PROJECT: JUBA POWER DISTRIBUTION SYSTEM REHABILITATION AND EXPANSION PROJECT

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN SUMMARY

COUNTRY: SOUTH SUDAN

September 2013

| Team          | Team Member          | Position                                      | Organization | Code   | Code
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<td>Team Leader</td>
<td>S. ASFAW</td>
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<td>Team Members</td>
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<td>F. KAMAU</td>
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<td>EL-ASKARI, KHALED</td>
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<td>N. OMAGOR</td>
<td>Environmentalist</td>
<td>Consultant</td>
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ACRONYMS

AAAC All Aluminum Alloy Conductor
AfDB African Development Bank
ART Anti Retroviral Treatment
BOOT Build Own Operate and Transfer
CES Central Equatoria State
CPA Comprehensive Peace Agreement
DFID Department for International Development
EDFI European Development Finance Corporation
ESI Electricity Supply Industry
ESMP Environment and Social Management Plan
FRHCL Fula Rapids Hydropower Company Limited
GoRSS Government of the Republic of Southern Sudan
HIV/AIDS Human Immunodeficiency Syndrome/Acquired Immuno Deficiency Syndrome
IDP Internally Displaced Persons
IESS Initial Environmental and Social Screening
IFC International Finance Corporation
IPP Independent Power Producers
JICA Japan International Cooperation
JTH Juba Teaching Hospital
MoED&WR Ministry of Electricity, Dams, Irrigation and Water Resources
MoE Ministry of Environment
NBHS National Baseline Household Survey
NEMA National Environment Management Authority
NGO Non-Government Organization
Norfund Norwegian Investment Fund for Developing Countries
OHS Occupational Health and Safety
PPA Power Purchase Agreement
PDSRE Juba Distribution System Rehabilitation and Expansion Project
PPE Personal Protection Equipment
PIC Public Information Centre
PIT Project Implementation Team
PMTCT Prevention of Mother to Child Transmission
RMC Regional Member Countries
SS South Sudan
SSAC Southern Sudan Aids Commission
SSCCSE Southern Sudan Centre for Census, Statistics and Evaluation
SSDP Southern Sudan Development Plan 2011-2013
SSEC South Sudan Electricity Corporation
SSIAP Southern Sudan Infrastructure Action Plan
SSFO South Sudan Field Office
SSNEMA South Sudan National Environment Management Authority
SPLA/M South Sudan Peoples’ Liberation Army/Movement
SSP South Sudan Police
STDs/STIs Sexually Transmitted Diseases/Sexually Transmitted Infections
UNEP United Nations Environment Programme
VCT Voluntary Counselling and Testing
EXECUTIVE SUMMARY

Project Title: Juba Distribution System Rehabilitation and Expansion Project  
Project Number: P-SS-FAO-002  
Country: Southern Sudan  
Department: ONEC  
Division: ONEC.2

a) Brief description of the project and key environmental and social components

Project Background

Electricity supply in Juba is from 17 MW (10 MW operational) installed diesel power plant and is distributed in 11 kV and 415/230 volts networks. The existing supply is weak with: (i) shortage of generation to meet demand; (ii) marginal capacities of the distribution system to supply new customers; and (iii) high losses in the distribution networks. The low level of generation capacity coupled with weak distribution networks has resulted in supply constraint leading to forced blackouts and load shedding in Juba. Consequently, most households and businesses are supplied from constrained, costly and unreliable captive power generation which has affected the quality of life, delivery of services and restrained business development in and around Juba.

The preparation of South Sudan Development Plan (SSDP) of 2011-2013 whose implementation period has been extended to 2016, did identify among others, that electricity supply networks in South Sudan (SS) in general and in Juba in particular has a lot of challenges which include shortage in generation and weakness of distribution networks. Subsequently, SSDP identified the rehabilitation of Juba Diesel Power Generation Station and Juba Power Distribution system as a short-term measure to improving the power supply in the City. Furthermore, the South Sudan Infrastructure Action Plan (SSIAP) prepared by the Bank reinforced the SSDP findings and proposed, among others, the development of Fula Rapids Hydropower Plant (HPP) and rehabilitation of Juba electricity networks in order to improve the power supply in the city in the short-to-medium term. Subsequently, two studies, namely, Juba Power System Diagnostic funded by International Finance Corporation (IFC) and Electricity Distribution and Load in Juba and Torit (funded by Norfund) were carried out in 2012. The studies prepared detailed assessments of the power supply situation in Juba and came up with detailed proposals for the rehabilitation and expansion of the distribution networks. In addition, Norfund commissioned Environmental and Social Impact Assessments (ESIAs) for the planned Fula Hydropower and for the transmission line to evacuate power from Fula to Juba.

The main objective of Juba Distribution System Rehabilitation and Expansion Project -Juba PDSRE Project is to increase the supply capacity and the reliability of the power distribution system in Juba. The project will bring about: (i) efficient evacuation of power from potential interventions lined up for improved electrification of Juba city; (ii) reduced losses and increase networks capacity to satisfy demand; (iii) expansion of the network to supply areas in Juba which are currently have no electricity services; (iv) the development of income generating
activities and increased employment opportunities; (v) improvement in energy supply to public priority institutions such as hospitals and schools, and; (vi) increased the electricity access rate in the city. Furthermore, access to the grid will reduce the current widespread use of generators in the city establishments thereby allow supply of energy at a more affordable price, and hence contribute towards economic growth and poverty reduction in South Sudan.

**Objectives of the ESMP**

The objective of the ESMP is to ensure that all steps are taken to address the potential environmental and social impacts of the project. The ESMP:

a. Outlines project background and the activities that will be undertaken during project implementation as well as its anticipated negative environmental and social impacts;

b. Reviews South Sudan’s policy, legal and administrative framework and level of congruence with African Department Bank polices and guidelines;

c. Describes public consultations and disclosure requirements;

d. Describes the measures proposed to mitigate negative, and to maximize positive, environmental and social impacts;

e. Defines the institutional structure to govern the implementation of the ESMP;

f. Defines the specific actions requires, roles and responsibilities for the actions, and associated costs; and

g. Describes capacity building requirements for the implementation of the ESMP.

**b) Major environmental and social impacts**

**Positive environmental and social impacts**

When operationalized, the project would bring a number of positive impacts to both the national economy as well as at household levels. These include:

a. When operational, the project will supply reliable electricity in Juba city. At the moment, SSEC does not supply any power to its estimated 5,000 connected consumers due to a multiplicity of challenges with its thermal generation systems. By the year 2016 after the rehabilitation and expansion of its grid, South Sudan Electricity Corporation (SSEC) should be able to supply and connect an estimated 20,000 consumers on top of its current staggering 10,000 which would then bring its consumers to 30,000 consumers;

b. Full time operation of Juba International Airport which will be possible once electricity distribution in Juba city is improved and made reliable through the project. At the moment, due to erratic power supply (amongst other constraints), the Airport operates from only 8:00am-6:00 pm. This has had implications on international travel connections to and through Juba and Southern Sudan at large;

c. The planned electricity rehabilitation and expansion project will involve replacement of over-head bare All Aluminum Alloy Conductors (AAAC) with insulated conductors as well as replacement of wooden poles with concrete poles. These will have a number of benefits such as: reduced visual intrusion from the current haphazard conductors dangling along the service routes and sometimes close to roofs and verandahs of houses, reduce rampant short circuiting risks from overhead sagging bare conductors, which frequently collide during rainy and windy days weather thereby causing short circuiting and power
outages in the city. The concrete poles are reliable, durable and not prone to termite attacks amongst others;
d. The plan to use concrete poles and insulated conductor cables will also eliminate rampant illegal power connections and thefts that affect the service. The illegal connectors will find it hard to climb concrete poles as opposed to wooden poles;
e. The project will boost the communications sector. Mobile telecommunication booster stations in and around Juba operate through diesel generators on 24-hour basis which makes their services expensive due to high cost of fuel. Charging of mobile phones and operations of internet cafes are expected to be at accessible costs once there is reliable and fairly cheaper power supply;
f. Improved power distribution will be an incentive to enhanced investment climate in Juba City. At the moment, most investments such as hospitality industry (hotels etc), Juba Breweries and a host of others, are operated through electricity from generators to run their operations which in the end translates to higher costs of the services and goods they provide;
g. In addition, the project will lead to reduced noise pollution from widespread individual power generators operated throughout Juba city and its environments to run businesses and facilities. At the moment, due to SSEC’s failure to supply power to its consumers, all electricity operated businesses in the city of Juba are run with power from generators of varying sizes and capacities, which leads to pollution from carbon emission in the city;
h. Improvement and extension of the electricity will lead to improved security in the city through better street lighting, which will contribute to its improved security. It is proposed that, about 2,250 street light points will be installed which will boost the security in the city;
i. It is also noted that, traffic management is increasingly becoming a challenge in Juba City. An investor had installed some traffic signaled lights at some junctions in the city which reportedly operated for less than three months before the entire system collapsed. When the project becomes operational, it is hoped high quality traffic control signaled lights will be installed to manage traffic;
j. Furthermore, the extension of electricity will bring about improved delivery of health services and general better operations of Juba Teaching Hospital whose full operations are hampered due to lack of electricity. In an effort to deliver its services to the population, each of the key departments such as Out Patient Department (OPD), labor unit, ophthalmology, mortuary, blood bank, water supply, incubation nursery, and Integrated disease unit each has a dedicated generator. To run all these generators on a daily basis requires about 1,200 liters of diesel which costs SSP 7,200/day let alone other associated costs;
k. It is envisaged that, improvement and extension of the electricity distribution grid can be a stimulus to improve operations of other utility providers especially water supply. Currently Juba city has very limited access to piped water system this is reportedly attributed to a number of challenges amongst others, including limited power supply;
l. According to 2011 statistics, urban unemployment in South Sudan was estimated to be at 12% (women 13% and men 11%). The project will present an opportunity for short-term employment to the local communities in the city. The contractor will likely recruit labor from the communities into semi-skilled and unskilled jobs. This is likely to benefit both male and female youth residing in the project area. Evidence shows that women are
equally capable of performing manual jobs when given the opportunity. There will therefore be short term employment opportunities to the local people during project implementation which will provide source of livelihood to the people;
m. Lack of reliable electricity is a disincentive towards acquisition of household items such as fridges and television sets. During consultations, women welcomed the project emphasizing that, it will encourage families acquire household electronics and gadgets such as fridges which will facilitate easy planning and running of their homes. At the moment, families find it difficult to stock fresh food items due to lack of fridges and this has implications on the livelihoods and general running of homes. Erratic and unreliable power supply from generators ruins fridges and television sets; and
n. As a consequence the only source of energy has been individual diesel generators for the majority of businesses and the well-off, leaving the small and micro enterprises such the small restaurants “mataam” operated by women groups (Rabita) who rely on night hours to prepare the following day’s sales to turn to kerosene and candles for domestic lighting. The cost comparison between energy cost from SSEC and running diesel generators is at least 10 times more; and the low income households have been spending at least SDG8 per day on alternative sources of lighting, representing approximately 15% of their daily sales. This project will therefore help reduce cost of energy across the board.

Negative environmental and social impacts

The anticipated negative impacts of the planned project will include following:
  ❖ Soil erosion concerns arising from the erection of poles for the distribution lines will involve digging and later back filling and if poorly compacted, loose soils may be eroded leading to dust on the road and siltation of drainage channels in the town. This will be mitigated through proper compaction of the poles holes;
  ❖ Furthermore, clearing of vegetation in the Right of Way will lead to loss of vegetation. However, vegetation clearing will be restricted to existing road reserves and in the planned alignments or routes for the distribution lines which reduces loss of vegetation;
  ❖ The works along the road will likely affect traffic flow during its implementation along the roads. This will be mitigated through working together with the traffic police to help manage the traffic on the project;
  ❖ From climate change perspective, the operations of the thermal power plant once rehabilitated will lead to continued generation of carbon emissions from thermal diesel generators operated by SSEC. However, SSEC has integrated measures geared towards efficient combustion of fossil fuels as well as mechanism for reduced carbon emission as part of the scope of work in the planned rehabilitation of the thermal generation plant equipment;
  ❖ There are concerns regarding management of conductors and poles that will be rendered useless from rehabilitation of the distribution lines. However, SSEC plans that the existing 11kv distribution lines will receive minimal rehabilitation involving replacement of wooden poles with concrete poles. Usable aluminum bare conductors as well as transformers and some wooden poles will be used for power distribution in some towns such as in Wau, Malakal and Yei;
Accidents and injuries to the workers during project implementation can be occupational health and safety concern which is to be mitigated through the provision of PPEs to the workers by the contractor;

The contractor will likely set up a temporary campsite as a base for his operations and storage of equipment and materials (but not for accommodation of workers). The operations of the campsite can present a number of concerns ranging from, security risks, fires, waste management, noise and a host of issues, which can cause conflicts and various other social ills. It is proposed that:

- Any possible land take for the project especially for the camp site will be fully compensated for in accordance with the South Sudan land laws;
- To address security concerns in the campsite, there will be need for security checkpoint at the gate to register entry and exit of traffic and visitors and cards issued for the time such visitors will be in the camp site;
- Proper sanitation facilities will be put in place at the campsite; and
- Cleanliness and general hygiene at the campsite will be handled through engaging workers to do cleaning and general up keep of the campsite.

Vandalism and theft of installations after construction leading to electrocution. This continues to be a major problem in neighboring countries like Uganda where vandals tend to steal transformer oils as well as some of the distribution related equipment. This impact is expected to be a small negative impact and is to be mitigated through:

- SSEC and the Project Implementation Team (PIT) to sensitize the communities on the negative effects of stealing and vandalising electrical installations. The sensitization messages to be conveyed through local radio programmes and in places of worship (churches and mosques);
- During construction, the contractors shall hire those workers who have been vetted by their local area leadership and with letters of introductions;
- Project equipment shall be guarded during construction and workers will be provided with identification tags to reduce intruders to working areas; and
- Contractors to work closely with area local leaderships in Payams and Bomas to help address security and safety at the site and the campsite.

Fears over discrimination in terms of employment opportunities in which contractors can employ only men and exclude women or local communities from the locality of the project. This can create some sentiments that can create animosity towards workers. It is proposed that, the contractor endeavours to offer some jobs to women and local communities. Consideration could be given to women to be employed in areas of welfare management, traffic control at work sites (flag person) and others could be encouraged to prepare food for sale to the workers;

HIV/AIDS prevalence in Juba is currently estimated to at 4-6% that is higher than SS figures of 3% as per the National Census of 2008. This means, workers in the campsite have higher risks of contracting the disease. It is proposed that, Juba Teaching Hospital Anti-Retroviral Treatment (ART) centre undertakes to sensitize the workers on HIV/AIDS;

Potential spillages from transformer oil that can be a source of concern in the project. However, transformer oil is not normally stored onsite as such; it is transported to the
sites for purposes of filling transformers that may have leaked off their oil during transportation, storage, or installation. Therefore, storage time of transformer oil onsite is to be limited to at least two days. It is suggested that, all transformers in the campsite should be placed on wooden platforms laid in a high-density polythene bags spread with sawdust to soak away and contain oil leakage;

- Potential disruption of electricity supply to consumers during project implementation process will not present any concerns since at the moment, the network is non-functional hence, no disruption of power supply is envisaged. However, if some of the anticipated power supply sources come on board before this project is completed, then the contractor will schedule his/her work programme in consultation with SSEC to avoid disrupting power supply to the consumers;

- Possible interference with roadside businesses during construction. Some kiosks and petty traders at the road edges will likely be affected and asked to momentarily relocate (say for 2 days only). This is to be mitigated through adequate notification to enable affected persons to adjust their work with minimum interference; and

- During operation of the project, there are fears of electrocution arising from broken wires amongst others. It is important that, the population is educated through radio programmes, school, churches and mosques and other avenues on the risks associated with electricity. Furthermore, SSEC will have its emergency response team in place on 24hour to respond to such problems. The infrastructure to be installed i.e. concrete poles and insulated conductors will all mitigate such risks in the project.

c) Enhancement and mitigation program

Once the ESMP is submitted to MoE upon review and approval and a Letter of Authorization with conditions will be issued. The conditions therein the Letter of Authorization will be incorporated into the overall project design and costing in the Bills of Quantities (BoQs). MoE, the Environment Unit in SSEC and the Environment Management Specialist from the consultant team will be responsible for overseeing the implementation of environment, gender and HIV measures in the project. In addition, the PIT should be able to take up environmental and social issues on the project that will be raised in the Bank’s routine supervision missions which will all serve to enhance the mitigation measures.

MoE emphasizes the need to have an Environmental Audit of the Project commissioned one year after the start of its implementation. MoE urges that, in the event by then SS will not be having its environment law in place, the Environmental Audit should be conducted in accordance with the Bank’s procedures. The Bank will be responsible for commissioning the environmental audits. The Audit will be able to bring to light some of the emerging environmental issues during the period of project implementation and proposed compliance interventions for such concerns. This will add to enhancement of mitigation measures in the project. In the present circumstances regarding environmental management framework in SS, these arrangements could suffice.

In addition, it is also recommended that, the contractor undertakes proper decommissioning of the works yard site as follows:
At the end of the project, it is recommended that, the contractor undertakes to decommission the site by:
a. Relocating all un-used equipment to their other possible storage site outside the project;
b. Demolishing any additional structures that could have been constructed/installed by the contractor. The sites should be leveled and any additional structures may be left onsite after securing a written request to do so from the landlord;
c. Dispose-off all the generated waste in accordance with the waste management plan and waste management regulations;
d. Clean up the site; and
e. Handover the site to the landlord and demobilize/withdraw of all personnel that had been posted to the yard including the security personnel. Handover acknowledgement should be written/ documented.

**d) Monitoring program and complementary initiatives**

The overall objective of environmental and social monitoring is to ensure that mitigation measures are implemented and are effective. Environmental and social monitoring will also enable response to new and developing issues of concern during project implementation and therefore, it will ensure that project activities comply and adhere to environmental provisions and standard specifications of both the Bank and GoRSS. The responsibility for the environmental monitoring will largely lie with the SSEC and MoE. MoE has had its key staff undergo on-the-job training at NEMA in Kenya on various aspects of environmental reviews, monitoring and compliance which will be helpful in handling environmental and social aspects of this project.

Some of the key monitoring indicators of focus will include amongst others:

- a. Soil erosion control measures instituted;
- b. Number of sensitization meetings held for the community through radio on aspects of the project etc.;
- c. Campsite health and waste management status;
- d. Involvement of women in the project activities which will include number of women employed in the project;
- e. Safety aspects on the project i.e. provision of PPEs for the workers; and
- f. HIV/AIDS sensitisation meetings held.
- g. Women’s solar program

**e) Institutional arrangements and capacity building requirements**

The Government of the Republic Southern Sudan will put in place a Project Implementation Team (PIT) that will comprise MoE, MoEDI&WRs and SSEC and the Supervising Consultant. The PIT will ensure the technical, administrative, accounting; financial, organizational as well as environmental and social aspects of the project are adhered to during implementation in line with the Bank’s requirements.

The capacity at both Ministry of Electricity and the SSEC, for effective environmental and social due diligence, does not exist. The needs for environmental and social impact assessments and monitoring of compliance with international standards and the local laws and regulations (when promulgated) shall increase as activities of the SSEC and Ministry of Electricity and Dams are charged with improvements and expansion of the electricity services in the country. To this effect, the SSEC and the Ministry of Electricity, Dams, Irrigation and Water Resources agreed to
create and recruit environmental and social experts in their establishments. The SSEC environmental and social experts shall be expected to supervise implementation of the ESMP in this project while at the Ministry of Electricity, Dams, Irrigation and Water Resources will be expected to monitor such activities and review implementation progress reports in line with the Ministry’s mandate. At least 2 positions will be created as an initial step in SSEC, and the Project Implementation Team shall include in its key staff an environmental specialist. In addition, the Water Division of the Ministry of Electricity, Dams, Irrigation and Water Resources has an environmental unit which provides environmental monitoring services as well; and the Ministry of Gender, Child and Social Welfare shall monitor the gender sensitization and solar lamp distribution program.

In the short-term, it is agreed that, two new university graduates interns be recruited at the Ministry and SSEC to create immediate capacity as an interim measure while positions are being formalized. The graduate interns would be subjected to practical training or attachments to environmental institutions in the region for specialized and targeted training to be considered under the capacity building component of this project. The SSEC in collaboration with the Ministry of Electricity and Dams will submit the capacity building (training and attachment) proposal to the Bank for consideration.

In addition, the Supervising Consultant will have in his/her Team an Environment Management Specialist who will be responsible for ensuring that there is compliance of the project activities with both contract and environmental conditions of the Bank. The Specialist will also assist the Utility in building the capacity of environmentalists through on-the-job training and mentoring. These will all provide some measures of ensuring there is sustainability in the Utility’s interventions beyond this project.

f) Public consultations and disclosure requirements

During the preparation of the ESMP, public consultations were held with the staff of South Sudan Electricity Corporation, Ministry of Electricity, Dams, Irrigation and Water Resources, Ministry of Environment, Ministry of Gender, Child and Social Welfare, South Sudan Urban Water Corporation, Management of Juba Teaching Hospital (JTH), Integrated Diseases Unit (JTH), Ministry of Interior and Wildlife Conservation as well as with development partners such as Norfund, Japan International Corporation Agency (JICA). In addition, consultations were also held with the Directorate of Environmental Health and Sanitation in Juba City Council. Other meetings were also held with Central Equatoria Women Union, Juba Women Cooperative and the Roots Project. The study team also held meetings with some metal fabricators, ice cream makers, saloon operators and restaurant operators. At the markets in Juba, consultations were held with charcoal sellers as well as with food (fresh and cooked) vendors.

In all the consultations, the stakeholders re-echoed the need for availability of reliable and affordable electricity that would help in boosting their operations as well as delivery of services. The views and comments of the public have all been incorporated into the ESMP and incorporated into the design of the project.
As part of the approval process, South Sudan Electricity Corporation will submit ten (10) hard copies and one (1) soft of the ESMP to the Ministry of Environment for review and clearance on a No-Objection basis. MoE will forward copies of the ESMP to lead agencies such as Juba City Council, Ministry of Electricity, Dams, Irrigation and Water Resources and Ministry of Environment at Central Equatoria State as well as circulate copies to Juba Public Library and Juba University library. In so doing, the ESMP will be disclosed and shared with key stakeholders including communities that are likely to be impacted by the project. The information shall also be available in key newspapers in circulation in Juba City.

g) Complementary Initiatives

i) Provision of Solar Lamps: The unavailability of reliable and affordable electricity has meant a 10 fold cost increase due to running of diesel generators as power back-ups for those operating businesses such as hotels, banks, restaurants, and even homes that can afford it; while the micro catering operators spend approximately 15% of their turnover on energy. The project has included in its design provision of solar lumps to approximately 1000 women (at a cost of USD 150,000) to the micro food venders in 6 main markets of the City.

ii) HIV/AIDS, STI and TB awareness and prevention: The 2012 Household Health Survey of Central Equatoria State showed that only 22.2% had comprehensive knowledge about HIV/AIDS. The IDU has enrolled (June 2013) on its ART program 4,441 persons of whom 60% are women (implying men are likely not being reached). Although the project is not expected to exacerbate the spread of communicable diseases which tend to be associated with facilities such as workers’ camp, it has, however, included a program of HIV/AIDS, STI and TB awareness and prevention campaigns for Juba City. This will give an opportunity to women groups and youth to have an intensified information campaign program on HIV/AIDS awareness and prevention to be implemented in the City in collaboration with the Integrated Diseases Unit (IDU) of Juba Teaching Hospital. The project will hence provide resources to conduct 16 activities of Group Counseling for Clients on ART; and conduct Counseling and Treatment campaigns in 6 locations for a period of 3months. The two activities are expected to be patronized by at least 4,000 people.

h) Estimated costs

A number of environmental and social intervention costs will be integrated into the project overall costs such hence built into the main contractor’s contract. These would include tree planting and grassing, where applicable especially at borrow pits and material sites; restoration costs, provision of access to homesteads, site meetings, monitoring and facilitation. The following summarises additional and distinctive environmental and social mitigation costs:
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<th>No.</th>
<th>Mitigation Activity</th>
<th>Cost (USD)</th>
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<td>01.</td>
<td>Environmental Monitoring</td>
<td>50,000</td>
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<tr>
<td>02.</td>
<td>Complementary Initiatives- Tree Planting</td>
<td>25,000</td>
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<tr>
<td>03.</td>
<td>Complementary Initiatives (provision of solar lamps for small-scale women entrepreneurs in the City)</td>
<td>150,000</td>
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<td>04.</td>
<td>Environmental Consultant to mentor Environmentalists at SSEC</td>
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<td>05.</td>
<td>HIV/AIDS mainstreaming</td>
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<td>06.</td>
<td>Gender mainstreaming</td>
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<td>07.</td>
<td>Environmental Audit costs</td>
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<td>08.</td>
<td>Safety measures (PPEs etc.)</td>
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<td>09.</td>
<td>Environmental Training and capacity building for SSEC</td>
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<td>10.</td>
<td>Environmental Mitigation (BoQ)</td>
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<td>TOTAL</td>
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The total project cost for the implementation of the environmental and social measures in the project is estimated to be US$585,000 which will be incorporated in the overall project costs.

i) Implementation schedule and reporting

Measures outlined in the ESMP will be implemented under the overall project implementation schedule as almost all of the environmental and social interventions will be incorporated into the project design and implementation accordingly. The reporting on the implementation process and progress of the ESMP provisions will be done in line with the overall project framework and any environmental and social aspects requiring actions will be addressed by the PIT and the Bank.