



ZESCO LIMITED

BUSINESS DEVELOPMENT DIRECTORATE

**ENVIRONMENTAL AND SOCIAL MANAGEMENT
FRAMEWORK (ESMF)**

FOR THE PROPOSED

**GPOBA – Electricity Access for Low- income Households
in Zambia PROJECT**

PREPARED BY

ENVIRONMENT AND SOCIAL ANALYSIS UNIT

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	4
1.1	Project Objective	4
1.2	Project Description	4
1.3	Project Location and Salient Characteristics	5
1.4	Duties and Responsibility of ZESCO and the Contractor	6
1.5	Environmental Coordinator or ECO.....	7
1.6	Safety, Health and Environmental (SHE) Officer	8
2.0	LEGAL FRAMEWORK	8
3.0	Assessment and Management of Potential Impacts.....	9
3.1	Code of Conduct and Method Statement	9
3.2	Awareness Campaigns.....	9
3.3	Liaison with Stakeholders and the Press.....	6
3.4	Employment.....	9
3.5	Environmental Aspects of Waste Management.....	10
3.6	General Guidelines for Construction Works	10
3.7	Temporary Works	11
3.8	Vegetation Protection.....	12
3.9	Protection of Fauna	12
3.10	Protection of Public and Private Property.....	13
3.11	Roads and Road Transport	13
3.12	Water Supply.....	13
3.13	Private Property, Schools and Institutions.....	14
3.14	Refuse and Waste Pollution Control	14
3.15	Fuel Storage and Workshop Areas	14
3.16	Toilet Facilities	15
3.17	Air Pollution Control	15
3.18	Noise Pollution Control.....	15
3.19	Restriction on Working Hours.....	15
3.20	Plant and Equipment.....	16
3.21	Explosives.....	16
3.22	Stockpiles and Spoil Dumps.....	16

3.23 Construction Work Site.....	16
3.24 Health.....	16
3.25 Respect for Cultural Values, Beliefs and Property Rights.....	17
3.26 Scenery Maintenance.....	17
4.0 MONITORING AND AUDIT PROGRAM.....	17
5.0 PHASING OF ACTIVITIES OF THE ESMF.....	18
6.0 LAND AQUISITION.....	18
7.0 STAKEHOLDER CONSULTATION.....	19
8.0 GRIEVANCE REDNESS MECHANISM.....	19
ANNEX 1 ESMP checklist.....	20

ACRONYMS

CBD	Central Business District
CFLs	Compact Fluorescent Lamps
ECO	Environmental Coordinator
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
ESD	Environment and Social Affairs Department
ESMF	Environmental and Social Management Framework
GPOBA	Global Partnership on Output Based Aid
IAES	Increased Access to Electricity Services
IDA	International Development Association
KM	Kilo Metres
kV	kilo Volt
kVA	kilo Volt Ampere
LV	Low Voltage
MSEs	Medium and Small entrepreneurs
MV	Medium Voltage
OBA	Out put Based Aid
OHL	Overhead Line
PCBs	Polychlorinated Biphenyls
PMT	Pole Mounted Transformers
PVC	Polyvinyl Chloride
ZEMA	Zambia Environmental Management Agency

1.0 INTRODUCTION

The Government of the Republic of Zambia recognises the need for increasing the rural and peri-urban access to electricity as a strategy for poverty reduction in such areas. The Electricity Access for Low-income Households project in Zambia, to be funded through the Global Partnership on Output Based Aid (GPOBA) financing mechanism, administered by the World Bank, aims to support scaling up government's strategy of increasing access to electricity in urban and peri-urban areas. The "Electricity Access for Low-income Households in Zambia Project" will provide electricity access to 22,000 households and 5,000 MSEs and introduce an OBA financing mechanism, whereby disbursements will be made against the independent verification of grid connections.

This Environmental and Social Management Framework (ESMF) sets out the principles, rules and procedures that will be used to assess the project's environmental and social impacts and contains plans to reduce and mitigate potential adverse impacts, in compliance with the Zambia environmental laws and regulations i.e. the Environmental Management Act (EMA) No.12 of 2011 statutory instrument No. 28, in particular the Environmental Impact Assessment (EIA) Regulations, and to meet the requirements of the World Bank's Safeguard Policies. It also contains provisions for on the roles and responsibilities of the agency or agencies responsible in implementing, monitoring and reporting on the management plan.

1.1 Project Objective

The Project objective is to increase access to grid-based electricity services in urban and peri-urban areas of Zambia through the use of an Output-Based Aid (OBA) approach. The project builds upon the Connection Fee Subsidy Program under the on-going Increased Access to Electricity Services (IAES) project.

1.2 Project Description

The project will support the provision of subsidies to facilitate new electricity connections and support installation of Ready-Boards including wiring and other ancillary activities to approximately 22,000 low-income households and 5,000 Micro and Small Enterprises (MSEs) in urban and peri-urban areas of Zambia. The subsidies will be disbursed against two outputs, (i) connecting a household or a MSE to the national power grid, and (ii) provision of Ready-Boards. Two types of connections will be supported for each household or MSE, including installation of three compact fluorescent lamps (CFLs) for each eligible household and MSE as follows:

The project will partially subsidize the cost of installation of new connections for low-income households and MSEs. The grant will finance two types of connection and three compact fluorescent lamps (CFLs) per households or MSE:

- **Standard Connection and three CFLs:** This type of connection includes the drop-wire from a supply line to the meter box, a single-phase pre-payment meter, circuit breaker and lightning arrester. The total charge for this type of connection is estimated at US\$203 for connections up to 30 meters from an existing pole. Additional costs for connections beyond 30 meters are borne by the consumer.
- **Enhanced Connection and three CFLs:** This type of connection includes the Standard Connection package plus installation of a Ready Board at an estimated charge of US\$256 for connections up to 30 meters from an existing pole. Additional costs for connections beyond 30 meters are borne by the consumer.
The project will only use pre-paid meters, hence tailoring to the needs of the poor who will be able to purchase power at their own discretion, without having to pay usage fees at regular intervals. The project will also support the training of women on safe and efficient use of electricity and household budgeting.
- In total, 140,000 people are expected to benefit from the project. Subsidies will be disbursed based on the “output” of connecting low-income households and MSEs to the national grid infrastructure through standard household connections or enhanced connections that will provide consumers with pre-installed (ready board) connection points, and provide the targeted consumers with energy efficient Compact Fluorescent Lamps (CFLs). The subsidy is expected to be US\$175 (86 percent of the cost) for standard connections and US\$210 (82 percent of the cost) for enhanced connections, with beneficiary contributions of the balance of US\$28 and US\$46.6, respectively.

Household eligibility criteria for subsidies under the project. ZESCO will be responsible for identifying consumers that are eligible for subsidized connections, and will use the following criteria to identify eligible households:

- Geographic targeting of low-income households
- High population density areas
- Capacity of the local distribution network to handle new connections

1.3. Project Location and Salient Characteristics

The project will focus on households in low-income settlements in urban and peri-urban areas throughout Zambia, locally known as "compounds" or "townships". Precise

locations are not yet known. The subsidy will be offered to all residents of the target areas that meet the following criteria: low-income area, high population density, and local distribution network capacity. This approach offers clear benefits in reducing political and intra-community tensions as well as risk of favoritism in selecting beneficiaries.

The proposed project is expected to have minimal adverse environmental and social impacts. This arises from the fact that the project is designed to install and connect power in already existing areas. Nonetheless this ESMF serves to ensure environmental protection measures and social safeguards are put in place during project development and implementation.

The potential environmental and social impacts associated with the project will largely occur during the construction phase of the project and might likely include potential environmental and social impacts associated with waste generation, dust, noise from moving vehicle, restriction in mobility around the working neighborhood, loss of income of affected business, and safety and health of workers. The envisaged impacts are expected to be minimal and can be managed through effective implementation of mitigation measures, as described further in this document.

1.4 Duties and responsibilities of ZESCO and the Contractor

This ESMF outlines the duties and responsibilities of ZESCO Limited and the Contractor with respect to environmental management and social safeguards during the implementation and operation of the project. The requirements herein also take into consideration the established international practice in project management, by ensuring that the task that has to be undertaken is completed within a set time, budget, resources and performance specifications designed to meet the needs of stakeholders and beneficiaries.

ZESCO shall ensure that the Contractor complies with all the requirements herein and the cost of compliance shall be included in the contract price. The cost of implementing the ESMF is part of the operational costs of ZESCO.

ZESCO shall require that the Contractor carries out the specified environmental and social protection requirements to the approval of the Project Environmental Coordinator (ECO) on behalf of the Employer who will be appointed by ZESCO. If so instructed by the ECO or the Site Manager, the Contractor shall implement additional mitigation measures payable under the applicable rates in the Day Work Schedule.

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This ESMF, in the following sections describes responsibilities and responsible parties for assessing, minimizing and mitigating adverse environmental and social impacts, and for monitoring and reporting.

1.5 Environmental Coordinator or ECO

ZESCO Limited will appoint an ECO to handle environmental and social issues that will arise during the implementation of the project. The ECO will assume overall responsibility to monitor the works and will report to the Project's Site Manager. The ECO will participate in all project meetings and the day-to-day running of the project. The ECO will be responsible for the organization and scheduling of Task Teams' environmental, safety and health awareness campaigns, monitoring and audits for various environmental and social aspects of the project. The ECO will also serve as the Community Liaison Officer to receive any complaints from the communities in the project area. The ECO will direct the complaints to the Site Manager or other appropriate officers for action as outlined in the developed grievance mechanism procedure. It will be the duty of the ECO to ensure that all grievances are recorded and resolved during project implementation and operational phases.

Environmental and social monitoring will mainly concentrate on the following aspects of prevention, mitigation or potential impacts minimization measures during construction:

- Site establishment;
- Excavations;
- Use of heavy duty machinery;
- Waste management;
- Health and Safety;
- Soil erosion;
- Noise and dust nuisance;
- Water pollution;
- General pollution;
- Disruption of the socio-economic state; and

- Employment and other specified benefits to local communities.

The Contractor is also required to appoint an officer who will be responsible for management of environmental and social issues on site. The Contractor's Safeguards Officer will maintain close liaison with the ECO and will have regular meetings.

1.6 Safety, Health and Environmental (SHE) Officer

A Safety, Health and Environmental (SHE or Safety Officer) must be on site to ensure a safe working environment. The Safety Officer will be on site on full time basis to monitor and ensure that safety standards are followed in the daily operations of the Contractor and he will report to the Project's Site Manager. The Safety Officer will participate in all project meetings and the day-to-day running of the project. The Safety Officer will be responsible for organizing and scheduling of safety awareness meetings for the workers and the local people. The Safety Officer will collaborate with the ECO to schedule and organize awareness campaigns for both construction workers and local people, where applicable. The Contractor's Safety Officer will maintain close liaison with the Employer's (ZESCO) Safety Officer and will have meetings regularly.

Monitoring and Reporting will be carried out by ZESCO as part of their daily routine operations and report to the Bank in the quarterly progress reports submitted to the Bank.

2.0 LEGAL FRAMEWORK AND OTHER POLICY DOCUMENTS

The preparation of the ESMF was guided by various legal instruments and policy documents which provide the overarching legislative framework for environmental management in Zambia. These include:

- The Environmental Management Act No. 12 of 2011, Statutory Instrument No. 28 of 1997 – The Environmental Impact Assessment Regulations;
- The Electricity Act, 1995;
- The Land Act, 1995 (CAP 292, CAP 289, CAP 288) and the Lands Acquisition Act, 1995 for the allocation and alienation of land under statutory leaseholds;
- The World Bank's Safeguard Policies, including OP 4.01 on Environmental and Social Assessment

3.0 Assessment and Management of Potential Impacts

3.1 Code of Conduct and Method Statement

The Method Statements will be prepared by the ECO during the implementation of the project based on the nature, type and scope of activities that will be supported by the project. As the various works are undertaken by the Contractor(s), it is imperative that the Construction Supervisor complies with environmental and social protection measures included in this ESMF, through a well-articulated code of conduct. Further, the Method Statement shall stipulate how the works will be carried out, taking due care of the environment.

3.2 Awareness Campaigns

The ECO shall be responsible for scheduling and organizing of environmental, social and health awareness campaigns for both construction workers and local people within the affected community, where applicable. The Safety Officer will be responsible for scheduling and organizing Safety awareness campaigns for both construction workers and local people on a monthly basis as part of the routine safety awareness carried by ZESCO. The two officers will organize joint meetings at which they will address the workers on various environmental, social, health and safety issues to be carried out monthly.

3.3 Liaison with Stakeholders and the Press

In order to avoid issuing conflicting statements to stakeholders the press and other interested and affected persons, only individual so designated by ZESCO may talk to stakeholders and issue press statements, when necessary. This will also prevent information about ZESCO, Contractor or the project, not meant for the public, to reach the press and the general public. ZESCO's Public Relations Manager, Project Manager or any other senior officer from may be designated to liaise with stakeholders and the press. The Contractor shall not be allowed to issue statements to the stakeholders and the press about the project.

3.4 Employment

The Construction Supervisor is encouraged to employ labour intensive techniques as much as possible. It is preferred that the Construction Supervisor employs local residents during the construction period. The Construction Supervisor shall tighten controls on

employment to ensure that people from outside the area are not employed at the expense of locals, except in the case of specialized skills that cannot be sourced locally.

3.5 Environmental Aspects of Waste Management

The following management features shall be applied:

- All waste (liquid and solid) arising from direct or indirect construction activities shall be disposed of in designated areas with approval from local authorities;
- Transformers and other equipment that will be installed at the project site shall be free of Polychlorinated Biphenyls (PCBs) or any other hazardous materials;
- All machinery repairs shall be carried out at designated repair workshops onsite and offsite;
- Waste oils shall be handled with care and stored in well labelled designated and safe sites as directed by the Site Manager. Waste oil should either be retreated for reuse or sold off to licensed vendors.

3.6 General Guidelines for Construction Works

Zesco shall cause the Contractor to conduct his activities in such a manner that causes the least possible disturbance to existing amenities, so as to comply with all relevant international and national requirements.

The Construction Supervisor shall abide by following general environmental and social guidelines during the course of works.

The Contractor shall not establish or undertake any activities that, in the opinion of the ECO or Site Manager are likely to affect the quality of work on site and surrounding communities. Where required, the ECO or the Site Manager may direct the Contractor or their Site Agent to refrain from such activities or to take remedial actions to reduce the adverse effects of their activities on both the physical and socio-economic environments:

- No work shall be carried outside the defined area of the works without the prior written approval from the Site Manager or as stipulated in the contract;
- All work areas shall be clearly marked with proper signage;
- To minimize air and noise pollution, the construction team shall use only equipment in good condition, which shall be properly maintained;
- All work vehicles shall travel at safe speeds so as not to endanger any person;
- The Safety Officer and the Site Manager in collaboration with the Contractor shall document all accidents. Safety rules and procedures shall be tightened in form of information to reduce the chances of recurrence;

- The construction team shall at all-times exercise due care and diligence not to damage private property. All damages shall be made well at the Contractor's or ZESCO's cost depending on the type of damage and the responsible party for the damage;
- Disturbance or disruption of the daily lives of local communities and their livelihood, including noise and dust pollution shall be minimized in as far as is practicable using appropriate methods and technology;
- The Contractor shall ensure that the construction site is maintained in a neat and tidy condition at all times;
- The Contractor, in consultation with ZESCO's Site Manager, shall employ as many locals (skilled and unskilled labor) as possible for the execution of the works. The Contractor should provide on-the-job training for some skills which the local people may not have. Only in specialized jobs where the local people may not have the necessary skills can the Contractor employ people from outside the project area;
- A register shall be kept of all employees, showing as much information as may be deemed necessary; and
- Monthly labour returns should be submitted to Site Manager on a form to be provided by ZESCO giving the information mentioned above.

3.7 Temporary Works

The following specific environmental guidelines shall be observed and implemented in mitigation of the potential environmental and social impacts in areas of activity, access roads and storage areas.

- Use of existing facilities such as access roads shall be used as opposed to construction of new ones. Public roads used by the project shall be maintained in a trafficable and safe manner with minimum creation of dust. All local speed limits shall be observed;
- Temporary storage areas shall be located within the designated area of the construction site as may be directed by Site Manager. These storage areas shall be appropriately sited taking into account the topography, access, security and safety;
- Work-sites shall be kept clean and tidy;
- The area is within reach of fuel service stations as such there will be no need to store fuel on site. However should need arise, fuel and lubricants shall be stored in clearly labelled UN approved above ground storage facilities at the workshop to ensure the surface area can be visually inspected. Tanks shall be inspected daily and any leakages stopped immediately;

- Sumps surrounded by low bunds and floored with impermeable material shall be constructed around the transformers. Oil spilled to sumps will be removed for recycling or safe disposal;
- Oil changes in machinery and equipment including vehicles shall take place at designated workshops unless in case of a major vehicle breakdown; and
- Demobilization from a site will include removal and safe disposal of all temporary structures and all types of waste. No un-drained water will remain on site. All the pools of water which may have collected at construction sites and storage sites should be drained to avoid breeding of mosquitoes.

3.8 Vegetation Protection

The project area is mostly built up, surrounded by areas designated for housing development, and does not have significant natural vegetation cover. Most of the vegetation includes fruit trees; as such impacts on natural vegetation are insignificant. However, where the activities affect any of the trees, the Contractor shall ensure that all work is undertaken in a manner that minimizes the impact on vegetation, outside the immediate area of works. The following shall apply with respect to the protection of areas of vegetation adjacent to the area of works:

- Vegetation clearance shall only take place within a specified area and for the purpose as defined in the project specifications;
- No tree or shrub outside the area of works shall be felled, cut or pruned, without the prior approval of the Site Manager;
- No tree outside the area of works shall be burned for any purpose;
- Any protected plant species if known, shall be reported to the ECO or Site Manager, prior to clearing. The Site Manager or ECO shall provide specific guidelines for the removal and transplanting of such tree species after consultation with the Forestry Department Staff; and
- Spoil shall not be heaped against trees as this could damage the stem.

3.9 Protection of Fauna

There are no wild animals expected to be present in the urban and peri-urban sites that will constitute the project area. There may be some domesticated animals such as dogs. The Contractor shall ensure that all works are undertaken in a manner that minimizes impacts on the animals. Under no circumstances shall any animals, if found, be handled;

removed; killed or interfered with by the construction team without guidance of the ECO or the Site Manager.

3.10 Protection of Public and Private Property

The following guidelines shall apply in order to mitigate the impacts of the construction activities on public and private property in the project area, where applicable:

- Appropriate permits shall be obtained before any works are carried out near or on public or private property; and
- Appropriate local agencies such as the Local councils shall be consulted before sourcing any bulk local materials such as sand, crushed stone that may attract permits and fees.

3.11 Roads and Road Transport

In carrying out construction works, the construction team and suppliers of materials shall comply with the provisions of the relevant Laws of Zambia on road usage, but not limited to the following:

- Where designated access routes are indicated in the work program, the construction team shall use no other routes without the approval of the ECO or the Site Manager;
- Where existing gravel roads are used frequently by the project in any part of the works as access roads for transporting labour and construction materials, the project shall maintain the road by:
 - Routine maintenance consisting of gravelling and dust control by watering.
 - Periodically watering all gravel roads in the proximity of dwellings, where these are heavily used by construction traffic, to minimize dust emission.
- The construction team, in all instances, shall exercise utmost driving control and care; and
- Any area of public road, which is closed because of the Works, shall not be reopened until appropriate safety and traffic management measures have been completed, and or until the ECO confirms that it is in a suitable condition for use by the public.

3.12 Water Supply

The local water supply system shall be used and, where possible, the contractor shall provide alternative water supplies or improve the existing water supply system so as to avoid negatively affecting the local supply system.

3.13 Private Property, Schools and Institutions

There may be private properties and Government institutions that may be disrupted during the execution of the works. The following guidelines shall apply to mitigate the impacts on private property and public institutions that may not be known:

- The provisions in this ESMF on pollution reduction shall apply;
- The Contractor shall ensure that access to services such as fields, electricity supply etc. to private property owners is not disrupted; and
- Any reasonable conditions demanded by the Local councils shall be respected and complied with in as far as it is practicable. If the contractor considers a demand unreasonable they shall contact ZESCO for arbitration.

3.14 Refuse and Waste Pollution Control

To mitigate the impacts arising from waste generation, the following programs shall be initiated:

- All waste materials will be collected in appropriate receptacles strategically placed and disposed of in designated sites within the City as approved by the Local Authority;
- The waste management program will be an on-going responsibility of the Contractor and the ECO;
- Burning of plastic material or any other materials shall not be permitted and all such materials shall be disposed of in a manner acceptable to the Site Manager or ECO and in accordance with the waste management guidelines as provided for by Local councils and ZEMA; and
- Soil contaminated by cement or other chemicals shall be removed and placed in approved disposal areas.

3.15 Fuel Storage and Workshop Areas

Fuel dispensing and repairs for machinery shall be done from a designated workshop. However, where such facilities shall be provided within the project site area, the following shall apply;

- Fuel dispensing areas and workshop areas for machinery shall be provided with concrete hard standing surfaces draining to oil separators, where applicable or in relation to the national and international standards;
- Drainage into watercourses from fuel storage and machinery maintenance areas shall not be permitted and where possible treated to remove oil and/or fuel; and
- Soil contaminated by fuel and oil leakage shall be removed and disposed of at an approved site and in a permitted manner or treated according to the Environmental Management (Licensing) Regulations, Statutory Instrument No. 112 of 2013 of the Environmental Management Act, No. 12 of 2011.

3.16 Toilet Facilities

The Contractor's work force shall be provided with appropriate mobile toilet facilities within construction work area. Portable toilets shall be used on the construction site and shall be kept in clean and good working condition.

The local Civil Engineer shall ensure that there are sufficient toilets for use by the construction workers on site.

3.17 Air Pollution Control

The Contractor shall take measures to reduce the emission of particulate matter from operations, excavations, road transport and other related construction activities. Equipment and vehicles that exhibit excessive emissions of exhaust gas due to poor engine adjustment or other inefficient operating conditions shall not be permitted. Burning of vegetative waste, construction materials and other waste shall not be permitted.

3.18 Noise Pollution Control

Construction activities such as operation of plant and equipment, and heavy vehicles will result in noise nuisance to residents near the project area. Suitable methods and equipment shall be used to diminish noise pollution.

3.19 Restriction on Working Hours

The Contractor shall restrict any of his operations, which may result in undue noise disturbance to nearby communities and dwelling to between 06.00 hrs and 18.00 hrs unless otherwise approved by the ECO or Site Manager.

3.20 Plant and Equipment

As far as practicable, the Contractor shall bring to site, and employ on the works, only environmentally acceptable and quietly operating plant and equipment, compatible with the safe and efficient construction of the works.

3.21 Explosives

No explosives shall be used.

3.22 Stockpiles and Spoil Dumps

In carrying out works that could cause accumulation of soil stock piles or spoils dumps, the following shall apply:

- Where no longer required, these stockpiles and spoil dumps shall be shaped and re-vegetated to blend with the local environment as much as possible;
- Drainage shall be provided to control base water flow such that migration of fines is kept within the stockpile or dump; and
- Where possible, old burrow pits shall be used for disposal sites in preference to undisturbed sites (new ones).

3.23 Construction Work Site

In establishing construction work site, the following general guidelines shall apply:

- Construction works shall not impinge on scenic beauty of undisturbed areas;
- A First Aid kit and toilets are provided for the workforce for operational use;
- Waste receptacles shall be used on site; and
- Protective clothing shall be issued to all categories of the workforce free of charge.

3.24 Health

Construction projects and associated labour force could serve as a vehicle for spreading disease such as cholera, STIs, and malaria. To minimize the spread of communicable diseases, the following guidelines shall apply during construction:

- Where practicable, the Contractor shall employ locals unskilled man power and use locally trained manpower from within the township where practicable to minimize communicable diseases from outside the area;
- The Contractor shall provide First Aid kits for the labour force;
- In the case of serious injuries on site, the Construction Supervisor/Project Site Manager shall formulate a plan to deal with such emergencies; and
- The provisions on pollution control and sanitation shall apply to maintain a healthy working environment.

3.25 Respect for Cultural Values, Beliefs and Property Rights

There is need for the Contractor to respect the cultural norms, beliefs and property rights of the local community during construction. The Construction team shall conduct their operations in a manner that will not upset the socio-religious order of any communities found near the project area.

3.26 Scenery Maintenance

Areas outside the work sites that will be affected during construction such as grass and small bushes shall be restored in a manner that the final ground appears as a natural extension of the adjacent undisturbed ground.

4.0 MONITORING AND AUDIT PROGRAM

A monitoring program will be implemented and carried out by ZESCO through its Environment and Social Analysis Unit (ESU). A schedule of environmental and social activities will be developed at the beginning of the project as part of the overall project design. Monitoring will ensure that initiation and completion of the programs is done and meets the intent of the program initiatives. Within this context this will include the following:

- Monitoring of route layout to ensure environmental and social programs are included in the design and construction schedules as well as ensuring the engineering design meets the intent of environmental program;
- Monitoring of construction activities to ensure that construction meets specifications and environmental and social management plan;
- Monitoring and modification to meet changes which develop over the course of the program implementation; and

- Liaison with Community, and various Government agencies to ensure all requirements associated with the project initiatives and environmental and social mitigation measures are met.

5.0 PHASING OF ACTIVITIES OF THE ESMF

In order to implement the ESMF, a phased program of activities has been proposed. However, the proposed outline does not exclude other appropriate activities as may be dictated by conditions during construction. The phasing of environmental and social activities shall be as outlined in the table below:

Table 1 Environmental and Social Management Plan

Phase	Activities	Responsibility
Mobilization	Health and Safety awareness campaigns for workers	ECO with Health and Safety Team
Construction	Health and safety awareness for both Local people and construction workers	ECO with Health and Safety Team
	Monitoring of compliance to outlined environmental and social mitigation measures	ECO
	Ensure implementation of environmental and social mitigation measures	Construction Supervisor/Site Manager / ECO
Completion / Commissioning	Environmental and Social Auditing	ECO with the ESD Auditing Team

6.0 LAND AQUISITION

The project will not entail land acquisition as the activities related to connection will not include demolition and disruption of any structure or installation of electricity poles. Additionally, no negative impact on assets or economic activities is anticipated. On the contrary, this project is expected to enhance the economic activities in the area, thereby improve livelihoods. In view of this, it has been determined that the World Bank Operational Policy on Involuntary Resettlement shall not be triggered.

7.0 STAKEHOLDER CONSULTATION

The project – Electricity Access for Low-income Households in Zambia – is developed as an outcome of public consultations under the parent project Increased Access to Electricity Services in which beneficiary communities acknowledged the success in connecting low-income households in Zambia, and requested that the geographical scope be expanded. This project, therefore, is an outcome and response to the requests made by the communities due to the success achieved from the IAES project. During the preparation of the ESMF, key stakeholders were consulted which included, officials from government agencies, professional organizations, NGOs, and beneficiary communities. An overwhelming strong, positive support for the project was reiterated during the meetings given the positive environmental and social impacts that the project will generate by increasing the access to electricity through the reduction in the use of biomass in cooking.

8.0 GRIEVANCE REDRESS MECHANISM

The implementation of the proposed Intensification Project will be monitored by ZESCO through its Environment and Social Affairs Department. Complaints may be made to the Environmental Coordinator who shall resolve them through the ZESCO internal grievance mechanism channel that already exists within ZESCO. Grievances related to any aspect on projects are handled through negotiations with affected people. The complaints received from affected people can be in verbatim, or in writing. Whenever the Environmental Coordinator receives complaints s/he will notes the same in writing and acknowledge receipt within ten (10) working days, and keep record for further consideration.

In addition to the above mechanisms, and at the option of the Affected People, grievances may be taken to other mediating bodies, such as the local leadership, or any other dispute resolution mechanism as may be decided by the Affected People.

Regardless of the above mechanisms, affected people will have the choice to forward their case to a court of law In accordance with Zambian law.

Annex 1 – ESMP checklist

General Guidelines for use of ESMP checklist:

The checklist format attempts to cover typical core mitigation approaches to civil works contracts with small, localized impacts. It is accepted that this format provides the key elements of an Environmental and Social Management Plan (ESMP) to meet World Bank Environmental and Social Assessment requirements under OP 4.01. The intention of this checklist is that it would be applicable as guidelines for the small works contractors.

The checklist has two sections:

Part 1 includes a brief description of the activity and an environmental and social screening checklist, where activities and potential environmental and social issues can be checked in a simple Yes/No format. If any given activity/issue is triggered by checking “yes”, a reference is made to the appropriate section in the following table, which contains clearly formulated management and mitigation measures.

Part 2 contains a checklist with impact mitigation measures for activities during project construction and implementation.

INSTITUTIONAL & ADMINISTRATIVE				
Country	Zambia			
Project title	GPOBA Electricity Access for Low-income Households in Zambia Project			
Scope of project and activity				
Institutional arrangements (Name and contacts)	WB (Project Team Leader)	Project Management	Local Counterpart and/or Recipient	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Counterpart Supervision	Local Inspectorate Supervision	Contactator
SITE DESCRIPTION				
Name of site				
Describe site location			Attachment 1: Site Map []Y [] N	
Who owns the land?				
Description of geographic, physical, biological, geological, hydrographic and socio-economic context				
Locations and distance for material sourcing,				

especially aggregates, water, stones?	
LEGISLATION	
Identify national & local legislation & permits that apply to project activity	
PUBLIC CONSULTATION	
Identify when / where the public consultation process took place	
INSTITUTIONAL CAPACITY BUILDING	
Will there be any capacity building?	<input type="checkbox"/> N or <input type="checkbox"/> Y if Yes, Attachment 2 includes the capacity building program

ENVIRONMENTAL /SOCIAL SCREENING		
	Activity	Status
Will the site activity include/involve any of the following??	A. Building rehabilitation	<input type="checkbox"/> Yes <input type="checkbox"/> No
	B. Minor new construction	<input type="checkbox"/> Yes <input type="checkbox"/> No
	C. Individual wastewater treatment system	<input type="checkbox"/> Yes <input type="checkbox"/> No
	D. Historic building(s) and districts	<input type="checkbox"/> Yes <input type="checkbox"/> No
	E. Acquisition of land ¹	<input type="checkbox"/> Yes <input type="checkbox"/> No
	F. Impact on Assets	<input type="checkbox"/> Yes <input type="checkbox"/> No
	G. Hazardous or toxic materials ²	<input type="checkbox"/> Yes <input type="checkbox"/> No
	H. Impacts on forests and/or protected areas	<input type="checkbox"/> Yes <input type="checkbox"/> No
	I. Handling / management of medical waste	<input type="checkbox"/> Yes <input type="checkbox"/> No
	J. Traffic and Pedestrian Safety	<input type="checkbox"/> Yes <input type="checkbox"/> No

¹ Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

² Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
General	Notification	<ul style="list-style-type: none"> (a) Public notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (b) All legally required permits, agreements, licenses, and clearances acquired for the project activities (c) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.
	Worker Safety	<ul style="list-style-type: none"> (a) Workers' PPE will comply with international good practice (hardhats, masks, safety glasses, harnesses and safety boots, tec.) (b) First aide medical kits and fire extinguishers available at work site (c) Contact information for emergency services (medical, fire) posted on the information board at work site
Pollution Management	Air Quality	<ul style="list-style-type: none"> (a) Construction machinery and equipment maintained in adequate working condition on regular basis (b) Spoils storage piles compacted (c) Dust sources watered to minimize discomfort to nearby residents (d) Materials and wastes are transported under a covered hood of a truck (e) Vehicle speed under control to lessen suspension of road dust
	Noise	<ul style="list-style-type: none"> (a) Construction noise limited to working hours in the vicinity of settlements (b) Engine covers of generators, air compressors, and other powered mechanical equipment closed during operation, and equipment placed as far away from residential areas as possible
	Waste	<ul style="list-style-type: none"> (a) Sites for permanent waste disposal identified and agreed with local officials (b) Sites for temporary storage of waste allocated to prevent scattered dumping of waste on and around the work site (c) Reuse and recycle construction waste whenever feasible (except asbestos) (d) Arrangements made with licensed companies, as available, for removal and recycling of used tires and filters of construction vehicles and machinery (e) No open air burning of waste on and off the work site
Erosion Control		<ul style="list-style-type: none"> (a) Slope protection provided through bank compaction, rip-rapping on critical sections, or vegetative stabilization (b) Topsoil remove and stored aside for later use in site restoration (c) Excess material used for restoration of degraded areas
Handling Chance Finds		<ul style="list-style-type: none"> (a) In case of chance finds during earth works - all activity taken on hold, a State entity in charge of cultural heritage preservation notified in written, and work resumed upon formal permission received from the above entity
Protection of Water Bodies	Turbidity	<ul style="list-style-type: none"> (a) Sediment traps set up along rivers and/or gabions along banks to filter out eroded sediments (b) Erosion control measures applied as provided above
	Pollution	<ul style="list-style-type: none"> (a) Vehicle and machinery servicing prohibited in the immediate proximity to water bodies (b) Servicing and fueling of vehicles and machinery limited to an allocated site with non-permeable floor and capacity to contain spills if occurred (c) Arrangements made with licensed companies, as available, for removal and recycling/deactivation of used oils and sand/gravel saturated with oil products
Nuisance to Local Communities		<ul style="list-style-type: none"> (a) Project works are scheduled beyond irrigation season to the extent possible in order to avoid/minimize service disruption (b) Work site is properly marked and fenced as appropriate (c) No temporary storage of construction materials and waste occurs within cultivated land plots or any type of private property (d) Areas for temporary storage of construction materials and waste allocated so that free movement of traffic and pedestrians is not hindered

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
During activity preparation							
During activity implementation							
During activity supervision							