and freedoms and administrative justice in Ghana. By combining the work of the Anti-Corruption Agency, the Ombudsman and the human rights commission under one umbrella, the Commission exists to enhance the scale of good governance, democracy, integrity, peace and social development by promoting, protecting and enforcing fundamental human rights and freedoms and administrative justice for all persons in Ghana.

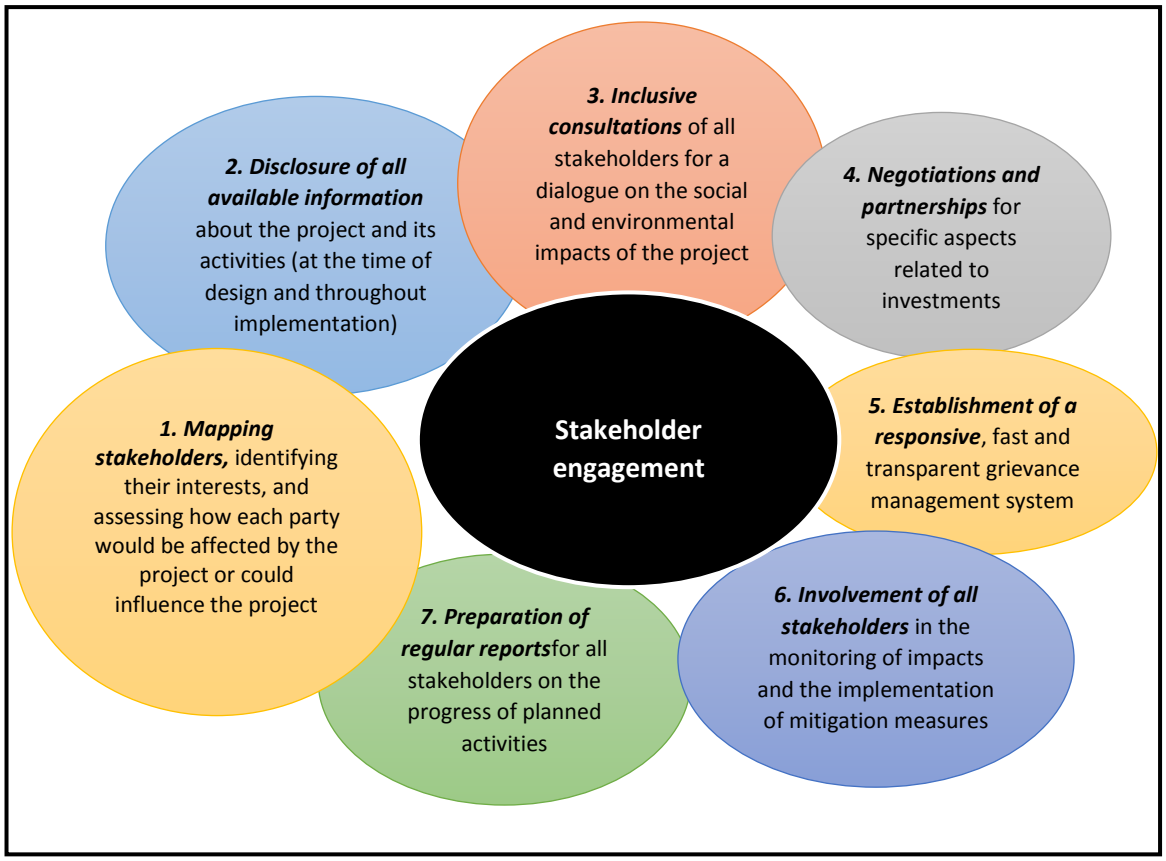
➢ In cases of major disputes, persons affected by the activities of the ACE Impact Project ***will be assisted, if necessary, to submit their claims*** to the Ombudsman.

IV.CONSULTATION OF STAKEHOLDERS

IV.1 The stakeholders

45. The ACE Impact Project will define and adopt a comprehensive and balanced approach to social mobilization and stakeholder engagement. It will develop a plan to involve the active participation of all stakeholders in decision-making processes, to foster dialogue and reduce tensions. The elements of this social mobilization plan are presented visually in the Diagram below.

Diagram : Main components of stakeholder engagement



IV.2 Social engagement

46. Engagement of all stakeholders will be an inclusive, ongoing and expanded processduring implementation of the CEA Impact Project.

47. The goal is to develop and maintain open and constructive relationships with all stakeholders to facilitate the management of the project and its stakeholders. individual sub-projects, including their environmental and social effects and risks.

48. This ESMF will be presented and discussed in a public consultation, with the participation of main stakeholders (the minutes of the public consultation are presented in Annex 8). Potential participants of the consultations are representatives of the following:

- Non-governmental organizations (working on environment and education);
- Businesses (national medium and/or small building companies);

- Neighborhood associations;
- Representative of professors of university departments and faculties;
- Associations of graduate and post-graduate students;
- Etc.

  - The first phase of the ACE Project demonstrated the importance of active student participation in promoting academic excellence. These comments have been through regular student surveys and regular supervision meetings with student groups.

    Both mechanisms served as feedback and complaint management mechanisms in the first phase. In addition, civil society, including businesses and other non-governmental entities, will be part of the sectoral advisory committees of each of the Centers to guide the center's activities to ensure that education and research activities meet the needs of the community. of development

V. ENVIRONMENTAL AND SOCIAL EVALUATION OF THE PROJECT

49. This chapter considers potential environmental and social concerns, which are likely to arise from the activities of the ACE Impact Project.

V.1 Typology of the activities of the Project

50. The Centers of Excellence to be built or rehabilitatedhave not yet been selected in Ghana. However, the main work that will likely be done under the ACE Impact Project and that may have an environmental and social impact is as follows:

- Construction of new buildings or other facilities within the current boundaries of university campuses;
- Extension of current buildings and facilities;
- Rehabilitation of old buildings and facilities, including repair of recent buildings that do not meet current standards.

V.2 General environmental and social impacts

51. Overall, in relation to these activities, all the negative or harmful environmental impacts that are likely to be generated by the Project will be ***limited in time and space***.

➔ The activities planned under the ACE Impact Project ***exclude any form of acquisition of land or propertyor resettlement or physical displacement of populations*** (all work will be done in land belonging to the universities).

V.3 General positive impacts

52. The Project will have ***many positive effects***, which should be sustained over the long term. *In general,* it will help fight poverty and boost shared prosperity, as well as encourage investment in knowledge and skills in all sub-sectors of education. Promising investments will be made in regional infrastructure and economic integration, with a focus on initiatives to produce highly qualified human resources for priority growth sectors. *More specifically*, the project will promote awareness among all national stakeholders about the environmental and social issues of Project activities and respect for the environment and the essential principles of sustainable development.

V.4 Risks ornegative impacts during the pre-construction phase

53. During the pre-construction phase (preparation of the bidding documents), the main risk is the neglect of the environmental and social aspects and their low consideration during the technical studies and / or the preparation of unsatisfactory environmental studies. This risk can be compounded if the information aspects and public participation are not taken into account. Furthermore, site selection could include some potential environmental and social concerns and impacts: for example, concerns in the siting of works on sections of campuses where they could conflict with adjoining land use outside the campus land, or on areas prone to or that have suffered soil erosion or damage.

54. Key mitigation measures for these risks will be the following: (i) public and stakeholder consultation during site selection and preparation and validation of studies; (ii) quality control and implementation of validation procedures for environmental studies and their dissemination; and (iii) regular supervision of building sites by environmental experts (in addition to the control of the relevant national institutions in relation to contractual specifications). Finally, mitigation measures could include relocating the nuisance activity outside the campus, and boxing up remedial civil works with the proposed construction activity.

- The effects of ***climate change*** will be taken into account in the choice of materials, the overall design of buildings and the technological options for construction (e.g., energy efficiency). The building will be in consonance with local climatic, environmental, and meteorological conditions and will incorporate proper ventilation and provision of sunshine, air movement, and maximum usage of daylight.
- ***Location and design of new buildings*** should also take into account site-specific risks (such as location near gullies which are prone to flooding and erosion; near water bodies and designated forests etc.).
- ***Sourcing of construction materials*** should be considered, especially given the risk of contractors using non-registered quarries, illegal sand-mining or creating new quarries through illegal extractions.
- The design of the buildings will take into account ***the gender dimension,*** especially in relation to the provision of a sufficient number of separate men's and women's washrooms (with the installation of lavatories, washbasins and urinals, etc.).
- All facilities, whether to be built or rehabilitated, will be properly designed in strict compliance with national standards for the protection and promotion of ***persons with disabilities***, by removing barriers for their inclusion and improving their accessibility to physical infrastructure.
    - Major measures to be planned are as follows: access ramps should have resting places and be of low slope; pathways should be of limited slope and include sufficient turning radius; doors should be light and easy to turn, and entrances should be sufficiently wide; parking space should be close to the main entrance; furniture, counters, equipment, power sockets, and plugs should be placed at suitable heights reachable by persons who use wheelchairs; handrails should be easy to grasp; etc.

V.5 Risks or negative impacts at the construction phase

55. Construction phase risks and impacts at the construction phase will be site specific. Despite the fact that they are manageable and small, this phase will have ***low to moderate impacts*** and could be a source of inconvenience for workers and all those living or working on university campuses. Of these impacts, the most important are:

Air quality, noise, water and sanitation, waste

- Pollution and nuisance (noise, dust) due to the construction of infrastructures (buildings).
- Dust generated by excavation work, improper storage of construction materials and cuttings, and the movement of construction machinery.
- Solid and liquid waste from construction sites.
- Noise and vibrations due to construction machinery and noisy equipment (jackhammers, air compressors, etc.).
- Presence of polluting paints, with resin and potentially toxic or dangerous solvents (for asthmatics, for example), asbestos and lead in products used for the rehabilitation of buildings.
- Occasional forms of pollution generated in construction sites by waste (some works could also affect the sewerage and waste disposal networks).
- Increased volumes of used oil due to certain work requiring the use of vehicles and various Class DD hazardous waste devices - these oils include hydraulic oils, motor, gearbox and lubricating oils and insulating and heat carrying fluids.
- Impact of some works on sources of drinking water.
- Damage to some underground networks and even temporary suspension of certain services (water, electricity, etc.).
- Emissions of ozone depleting substances if air conditioners contain R22 fluid hydro-chloro-fluoro-carbons (HCFCs).

- Emissions of greenhouse gas (GHG) related to the exhaust gases of construction vehicles, as well as olfactory nuisances, health risks and pollution.

Vegetation and soils

- Uprooting of trees and cutting of shrubs made necessary by certain activities, with reduction of green spaces.
- Risks of localized soil degradation, despite the fact that washout works will be limited in depth.
- Certain forms of soil erosion due to unreported construction activities: in particular, the artificialization of the soil could contribute to making the soil impermeable, thus limiting the infiltration of rainwater and increasing the runoff, with a saturation of the networks of sanitation.
- Risk of subsidence and landslides due to possible excavation work.
- Risks of floods, without the adoption of soil waterproofing techniques.

Hygiene, health and safety of workers, residents and users

- Accidents caused by construction machinery traffic and possible non-compliance with safety instructions.
- Safety of university users due to poor organization of work sites and work areas (e.g., poor gear location, improper storage of construction materials and equipment, etc.) and no signaling of certain areas at risk (for extension work or installation of equipment).
- Accidents of workers (scaffolding falls, misuse of equipment, electrocutions, etc.).

Natural risks

- Some of the proposed development could be affected by risks associated with the effects of climate change (in particular, risks associated with floods caused by heavy rains).

Risks of conflicts between the workers and local populations

- The works may have impacts on university campuses, with the likely restriction of vehicle and pedestrian traffic in the vicinity of construction sites, noise and dust-related inconvenience, space congestion caused by building materials, construction and construction waste, not to mention negative impacts due to the transformation of the landscape.

    - To avoid social tension, it is desirable to recruit a ***local workforce.***
    - Although it is expected that selected contractors would recruit a local workforce, it can be expected ***that skilled and unskilled workers*** may be brought in for temporary periods from outside the community. This would potentially increase risks of sexual harassment, prostitution and underage sex on vulnerable sections of the local population, especially women and minors.[1]

Physical cultural resources

- Some historic and archaeological buildings may be affected by the work and some excavations may reveal archaeological and historical remains.[2]

V.6 Risks or negative impacts during themaintenance phase

56. During theoccupancy and maintenance phase, project activities should not pose any particular environmental and social problems. Potential negative impacts might generally be due to: inadequate design; the lack of a system for the collection and transfer of waste, in particular solidwaste; a possible lack of an effective, regulatory and adapted sanitation system; lack of regular maintenance procedures; insufficient enforcement of security measures; and the lack of appropriate measures for people with disabilities. Appropriate measures of the ***National Disaster Management Plan*** (managed

[1] See also Annex 3.

[2] See Annex 2 for incidental discovery ("*chance finds*") of physical cultural property.

by the ***National Disaster Management Organisation (NADMO)*** will be strictly adhered to (in terms of fires or explosions, with the installation of smoke detectors, extinguishers, and alarm devices). All these risks can cause a malfunction or a deterioration of the works and generate certain negative impacts.

- In compliance with national regulations, building companies working under the ACE Impact Project will be required t***o regularly monitor compliance with safety and health standards***, and to periodically carry out measurements, analyses and assessments of environmental conditions and, where appropriate, undertake collective or individual protection measures to prevent damage to the safety and health of workers.

57. The environmental and social risks of the Project and the corresponding mitigation measures are summarized in Table 1 below (the indicative list of environmental and social clauses to be included in the contracts of the contracting companies and their respective Worksites-ESMP).

V.7 Measures mitigating the adverse impacts of the project

58. Different measures will be planned to reduce the potential impacts during implementation of the various activities planned under the ACE Impact Project:

- *Normative measures* to be complied with by the sub-project promoter and its contractors (companies carrying out the works), in accordance with national regulations and World Bank OP 4.01 and OP.4.11;
- *Mitigation measures* to reduce potential negative environmental and social effects.

Table 1 : Check list. Environmental and social risks and mitigating measures

Types of risk	Assessment	Level of risk (*)	Main measures
1. Tendering process (pre-construction phase)	Neglecting environmental and social issues	Low to moderate	Preparation of appropriate Terms of Reference, which will be validated by EPA and approved by the WB. All mitigation measures must be included into the contractor bid documents.
2. Constructions	Risks related to large deep excavations; opening of trenches for laying extension and densification pipes.	Moderate	Selection of specialized companies Conduct of prior technical studies. Preparation of detailed technical specifications for contractors
3. Demolitions or extensions of building	Safety of workers, residents and users Compliance with the rules in the use of large machines for the demolition of buildings	Moderate	Preparation of detailed technical specifications f or contractors During indoor demolition activities, debris must be kept in a controlled area. Water must be sprayed to reduce dust from debris. Eliminate dust during pneumatic drilling anddestruction of walls by continuous vaporization of water and / orinstallation of dust screens on the site Maintain the surrounding environment (sidewalks, roads) free of debris, in order tominimize the amount of dust No open fire of construction / waste materials will be carried out on the site.
4. Soils	Pollution risks or accidental soil erosion (at the site and neighborhood level)	Low	Conducting preliminary geotechnical studies. Anti-erosion measures
5. Waters	Potential groundwater pollution and groundwater contamination (accidental spills of hydrocarbons and lubricating oils)	Low to moderate	Use of small structures allowing the flow of rainwater Wastewater management: Sanitary sewage disposal (or sealed and fenced pit) Quality control of drinking water Implementation of appropriate erosion and sediment control measures, such as hay bales and / or silt barriers to prevent the movement of sediments from the site and the generation of excessive turbidity in the yards. water and nearby rivers.
6. Debris	Construction debris	Moderate	Correct management of debris, according to the standards established in the contractor's ESMP-W
7. Waste	Construction site waste (during construction) Domestic waste (during maintenance)	Low to moderate	Adequate storage of products and waste (waterproof storage); Disposal of waste to authorized public landfills. Hygiene in construction sites Prohibition of waste in the open air Roadways and sites for waste collection and disposal will be identified for the main types of waste typically generated by demolition and construction activities. Mineral construction and demolition waste will be segregated from general waste, organic, liquid and chemical waste through on-site sorting and placed in appropriate containers. Construction waste will be collected and disposed of appropriately by licensed collectors

			Waste disposal records will be maintained as evidence for the appropriate management planned. Where appropriate, the contractor will reuse and recycle suitable and viable materials (with the exception of asbestos) All these provisions must be reported in the Contractor's ESMP-W
8. Hazardous toxic waste (including medical waste)	Management of hazardous toxic waste	Low	Temporary on-site storage of any hazardous or toxic substances will be conducted in secure containers that provide compositional data, properties and handling information for those substances. Containers of hazardous substances must be placed in a leak-proof container to prevent spillage and leakage The waste is transported by specially authorized carriers and is disposed of at a site authorized for this purpose. Paints containing toxic ingredients or solvents or lead-based paints will not be used In accordance with national regulations, the contractor will ensure that newly constructed and / or rehabilitated health care facilities have sufficient infrastructure for the management and disposal of medical waste; this includes and is not limited to: (i) Special facilities for separate health care waste (including "sharps instruments" for soiled instruments and human residues or liquids) from other waste disposal systems , clinical waste: yellow bags and containers; special boxes resistant to perforation; household waste (non-organic): black bags and containers (ii) appropriate storage facilities for medical waste are in place; and (iii) If the activity includes institutional treatment, appropriate elimination options should be in place
9. Asbestos	Management of asbestos	Low	If asbestos is detected at the project site (demolition work), it must be clearly marked as a hazardous substance. If possible, asbestos will be suitably contained and sealed to minimize exposure Before removal (if such removal is necessary), asbestos will be treated with a wetting agent to minimize the amount of asbestos dust Asbestos will be treated and eliminated by qualified and experienced professionals If asbestos-containing materials are to be stored temporarily, the waste must be safely placed in closed containers and reported in an appropriate manner. Asbestos removed will not be reused
10. GHG emissions	Exhaust gas	Low to moderate	Regular maintenance of construction machinery and vehicles
11. Vegetation	Some works involve the cutting or removal of vegetation (trees, shrubs) and the reduction or destruction of green spaces.	Low	Establishment of a green zone Search for alternative solutions (to avoid cutting trees) Tree planting to compensate for the possible destruction of green spaces and the shortfall in terms of CO_2 sequestration capacities

12. Air quality	Negative potential impact of heavy machinery on construction sites and vehicles	Moderate	Air pollution control system (compliance with standards for exhaust emissions from construction equipment (work phase). Watering of construction sites; Systematic removal of unused embankments
13. Atmospheric pollution	The sites could contribute to increase air pollution and dust generation. Increased pollution and improper storage of materials and displacement and use of materials	Low to moderate	Adoption of strict safety standards in areas close to construction sites. Use of techniques to mitigate this risk in construction sites Organization of public awareness and information campaigns Watering the building sites
14. Noise pollution	Increased noise and vibration (rolling stock, jackhammers, air compressors)	Low to moderate	Establishment of regular control measures of the intensity of noise pollution Sound measurements according to NT 48.04 (ISO.1996 / 1) in case of complaints or perception of exceedance by controllers Respect of working hours on construction sites Noise from construction activities will be restricted to the schedule agreed in the permit During operation, the engine covers of generators, air compressors and other mechanical equipment shall be closed and the equipment will be placed as far as possible from the residential areas.
15. Health and safety of workers, residents and users	Accidents in construction sites Workers falling from scaffolding (the most common of accidents)	Moderate	Establishment of safety rules in construction sites and application of instructions and rules of hygiene Staff management Helmets door by workers Warning signs for places at risk
16. Building safety	Risk of fires and explosions	Low	In accordance with the National Building Regulations LI 1630 (building safety and prevention of fire and explosion risks). Installation of smoke detectors, fire extinguishers and alarm devices.
17. Traffic and pedestrian safety	Direct or indirect hazards to public traffic and pedestrians through construction activities	Low to moderate	In accordance with national regulations, the contractor must ensure that the construction site is properly secured and that traffic related to the construction is regulated. This includes, but is not limited to, signage, warning signs, gates and diversions: the site will be clearly visible and the public warned of all potential dangers Traffic management system and staff training, particularly for site access and dense traffic near the site. Provide safe crossings and passages for pedestrians when construction traffic interferes. Adjustment of working hours to local traffic patterns Active management of traffic by trained and visible staff on the site, if necessary for a safe passage and convenient for the public. Provide safe and continuous access to offices, stores and residences during renovation activities, if the buildings remain open to the public.
18. Child labor	Use by contractors of child labor	Low	Strict compliance with national regulations on child labor by works contractors

19. Disabled people	Neglecting disabled people in building plans and rehabilitation of buildings	Low to moderate	Accessibility mechanisms for persons with disabilities in public buildings (access ramps, sanitary blocks, etc.)
20. Restauration of historic buildings	Neglecting the historic value of buildings	Low to moderate	Notify the local competent authorities and obtain the authorizations / permits. Full compliance with heritage management regulations regarding buildings of historical value.
21. Archaeological, cultural and historical heritage	Neglecting historic heritage	Low	Ensure that arrangements are in place to ensure that artefacts or other "finds" encountered during excavation or construction are noted, that officials are contacted, and that work is delayed or altered to accommodate these discoveries. Compliance with national regulations for the protection of historical and cultural property. Possible involvement of the National Heritage Department and specialized centers. See Annex 2 for 'Chance Find' procedures.

(*) A more specific level of risks will be established during the preparation of the ESMP of each sub-project.

VI. ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCEDURES

VI.1 Screening of sub-projects

59. Under the ACE Impact Project, all the activities (sub-projects) must be subjected to *an environmental and social screening*, a procedure aimed to:

- Determine the nature and the extent of their anticipated adverse environmental and social impacts;
- Define the most appropriate backup tool, depending on the nature and extent of these impacts;
- Establish and implement appropriate mitigation measures.

VI.2 Environmental and social management tools

42. Screening of sub-projects (individual sites for the construction, rehabilitation or extension of buildings) is an important element of the environmental and social management process (see Inset below).

- Note that in Ghana the activities planned within the context of the ACE Impact Project are not considered as undertakings requiring registration and environmental permit and for them ESIA is not mandatory (EPA LI 1652 (1999).[1]

Harmonizing nationaland World Bank procedures

Under the ACE Impact Project, the following sub-projects will be considered ***ineligible:***

- ***World Bank Category A sub-projects***, which may have very negative, diverse, irreversible environmental and social impacts.
- Sub-projects for which the World Bank operational policies are not triggered (i.e; *OP 4.04 Natural Habitat; OP 4.12 Involuntary resettlement; OP 4.09, Pest Management; OP 4.10: Indigenous Peoples*; *OP 4.36: Forests*; *OP 4.37 Safety of Dams*; *OP 7.50 International Waterways*; and O*P 7.60, Disputed Areas)*.

In terms of Ghanaien procedures *(*in compliance with the *1995 Environmental Impact Assessment Procedures)*:

- ***The Environment Protection Agency (EPA***) will:
  - Supervise all procedures for compliance with EA requirements and provide guidance on complying with them, particularly the *screening process*(allowing EPA to determine whether a proposed activity should be subjected to further assessment, and if so, the level of assessment that will be required);
  - Assess the***Environmental Assessment Preliminary Registration Form EA1*** prepared by a promoter to register the sub-project with EPA.
  - Based on the information gathered during the screening process, the ***EPA officers*** would visit the proposed project sites to assess the adequacy of the information provided and also the appropriateness/suitability of the selected site, and they would decide whether to give approval at this stage or require further analysis in the form of either a ***Preliminary Environmental Assessment (PER)*** or an ***Environmental Impact Assessment*** (EIA).

[1] See Annex 1.

In terms of World Bank requirements (in compliance with POs 4.01 and 4.11)***:***

- An***Environmental and Social Information Sheet (ESIS)*** will be drawn up to complete – if necessary -the *Environmental Assessment Preliminary Registration Form****.***
- The screening process would be complemented by the parallel preparation of a ***Simplified Screening Form (SSF)*** (see the template in Annex 4) to make it possible, among other things, to determine from the outset – in a direct and concise way - the scope and level of potential negative environmental and social impacts of any activity (*high, substantial, moderate* or *low impact*), as well as definethe social management tool which is require.
- For subprojects whose environmental and social impact will be considered ***low***, a simple ***Environmental and Social Information Sheet (ESIS)*** will be drawn up (to complement the PER). This will include appropriate measures to be eventually integrated into the Contractor's technical specification.
- For sub-projects whose environmental and social impacts will be considered ***moderate***, an***Environmental and Social Management Plan (ESMP)***will be prepared-even if, because of the nature of the works, national procedures do not require the preparation of a PER or of an EIA -(see ToR and content of the ESMP in Annex 2).The ESMP will include appropriate measures to be eventually integrated into the Contractors technical specifications.
    - An ESMPis a detailed plan and schedule of measures necessary to minimize, mitigate or control any potential negative environmental and social impacts identified under the ACE Impact Project. An ESMP consists of a set of generic mitigation, monitoring and institutional measures to be taken during implementation and operation of the proposed project to eliminate negative environmental and social impacts, offset them or reduce them to acceptable levels.
- Key results of the ESMP will be included in the ***Worksite-Environmental & Social Management Plan (W-ESMP)*** to be prepared by the contractor (see Annex 3). See also Annex 4 for an indicative list of environmental measures.

Public***consultations with key stakeholder will be held*** throughout the process.

Under the ACE Impact Project, an adequate***Grievance Redress Mechanisms*** will be set up at the level of each participating university (E-system). Within this system, all environmental and social related complaints and grievanceswill be addressed in a timely, effective and efficient manner.

60. To qualify as eligible, any sub-project with potential environmental and social risks must include ***a budget line***to cover the costs of implementing any measures to mitigate environmental and social risks (negative impacts). This is a direct consequence of the legal "polluter pays" principle, which will apply to any sub-project regardless of its size and importance.

- In this perspective, mitigation measures are ***an integral part of a sub-project***, which must themselves be considered as full-fledged investments.

Table 2: Screening process: Objectives and responsibilities

PHASE	ACTIVITY	OBJECTIVE	RESPONSIBILITY
a) Site identification and sub-project	Identification of the sub-project	Describe the nature of the activities of the sub-projectand its main characteristics	Promoter of the subproject (unit of the participating university)
b) Screening of the submitted subproject and preparation of the type of backup instrument required	**Preparation of the SSF** **Categorization of the subproject**	Identify the nature and extent of the environmental and social impact of any sub-project	Safeguards Expert, in collaboration with EPA (with information to the WB).
	Preparation of Registration Form EA1 (with an ESDS, if needed)	For sub-projects whose negative environmental and social impact is considered *minimal*: preparation of a simple ESIS. [ESIS mitigation measures will be directly integrated into the tenders and specifications of the contractors].	Documentation sent to EPA for review and clearance.
	Analysis and validation of the results of the screening	• Verification of all the information. • Review of proposed mitigation measures • Categorization of subprojects and required safeguard tools • Decisions regarding the type of public consultation to be applied	Safeguards Expert with external resource persons Package sent to EPA for clearance;
	Combined preparation of EIA and ESMP	A combined EIA / ESMP will be prepared for subprojects with potential negative impacts are considered as *moderate* Validation of the EIA/ESMP and issuance of the environmental permit. ESMP mitigation measures will be directly incorporated into tenders and contractor technical specifications.	External firm / resource person (ToR validated by EPA, if needed). As the ToR is already included in the present ESMF, the WB no objection will be not needed. EPA PIU: coordinator and safeguards expert, with procurement officer)
c) Communication and stakeholder engagement	**Disclosure of information** **Public consultations**	EIA / ESMPs and records of consultations will be made available to the public through the most appropriate means. Stakeholders	MoE with PIU
d) Grievances	Grievance management and	A grievance management mechanism will be defined and put in place in place at	AAU will set up a regional E-system (with the participation of each university / center at national level): the center will

	redress mechanisms	the site level (grievance of those directly or indirectly affected by Project activities).	solve grievances in first instance, including issues related to environmental and social safeguards.
e) Monitoring & control and reporting	**Environmental and social monitoring** **Reporting**	Monitoring of the proper implementation of sub-projects in accordance with proposed environmental and social measures, national laws and WB's Safeguards Policies (against a set of indicators) Maintenance and maintenance measures Preparation of an annual supervision report for safeguards at the regional level.	PIU Safeguards Expert (with external TA). Contractor: implementation of the EIA/ESMP environmental and social safeguard measures EPA external control (compliance to national regulations). The safeguard consultant at AAU will develop this report based upon information from the participating universities.
f) Evaluations	***Mid-term and final evaluation of the Project***	Assess the implementation of safeguards	Participation of the PIU Safeguard expert in the preparation of the evaluations (conducted by external consultants)
g) Independent audit	***Before mid-term review of the Project***	***Environmental/ social audit of all the sub-projects)***	To be commissioned by PIU

(*) The different elements of this table will be better specified during consultations and the forthcoming evaluation of the ACE Impact Project.

VII.MONITORING, CONTROL AND EVALUATION

VII.1 Objectives of environmental and social monitoring and control

61. Environmental and Social monitoring& control is a crucial component of the ESMF during project implementation. The Project' Environmental and Social Management Monitoring System aims to describe: (i) the elements to be monitored; (ii) monitoring methods and tools; (iii) the responsibilities for monitoring and reporting; and (iv) the periodicity of monitoring. The system aims to ensure that: identified mitigation measures are appropriate and affectively implemented and produce the anticipated results; any additional impacts not identified in the analysis of the potential environmental and social impacts of the rehabilitation and/ or construction of facilities are captured as early as possibleand are modified, discontinued or replaced if they prove to be inadequate.

VII.2 Responsibilities

62. Environmental and social internal monitoring is carried out by the Project'sSafeguards expert with the aim of ensuring that environmental and social safeguards of the project are adhered to. This monitoring will concretely include: (i) the inclusion of the mitigation measures recommended in the sub-project; (ii) the compliance oversight during the building activities; and (iii) the monitoring of environmental and social management measures in the implementation of different activities.[1]

- The ***Project Safeguards expert***will be assisted by the ***Regional Safeguard Consultant*** at the *Regional Facilitation Unit (RFU)* (based in Accra, Ghana), whose role of ensuring consistent and harmoniousimplementation and monitoring of ACE Impact Project environmental measures in all the countries concerned.

63. The ***external environmental and social monitoring***, carried out by the EPA at its discretion, is intended to ensure compliance with national regulations on environmental and social protection and to verify the quality of implementation of environmental protection measures.

64. The knowledge acquired with these two forms of environmental and social monitoring will make it possible to correct the mitigation measures and possibly to revise certain standards of environmental protection.

65. The environmental monitoring system (which will cover the construction phase and post-construction clean-up) must include, in particular:

- The list of all the parameters requiring environmental monitoring;
- The measures and means envisaged to protect the environment;
- An intervention mechanism in case of observation of the non-compliance with the legal and environmental requirements or the commitments of the sub-project promoters;
- The contracting parties' commitments - to submit monitoring reports (number, frequency, content).

66. Annual verification of the execution of the measures is intended to ensure that the environmental and social mitigation measures are implemented in accordance with the described procedures in the ESMF.

VII.3Tracking indicators

49. In order to assess the effectiveness of the sub-projects, including the construction and rehabilitation of buildings and their subsequent maintenance, the environmental and social indicators

[1] Refer also to Table 2 (above)

are shown in Table 3 below. Several of these indicators will be further defined in the ESMP for specific activities and will be regularly monitored during implementation of the subprojects. They will be specified in the Technical specification of the different building companies or contractors as well as those of possible subcontractors.

Table 3 : Environmental and social management monitoring indicateurs

Measure	Category	Indicator (*)
Technical mesures (screening a preparation of safeguard tools)	ESMP W-ESMP	Number of sub-projectscreened Number of ESMPs prepared, validated and approved NumberofW-ESMPsprepared, validated and approved
Monitoring related measures	Environmental monitoring and control of sub-projects	Number of missions completed to monitor risk mitigation measures
Sensitization	Raising public awareness and advocacy on the environmental, health, safety and social issues of sub-projects and good practices	Number of people who benefited from these sessions (with percentage of women)
Grievance management	Management of grievances of persons directly or indirectly affected by Project activities	Number of grievances received Number of grievances treated

(*) All the indicators will be quantified during the forthcoming appraisal of the ACE Impact Project

VIII. ACTION PLAN: KEY RECOMMENDATIONS

67. This chapter presents the main recommendations of the ESMF's Action Plan of the ACE Impact Project in Ghana:

(i) ***Environmental and social screening***: By Project effectiveness, each Ghanaian participating university must have prepared the description of its subproject (facilities to be built or rehabilitated). This will enable the Project's safeguards expert, in collaboration with EPA, to move quickly to the next steps on environmental and social safeguards. This process will be updated each year as the annual work plan is prepared

(ii) ***Qualified personnel:*** Each selected university will use the services of a qualified person (appointed or recruited), who will be in charge of implementing the safeguarding measures, including monitoring, surveillance, control and evaluation of risk mitigation measures, and keep the partnership links with EPA throughout the project.

(iii) ***Operational Manual***: The Project's*Operational Manual* must include a section on the basic principles and regulatory measures of the ESMF, indicating in particular:

- Subprojects' screening procedures: for any operation carried out under the Project;
- The respective responsibilities of different stakeholders (acquisition of required authorizations by the promoters or preparation of complete ESMP-Worksites, including a Safety and Hygiene Plan, by the contractors).
- Mechanisms for the control and monitoring of the environmental and social indicators.
- Costs of environmental and social safeguards.

(iv) ***Information, sensitization and training on environmental and social management (ESM) issues:*** Information and sensitization sessions on ESM will be provided to the representatives of the institutional actors involved in implementation of the Project, including the companies in charge of the works. These initiatives (to be coordinated by the Project safeguards specialist, in collaboration with EPA, and the assistance of external resource persons) will take place immediately after Project effectiveness, during the first six months of implementation. Costs related to these trainings will be included in the overall project management costs of outreach / training / capacity building. Particularly important is the information sessions of entrepreneurs on the preparation of their various comprehensive ESMP-Building sites.

- Within the context of the *Impact boot camp* that the AAU will organize (with the support of WB) prior to Project effectiveness, for all university teams, special sessions will focus on environmental and social safeguards issues and the key elements of the ESMF.

(v) ***Grievance redress mechanism:*** Under the regional e-system for grievances management, which will be created within each participating university / center, a special section will concern all environmental and social safeguards-related grievances.

Once it has been discussed, approved and validated by all stakeholders, this Action Plan will be binding.

IX. ESTIMATED COSTS

68. The budgeting for implementation of the ESMF will be done at two levels:

- ***At the national level: each participating university***will have a budget of a maximum of ***USD 50,000***to cover costs of technical measures related to environmental and social assessment procedures, including various capacity building initiatives andpreparation and monitoring of ESIAs / ESMPs for sub-projects.

- ***At the regional level***: the AAU will reserve ***USD 200,000*** for the regional safeguard consultant, national and regional disclosures, and associated missions/workshops

69. All costs related to environmental and social risk mitigation measures will be included in the budgets of individual sub-projects.

ANNEXES

Annex 1: Undertaking Requiring Registration and Environmental Permit (EPA Li 1652 (1999)

SECTOR	SUB SECTOR	DESCRIPTION
AGRICULTURE	Community Pastures	Involving the clearing of land greater than 40 ha Involving the clearing of land located in an environmentally sensitive area
	Fruit and other vegetable farms	Management areas: Involving the clearing of land greater than 40 ha Involving the clearing of land located in an environmentally sensitive area
FISHING AND TRAPPING	Fishing	a. fish or shell fish farming in salt water, brackish water or fresh water, where the proposal includes the construction of shore-based facilities other than wharves; b. permanent traps or weir fisheries, salt water.
	Services incidental to fishing	Fish or shellfish breeding and propagating services, or fish or shellfish hatchery services, where the proposal includes the construction of shore-based facilities other than wharves.
LOGGING AND FORESTRY	Logging	Management of forested land for the primary purpose of harvesting timber in a contract area.
	Forestry services	a. application of pesticides; b. introduction of exotic species of animals, plants or microbial agents.
MINING	Metal mines Non metal mines	-
CRUDE OIL AND NATURAL GAS	Crude oil or petroleum production facilities Natural gas production facilities	
QUARRIES AND SAND PITS	Stone quarries	Where the total area is greater than 10ha, OR Where any portion is to be located within an environmentally portioned area
	Sand and gravel pit	a. where the total area is greater than 10 hectares, or b. where any portion is to be located within an environmentally sensitive area.
FOOD	Meat and poultry products	a. abattoirs; b. meat, fat or oil processing facilities c. poultry processing facilities.
	Fish products	-
	Flours, prepared cereal foods and feeds Feed mills	-
BEVERAGES	Distillery products Brewery products Wines	-
RUBBER PRODUCTS	a. tyres and tubes; b. rubber hoses and beltings; c. other rubber products	-
PLASTIC PRODUCTS	a. tyres and tubes; b. rubber hoses and beltings; c. other rubber products	-
LEATHER AND ALLIED PRODUCTS	Man made fibres and filament yarns Spun yarns and woven cloths Broad knitted fabrics	-
TEXTILE PRODUCTS	Natural fibres processing and felt products Carpets, mats and rugs Canvas and related products Other textile products	-
WOOD	Sawmill, planning mill and shingle mill products industries Veneers and plywoods	-

SECTOR	SUB SECTOR	DESCRIPTION
	Other wood products Wood preservation facilities which use hazardous chemicals or similar chemical processes Particle board or wafer board production	
PAPER AND ALLIED PRODUCTS	Pulp and paper Asphalt roofing Other converted paper products	-
PRIMARY METALS		-
FABRICATED METAL PRODUCTS		-
TRANSPORTATION EQUIPMENT		-
REFINED PETROLEUM PRODUCTS	Agricultural chemicals Plastics and synthetic resins Paints and varnishes Soaps and cleaning compounds Other chemical products	-
OTHER MANUFACTURING	Scientific and professional equipment	Photographic films and plates manufacturing Floor tiles, linoleum and coated fabrics manufacturing Other manufacturing products
CONSTRUCTION	Industrial construction (other than buildings)	a) Construction of pipelines for the transmission of oil, natural gas and other related products from the source to the point of distribution, where: Any portion of the pipeline is to be located at a distance greater than 500m from an existing right of way; or Any portion of the pipeline is to be located in an environmentally sensitive area b) diesel electric power generating plants having capacity greater than 1 megawatt a gas turbine electric power generating plants having capacity greater than 1 megawatt c)nuclear electric power generating plants
HIGHWAYS AND HEAVY CONSTRUCTION	Roads	-
	Waterworks and sewage system	Construction of trunk pipelines for transmission of water from the source to the point of distribution Construction of trunk sewer pipelines Construction of trunk sewer pipeline outfalls
	Hydroelectric power plants and related structures	Construction of dams and associated reservoirs Inter or intra basin water transfers Construction of hydroelectric power developments
UTILITIES		Establishment of waste disposal sites Establishment of facilities for the collection or disposal of hazardous waste materials

Annex 2: Procedures in case of fortuitous discovery of physical cultural property

In the event that, during the implementation phase, Project activities may have unforeseen effects on physical cultural properties, particularly in case of incidental discoveries.

The "physical cultural property" to which the procedures of OP 4.11 apply are "*movable or immovable objects, sites, works or groups of works of archaeological, paleontological, historical, architectural, religious, aesthetic or other value*".

To this end, in accordance with the chance find procedures of World Bank:

- *Project officials* should ensure that ESMP / EIS *Terms of Reference* include aspects of incidental discovery of physical cultural property and that procedures for incidental discoveries are effectively provided for in construction contracts, in collaboration with legally responsible services.

- The contractor charge of the works must include in its *Environmental and Social Management Plan – Worksite* (ESMP-BS) and actually follow the procedures provided in case of incidental discovery of cultural property:

  - Beforehand, inform the workers about the goods concerned and the procedure to follow;
  - After discovery: secure the site; stop immediately the work in the case of an archaeological remains (cave, furnaces, cemetery, burial, old objects of art, figurines, statuettes);
  - Inform the local branch of the Ministry of Tourism and Culture and the National Council of Arts and Culture;
  - Delimit the site of the discovery;
  - Do not resume work unless authorized by the responsible local authorities and the Ministry of Tourism and Culture.

Source: World Bank (2009) *Cultural Heritage in Environmental Assessment* (1994)

See the full text of this document on-line:
https://siteresources.worldbank.org/INTSAFEPOL/1142947- 1116497775013/20507410/ Update8 Cultural HeritageInEASeptember1994.pdf

Annex 3: Managing the risks of adverse impacts from temporary project induced labor influx

Excerpts from "MANAGING THE RISKS OF ADVERSE IMPACTS ON COMMUNITIES FROM TEMPORARY PROJECT INDUCED LABOR INFLUX"

(Note prepared in 2016 by Operations Policy and Country Services (OPCS) and Environmental and Social Safeguards Advisory Team (ESSAT).[2]

Bank-financed investment projects often involve construction of civil works for which the required labor force and associated goods and services cannot be fully supplied locally for a number of reasons, among them worker unavailability and lack of technical skills and capacity. In such cases, the labor force (total or partial) needs to be brought in from outside the project area. In many cases, this influx is compounded by an influx of other people ("followers") who follow the incoming workforce with the aim of selling them goods and services, or in pursuit of job or business opportunities. The rapid migration to and settlement of workers and followers in the project area is called labor influx, and under certain conditions, it can affect project areas negatively in terms of public infrastructure, utilities, housing, sustainable resource management and social dynamics.

The influx of workers and followers can lead to adverse social and environmental impacts on local communities, especially if the communities are rural, remote or small. Such adverse impacts may include increased demand and competition for local social and health services, as well as for goods and services, which can lead to price hikes and crowding out of local consumers, increased volume of traffic and higher risk of accidents, increased demands on the ecosystem and natural resources, social conflicts within and between communities, increased risk of spread of communicable diseases, and increased rates of illicit behavior and crime. Such adverse impacts are usually amplified by local-level low capacity to manage and absorb the incoming labor force, and specifically when civil works are carried out in, or near, vulnerable communities and in other high-risk situations. While many of these potential impacts may be identified in a project's Environmental and Social Impact Assessment (ESIA), they may only become fully known once a contractor is appointed and decides on sourcing the required labor force. This means that not all specific risks and impacts can be fully assessed prior to project implementation, and others may emerge as the project progresses.

Key Principles that are key to properly assessing and managing the risks of adverse impacts on communities that may result from temporary project induced labor influx.

- Reduce labor influx by tapping into the local workforce.
- Assess and manage labor influx risk based on appropriate instruments.
- Incorporate social and environmental mitigation measures into the civil works contract.
- Risk of social conflict (conflicts may arise between the local community and the construction workers, which may be related to religious, cultural or ethnic differences, or based on competition for local resources).
- Increased risk of illicit behavior and crime
- Influx of additional population ("followers") (people who expect to get a job with the project, family members of workers, as well as traders, suppliers and other service providers).
- Impacts on community dynamics.
- Increased burden on and competition for public service provision.

[2] The full document may be found on-line: http://pubdocs.worldbank.org/en/497851495202591233/Managing-Risk-of-Adverse-impact-from-project-labor-influx.pdf.

• Increased risk of communicable diseases and burden on local health services (the influx of people may bring communicable diseases to the project area, including sexually transmitted diseases (STDs), or the incoming workers may be exposed to diseases to which they have low resistance).
• Gender-based violence (inappropriate and criminal behavior, such as sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors from the local community).
• Child labor and school dropout.
• Local inflation of prices.
• Increased pressure on accommodations and rents.
• Increase in traffic and related accidents.

Annex 4: Simplified Screening Form (SSF) forenvironmental and social impacts

1. Nature of the activity: ……..

2. SSF Number: ……..

3. Location: ……

4. Name and address of the Promoter of the sub-project:
……..

A) GENERAL ELIGIBILITY

Does the activity …	Yes	No
Have an impact on areas for which the World Bank operational policies have not been triggered? In particular:		
• Impact on Natural habitats, protected zones *(Under OP 4.04 Natural Habitats)* • Use of pesticides to control pests (under *OP 4.09, Pest Management*)? • Disrespect for human dignity, human rights, economic systems and cultures of indigenous peoples (under *OP 4.10: Indigenous Peoples*)*?* • Involuntary taking of land (*Under OP 4.12: Involuntary resettlement*) • Impact on forest health and quality (under *OP 4.36: Forests*)*?* • Serious consequences resulting in malfunctioning or stopping a dam (under *OP 4.37 Safety of dams*)*?* • Effects on waters of two or more states (under *OP 7.50 International waterways*)? • Sub-projects located in disputed areas (*under OP 7.60, Disputed areas)?*		

If the answer is YES to one of these general eligibility questions: the sub-project is not eligible under the ACE IMPACT Project.

B) ENVIRONMENTAL IMPACT

	Will the activity …	Yes	No
1	Include removal and/or cutting of a considerable number of trees?		
2	Potentially affect the ecology of a protected area (e.g. interference on mammalian or bird migration routes)?		

3	Potentially affect geological or soil instability (e.g., erosion, landslides and subsidence)?		
4	Be located in an area threatened by silting?		
5	Is located in an area where there is no household waste management system?		
6	Generate non-hazardous waste that will be stored on the project site?		
7	Involve the use of an already over-exploited groundwater?		
8	Contribute to reducing the amount of water available to other local users?		
9	Is located in an area where there is no sanitation network?		
10	Occur in old establishments that may contain asbestos cement?		
11	Include large deep excavations?		
12	Have important potential accidental soil erosion, groundwater pollution and contamination?		
13	Greatly increase air pollution and dust generation?		
14	Greatly increase noise pollution and vibrations?		

- **If the answer is YES to one of these general eligibility questions:** An Environmental and Social Management Plan (ESMP) will be prepared in line with WB requirements – even if, because of the nature of the works, national procedures do not require the preparation of a PER or of an EIA.

- **If the answer is NO to all questions:** According to national regulations, an PER or an EIA will not be mandatory. However, in compliance with WB policies 4.01 and 4.11, the preparation of an SSF or, in certain cases, of a fully-fledged ESMP, will be considered as necessary**.**

Annex 5: Terms of Reference for the preparation of an ESIA / ESMP

I. INTRODUCTION AND CONTEXT

This section of the ToR will be completed at the appropriate time and will provide basic information regarding the nature and activities of a sub-project under the ACE Impact Project.

II. OBJECTIVES

This section will: (i) present the objectives and activities planned under the specific sub-project (construction, rehabilitation or extension of buildings or other facilities); and (ii) indicate activities that may have environmental and social impacts and that require attenuation measures.

III. TASKSOF THE CONSULTANT

The consultant will be mandated to prepare a single document including an Environmental and Social Impact Assessment (ESIA) and an Environmental and Social Management Plan (ESMP) of the sub-project in accordance with national procedures for EIA and World Bank operational policies that were triggered under the Project (i.e. OP 4.01 Environmental evaluation and 4.11 Physical cultural resources). To do this, the Consultant should refer directly to the results of the analyzes 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.

IV. THE MANDATE OF THE CONSULTANT

- Prepare a complete ESMP (see Outline in appendix)
- Provide a general 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 the monitoring and reporting systems
- Describe the arrangements for handling complaints and resolving potential conflicts

V. QUALIFICATIONSAN PROFILEOF 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.

APPENDIX : General outline of the ESMP

The ESMP will include the following elements:

1. Description and rationale of the sub-project (area, area, population affected, etc.)
2. Role of key stakeholders and definition of their responsibilities
3. Identification of the eligible beneficiaries of the sub-project and the persons affected
4. Detailed presentation of the main potential environmental risks (pre-construction phase, work phase, maintenance phase)
5. Detailed presentation of the various technical measures envisaged to mitigate the risks
6. Framework concerning the Information, Consultation and Participation of stakeholders
7. Presentation of training initiatives and capacity building
8. Presentation of work supervision mechanisms
9. Definition of monitoring indicators and control of mitigation measures
10. Outline of the program for monitoring implementation of the mitigation measures
11. Definition of the monitoring, supervision and control system
12. Schedule of implementation of sub-project activities
13. Description of the organizational responsibilities for implementation of the sub-project
14. Description of the arrangements for handling complaints and settling potential conflicts
15. Definition of reporting system (fact sheets)
16. Presentation of the public disclosure system of the ESMP
17. Detailed budget

Annex 6: General Outline of a Worksites-Environmental and social Plan (W-ESMP)

(To be prepared by a contractor. A simplified W-ESMP will be prepared by small enterprises involved in minor works

1. ENVIRONNEMENTAL POLICY OF THE CONTRACTOR: General Statement

2. OBJECTIVES
   - 2.1 Preparation of the ESMP
   - 2.2 Responsibilitiesof the Contractor
   - 2.3 Responsibilités of sub-contractors
   - 2.4 Documentation related to monitoring and control
   - 2.5 Security and Hygiene Plan (SHP)
   - 2.6 Implementing and updating the W-ESMP

3. ENVIRONNEMENTAL MANAGEMENT SYSTEM
   - 3.1 Responsibilities of the contractor
   - 3.2 Sub-contractors
   - 3.3 Planning the Environment, Health, Hygien and Security documentation
   - 3.4 Request for approval of site
   - 3.5 Management of non compliances
   - 3.5 Humain resources
   - 3.6 Controls
   - 3.7 Reporting
   - 3.8 Notification of accidents
   - 3.9 Internal regulations
   - 3.10 Training on Environmentn Health, Hygien and Security
   - 3.11 Standards

4. PROTECTION OF THE ENVIRONMENT
   - 4.1 Protection of sourrounding areas
   - 4.2 Selection of escavation and site access areas
   - 4.3 Effluents
   - 4.4 Water management
   - 4.5 Rivers and streams
   - 4.6 Emissions and dust
   - 4.7 Noises and vibrations
   - 4.8 Waste management
   - 4.9 Clearing of vegetation
   - 4.10 Erosion and sedimentation
   - 4.11 Cleaning up after works
   - 4.12 Documentation concerning the site (after the works)

5. SECURITYAND HYGIENE
   - 5.1 Safety and hygien plan
   - 5.2 Daily and weekly meetings
   - 5.3 Equipment and operating standards
   - 5.4 Working licenses
   - 5.5 Equipment and individual protection
   - 5.6 Hazardous material
   - 5.7 Emergency planning
   - 5.8 Ability to work
   - 5.9 First help
   - 5.10 Health center and medical staff
   - 5.11 First aid kits

Annex 7: Indicative list of environmental measures

These measures could be included (partially or entirely) as environmental and social clauses in contracting firms' contracts.

1. Prohibited actions

The following actions are prohibited on the subproject site or in its immediate vicinity:

- Cut trees outside the construction zone;
- Use unauthorized raw materials;
- Intentionally destroying a discovered physical cultural resource;
- Continue to work after discovering an archaeological remains (cave, cemetery, burial ground);
- Use firearms (except authorized guards);
- Consume alcohol on the job site and during working hours.

2. Management mesures

2.1 Environmental mesures management (precautions to be taken by the building company during the works to avoid the occurrence of nuisances and impacts).

- Waste management
    - o Minimize the production of waste and then eliminate it;
    - o Set up controlled assembly sites;
    - o Identify and classify potentially hazardous waste and apply specific disposal procedures (storage, transportation, disposal);
    - o Entrust the disposal to the approved professional structures;
    - o Store and dispose of construction waste consistent with national regulations
- Equipment maintenance
    - o Delimit garage, repair and maintenance areas (washing, emptying) of materials and equipment away from any source of water;
    - o Carry out maintenance on the demarcated areas;
    - o Properly manage the draining oils.
- Fight against erosion and filling of water courses
    - o Avoid creating trenches and deep furrows along developed access roads;
    - o Avoid disposing of loose materials on sloping ground;
    - o Erect protections around borrow pits and deposits of fine soft materials
- Materials in reserves and loans
    - o Identify and delineate areas for stockpiled materials and borrow pits, ensuring that it is at a safe distance (at least 50 m) from steep slopes or erosion-prone soils and drainage areas. water close;
    - o Limit the opening of borrow pits to the strict minimum necessary.
- Fight against dust and other nuisances
    - o Minimize dust emission to avoid or minimize negative consequences influencing air quality
    - o Limit speed to 24 km / h within 500 m of the site;
    - o Regularly water areas prone to dust emission during the day;
    - o Respect the hours of rest for work in residential areas in the city, or during school hours for repairs and rehabilitations.

2.2. Safety management (safe layout on the site to be taken by the contracting company, according to national health and safety standards for the benefit of the workers and adequate signage of the site to avoid accidents).

- Properly and permanently sign site access roads and hazardous areas of the site;
- Make staff aware of the wearing of safety equipment (nose cover, glove, helmet, etc.);
- Regulate traffic on leaving school;
- Interrupt all work during heavy rains or in case of emergency.

2.3 Relations with the neighborhood

• Inform local authorities about the detailed schedule of work and the risks associated with the site;
• Systematically recruit local workers of equal competence;
• Contribute to the maintenance of tracks used by vehicles serving the site;
• Avoid supply disruption of basic services (water, electricity, telephone) due to work otherwise inform at least 48 hours in advance;
• Do not work at night. Otherwise, inform the local authorities at least 48 hours in advance.

2.4. Implementation of ''Chance Find Procedure''. Its application makes it possible to safeguard the historical vestiges for the benefit of the culture and the economic activities like the tourism. It consists in alerting the competent authority in case of discovery of vestige (objects of ancient art, archaeological vestiges, etc.) during the opening and the exploitation of the quarries and pits of loan, and during the scours for the constructions themselves. same. It will be for the contractor to:
• To inform workers of the goods concerned and the procedure to be followed;
• Immediately stop the work in the case of an archaeological remains (cave, cave, furnaces, cemetery, burial) pending the decision of the competent authority;
• In the case of objects (figurines, statuettes) circumscribe the area and alert the competent authority;
• Do not resume work unless authorized by the competent authority.

Annex 8: Minutes of the Stakeholder Public Consultation

1.0 Introduction

The consultation meeting for Ghana was held at the World Bank office in Accra on **Monday October 22, 2018 from 11:00 a.m. to 3:30 p.m.**

The participants were from tertiary institutions that would potentially benefit from support under the ACE Impact Project including the University of Cape Coast (Central Region); University of Development Studies (Northern Region); University of Ghana (Greater Accra Region); and the Kwame Nkrumah University of Science and Technology (Ashanti Region).

The Session was opened by the World Bank Senior Education Specialist, Eunice Ackwerh who outlined the purpose of the consultation. After welcoming the participants to the workshop, she invited them to do self-introductions and outline their expectations in view of the objectives of the consultation.

Purpose of an Environmental and Social Management Framework (ESMF): The Bank requires environmental assessment (EA) of projects proposed for Bank financing to ensure that they are environmentally sound and would ensure environmental sustainability in the design, implementation and completion of projects.

Objectives of Consultations: The consultation was held to elicit comments, suggestion and contributions from stakeholders on the environmental and social implications of the project.

2.0 Overview of World Bank Environmental and Social Safeguards

A presentation made by Franklin Gavu, Environmental Safeguards Specialist of the World Bank focused on the purpose of safeguards; safeguard policies; OP/BP 4.01 environmental assessment; environmental assessment process; project environmental assessment categories; roles and responsibilities of the environmental assessment process; environmental management plans; mitigation measures; monitoring; implementation support challenges; and addressing challenges during the implementation of project activities.

The presentation reiterated the purpose of the World Band safeguard policies as protecting persons and the environment from adverse effects; reducing and managing the risk; and enhancing social equity and environmental sustainability. Participants were made to understood that the critical policy for the ACE Impact Project is OP/BP 4.01 environmental assessment which is a continuous and active process from pre-project, during project, to post project. The range of assessment instruments i.e. EA, EIA, ESMF, EMP were all discussed. Key aspects of the assessment process include environmental management planning, stakeholder consultation, public disclosure of the EA documents and monitoring and implementation support.

During the explanation of the various EA categories (A, B, C, and FI), participants were made aware that the ACE Impact Project category is "B" with likely site specific but reversible potential impacts for which mitigation measures can be designed readily. The roles and responsibilities outlined for the Borrower and the Bank include:

Borrower is responsible for:	Bank is responsible for:
• preparing the EA • consulting with project-affected people and local NGOs • retaining independent expert not affiliated with the project to carry out EA (for Category A projects) • engaging an advisory panel or independent, internationally recognized environmental specialists to advise on all aspects of the project relevant to the EA (for highly risky, contentious projects, or with serious and multidimensional environmental concerns • disclosing EA and other documents in-country in a form and language understandable and accessible by the project affected people	• screening the Project and determining the EA category • advising Borrower on EA requirements • reviewing findings and recommendations of the EA to determine whether it provides an adequate basis for processing project and is consistent with OP 4.01 • making EA and other safeguard reports available to the Board and to the general public through Infoshop • provide legal or technical capacity for key EA functions (where borrower has inadequate legal or technical capacity for key EA functions).

To address issues during project implementation the following good practices were recommended:

- assign a dedicated Environment Specialists to the project's implementation unit;
- use the Environmental Specialists in Bank teams very early in the project cycle;
- monitor and report on practical environmental indicators;
- bidding and contractual documents should include EMP provisions on mitigation/monitoring;
- ensure contractor has knowledgeable environmental specialist on team and knows the obligations of monitoring/reporting
- provide regular training to contractors and require reporting on a regular basis
- environmental specialist needs to visit the field regularly at planned phases (pre, during and post) construction.

3.0 Ghana's Environmental and Social Safeguards Policies

The Ag. Director of Environmental Assessment and Audit in the Environmental Protection Agency (EPA), Mr. Badu-Yeboah presented on the key legal and environmental framework for assessments in Ghana; steps in the EA process; types of assessment and the environmental and assessment and project cycle.

Legal and Regulatory Framework: According to the EPA Act, 1994 (Act 490), the Environmental Protection Agency is the lead agency for environmental protection in Ghana. Under Act 490, the EPA is mandated to oversee, coordinate and regulate all issues related to the environment in Ghana. The 1992 Constitution of Ghana mandates every citizen to protect and safeguard the environment.

Types of Assessments: Various types of assessments are required by the EPA in various situations. These include: (i) Initial Assessment and the completion of Form EA1; (ii) Preliminary Environmental Assessment and the preparation of a Preliminary Environmental Report (PER); (iii) Scoping and the preparation of a Scoping Report; Environmental Impact Assessment and the preparation of Environmental Impact Statement (EIS); Strategic Environmental Assessment (SEA) and the preparation of an SEA Report; Post EIA

Assessments; Annual Environmental Report (AER); and Environmental Management Plan (EMP) which is prepared to mitigate risks.

Steps in the Assessment Process: The presentation also outlined several steps in the assessment process including registration, screening, scoping/terms of reference, EIA Study, review and public hearing, decision making, appeals and public participation at all levels of the process.

Environmental Assessment Project Cycle: The environmental project cycle, timelines for review, and the project phase for relevant assessments was also discussed.

4.0 Presentation on the ACE III Impact Project

The presentation on the ACE III Impact was made by Ms. Eunice Ackwerh, Senior Education Specialist, World Bank. She outlined the ACE Impact **Development Objective** to: *improve quality, quantity and development impact of postgraduate education in selected universities through regional specialization and collaboration*. The ACE Impact Project's three **Components** aim to: (i) build and strengthen the capacity of competitively selected ACE Impact centers based in higher education institutions across West and Central Africa; (ii) expand the regional scope of impact of the ACEs funded under Component 1 by providing demand-side funding for partnering institutions and regional students to buy the training and services from the ACEs; and (iii) fund, through a Regional IDA grant of US$10 million to the Association of African Universities (AAU), the facilitation of the ACE Impact project's regional activities and support to centers under the project.

The Institutional Arrangements include the Association of African Universities (AAU) which will be responsible for the implementation of components 1 and 2.

5.0 Questions/Suggestions/Contributions and Responses

Prior to the consultation with stakeholders, the draft ESMF document was shared with participants and participants were led through the document to elicit their questions and comments. Participants were of the view that since they had gone through the ESMF documents prior to the consultations, it would be expedient to ask questions and indicate comments and suggestions during the session on questions and responses.

6.0 Questions/Suggestions/Contributions and Responses

1. **Question:** Under the procedures for the Environmental Impact Assessment (EIA) what will be the role of the Environmental Protection Agency (EPA) in the ACE III Impact Project?
   Response: *The management plans are post EIA and therefore fall under the EPA assessment.*

2. **Question:** Do tender documents have a component for EPA and at which point will the EPA be consulted?
   Response: *The EPA should be consulted and a permit should be obtained prior to commencement of works. In some cases, tender documents may require environmental permits or environmental clearance/assessment.*

3. **Question:** Given that ACE III Impact Project is under category B, which procedures apply considering that the Environmental Management Plan should be prepared within 18 months?
   Response: *Even though the ACE III Project is a category B, it will still have to be screened.*

4. **Question:** Given that ACE III Impact Project is under category B is an EIA mandatory?
   Response: *Even though the ACE III Project is a category B, an EIA will be mandatory if the works will be put in an environmentally sensitive area.*

7.0 Recommendations/Next steps

After several questions and comments, the following recommendations were proposed:

c. There should be continued dissemination of the ESMF and its requirements to other stakeholders especially to civil works contractors who may be executing works under the project.

d. Stakeholder communities and the general public should have knowledge about the ESMF to afford potential project affected persons the opportunity to have their voice heard.

8.0 Recommendations/Next steps

Ms. Eunice Ackwerh, Senior Education Specialist and Country TTL of the ACE III Impact thanked the participants for their support for the project and expectation that the project will meet all outlined objectives during implementation.

The list of participants is shown below.

Participant List ACE III Impact Environme