



# **Environmental and Social Management Plan**

## **Building Resilient Communities and Ecosystems through Restoration of Wetlands and Associated Catchments in Uganda**

## Disclaimer

This Environmental and Social Management Plan has been prepared for the submission of the proposal to the Green Climate Fund for the purposes of assisting in the assessment of the potential environmental and social impacts of the “*Building Resilient Communities and Ecosystems through Restoration of Wetlands and Associated Catchments in Uganda*” proposal. This Environmental and Social Management Plan has been prepared prior to undertaking an Environmental and Social Impact Assessment (or commonly known as an Environmental Impact Assessment). Normally, an Environmental and Social Management Plan would be prepared following baseline studies and then the subsequent impact assessment contained within the Environmental and Social Impact Assessment and would form the basis for the construction and operational environmental and social management plans.

As no Environmental and Social Impact Assessment have been undertaken for the projects, this Environmental and Social Management Plan has been prepared solely on the author’s experience with projects of this nature and in consideration of international good practice for these types of projects.

## Assumptions

The following assumptions have been made in the preparation of this Environmental and Social Management Plan:

1. all components of the proposal will have an Environmental and Social Impact Assessment/s prepared prior to the construction and operation of the specific project components;
2. none of the projects will require the displacement of people;
3. none of the projects will be conducted in wetlands that have otherwise been degraded through anthropogenic impacts;
4. appropriate modelling will be conducted prior to the final design of any significant changes to wetland characteristics and hydrological processes to ensure any works will not have significant impacts on hydrological processes;
5. appropriate erosion and sediment control will be undertaken during all stages of the projects; and
6. there will be no release of pollution and/or chemicals as a result of the projects.

## Environmental and Social Management Plan for Building Resilient Communities and Ecosystems through Restoration of Wetlands and Associated Catchments in Uganda Project

1. This document is an Environmental and Social Management Plan (ESMP) for the “*Building Resilient Communities and Ecosystems through Restoration of Wetlands and Associated Catchments in Uganda*” proposal submitted to the Green Climate Fund for funding. The project will provide the restoration and rehabilitation of wetlands, improved agricultural practices and alternative livelihood options in the wetland catchment; and strengthening access to climate and early warning information to farmers and other target communities to support wetland management.

### Governing Legislation

2. The legislative and policy basis for the provision of wetland protection projects comes under a number of piece of legislation including but not limited to the:
  - a. *National Environment Act 1998*;
  - b. *National Environment Water Act 1998*.
  - c. *National Environment (Audit) Regulations 2009*;
  - d. *National Environment Impact Assessment Regulations 1998*;
  - e. *National Environment Forestry and Tree Planting Act 2003*;
  - f. *National Environment (Minimum Standards for Discharge of Effluents into Water or Land) Regulations*;
  - g. *National Environment (Wetlands, Riverbanks and Lakeshores Management) Regulations*;
  - h. *Water Act 1997*;
  - i. *Wildlife Act 1996*; and
  - j. *Land Act (Cap 227)*.

### *National Environment Act 1998 and National Environment Impact Assessment Regulations 1998*

3. Environmental management and the requirement for an environmental impact assessment are controlled by the *National Environment Act 1998 and National Environment Impact Assessment Regulations 1998*. The Ministry of Water and Environment (MoWE) administers the Act and Regulations. Specifically, Part 5 of the Act (sections 19 and 20) sets out the process and procedures for the undertaking of an Environmental Impact Assessment (EIA).
4. Of importance, sections 36 and 37 relate to the restriction on the use of wetlands and management of wetlands respectively. Section 36(1) specifically stated that *no person shall*:
  - a. *reclaim or drain any wetland*;
  - b. *erect, construct, place, alter, extend, remove or demolish any structure that is fixed in, on, under or over any wetland*;
  - c. *disturb any wetland by drilling or tunnelling in a manner that has or is likely to have an adverse effect on the wetland*;
  - d. *deposit in on or under any wetland any substance in a manner that has or is likely to have an adverse effect on the wetland*;
  - e. *destroy, damage or disturb any wetland in a manner that has or is likely to have an adverse effect on any plant or animal or its habitat*;
  - f. *introduce or plant any exotic or introduced plant or animal in a wetland,*  
*unless he or she has written approval from the authority given in consultation with the lead agency.*
5. Section 36(2) states that the *Authority may, in consultation with the lead agency, and upon an application to carry on any activity referred to in subsection (1), make any investigation it considers necessary, including an environmental impact assessment referred to in section 19 to determine the effect of that activity on the wetland and the environment in general.*

### Overview - Institutional Requirements for the Environmental and Social Management Plan

6. As the project will be funded by the Green Climate Fund through the UNDP, all works (including but not limited to civil and construction contractors) must adhere to the outcomes of the ESIA (once

prepared) and this or a modified ESMP (following an ESIA) including complying with the appropriate avoidance and mitigation measures. The ESIA and this or a modified ESMP will be assessed for each project by the DoE and UNDP prior to any works being undertaken. The ESMP identifies potential risks to the environment and social matters from the projects and outlines strategies for managing those risks and minimising undesirable environmental and social impacts.

7. The MoWE will be responsible for the supervision of the ESMP. The UNDP will gain the endorsement of the MoWE and will ensure the ESMP is adequate and followed. The supervising engineer will ensure timely remedial actions are taken by the contractor where necessary.

### **Objectives of the Environmental and Social Management Plan**

8. An ESMP is a management tool used to assist in minimising the impact to the environment and reach a set of environmental objectives. To ensure the environmental objectives of the projects are met, this ESMP will be used by the contractor to structure and control the environmental management safeguards that are required to avoid or mitigate adverse effects on the environment.
9. The environmental and social objectives of the projects are to:
  - a) restore and rehabilitate wetlands to provide functioning hydrological systems and increase ecosystem resilience;
  - b) improved agricultural practices and alternative livelihood options in the wetland catchment to reduce pressures on wetlands;
  - c) provide alternate income to those currently using wetland areas for agricultural activities;
  - d) develop and strengthen access to climate and early warning information to farmers and other target communities to support wetland management and improve agricultural outputs;
  - e) provide training to local staff;
  - f) encourage good management practices through planning, commitment and continuous improvement of environmental practices;
  - g) comply with all applicable laws, regulations and standards for the protection of the environment; and
  - h) adopt the best practicable means available to prevent or minimise environmental impact.
  - i) describe all monitoring procedures required to identify impacts on the environment; and
  - j) provide an overview of the obligations of MoWE and UNDP staff and contractors in regard to environmental obligations.
10. The ESMP will be updated from time to time by the contractor in consultation with the UNDP staff and MoWE.

### **General Management Structure and Responsibilities**

11. The UNDP and MoWE are accountable for the provision of specialist advice on environmental issues to the contractor and for environmental monitoring and reporting. The MoWE will assess the environmental performance of the contractor in charge of construction throughout the project and ensure compliance with the ESMP.
12. The MoWE will be responsible for monitoring the implementation of the ESMP by relevant supervisory staff during construction. During operations the contractor will be accountable for implementation of the ESMP. Contractors working on the projects have accountability for preventing or minimising environmental and social impacts.

### **Administration**

13. The MoWE will be responsible for the revision or updates of this document during the course of work. It is the responsibility of the person to whom the document is issued to ensure it is updated.
14. The site supervisor will be responsible for daily environmental inspections of the construction site. The MoWE will cross check these inspections by undertaking monthly audits.
15. The contractor will maintain and keep all administrative and environmental records which would include a log of complaints together with records of any measures taken to mitigate the cause of the complaints.
16. The contractor will be responsible for the day to day compliance of the ESMP.

17. MoWE will be the implementing agency and will be responsible for the implementation and compliance with the ESMP via the contractor. The ESMP will be part of any tender documentation.
18. The Supervising Engineer/Project Manager will supervise the contractor, while the MoWE will be responsible for environment and social issues.

#### **Economic Displacement during project activities**

19. No people will be displaced or relocated will be relocated as a result of the project. However, there is the potential for there to be a reduction in the availability of land for crop production through the rehabilitation of the wetlands. There will potentially be an impact on what farmers currently utilize being converted back into wetlands.
20. Prior to any work, carefully planning and stakeholder consultation will be undertaken prior to the construction and development of any new wetlands and the rehabilitation of existing wetlands. To ensure there is limited impact on people, crop diversification is planned. This will improve the livelihoods overall of people working in and around the wetlands and increase their income potential. Where available, local people will be employed to undertake construction and maintenance of the wetlands, thereby providing a social benefit to the community.

#### **Land Requirements for Meteorological Stations**

21. All meteorological stations are proposed to be constructed on land currently owned by the Government of Uganda. As such, there is no requirement for any form of land acquisition.

#### **Indigenous Peoples and Ethnic Minorities**

22. As part of due diligence, an analysis and consultations were undertaken as to the likelihood of any of the project's activities involving indigenous people and/or ethnic minorities. No indigenous people and/or ethnic minorities are known to occur in the project area.

#### **Public Consultation and Environmental and Social Disclosure**

23. The projects are designed to improve restore and rehabilitate wetlands, install an early warning system; and improve agricultural practices and alternative livelihood options in the wetland catchment. Agricultural activities are currently being undertaken within wetlands that are proposed to be restored and rehabilitated although it is unknown if people currently reside within wetland footprints. During site selection, MoWE will ensure there are no resettlement issues and any individuals that may have their livelihoods impacted are provided with alternate livelihoods as proposed as part of the project. The ESIA's will also include public consultation as part of their stakeholder engagement plan and this information will be included in any modified ESMP.
24. Large, widespread consultation with affected communities have been undertaken to inform the detailed design of the project. It is anticipated that based on the communities' needs, the projects will be fully accepted.
25. The UNDP and MoWE will develop and release Community Flyers on a regular basis to provide interested stakeholders with an update on the construction status of the projects. A publicised telephone number will be maintained throughout the construction of all projects to serve as a point of contact for enquiries, concerns and complaints. All enquiries, concerns and complaints will be recorded on a register and the appropriate manager will be informed. All material must be published in English, Swahili and Luganda.
26. Where there is a community issue raised, the following information will be recorded:
  - a) time, date and nature of enquiry, complaint or concern;
  - b) type of communication (eg telephone, letter, personal contact);
  - c) name, contact address and contact number;
  - d) response and investigation undertaken as a result of the enquiry, complaint or concern; and
  - e) actions taken and name of the person taking action.
27. Some enquiries, complaints and concerns may require an extended period to address. The complainant(s) will be kept informed of progress towards rectifying the concern. All enquiries, complaints and concerns will be investigated and a response given to the complainant in a timely manner.

28. A nominated contractor staff will be responsible for undertaking a review of all enquiries, complaints and concerns and ensuring progress toward resolution of each matter.

#### **Site Supervisor**

29. The site supervisor is responsible for ensuring compliance with the ESMP. The site supervisor will provide advice on effective environmental management of the project to the UNDP Staff, MoWE and engineers and all construction site personnel. The site supervisor is to also ensure the environmental awareness of project personnel is maintained through appropriate training. A compliance report on mitigation measures will be submitted by the UNDP to MoWE for the civil contractor. An independent review of the compliance may be undertaken during construction and post construction where deemed necessary.

#### **Environmental Procedures and Site and Activity-Specific Work Plans/Instructions**

30. Environmental procedures provide a written method describing how the management objectives for a particular environmental element are to be obtained. They contain the necessary detail to be site or activity-specific and are required to be followed for all construction works. Site and activity-specific work plans and instructions are to be issued through the following methods:

#### **Environmental and Incident Reporting**

31. Any incidents, including non-conformances to the procedures of the ESMP are to be recorded using an Incident Record and the details entered into a register. For any incident that causes or has the potential to cause material or serious environmental harm, the site supervisor shall notify MoWE as soon as possible. The contractor must cease work until remediation has been completed as per the approval of MoWE.

#### **Daily and Weekly Environmental Inspection Checklists**

32. A daily environmental checklist is to be completed at each work site by the relevant site supervisor and maintained within a register. The completed checklist is forwarded to MoWE for review and follow-up if any issues are identified. A weekly environmental checklist is to be completed and will include reference to any issues identified in the daily checklists completed by the Site Supervisors.

#### **Corrective Actions**

33. Any non-conformances to the ESMP are to be noted in weekly environmental inspections and logged into the register. Depending on the severity of the non-conformance, the site supervisor may specify a corrective action on the weekly site inspection report. The progress of all corrective actions will be tracked using the register. Any non-conformances and the issue of corrective actions are to be advised to MoWE.

#### **Complaints Register and Grievance Redress Mechanism**

34. During the construction and implementation phases of any project, a person or group of people can be adversely affected, directly or indirectly due to the project activities. The grievances that may arise can be related to social issues such as eligibility criteria and entitlements, disruption of services, temporary or permanent loss of livelihoods and other social and cultural issues. Grievances may also be related to environmental issues such as excessive dust generation, damages to infrastructure due to construction related vibrations or transportation of raw material, noise, traffic congestions, decrease in quality or quantity of private/ public surface/ ground water resources during irrigation rehabilitation, damage to home gardens and agricultural lands etc.
35. Should such a situation arise, there must be a mechanism through which affected parties can resolve such issues in a cordial manner with the project personnel in an efficient, unbiased, transparent, timely and cost-effective manner. To achieve this objective, a grievance redress mechanism has been included in ESMP for this project
36. The project allows those that have a complaint or that feel aggrieved by the project to be able to communicate their concerns and/or grievances through an appropriate process. The Complaints Register and Grievance Redress Mechanism set out in this ESMP and to be used as part of the project will provide an accessible, rapid fair and effective response to concerned stakeholders, especially any vulnerable group who often lack access to formal legal regimes.
37. While recognizing that many complaints may be resolved immediately, the Complaints Register and Grievance Redress Mechanism set out in this ESMP encourages mutually acceptable resolution of

issues as they arise. The Complaints Register and Grievance Redress Mechanism set out in this ESMP has been designed to:

- a. be a legitimate process that allows for trust to be built between stakeholder groups and assures stakeholders that their concerns will be assessed in a fair and transparent manner;
  - b. allow simple and streamlined access to the Complaints Register and Grievance Redress Mechanism for all stakeholders and provide adequate assistance for those that may have faced barriers in the past to be able to raise their concerns;
  - c. provide clear and known procedures for each stage of the Grievance Redress Mechanism process, and provides clarity on the types of outcomes available to individuals and groups;
  - d. ensure equitable treatment to all concerned and aggrieved individuals and groups through a consistent, formal approach that, is fair, informed and respectful to a complaint and/or concern;
  - e. to provide a transparent approach, by keeping any aggrieved individual/group informed of the progress of their complaint, the information that was used when assessing their complaint and information about the mechanisms that will be used to address it; and
  - f. enable continuous learning and improvements to the Grievance Redress Mechanism. Through continued assessment, the learnings may reduce potential complaints and grievances.
38. In order to ensure that any grievance that may arise is resolved in a manner that will accrue maximum benefits to both the project and affected parties, the following aspects were taken into consideration in developing the grievance redress mechanism:
- a. special attention to cultural norms in Uganda;
  - b. will build on existing national mechanisms in Uganda;
  - c. ensure that community have information about the project activities, selection criteria and possible impact on them;
  - d. to build up productive relationships among the stakeholders including and affected parties;
  - e. provide a mechanism for the affected parties to negotiate and influence the decisions and policies of the project which might adversely affect them;
  - f. mitigate or prevent adverse impacts of the project on the environment and produce appropriate corrective or preventive action;
  - g. to harmonize project activities with the activities of potentially affected parties to avoid grievances or disputes if possible before they arise; and
  - h. should a grievance or dispute arise, provide a forum for addressing such issues at the lowest possible level so that they are resolved as and when they occur.
39. Eligibility criteria for the Grievance Redress Mechanism include:
- a. Perceived negative economic, social or environmental impact on an individual and/or group, or concern about the potential to cause an impact;
  - b. clearly specified kind of impact that has occurred or has the potential to occur; and explanation of how the project caused or may cause such impact; and
  - c. individual and/or group filing of a complaint and/or grievance is impacted, or at risk of being impacted; or the individual and/or group filing a complaint and/or grievance demonstrates that it has authority from an individual and or group that have been or may potentially be impacted on to represent their interest.
40. The Grievance Redress Mechanism has been designed to be problem-solving mechanism with voluntary good-faith efforts. The Grievance Redress Mechanism is not a substitute for the legal process. The Grievance Redress Mechanism will as far as practicable, try to resolve complaints and/or grievances on terms that are mutually acceptable to all parties. When making a complaint and/or grievance, all parties must act at all times, in good faith and should not attempt to delay and or hinder any mutually acceptable resolution.
41. A complaints register will be established to record any concerns raised by the community during construction. Any complaint will be advised to the UNDP and MOWE within 24 hours of receiving the complaint. The complaint will be screened. Following the screening, complaints regarding corrupt practices will be referred to the UNDP for commentary and/or advice along with the Uganda Inspector General of Government.

42. A summary list of complaints received and their disposition must be published in a report produced every six months in English or appropriate local language.
43. In order to ensure smooth implementation of the Project and timely and effectively addressing of problems that may be encountered during implementation, a robust Grievance Redress Mechanism, which will enable to the Project Authorities to address the grievances of the stakeholders of the Project has been established.
44. All complaints regarding social and environmental issues can be received either orally (to the field staff), by phone, in complaints box or in writing to the UNDP, MoWE or the Construction Contractor. A key part of the grievance redress mechanism is the requirement for the project proponent and construction contractor to maintain a register of complaints received at the respective project site offices. All complainants shall be treated respectfully, politely and with sensitivity. Every possible effort should be made by the project proponent and construction contractor to resolve the issues referred to in the complaint within their purview. However, there may be certain problems that are more complex and cannot be solved through project-level mechanisms. Such grievances will be referred to the Grievance Redress Committee. It would be responsibility of the MoWE to solve these issues through a sound / robust process.
45. The Grievance Redress Mechanism has been designed to ensure that an individual and/or group are not financially impacted by the process of making a complaint. The Grievance Redress Mechanism will cover any reasonable costs in engaging a suitably qualified person to assist in the preparation of a legitimate complaint and/or grievance. Where a complaint and/or grievance is seen to be ineligible, the Grievance Redress Mechanism will not cover these costs.
46. Information about the Grievance Redress Mechanism and how to make a complaint must be placed at prominent places for the information of the key stakeholders.
47. The Safeguards officer in the PMU will be designated as the key officer in charge of the Grievance Redress Mechanism. The Terms of Reference for these positions (as amended from time to time) will have the following key responsibilities:
  - a. PMU – Safeguards Officer
    - (i) coordinate formation of Grievance Redress Committees before the commencement of constructions to resolve issues;
    - (ii) act as the focal point at the PMU on Grievance Redress issues and facilitate the resolution of issues within the PMU;
    - (iii) create awareness of the Grievance Redress Mechanism amongst all the stakeholders through public awareness campaigns;
    - (iv) assist in redress of all grievances by coordinating with the concerned parties;
    - (v) maintain information on grievances and redress;
    - (vi) monitor the activities of MoWE on grievances issues; and
    - (vii) prepare the progress for monthly/quarterly reports.
48. A two tier Grievance Redress Mechanism structure has been developed to address all complaints in the project. The first tier redress mechanism involves the receipt of a complaint at the local/village and/or Divisional Secretariat level. The stakeholders are informed of various points of making complaints (if any) and the PMU collect the complaints from these points on a regular basis and record them. This is followed by coordinating with the concerned people to redress the Grievances. The Safeguards Officer of the PMU will coordinate the activities at the respective district local government level to address the grievances and would act as the focal point in this regard. The Community Development Officer of the Local Government or in the absence of the Community Development Officer, any officer given the responsibility of this would coordinate with the Safeguards and Gender Manager of the PMU and MoWE in redressing the grievances. The designated officer of the Local Government is provided with sufficient training in the procedure of redress to continue such systems in future.
49. Following the receipt of a complaint, the following entities would be informed:
  - a. Respective Local Council;
  - b. Concerned Parish Chief
  - c. District Environment Officer

- d. Chief Administrative Officer
  - e. District Police Commander
  - f. Executive Director, National Environment Management Authority
  - g. Sub-county Environment Secretary; and
  - h. Resident District Commissioner.
50. The complaints can be made orally (to the field staff), by phone, in complaints box or in writing to the UNDP, MoWE or the Construction Contractor. Complainants may specifically contact the Safeguards Officer and request confidentiality if they have concerns about retaliation. In cases where confidentiality is requested (i.e. not revealing the complainant's identity to UNDP, MoWE and/or the Construction Contractor). In these cases, the Safeguards Officer will review the complaint, discuss it with the complainant, and determine how best to engage project executing entities while preserving confidentiality for the complainant.
  51. As soon as a complaint is received, the Safeguards Officer would issue an acknowledgement. The Community Development Officer receiving the complaint should try to obtain relevant basic information regarding the grievance and the complainant and will immediately inform the Safeguards Officer in the PMU.
  52. The PMU will maintain a Complaint / Grievance Redress register at the Provincial Level. Keeping records collected from relevant bodies is the responsibility of PMU.
  53. After registering the complaint, the Safeguards Officer will study the complaint made in detail and forward the complaint to the concerned officer with specific dates for replying and redressing the same. The Safeguards Officer will hold meetings with the affected persons / complainant and then attempt to find a solution to the complaint received. If necessary, meetings will be held with the concerned affected persons / complainant and the concerned officer to find a solution to the problem and develop plans to redress the grievance. The deliberations of the meetings and decisions taken are recorded. All meetings in connection with the Grievance Redress Mechanism, including the meetings of the Grievance Redress Committee, must be recorded. The Safeguards Officer for the Grievances Redress Mechanism will be actively involved in all activities.
  54. The resolution at the first tier will be normally be completed within 15 working days and the complaint will be notified of the proposed response through a disclosure form. The resolution process should comply with the requirements of the Grievance Redress Mechanism in that it should, as far as practicable, be informal with all parties acting in good faith. Further, the Grievance Redress Mechanism should, as far as practicable, achieve mutually acceptable outcomes for all parties.
  55. Should the grievance be not resolved within this period to the satisfaction of the complainant, the grievance will be referred to the next level of Grievance Redress Mechanism. If the social safeguard and gender officer feels that adequate solutions can be established within the next five working days, the officer can decide on retaining the issue at the first level by informing the complainant accordingly. However, if the complainant requests for an immediate transfer to the next level, the matter must be referred to the next tier. In any case, where the issue is not addressed within 20 working days, the matter is referred to the next level.
  56. Any grievance related to corruption or any unethical practice should be referred immediately to the Inspector General of Government and the Office of Audit and Investigation within the UNDP Stakeholder Response Unit in New York
  57. The Grievance Redress Committee formed at every district local government level would address the grievance in the second tier. A Grievance Redress Committee will be constituted for every district local government by the circulars issued by the Resident District Commissioner, who would also be the Chairman of the Committee.
  58. The Structure of the committee would be:
    - a. Resident District Commissioner – Chairman;
    - b. District Secretary for Environment;
    - c. Chairpersons of District Local Government
    - d. Representative of the non-government organization/civil society working in the area as nominated by the Resident District Commissioner;
    - e. Member of Faith Based Organisation in the district; and

- f. District Environment Officer.
59. The Social Safeguard and Gender Officer from the PMU will coordinate with the respective Resident District Commissioner in getting these Committees constituted for each District and get the necessary circulars issued in this regard so that they can be convened whenever required.
60. The Terms of Reference for the Grievance Redress Committee are:
- a. providing support to the affected persons in solving their problems;
  - b. prioritize grievances and resolve them at the earliest;
  - c. provide information to the PMU and MoWE on serious cases at the earliest opportunity;
  - d. Coordinate with the aggrieved person/group and obtain proper and timely information on the solution worked out for his/her grievance; and
  - e. study the commonly occurring grievances and advise PMU, Project Board on remedial actions to avoid further occurrences.
61. The Grievance Redress Committee will hold the necessary meetings with the aggrieved party/complainant and the concerned officer and attempt to find a solution acceptable at all levels. The Grievance Redress Committee would record the minutes of the meeting.
62. Grievance Redress Committee will communicate proposed responses to the complainant formally. If the proposed response satisfies the complainant, the response will be implemented and the complaint closed. In cases where a proposed response is unsatisfactory to the complainant, the Grievance Redress Committee may choose to revise the proposed response to meet the complainant's remaining concerns, or to indicate to the complainant that no other response appears feasible to the GRC. The complainant may decide to take a legal or any other recourse if s/he is not satisfied with the resolutions due to the deliberations of the three tiers of the grievance redress mechanism.
63. In addition to the project-level grievance redress mechanism, complainants have the option to access UNDP's Accountability Mechanism, with both compliance and grievance functions. The Social and Environmental Compliance Unit investigates allegations that UNDP's Standards, screening procedure or other UNDP social and environmental commitments are not being implemented adequately, and that harm may result to people or the environment. The Social and Environmental Compliance Unit is housed in the Office of Audit and Investigations, and managed by a Lead Compliance Officer. A compliance review is available to any community or individual with concerns about the impacts of a UNDP programme or project. The Social and Environmental Compliance Unit is mandated to independently and impartially investigate valid requests from locally impacted people, and to report its findings and recommendations publicly.
64. The Stakeholder Response Mechanism offers locally affected people an opportunity to work with other stakeholders to resolve concerns about the social and environmental impacts of a UNDP project. Stakeholder Response Mechanism is intended to supplement the proactive stakeholder engagement that is required of UNDP and its Implementing Partners throughout the project cycle. Communities and individuals may request a Stakeholder Response Mechanism process when they have used standard channels for project management and quality assurance, and are not satisfied with the response (in this case the project level grievance redress mechanism). When a valid Stakeholder Response Mechanism request is submitted, UNDP focal points at country, regional and headquarters levels will work with concerned stakeholders and Implementing Partners to address and resolve the concerns. Visit [www.undp.org/secu-srm](http://www.undp.org/secu-srm) for more details. The relevant form is attached at the end of the ESMP. The relevant form is attached as Annexure One to the ESMP.
65. The Social Safeguards Officer of the PMU will initially brief all the staff of PMU, the concerned officer in the office of the Resident District Commissioner and the Chief Administrative Officer, on the Grievance Redressal Mechanism of the Project and explain them the procedures and formats to be used including the reporting procedures. The Safeguards Officer will further brief the concerned Local Authorities, Technical staff at Sub-county and District on the Grievance Redress Mechanism of the Project and explain to them the procedures and formats to be used including the reporting procedures.
66. The Safeguard Officer of the PMU will prepare the Quarterly Report on the Grievance Redressal issues of the Project as part of quarterly reporting.

### Review and Auditing

67. The ESMP and its procedures are to be reviewed at least two month by UNDP staff and MoWE. The objective of the review is to update the document to reflect knowledge gained during the course of construction operations and to reflect new knowledge and changed community standards (values).

Any changes are to be developed and implemented in consultation with UNDP Staff and MoWE. When an update is made, all site personnel are to be made aware of the revision immediately through a tool box meeting.

### **Training of Contractors**

68. The main contractor has the responsibility for ensuring systems are in place so that relevant employees, contractors and sub-contractors are aware of the environmental and social requirements for construction, including the ESMP.
69. All construction personnel will attend an induction which covers health, safety, environment and cultural requirements.
70. All staff and contractors engaged in any activity with the potential to cause serious environmental harm (e.g. handling of hazardous materials) will receive task specific environmental training.

### **Key Environmental and Social Indicators**

71. This section identifies the Key Environmental and Social Indicators identified for the project and outlines respective management objectives, potential impacts, control activities and the environmental performance criteria against which these indicators will be judged (i.e. auditable). This section further addresses the need for monitoring and reporting of environmental performance with the aim of communicating the success and failures of control procedures, distinguish issues which require rectification and identify measures which will provide continuous improvement in the processes by which the projects are managed.

## Water Quality

72. The projects involve the rehabilitation of numerous wetlands and the construction and installation of the early warning system to improve livelihoods and the environment more broadly.
73. The construction and installation of the early warning system along with the restoration and rehabilitation of the wetlands will result in the movement of sediment during construction. While it is assumed that none of the wetlands are currently undisturbed, protected and/or pristine environments, there is a necessity to maintain appropriate water quality standards within these environments when undertaking the construction and installation of the early warning system and the rehabilitation of the wetlands to protect riverine environments and downstream users.
74. The rehabilitation of the wetlands could also result in changes to small and medium scale hydrological processes that could result in changes to water quality within specific locations. Prior to final design and construction, it will be necessary to undertake modelling to ensure that any impacts are mitigated.

## Performance Criteria

75. The following performance criteria are set for the construction of the projects:
  - a) no significant decrease in water quality as a result of rehabilitation activities;
  - b) no significant decrease in the quality and quantity of surface water as a result of construction activities in proximity to the projects;
  - c) water quality shall conform to any approval conditions stipulated by UNDP, MoWE and/or other government departments, or in the absence of such conditions follow a 'no worsening' methodology;
  - d) no offsite impact will occur through the release of sediment into riverine environments; and
  - e) effective implementation of site-specific Erosion, Drainage and Sediment Control Plan (EDSCP).
76. By following the management measures set out in the ESMP, the rehabilitation of wetlands and the construction and installation of the early warning system will not have a significant impact on water quality across the broader area.

## Monitoring

77. A standardised water quality monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. The site supervisor will be required to conduct a daily visual inspection for turbidity within or adjacent to their work area as a part of the daily site inspection checklist.

## Reporting

78. All water quality monitoring results and/or incidents will be tabulated and reported as outlined in the ESMP. The MoWE must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to water quality is exceeded.

**Table 1: Water Quality Management Measures**

| Issue   | Control Activity (and Source)  | Action Timing              | Responsibility           | Monitoring and Reporting  |
|---|--|----------------------------|--------------------------|---|
| W1: Elevated turbidity in wetlands and riverine environments. | W1.1: Develop and implement a site specific Erosion, Drainage and Sediment Control Plan (EDSCP) to address drainage control, sediment and erosion controls and stockpiling of materials including soil during construction of all components of the project. EDSCP measures to be inspected regularly to ensure all devices are functioning effectively. | Pre Earthworks             | Site Supervisor          | Initial set up and then as required with reporting to MoWE and UNDP |
|   | W1.2: Designated areas for storage of fuels, oils, chemicals or other hazardous liquids should have compacted impermeable bases and be surrounded by a bund to contain any spillage.   | Entire construction phase  | All Personnel            | Weekly with reporting to MoWE and UNDP                              |
|   | W1.3: Conduct regular surface water quality monitoring in location where the groundwater is likely to be impacted including assessing the changes to water quality.  | Entire construction phase  | Site Supervisor          | Twice weekly with reporting to MoWE and UNDP                        |
|   | W1.4: Schedule works in stages to ensure that disturbed areas are revegetated and stabilised progressively and as soon as practicable after completion of works.   | No works during wet season | Site Supervisor and MoWE | Maintain records  |
|   | W1.5: Construction materials will not be stockpiled in proximity to the recharge locations that may allow for release into riverine and other wetland environments. Construction equipment will be removed from in proximity to the wetlands and riverine environments at the end of each working day or if heavy rainfall is predicted.                 | Entire construction phase  | Site Supervisor          | Maintain daily records  |
|   | W1.6 Minimise the release of clays and very fine silts into wetlands and riverine environments through the installation of sediment basins, rock checks and sediment fences in appropriate places as outlined in the EDSCPs.   | Entire construction phase  | Site Supervisor          | Maintain daily records  |
|   | W1.7 Disturbance of vegetation to be limited to that required for construction works   | Entire construction phase  | All Personnel            | Weekly with reporting to MoWE and UNDP                              |

| Issue   | Control Activity (and Source)   | Action Timing | Responsibility | Monitoring and Reporting               |
|---|---|---------------|----------------|--|
| W2: Increase of gross pollutants, hydrocarbons, metals and other chemical pollutants into wetlands and riverine environments. | W2.1: Reuse suitable water runoff from site to supplement construction water supply.  | All phases    | All Personnel  | Weekly with reporting to MoWE and UNDP |
|   | W2.2: Designated areas for storage of fuels, oils, chemicals or other hazardous liquids should:<br>1. Have compacted impermeable bases; and<br>2. Surrounded by a bund to contain any spillage.                             | All phases    | All Personnel  | Weekly with reporting to MoWE and UNDP |
|   | W2.3: Check all vehicles, equipment and material storage areas daily for possible fuel, oil and chemical leaks.   | All phases    | All Personnel  | Daily and maintain records             |
|   | W2.4: Rubbish and waste materials to be placed in suitable facilities to ensure that they do not enter the wetland and riverine environments. Ensure all absorbent material is placed in contaminant bags prior to removal. | All phases    | All Personnel  | Weekly reporting to MoWE and UNDP      |
|   | W2.5: Minimise the use of herbicides and use only biodegradable herbicides that have minimal impact on water quality and fauna.   | All phases    | All personnel  | Maintain records                       |

## Erosion, Drainage and Sediment Control

79. Uganda lies within the African plate, which is a continental crust that contains Archaean cratons that date at least 2700 Ma. The country's geology contains a wide variety of minerals. It is situated on a plateau that gently drops from approximately 1,500 metres above sea level in the south to approximately 900 metres in the north although there are peaks including for example, Ptolemy's Mountains of the Moon in the north with a peak of 5,109 metres. The soils, in general, are fertile (and primarily lateritic), and those in the region of Lake Victoria are among the most productive in the world. Interspersed with these are the waterlogged clays characteristic of the northwest and of the western shores of Lake Victoria.
80. The project will be located in the South Western Uganda (6 districts of Kabale, Kisoro, Kanungu, Rukungiri, Greater Bushenyi and Ntungamo) and Eastern Uganda (9 districts of Pallisa, Kibuku, Bukedea, Namutumba, Butaleja, Budaka, Tororo, Kaliro Ngora and Mbale). These areas are the main areas of volcanicity in Uganda. The eastern volcanics are older and range from Cretaceous to Miocene and comprise generally soda-rich agglomerates, lavas and tuffs extruded by central volcanoes of Moroto, Kadam and Elgon Mountains. In western Uganda, volcanism was confined to the later Pleistocene and the volcanic areas are potash-rich. The volcanic attributes form prominent cones including for example, Mount Mufumbira and are also represented by explosion craters in areas between Lake George and Fort Portal.

## Performance Criteria

81. The following performance criteria are set for the construction of the projects:
  - a. no build-up of sediment in the wetlands and riverine environments and or groundwater as a result of construction and rehabilitation activities;
  - b. no degradation of water quality on or off site of all projects;
  - c. all water exiting the project area and/or into groundwater systems is to have passed through best practice erosion, drainage and sediment controls;
  - d. no changes to hydrological processes from wetland rehabilitation;
  - e. no changes to existing erosion or sediment deposition regimes from the taking of sediment from wetland environments; and
  - f. effective implementation of site-specific EDSCP.
82. By following the management measures set out in the ESMP, construction and rehabilitation activities of the projects will not have a significant impact as a result of sedimentation across the broader area.

## Monitoring

83. A standardised sediment control monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. The site supervisor will be required to:
  - a. conduct site inspections on a weekly basis or after rainfall events exceeding 20mm in a 24 hour period;
  - b. develop a site-specific checklist to document non-conformances to this ESMP or any applicable EDSCPs; and
  - c. communicate the results of inspections and/or water quality testing to the Site Supervisor and ensure that any issues associated with control failures are rapidly rectified and processes are put in place to ensure that similar failures are not repeated.
84. It is the responsibility of the site supervisor to:
  - a. conduct daily inspections of EDS control measures as part of the Daily Check Procedure; and
  - b. consult MoWE and UNDP staff when a non-conformance is suspected and amend accordingly.

## Reporting

85. All sediment and erosion control monitoring results and/or incidents will be tabulated and reported as outlined in the ESMP. The MoWE must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to erosion and sediment control is exceeded.

**Table 2: Erosion, Drainage, Sediment Control Measures**

| Issue  | Control Activity (and Source)   | Action Timing               | Responsibility  | Monitoring and Reporting |
|--|---|-----------------------------|-----------------|--------------------------|
| E1: Loss of soil material and sedimentation to wetlands and riverine environments and/or groundwater systems from site due to earthwork activities | E1.1: Develop and implement an EDSCP for any surface works, embankments and excavation work, water crossings and stormwater pathways.   | Entire construction phase   | All Personnel   | Maintain records         |
|  | E1.2: Ensure that erosion and sediment control devices are installed, inspected and maintained as required.   | Entire construction phase   | All Personnel   | Maintain records         |
|  | E1.3: Schedule/stage works to minimise cleared areas and exposed soils at all times.  | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.4: Incorporate the design and location of temporary and permanent EDSC measures for all exposed areas within wetlands and riverine environments. These shall be implemented prior to pre-construction activities and shall remain onsite during work | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.5: Schedule/stage proposed works to ensure that major vegetation disturbance and earthworks are carried out during periods of lower rainfall and wind speeds.  | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.6: Strip and stockpile topsoil for use during revegetation.  | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.7: Schedule/stage works to minimise the duration of stockpiling topsoil material   | During construction         | All Personnel   | Maintain records         |
|  | E1.8: Locate stockpile areas away from sensitive locations.   | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.9: Design stormwater management measures to reduce flow velocities and avoid concentrating runoff.   | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.10: Include check dams in drainage lines where necessary to reduce flow velocities and provide some filtration of sediment.  | Pre and during construction | Site Supervisor | Maintain records         |
|  | E1.11: Mulching shall be used as a form of erosion and sediment control (dependent on site selection), include extra sediment fencing during high rainfall.   | During construction         | All Personnel   | Maintain records         |

| Issue  | Control Activity (and Source)   | Action Timing             | Responsibility  | Monitoring and Reporting               |
|--|---|---------------------------|-----------------|--|
| E1: Loss of soil material and sedimentation to wetlands and riverine environments and/or groundwater systems from site due to earthwork activities | E1.12: Bunding shall be used around sensitive/dangerous goods as necessary.   | During construction       | All Personnel   | Maintain records                       |
|  | E1.14: Grassed buffer strips shall be incorporated where necessary during construction to reduce water velocity were applicable.  | During construction       | Site Supervisor | Maintain records                       |
|  | E1.15: Silt curtain to be installed to protect from increased sediment loads.   | During construction       | Contractors     | Maintain records                       |
|  | E1.16: Excess sediment in all erosion and sediment control structures (eg. Sediment basins, check dams) shall be removed when necessary to allow for adequate holding capacity.   | During construction       | Contractors     | Maintain records                       |
| E2: Soil contamination   | E2.1: If contamination is uncovered or suspected (outside of the project footprints), undertake a Stage 1 preliminary site contamination investigation. The contractor should cease work if previously unidentified contamination is encountered and activate management procedures and obtain advice/permits/approval (as required). | Entire construction phase | All Personnel   | Daily and maintain records             |
|  | E2.2: Adherence to best practice for the removal and disposal of contaminated soil/material from site (if required), including contaminated soil within the project footprints.   | Entire construction phase | All Personnel   | Daily and maintain records             |
|  | E2.3: Drainage control measures to ensure runoff does not contact contaminated areas (including contaminated material within the project foot prints) and is directed/diverted to stable areas for release.   | Entire construction phase | All Personnel   | Daily and maintain records             |
|  | E2.4: Avoid importing fill that may result in site contamination and lacks accompanying certification/documentation. Where fill is not available through on site cut, it must be tested in accordance with geotechnical specifications.   | Entire construction phase | All Personnel   | Daily and maintain records             |
| E3 Changes in hydrological processes through rehabilitation  | E3.1 Ensure no increased erosion of deposition occurs as a result of rehabilitation works.  | All phases                | All Personnel   | Weekly with reporting to MoWE and UNDP |
|  | E3.1 Ensure no long term changes in hydrological processes as a result of rehabilitation works.   | All phases                | All Personnel   | Weekly with reporting to MoWE and UNDP |

### Noise and Vibration

86. All construction activities have the potential to cause noise nuisance. Vibration disturbance to nearby residents and sensitive habitats is likely to be caused through the use of vibrating equipment. Blasting is not required to be undertaken as part of this project.
87. It is assumed that there are no sensitive receptors in proximity to the projects.
88. Contractors involved in construction activities should be familiar with methods of controlling noisy machines and alternative construction procedures as contained within specific Uganda legislation or in its absence, international good practice may be used if the legislation has not been enacted.
89. The detail, typical equipment sound power levels, provides advice on project supervision and gives guidance noise reduction. Potential noise sources during rehabilitation and construction may include:
  - a. excavation equipment for all aspects of the projects;
  - b. delivery vehicles; and
  - c. power tools and compressors.

### Performance Criteria

90. The following performance criteria are set for the construction of the projects:
  - a. noise from construction activities must not cause an environmental nuisance at any noise sensitive place;
  - b. undertake measures at all times to assist in minimising the noise associated with construction activities;
  - c. no damage to off-site property caused by vibration from construction and operation activities;
  - d. no impact to fauna species as a result of rehabilitation of the wetlands and/or the construction and installation of the early warning system; and
  - e. corrective action to respond to complaints is to occur within 48 hours.

### Monitoring

91. A standardised noise monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. Importantly, the site supervisor will:
  - a. ensure equipment and machinery is regularly maintained and appropriately operated; and
  - b. carry out potentially noisy construction activities during daylight hours only; i.e. 7am -5pm.

### Reporting

92. All noise monitoring results and/or incidents will be tabulated and reported as outlined in the ESMP. The MoWE must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to noise is exceeded.

**Table 3: Noise and Vibration Management Measures**

| Issue                      | Control Activity (and Source)  | Action Timing               | Responsibility  | Monitoring and Reporting   |
|----------------------------|--|-----------------------------|-----------------|----------------------------|
| N1: Increased noise levels | N1.1: Select plant and equipment and specific design work practices to ensure that noise emissions are minimised during construction and operation including all pumping equipment.  | All phases                  | Contractor      | Maintain records           |
|                            | N1.2: Specific noise reduction devices such as silencers, mufflers and/or acoustic rock breaking heads shall be installed as appropriate to site plant and equipment.  | Pre and during construction | Contractor      | Maintain records           |
|                            | N1.3 Minimise the need for and limit the emissions as far as practicable if noise generating construction works are to be carried out outside of the hours: 7am-5pm (Mon - Fri).   | Construction phase          | All Personnel   | Daily and maintain records |
|                            | N1.4: Consultation with nearby residents in advance of construction activities particularly if noise generating construction activities are to be carried out outside of the hours: 7am-5pm (Mon - Fri) and 7am-3pm (Sat). | Construction phase          | All Personnel   | Daily and maintain records |
|                            | N1.5 The use of substitution control strategies shall be implemented, whereby excessive noise generating equipment items onsite are replaced with other alternatives.  | Construction phase          | All Personnel   | Daily and maintain records |
|                            | N1.6 Provide temporary construction noise barriers in the form of solid hoardings where there may be an impact on specific residents.  | Construction phase          | Site Supervisor | Daily and maintain records |
|                            | N1.7 All incidents complaints and non-compliances related to noise shall be reported in accordance with the site incident reporting procedures and summarised in the register.   | Construction phase          | Site Supervisor | Maintain records           |
|                            | N1.8 The contractor should conduct employee and operator training to improve awareness of the need to minimise excessive noise in work practices through implementation of measures.                                       | Pre and during construction | Contractor      | Maintain records           |

| Issue                             | Control Activity (and Source)  | Action Timing               | Responsibility  | Monitoring and Reporting |
|-----------------------------------|--|-----------------------------|-----------------|--------------------------|
| N2. Vibration due to construction | N2.1: Identify properties, structures and habitat locations that will be sensitive to vibration impacts resulting from construction and operation of the projects.                   | Pre and during construction | Contractor      | Maintain records         |
|                                   | N2.2: Design to give due regard to temporary and permanent mitigation measures for noise and vibration from construction and operational vibration impacts.                          | Pre-construction            | Contractor      | Maintain records         |
|                                   | N2.3: All incidents, complaints and con-compliances related to vibration shall be reported in accordance with the site incident reporting procedures and summarised in the register. | Construction phase          | Site Supervisor | Maintain records         |
|                                   | N2.4: During construction, standard measure shall be taken to locate and protect underground services from construction and operational vibration impacts                            | Construction phase          | Site Supervisor | Maintain records         |

### Air Quality

93. All construction activities have the potential to cause air quality nuisance, particularly the movement of sediment in dry wetland locations.
94. Vibration disturbance to nearby residents is likely to be caused through the use of vibrating rollers, graders and construction traffic. Blasting is not required to be undertaken as part of this project.
95. It is assumed that there are no sensitive receptors in proximity to the projects.
96. Contractors involved in construction and operation activities should be familiar with methods minimising the impacts of deleterious air quality and alternative construction procedures as contained in the Uganda legislation.

### Performance Criteria

97. The following performance criteria are set for the construction of the projects:
  - a. release of dust/particle matter must not cause an environmental nuisance;
  - b. undertake measures at all times to assist in minimising the air quality impacts associated with construction and operation activities; and
  - c. corrective action to respond to complaints is to occur within 48 hours.

### Monitoring

98. A standardised air monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. Importantly, the site supervisor will:
  - a. ensure all stockpiles are covered so as to not allow dust to generate; and
  - b. the requirement for dust suppression will be visually observed by all personnel daily and by MoWE and UNDP staff when undertaking routine site inspections (minimum frequency of once per week).

### Reporting

99. All air quality monitoring results and/or incidents will be tabulated and reported as outlined in the ESMP. The MoWE must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to air quality is exceeded.

**Table 4: Air Quality Management Measures**

| Issue  | Control Activity (and Source)   | Action Timing               | Responsibility  | Monitoring and Reporting   |
|--|---|-----------------------------|-----------------|----------------------------|
| A1: Increase in dust levels at sensitive locations | A1.1: Implement effective dust management measures in all areas during design, construction and operation.  | Pre and during construction | All Personnel   | Daily and maintain records |
|  | A1.2: Install dust gauges at locations identified for construction lay down and stockpiling within the project footprints.                            | During construction         | Site Supervisor | Daily and Weekly Reports   |
|  | A1.3: Manage dust/particulate matter generating activities to ensure that emissions do not cause an environmental nuisance at any sensitive locations | During construction         | Site Supervisor | Daily and maintain records |
|  | A1.4: Construction activities should minimising risks associated with climatic events.  | During construction         | Site Supervisor | Daily and maintain records |
|  | A1.5: Implement scheduling/staging of proposed works to ensure major vegetation disturbance and earthworks are minimised.                             | Entire construction         | Contractor      | Daily and maintain records |
|  | A1.6: Ensure that materials to be stockpiled onsite are not ordered and/or purchased until they are required for works.                               | Entire construction         | Contractor      | Daily and maintain records |
|  | A1.7: Locate material stockpile areas as far as practicable from sensitive receptors.   | During construction         | Site Supervisor | Daily and maintain records |
|  | A1.8: Source sufficient water of a suitable quality for dust suppression activities complying with any water restrictions.                            | During construction         | Site Supervisor | Daily and maintain records |
|  | A1.9: Schedule revegetation activities to ensure optimum survival of vegetation species.  | During construction         | Site Supervisor | Maintain records           |
|  | A1.10: Ensure an air quality management plan is developed and implemented.  | Pre and during construction | Contractor      | Maintain records           |
|  | A1.11: Rubbish skips and receptacles should be covered and located as far as practicable from sensitive locations.                                    | During construction         | Site Supervisor | Maintain records           |
|  | A1.12: Restrict speeds on access tracks.  | During construction         | Site Supervisor | Daily and maintain records |
|  | A1.13: Cover loads of haul trucks and equipment and plant when not in use and in transit.   | During construction         | Site Supervisor | Daily and maintain records |

| Issue  | Control Activity (and Source)   | Action Timing               | Responsibility  | Monitoring and Reporting   |
|--|---|-----------------------------|-----------------|----------------------------|
| A2. Increase in vehicle emissions (including odours and fumes) | A2.1 Ensure construction vehicles are switched off when not in use.   | During construction         | Site Supervisor | Daily and maintain records |
|  | A2.2 Ensure only vehicles required to undertake works are operated onsite.  | During construction         | Site Supervisor | Daily and maintain records |
|  | A2.3 Ensure all construction vehicles, plant and machinery are maintained and operated in accordance with design standards and specifications.  | During construction         | Site Supervisor | Daily and maintain records |
|  | A2.4 Develop and implement an induction program for all site personnel, which includes as a minimum an outline of the minimum requirements for environmental management relating to the site. | Pre and during construction | Contractor      | Daily and maintain records |
|  | A2.5 Locate construction car park and vehicle/plant/equipment storage areas as far as practicable from sensitive locations.   | During construction         | Site Supervisor | Daily and maintain records |
|  | A2.6 Direct exhaust emissions of mobile plant away from the ground.   | During construction         | Site Supervisor | Daily and maintain records |
|  | A2.7 Rubbish skips and receptacles should be covered and located as far as practicable from sensitive locations.  | During construction         | Site Supervisor | Daily and maintain records |

## Flora and Fauna

100. It is assumed that the majority of the project areas have been previously disturbed although vegetation may still exist. Further, it is assumed that the wetlands being rehabilitated and the construction and installation of the early warning system will be located in areas that do not contain important undisturbed habitats.
101. Uganda is one of the top ten countries in the world for biodiversity; particularly for mammalian diversity (six species are endemic). Uganda has 364 species of mammals and 1062 species of birds. There are relatively few varieties of fish, but the lakes and rivers contain plentiful stocks of tilapia, Nile perch, catfish, lungfish, elephant snout fish, and other species.
102. Contractors involved in construction activities should be familiar with methods minimising the impacts of clearing vegetation to minimise the footprints of all projects to that essential for the works and rehabilitate disturbed areas. By doing these activities, the projects should minimise the impact upon terrestrial and aquatic flora and fauna where ever practical.

## Performance Criteria

103. The following performance criteria are set for the construction of the projects:
  - a. no clearance of vegetation outside of the designated clearing boundaries;
  - b. no death to native fauna as a result of clearing activities;
  - c. no loss of important vegetation areas;
  - d. no long term deleterious impacts on terrestrial and aquatic habitats;
  - e. no introduction of *new* weed species as a result of construction activities;
  - f. no increase in *existing* weed proliferation within or outside of the corridor as a result of construction activities; and
  - g. successful establishment of rehabilitation works incorporating species native to the local area.

## Monitoring

104. A flora and fauna monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. Importantly, the site supervisor will when undertaking clearing works, will compile a weekly report to MoWE and UNDP staff outlining:
  - a. any non-conformances to this ESMP;
  - b. the areas that have been rehabilitated during the preceding week; and
  - c. details of the corrective action undertaken.

## Reporting

105. All flora and fauna monitoring results and/or incidents will be tabulated and reported as outlined in the ESMP. The MoWE must be notified immediately in the event of any suspected instances of death to fauna and where vegetation if detrimental impacted.

**Table 5: Flora and Fauna Management Measures**

| Issue  | Control Activity (and Source)   | Action Timing                | Responsibility  | Monitoring and Reporting                   |
|--|---|------------------------------|-----------------|--|
| FF1. Terrestrial and aquatic habitat loss and disturbance of fauna | FF1.1 Limit vegetation clearing and minimise habitat disturbance through adequate protection and management of retained vegetation.           | During construction          | Site Supervisor | Daily and maintain records                 |
|  | FF1.2: Minimise noise levels and lighting intrusion throughout construction in the vicinity of any sensitive locations.                       | During construction          | Site Supervisor | Daily and maintain records                 |
|  | FF1.3: Ensure that all site personnel are made aware of sensitive fauna/habitat areas and the requirements for the protection of these areas. | During construction          | Contractor      | Daily and maintain records                 |
|  | FF1.4 Minimise disturbance to onsite fauna and recover and rescue any injured or orphaned fauna during construction.                          | During construction          | Contractor      | Daily and maintain records, report to MoWE |
| FF2. Introduced flora and weed species                             | FF2.1: Implement an EDSCP to reduce the spread of weeds through erosion and sediment entering any waterways and therefore spreading.          | Pre and during construction  | Contractor      | Maintain records                           |
|  | FF2.2: Revegetate disturbed areas using native and locally endemic species that have high habitat value.                                      | During construction          | Site Supervisor | As required and maintain records           |
|  | FF2.3: Minimise disturbance to mature remnant vegetation, particularly canopy trees.  | During construction          | Site Supervisor | Daily and maintain records                 |
|  | FF2.4: The removal of regrowth native trees should be minimised particularly where the width of a forest is narrow.                           | During construction          | Site Supervisor | Daily and maintain records                 |
|  | FF2.5: Small trees and shrubs shall be removed in preference to large trees.  | During construction          | Site Supervisor | Daily and maintain records                 |
|  | FF2.6: Vegetation to be removed shall be clearly marked using paint or flagging tape.   | During construction          | Site Supervisor | Daily and maintain records                 |
|  | FF2.7: Environmental weeds and noxious weeds within the project footprints shall be controlled.   | During and post construction | Site Supervisor | Weekly and maintain records                |

## Waste Management

106. The MoWE advocate good waste management practice. The preferred waste management hierarchy and principles for achieving good waste management is as follows:
- a. waste avoidance(avoid using unnecessary material on the projects) ;
  - b. waste re-use (re-use material and reduce disposing);
  - c. waste recycling(recycle material such as cans, bottles, etc.; and
  - d. waste disposal (all petruscible to be dumped at approved landfills).
107. The key waste streams generated during construction are likely to include waste from the construction and installation of the early warning system and any sediment removed from wetlands, although this is anticipated to be minimal as it is likely that the early warning system infrastructure will be prefabricated and sediment will be used on site. The wastes to be generated will also include:
- a. the excavation wastes unsuitable for reuse during earthworks;
  - b. wastes from construction equipment maintenance. Various heavy vehicles and construction equipment will be utilised for the duration of the construction phase. Liquid hazardous wastes from cleaning, repairing and maintenance of this equipment may be generated. Likewise leakage or spillage of fuels/oils within the site needs to be managed and disposed of appropriately;
  - c. non-hazardous liquid wastes will be generated through the use of workers' facilities such as toilets; and
  - d. general wastes including scrap materials and biodegradable wastes
108. Contractors involved in construction and operational activities should be familiar with methods minimising the impacts of clearing vegetation to minimise the footprint to that essential for the works and rehabilitate disturbed areas. By doing these activities, the projects should minimise the impact of waste generated by the project.

## Performance Criteria

109. The following performance criteria are set for the construction of the projects:
- a. waste generation is minimised through the implementation of the waste hierarchy (avoidance, reduce, reuse, recycle);
  - b. no litter will be observed within the project footprint or surrounds as a result of activities by site personnel;
  - c. no complaints received regarding waste generation and management;
  - d. any waste from on-site portable sanitary facilities will be sent off site for disposal by a waste licensed contractor; and
  - e. waste oils obtained from the oil separator will be collected and disposed or recycled off-site, local oil companies or shipped for recycling.

## Monitoring

110. A waste management monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue.

## Reporting

111. The MoWE must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to waste is exceeded.

**Table 6: Waste Management Measures**

| Issue   | Control Activity (and Source)  | Action Timing               | Responsibility  | Monitoring and Reporting    |
|---|--|-----------------------------|-----------------|-----------------------------|
| WT1:<br>Production of wastes and excessive use of resources | WT1.1: Preference shall be given to materials that can be used to construct the project that would reduce the direct and indirect waste generated.   | Pre and during construction | Contractor      | Maintain records            |
|   | WT1.2: Consideration shall be given to the use of recycled aggregates and fly-ash cement mixes for the construction of the early warning system infrastructure.  | Pre and during construction | Contractor      | Maintain records            |
|   | WT1.3: Daily waste practices shall be carried out unless these are delegated to the activities of external waste management bodies.  | During construction         | Site Supervisor | Daily and maintain records  |
|   | WT1.4: The use of construction materials shall be optimised and where possible a recycling policy adopted.   | During construction         | Site Supervisor | Weekly and maintain records |
|   | WT1.5: Separate waste streams shall be maintained at all times i.e. general domestic waste, construction waste and contaminated waste. Specific areas on site shall be designated for the temporary management of the various waste streams. Adequate signage and colour coded bins will be used for each waste streams. | During construction         | Site Supervisor | Weekly and maintain records |
|   | WT1.6: Any contaminated waste shall be disposed of at an approved landfill.  | During construction         | Site Supervisor | Weekly and maintain records |
|   | WT1.7: Recyclable waste (including oil and some construction waste) shall be collected separately and disposed of correctly.   | During construction         | Site Supervisor | Weekly and maintain records |
|   | WT1.8: Waste sites shall be sufficiently covered daily to ensure that wildlife does not have access to any of the waste.   | During construction         | Site Supervisor | Daily                       |
|   | WT1.9: Disposal of waste including all filters shall be carried out in accordance with the Government of Uganda requirements.  | During construction         | Site Supervisor | Weekly and maintain records |
|   | WT1.10: Fuel and lubricant leakages from vehicles and plant shall be immediately rectified.  | During construction         | Site Supervisor | Daily and maintain records  |
|   | WT1.11: Where possible, concrete batching plants shall be centrally located to minimise the occurrence of concrete batching at individual construction locations.  | Pre and during construction | Contractor      | Maintain records            |

| Issue   | Control Activity (and Source)   | Action Timing       | Responsibility  | Monitoring and Reporting                         |
|---|---|---------------------|-----------------|--|
| WT1:<br>Production of wastes and excessive use of resources | WT1.12: Major maintenance and repairs shall be carried out off-site whenever practicable.   | During construction | Site Supervisor | Weekly and maintain records                      |
|   | WT1.13: Remnants of waste shall not be left at any location near the project footprint.   | During Construction | Site Supervisor | Weekly and maintain records                      |
|   | WT1.14: Disposal of trees shall be undertaken in accordance with one or more of the following methods:<br>a. Left in place;<br>b. Chipped and mulched; and<br>c. Large trunk sections may be sold/passed on to a commercial mill. | During Construction | Site Supervisor | Weekly and maintain records                      |
|   | WT1.15: Hydrocarbon wastes shall be stored in colour coded and labelled drums placed around fuelling depots.  | During Construction | Site Supervisor | Daily and maintain records                       |
|   | WT1.16: Where possible, fuel and chemical storage and handling shall be undertaken at central fuel and chemical storage facilities, such as petrol stations.  | During Construction | Site Supervisor | Daily and maintain records                       |
|   | WT1.17: On-site storage of fuel and chemicals shall be kept to a minimum.   | During Construction | Contractor      | Daily, maintain records and report any incidents |
|   | WT1.18: Any waste oils and lubricants are to be collected and transported to recyclers or designated disposal sites as soon as possible.  | During Construction | Site Supervisor | Daily and maintain records                       |
|   | WT1.19: Any dangerous goods stored on site shall be stored in accordance with Uganda regulations.   | During Construction | Contractor      | Daily and maintain records                       |

## Chemical and Fuel Management

112. The key types of chemicals and fuels likely to be stored on-site during construction include but are not limited to diesel and unleaded petrol for the refuelling of plant equipment and generators.
113. If not handled, stored or used appropriately, contamination of land, wetland, riverine environments and groundwater systems could occur. The accidental discharge of hazardous materials during construction activities is a potential risk to the local environment. Accordingly, all oil, grease, diesel, petrol and chemicals should be stored off site within a bunded area.
114. Potential activities which could result in spills are:
  - a. use of machinery and vehicles – potential for fuels, oils and lubricant spills;
  - b. transport, storage and handling of fuels, machinery oils, grease;
  - c. transport, storage and handling of cement and other construction materials; and
  - d. Impacts associated with hazardous materials will primarily be associated with the storage and handling during the construction and operation phase.

## Performance Criteria

115. The following performance criteria are set for the construction of the projects:
  - a. ensure a Material Safety Data Sheet (MSDS) Register should be developed for all chemicals and fuels retained on site;
  - b. handling and storage of hazardous material is in accordance with the relevant legislation and best management practices;
  - c. all spills are reported to MoWE within **one hour** of occurrence; and
  - d. no spills enter the wetland or riverine environments; and
  - e. prevent the uncontrolled release of oil, grease and diesel to the environment;
  - f. no spills of hazardous materials;
  - g. no chemical spills into the groundwater aquifers; and
  - h. no contamination of land due to spills of hazardous materials.

## Monitoring

116. A chemical and fuel management program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. Importantly, the site supervisor should:
  - a. conducted daily chemical and fuel assessments as part of their daily check procedure;
  - b. manage the selection, purchase, storage, handling and disposal of chemicals to ensure minimal environmental impact;
  - c. regularly inspect equipment that uses fuel, lubricants and/or hydraulic fluid;
  - d. develop procedures and install equipment to contain, minimise and recover spills; and
  - e. provide staff with procedures and training in spill prevention and clean up.

## Reporting

117. The MoWE must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level as a result of a chemical or fuel leak or spill.

**Table 7: Chemical and Fuels Management Measures**

| Issue                                     | Control Activity (and Source)   | Action Timing       | Responsibility  | Monitoring and Reporting              |
|---|---|---------------------|-----------------|---------------------------------------|
| C1 Poor management of chemicals and fuels | C1.1: Prepare spill management plan addressing measures   | Pre-construction    | Contractor      | Maintain records and weekly reporting |
|   | C1.2: Store and handle all chemicals, fuels, oils and potentially hazardous materials as specified in relevant standards and guidelines. All hazardous materials to be approved for use onsite. All hazardous materials and construction fuel will be stored in appropriate storage facilities (e.g. fuel and chemicals will be stored in a bunded area). | During Construction | Site Supervisor | Daily and maintain records            |
|   | C1.3: Hydrocarbon wastes shall be stored in colour coded and labelled drums placed around fuelling depots and disposed of.  | During Construction | Site Supervisor | Daily and maintain records            |
|   | C1.4: Where possible, fuel and chemical storage and handling shall be undertaken at central fuel and chemical storage facilities, such as petrol stations/site depot.   | During Construction | Site Supervisor | Daily and maintain records            |
|   | C1.5: Onsite storage of fuel and chemicals shall be kept to a minimum.  | During Construction | Site Supervisor | Daily and maintain records            |
|   | C1.6: Emergency clean up kits for oil and chemical spills will be available onsite and in all large vehicles.   | During Construction | Site Supervisor | Daily and maintain records            |
|   | C1.7: Refuelling activities to preferentially occur off site however if required onsite ensure refuelling activities occur in designated areas of the site where appropriate temporary protection measures have been designed/located and are no less than 20 metres from surface waters and drainage lines.  | During Construction | Site Supervisor | Daily and maintain records            |

### Emergency Response Plan

118. In the event of actions occurring, which may result in serious health, safety and environmental (catastrophic) damage, emergency response or contingency actions will be implemented as soon as possible to limit the extent of environmental damage.
119. It is assumed that there are residences located near the construction activities.
120. The contractor will need to incorporate construction emergency responses into the projects complying with the requirements under the Occupational, Health and Safety Policy of the contractor or the work related Government of Uganda legislation.

### Performance Criteria

121. The following performance criteria are set for the construction of the projects:
  - a. no incident of fire outbreak during construction;
  - b. reduce the risk of fire by undertaking hot works within cleared locations;
  - c. provide an immediate and effective response to incidents that represent a risk to public health, safety or the environment; and
  - d. minimise environmental harm due to unforeseen incidents.

### Monitoring

122. An emergency response monitoring program has been developed for the projects. The program is subject to review and update at least every two months from the date of issue. Importantly, visual inspections will be conducted by site supervisor daily with reporting to MoWE and UNDP staff on a weekly basis (minimum) noting any non-conformances to this ESMP.

### Reporting

123. The MoWE and UNDP staff must be notified immediately in the event of any emergency, including fire or health related matter including those that have resulted in serious environmental harm.

**Table 8: Emergency Management Measures**

| Issue   | Control Activity (and Source)  | Action Timing               | Responsibility  | Monitoring and Reporting   |
|---|--|-----------------------------|-----------------|----------------------------|
| E1. Fire and Emergency management and prevention strategies implemented | E1.1: Flammable and combustible liquids bunding/storage areas to be designed in accordance with appropriate international standards  | Pre and during construction | Contractor      | Daily and maintain records |
|   | E1.2: Fire extinguishers are to be available within all site vehicle   | During construction         | Contractor      | Daily and maintain records |
|   | E1.3: No open fires are permitted within the project area  | During construction         | Site Supervisor | Daily and maintain records |
|   | E1.4: No cigarette butts are to be disposed of onto the ground throughout the project area, all smokers must carry a portable disposal bin to reduce the risk of a spot fire starting and general litter | During construction         | All Personnel   | Daily and maintain records |
|   | E1.5: Any stockpiles of mulch are not to exceed two metres in height and width and must be turned regularly.   | During construction         | All Personnel   | Daily and maintain records |
|   | E1.6: Train all staff in emergency preparedness and response (cover health and safety at the work site)  | During construction         | Site Supervisor | Daily and maintain records |
|   | E1.7: Check and replenish First Aid Kits   | During construction         | Site Supervisor | Daily and maintain records |
|   | E1.8: Use of Personal Protection Equipment   | During construction         | All Personnel   | Daily and maintain records |

Annexure One



*Empowered lives.  
Resilient nations.*

## Guidance for Submitting a Request to the Social and Environmental Compliance Unit (SECU) and/or the Stakeholder Response Mechanism (SRM)

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### **Purpose of this form**

- **If you use this form, please put your answers in bold writing to distinguish text**
- **The use of this form is recommended, but not required. It can also serve as a guide when drafting a request.**

This form is intended to assist in:

- (1) Submitting a request when you believe UNDP is not complying with its social or environmental policies or commitments and you believe you are being harmed as a result. This request could initiate a 'compliance review', which is an independent investigation conducted by the Social and Environmental Compliance Unit (SECU), within UNDP's Office of Audit and Investigations, to determine if UNDP policies or commitments have been violated and to identify measures to address these violations. SECU would interact with you during the compliance review to determine the facts of the situation. You would be kept informed about the results of the compliance review.

and/or

- (2) Submitting a request for UNDP "Stakeholder Response" when you believe a UNDP project is having or may have an adverse social or environmental impact on you and you would like to initiate a process that brings together affected communities and other stakeholders (e.g., government representatives, UNDP, etc.) to jointly address your concerns. This Stakeholder Response process would be led by the UNDP Country Office or facilitated through UNDP headquarters. UNDP staff would communicate and interact with you as part of the response, both for fact-finding and for developing solutions. Other project stakeholders may also be involved if needed.

Please note that if you have not already made an effort to resolve your concern by communicating directly with the government representatives and UNDP staff responsible for this project, you should do so before making a request to UNDP's Stakeholder Response Mechanism.

**Confidentiality** If you choose the Compliance Review process, you may keep your identity confidential (known only to the Compliance Review team). If you choose the Stakeholder Response Mechanism, you can choose to keep your identity confidential during the initial eligibility screening and assessment of your case. If your request is eligible and the assessment indicates that a response is appropriate, UNDP staff will discuss the proposed response with you, and will also discuss whether and how to maintain confidentiality of your identity.





## Annex VI (b) – Environmental and Social Management Plan

GREEN CLIMATE FUND FUNDING PROPOSAL

15. Would you like to work with other stakeholders, e.g., the government, UNDP, etc. to jointly resolve a concern about social or environmental impacts or risks you believe you are experiencing because of a UNDP project?

Mark "X" next to the answer that applies to you: Yes: No:

16. Would you like your name(s) to remain confidential during the initial assessment of your request for a response?

Mark "X" next to the answer that applies to you: Yes: No:

If confidentiality is requested, please state why:

17. Requests for Stakeholder Response will be handled through UNDP Country Offices unless you indicate that you would like your request to be handled through UNDP Headquarters. Would you like UNDP Headquarters to handle your request?

Mark "X" next to the answer that applies to you: Yes: No:

If you have indicated yes, please indicate why your request should be handled through UNDP Headquarters:

18. Are you seeking both Compliance Review and Stakeholder Response?

Mark "X" next to the answer that applies to you: Yes: No:

19. Are you unsure whether you would like to request a Compliance Review or a Stakeholder Response? Mark "X" next to the answer that applies to you: Yes: No:

### Information about the UNDP Project you are concerned about, and the nature of your concern:

20. Which UNDP-supported project are you concerned about? (if known):

21. Project name (if known):

22. Please provide a short description of your concerns about the project. If you have concerns about UNDP's failure to comply with its social or environmental policies and commitments, and can identify these policies and commitments, please do (not required). Please describe, as well, the types of environmental and social impacts that may occur, or have occurred, as a result. If more space is required, please attach any documents. You may write in any language you choose



## Annex VI (b) – Environmental and Social Management Plan

GREEN CLIMATE FUND FUNDING PROPOSAL

23. Have you discussed your concerns with the government representatives and UNDP staff responsible for this project? Non-governmental organizations?

Mark "X" next to the answer that applies to you: Yes: No:

If you answered yes, please provide the name(s) of those you have discussed your concerns with

Name of Officials You have Already Contacted Regarding this Issue:

| First Name | Last Name | Title/Affiliation | Estimated Date of Contact | Response from the Individual |
|------------|-----------|-------------------|---------------------------|------------------------------|
|            |           |                   |                           |                              |
|            |           |                   |                           |                              |
|            |           |                   |                           |                              |
|            |           |                   |                           |                              |

24. Are there other individuals or groups that are adversely affected by the project?

Mark "X" next to the answer that applies to you: Yes: No:

25. Please provide the names and/or description of other individuals or groups that support the request:

| First Name | Last Name | Title/Affiliation | Contact Information |
|------------|-----------|-------------------|---------------------|
|            |           |                   |                     |
|            |           |                   |                     |
|            |           |                   |                     |
|            |           |                   |                     |

Please attach to your email any documents you wish to send to SECU and/or the SRM. If all of your attachments do not fit in one email, please feel free to send multiple emails.

### Submission and Support

To submit your request, or if you need assistance please email: [project.concerns@undp.org](mailto:project.concerns@undp.org)