

TERMS OF REFERENCE

TERMS OF REFERENCE FOR CONSTRUCTION SUPERVISION OF MATANDA IRRIGATION SCHEME - DAM AND PIPE NETWORK

1. BACKGROUND

1.1 Introduction

The Government through the Ministry of Water and Environment with financial assistance from the World Bank is undertaking implementation of the Irrigation for Climate Resilience Project. The project will establish irrigation and drainage infrastructure in Kabuyanda and Matanda in Isingiro, and Kanungu districts respectively.

The project is designed to assist the Government of Uganda increase the area under irrigated agriculture. This will foster the Government programme of modernizing agriculture that aims at increasing incomes and improving the quality of life of poor farmers and their households. It will further ensure food security and provision of gainful employment through improved agricultural enterprise development and promotion of sustainable land use and management of natural resources.

The Consultancy assignment entails the construction supervision of the construction process of: (i) Matanda dam and (ii) the Off-farm pipe network up to the block. The civil works for the dam and the pipe network system for Matanda Irrigation Scheme will be executed by two separate contractors. Both works contracts shall be executed concurrently. However, the construction supervision for the Off-farm pipe network up to the block will commence about 9 months or so later.

1.1.1 Matanda Irrigation Scheme The proposed scheme is located in the sub-counties of Kihhihi, Nyakinoni, Nyamirama in Kanungu District, Western region. The water for the scheme is to be abstracted from Kiruruma River. Kiruruma River drains an area of 150.73sq.km upstream of the dam site. Water flow estimated at the proposed dam site is 54.12 Mm³//yr corresponding to 1.72m³/s.

a. Matanda Dam

The design consists of a conventional concrete gravity dam on the Kiruruma River, 20m high, 110 m of maximum crest length, and creating a 11 Mm³ reservoir. The dam will feed a piped irrigation network serving a command area of 4420 ha. The minimum operational level of the dam is at 1,256 m, which allows feed the system with natural pressure

b. Matanda Irrigation Scheme pipe network

The Scope of Works for construction of the off-farm pipe network comprises of Primary, secondary and tertiary distribution lines reaching the different zones in the command area up to the farm unit hydrant (20ha), scheme roads and sanitary facilities. The pipe system proposed for the scheme shall comprise; Steel Pipe (MS Pipe) - for pipes having diameter more than 1000mm,

Ductile Iron (D.I) pipes - for diameters ranging from 300mm to 1000mm, and HDPE pipes for diameters less than 300mm.

1.2 Objective of the Assignment

The overall objective of the assignment is to supervise the construction works to be executed under two different works contracts namely; Construction of Matanda Dam and Auxiliary Facilities, and Construction of the Off farm Pipe Network for Matanda Irrigation Scheme up to the block through prudent contracts management, to ensure: conformity and compliance to design specifications and design modifications; quality control and assurance; performance monitoring for the infrastructure during defects period, and adherence to the Environmental and social safeguard policies and requirements.

The Construction of Matanda Dam and Auxiliary Facilities will commence about 9 months before the Construction of Pipe Network for Matanda Irrigation Scheme. Thus, the Consultant has to accordingly plan to deploy adequate resources to supervise the two associated but separate works contracts.

2. SCOPE OF THE ASSIGNMENT

The scope of the Consultancy Services, includes but is not limited to:

2.1 Construction Supervision of Matanda Dam and Auxiliary facilities.

The Consultant shall prepare for the commencement of the works; and subsequently supervise the Construction Contract as the “Engineer”. The terms and conditions for construction works shall be as stipulated in the latest harmonized version of the FIDIC conditions of contract. Construction supervision will also be in line with the ENVIRONMENTAL AND SOCIAL POLICY in section 10, and the CODE OF CONDUCT in section 11.

Construction supervision for Matanda Dam and Auxiliary facilities will encompass the entire scope of work related to the Dam. The scope of supervision will also encompass re-instatement works. The Consultant shall put in place a quality assurance system, a risk and environmental, health and safety management system to ensure compliance with construction standards.

Construction supervision for the dam covers three distinct phases: (i) pre-construction appraisal phase (2 calendar months); (ii) construction phase (30 calendar months) and (iii) defects liability phase (12 calendar months).

2.1.1 Pre-Construction appraisal phase

During pre-construction appraisal, the consultant's tasks shall include, but not be limited to the following:

- i. Perform design appraisals and, where appropriate, propose modifications with working drawings in consultation with the Client.
- ii. Facilitate Sites Handover for the Works to the Contractors.
- iii. Supervise and direct the contractor in undertaking additional geological, geophysical and geotechnical investigations.
- iv. Review Contractors' Environmental and Social Management Plans (C-ESMP), taking into consideration the provisions made in the initial project ESIA, ESIA Certificate Conditions of Approval by issued by NEMA, and any associated Environmental and Social Assessments undertaken during project planning, implementation and operation. The C-ESMP shall cover all project activities to be undertaken by the Contractors, including the main project linear works, supporting facilities such as Camps, Equipment Storage Yards, Materials sites (gravel, sand, clay, stone aggregates, etc).
- v. Supervise the contractor in undertaking engineering tests on construction materials (gravel, sand, clay, stone aggregates, etc).
- vi. Ensure that insurance, performance securities and advance payments guarantees are furnished by the Contractor in time. In liaison with the Employer, shall validate these documents and ensure authenticity in order to issue the commencement notice for the construction.
- vii. Review and make recommendations to the Contractor's procurement schedule.
- viii. Ensure that the Contractor conforms with the legal, health and safety standards and all safe guards' requirements.
- ix. Review Construction Supervision and Quality Assurance Plan (CSQAP), understand the requirements of CSQAP and reflect the requirements in the proposed supervision methodology.
- x. Review the Environmental and Social Monitoring Plan (ESMP), outline and disseminate the mitigating/enhancing, monitoring, consultative and institutional measures required to prevent, minimize, mitigate or compensate for adverse environmental and social impacts or enhance the beneficial impacts.
- xi. Prepare minimum safety standards for workers. Ensure tools and guidelines for safeguard procedures specifying minimum safety procedures are available and accessible to all sites staff for consultants, contractors and workers.
- xii. Develop and establish construction management systems and procedures for correspondences and notices among Employer/Consultant/Contractor ensuring effective administrative link between the owner and contractor; for site management documentation,

reporting, duties and responsibilities of key consultant's staff, site approvals etc. ensuring that the construction work is carried out in accordance with the contract design and specifications, typically with a team including full-time specialists, quality control inspectors, field technicians, and quantity surveyors.

- xiii. Develop and establish a Quality Control and Quality Assurance System and review and approve the contractor's Quality Assurance Plan.
- xiv. Review and approve the contractor's method statements before construction as required in the technical specifications for all important elements of the project and check for any non-compliant methods, equipment, or materials to be corrected before work commencement. Handle contractor's claims in a timely manner and advise the owner accordingly.

2.1.2 Construction Supervision phase

The Consultant shall deploy a full-time supervision team on site. The team shall be responsible for supervising the entire construction process of the dam and the auxiliary facilities. During the entire construction process, the Consultant shall work in close cooperation with the Employer's project team.

During the construction period, the Consultant's tasks shall include, but not be limited to the following:

- i. Review the Contractors' work programs (in acceptable and compatible software) and method statements while highlighting areas that may pose a risk to works scope, quality and timely completion. Identify the key milestones and the critical path activities. Analyze relevance of activities and consistency with project works Programme and provide advice to eliminate unnecessary/redundant activities.
- ii. Review Contractor's proposed resources (labour/staff, equipment and materials), utilization, deployment, productivity and efficiency. Undertake a detailed works analysis and ensure the detailed works project schedule presents realistic resource utilization and deployment and productivity rates (labour & equipment) for each activity to attain the target outputs and is synchronized with the work programme and updated on a monthly basis.
- iii. Review and approve the contractor's method statements before construction as required in the technical specifications for all important elements of the project and check for any non-compliant methods, equipment, or materials to be corrected before work commencement. Handle contractor's claims in a timely manner and advise the owner accordingly.
- iv. Carryout Environmental, Social, Health and Safety due diligence during acquisition and operation of all the supporting facilities by the Contractors, including technical supervision of conduct of applicable statutory assessments. The Consultants shall review TORs for all Assessments to ensure technical adequacy of the prepared ESIA/ ESMPs reports before submission to MWE/MAAIF, NEMA and/or to the Bank for clearance;

- v. Ensure that the Contractor conducts the necessary environmental and social assessments, and obtains the requisite statutory approvals (such as licenses, certificates, permits, etc) for any proposed auxiliary facilities including campsites, equipment yards, borrow pits, quarry sites, dumpsites, before establishments and/or installation of equipment, etc.
- vi. Ensure that the Contractor works within the environmental and social frameworks as detailed in the project's Environmental and Social Impact assessment (ESIA)/Environmental and Social Management Plan (ESMP) and the Resettlement Action Plan (RAP), and compliance with the relevant National policies and legal Framework, and with the environment and social safeguard policies of the Bank.
- vii. Review and make recommendations to the Contractor's procurement schedule, and supervise the Contractors' procurements, ensuring that all materials are from the right source, quality and of sufficient quantities.
- viii. Inspect and assess all proposed works sites, quarry and borrow areas and materials for the project;
- ix. Ensure adequacy of implementation of the mitigation measures and strengthening of compliance to environmental and social safeguards procedures (ESAP).
- x. Ensure range and nature of safety measures at works sites and their supervision are in place and implemented.
- xi. Supervise the Contractors' actual work progress versus the planned work programme and ensure that delays are kept to a minimum and, that the Contractor at their cost takes measures to make up for time lost and pull the project back to planned schedule. In addition, the Consultant is required to keep a monthly updated work program in liaison with Contractor.
- xii. Timely issue to the Contractors all the necessary correspondences related to information, instructions, clarifications and suggestions to ensure consistency in quality, positive progress and planned costs.
- xiii. Inspect, determine and approve the part of works before, during and after construction of part and, or whole of the works to ensure all time compliance with the specifications and standards.
- xiv. Supervise the Contractors' construction activities, ensuring that all construction is undertaken as designed, or in accordance with client-approved variations to the original design, and that all quality standards are met.
- xv. Advise the owner on variation orders.
- xvi. Undertake and prepare revised designs, improvements or modifications as necessary during construction.
- xvii. Review and approve any amendments to designs from the Contractor.

- xviii. Ensure that the Contractor has issued insurance of all personnel for accidents liabilities during construction.
- xix. Inspect and certify all completed works. Certify payment certificates for payments of completed works or parts thereof. Ad measure and certify all quantities invoiced by the Contractor. Prepare the contractor's payment statement including final certificate in accordance with General Conditions of Contract and Conditions of Particular application.
- xx. Ensure that the Contractors perform tests and provide reports from approved laboratories according to the approved and agreed upon quality standards to the client, and approve the materials procured by the contractor for the works to ensure that they comply with design assumptions and specifications.
- xxi. Undertake independent tests or inspections as considered necessary to confirm that the construction is completed in accordance with the design intent.
- xxii. Periodically review the status of the Contractors' real versus required staffing, equipment, insurance, status of performance securities, advance payment guarantees and recommend appropriate actions to the client. In addition, the Consultant will check the status of expiry of the performance bond and advance payment guarantee and recommend appropriate actions (if applicable) to the Employer.
- xxiii. State all methods and procedures that are intended to ensure robust quality control, execute all procedures accordingly, and report on all quality control undertakings and their results to the client.
- xxiv. In addition to continuous construction supervision, schedule and organize a weekly formal inspection of activities with the Contractors' representatives and agree with the Contractors on progress made.
- xxv. Undertake regular delay surveys to facilitate acquisition of specific site production and productivity of the works (labor and equipment) or materials availability for the Contractor. Monitor and document Contractor inefficiencies, disruptions and delays and determine problems and advise on solutions to improve works progress rates.
- xxvi. Periodically prepare a risk management plan for the construction project. Carry out risk identification for potential delays, disruptions, disputes arising from compensation events, reliability of materials sources and delivery and unforeseen ground conditions and environmental hazards and their potential impacts on construction methods. Undertake analysis/assessment of potential risk identified and evaluate effects (qualitatively and quantitatively) and ranking of occurrence and classify and major, moderate or minor. Draw-up risk response to circumstances to include possibilities for risk avoidance, transfer or controllable/minimization.
- xxvii. Advise the Employer on contractual obligations and establish early warning systems to minimize occurrence from potential compensation events and subsequent claims for time extension and/or costs.

- xxviii. Develop and maintain a project progress reporting format that is both, concise and in accordance with the Employer's requirements.
- xxix. Monthly progress reporting to the client, and immediate reporting shall any issues be identified that could affect the project completion schedule. This shall include arrangement for site meetings as and when they may be required.
- xxx. Monitor the value of works executed against payments made to the Contractor and report to the Employer monthly consistency against programme of expenditure and works giving reasons and recommendations.
- xxxi. In consultation with the client, and if necessary, prepare variation orders.
- xxxii. Schedule and organize witness-testing events, including contractual tests for the completed works.
- xxxiii. Maintain daily site records on prevailing weather conditions, labour productivity, availability and operational condition of key plant, plant productivity, daily activity outputs, and disputes between employers and staff as well as between contractor and local residents, and all other observations that may be of importance in case of any arbitration or legal disputes.
- xxxiv. Ensure that the contractor meets Environment, Social, Health and Safety requirements (ESHS) as indicated in Annexes 1 and 2, and in the project ESIA/ESMP.
- xxxv. Ensure that the contractor works within the environmental and social frameworks as detailed in the project's environmental social impact assessment (ESIA) and environmental and social management plan (ESMP) and the Resettlement Action Plan (RAP). Document and verify any complaints and grievances from project affected persons/workers. Ensure adherence to the NEMA Certificate of Approval Conditions.
- xxxvi. Ensure that there is timely and coordinated response to environmental and social issues – a functional system of reporting safeguard issues in place and issues of concern by different stakeholders regularly discussed and responded to.
- xxxvii. Develop and maintain an Environmental and Social Compliance management "Tracker" to document implementation C-ESMP and instructions issued during project implementation by the Contractors;
- xxxviii. Develop and maintain an Accident Log during project implementation and undertake to report serious and severe accidents to the Employer within 24 hours of occurrence.
- xxxix. Document the responses to environmental and social issues of concern raised by different stakeholders. Ensure preparation of quality and timely environmental and social reports on regular monthly basis.

- xl. The Consultant shall guide the Contractors on compiling Operation and Maintenance Manual and shall forward three (3) copies of the Manual to the Client as shall be provided for in the Works Contract.
- xli. Commission and approve completed systems and facilitate hand over to Employer.
- xlii. Prepare snag lists after substantial completion of works.
- xliii. Prepare environmental and social audits and certification with regulatory authority.
- xliv. Prepare the 'substantial completion report' prior to technical handover.
- xlvi. Facilitate technical commissioning.

2.1.3 Defects Liability Phase (DLP)

The Consultant shall ensure and maintain three monthly/quarterly supervision and monitoring during the Defects Liability Period. During the entire period, the consultant shall work in close cooperation with relevant operational staff, as nominated by the local authorities, communities and Employer. During the Defects Liability Period, the Consultant's tasks shall include, but not be limited to the following:

- i. Supervise and update the Contractor's snag list, as agreed and contained in the substantial completion report.
- ii. Monitor the performance of all hydraulic works and equipment, notify both the contractor and the client on defects identified, and recommend remedial actions.
- iii. Supervise and certify the remedying of any defects that become apparent during the Defects Liability Phase.
- iv. Review and supervise the agreed upon 'on the job' training programme of operational staff by the Contractors.
- v. Ensure that the Contractors supply complete sets of all works manuals, drawings, models, warranties, and other relevant documentation to the Employer. The supervision Consultant shall point out all items missing and recommend actions to be taken to the Employer.
- vi. Review, approve, and certify 'As-Built' drawings.
- vii. Compile and document the schemes Asset Register in GIS
- viii. Review and certify the Final Statement of Accounts.
- ix. Develop and maintain a Defects Liability reporting format that is both, concise and in accordance with the Employer's requirements.
- x. Hold regular scheduled meetings with the Contractors and Employer where all defects identified are recorded and a time schedule for remedying these shall be agreed.
- xi. Prepare monthly progress reporting to the Employer on the operational status of scheme.

- xii. Prepare Final Completion Report, including the design modifications (detailed analysis).
- xiii. Assist the Employer in the final handover and acceptance process, including all associated administrative work, such as the discharge certificate (Defects Liability Certificate) for the Contractor.
- xiv. Update Asset Register.

2.2 Construction supervision of the Matanda Irrigation Scheme Pipe Network

Commencement of the Construction works for the Off-farm Pipe Network up to the Block is estimated to be six (6) months after that of the Construction works for Matanda Dam and Auxiliary Facilities.

The Consultant shall prepare for the commencement of the works for the pipe network; and subsequently supervise the construction Contract as the “Engineer”. The terms and conditions for construction works shall be as stipulated in the latest harmonized version of the FIDIC conditions of contract. Construction supervision will also be in line with the ENVIRONMENTAL AND SOCIAL POLICY in section 10, and the CODE OF CONDUCT in section 11.

Construction supervision will encompass the entire scope of work related to the Matanda Irrigation Scheme Off-farm Pipe Network up to the Block. Figure 1 below illustrates the Matanda Command area including the main pipe line and the 20Ha blocks. The scope of supervision will as well include re-instatement works. The Consultant shall put in place a quality assurance system, a risk and environmental, health and safety management system to ensure compliance with construction standards.

Construction supervision for the pipe network/conveyance covers three distinct phases: (i) pre-construction appraisal phase (2 calendar months); (ii) construction phase (24 calendar months) and (iii) defects liability phase (12 calendar months).

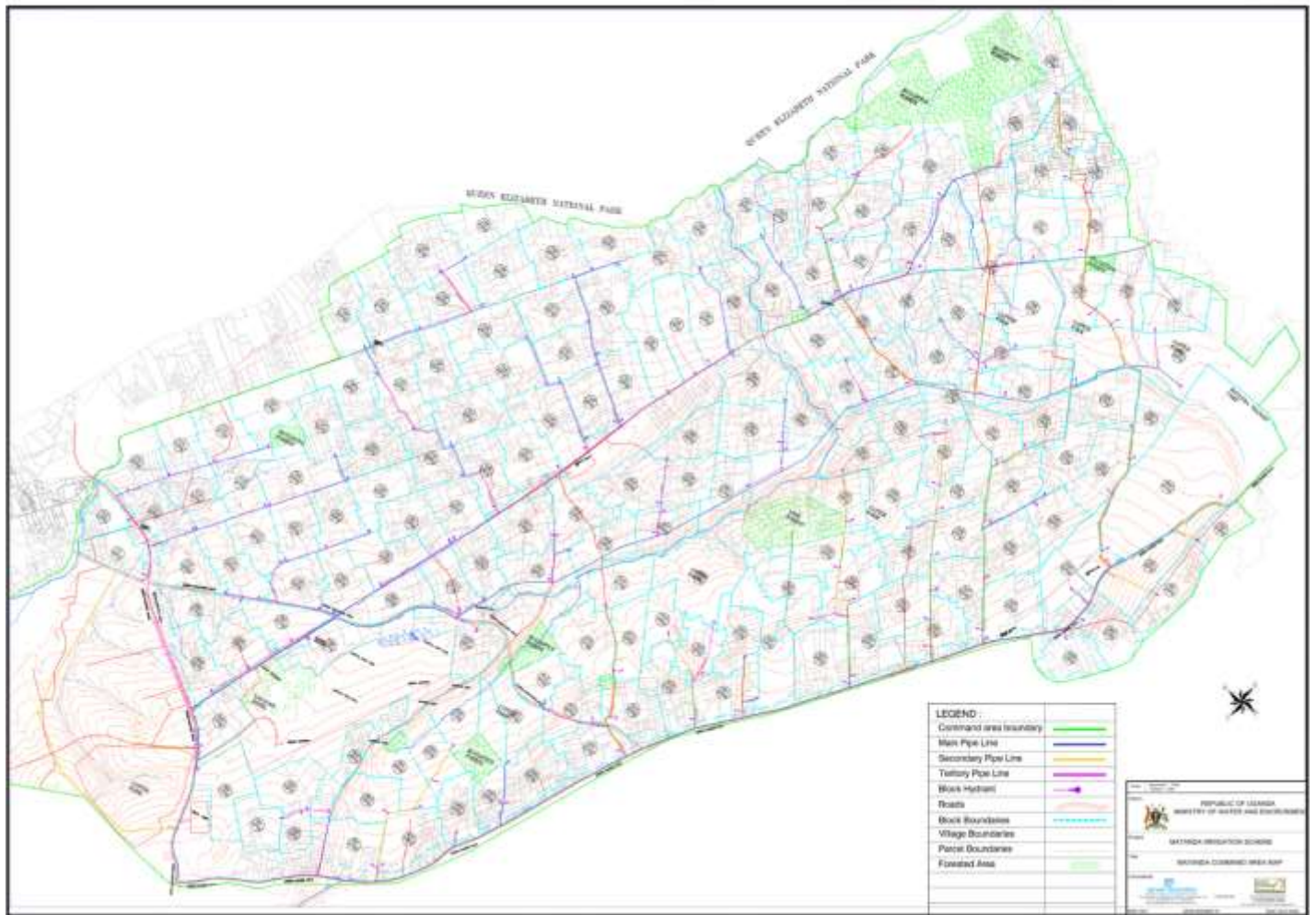


Figure 1: A Map of the Matanda Command area showing the main pipe line and the 20Ha blocks

2.2.1 Pre-Construction appraisal phase

During pre-construction appraisal, the consultant's tasks shall include, but not be limited to the following:

- i. Perform design appraisals and, where appropriate, propose modifications with working drawings in consultation with the Client.
- ii. Facilitate Sites Handover for the Works to the Contractors.
- iii. Review Contractors' Environmental and Social Management Plans (C-ESMP), taking into consideration the provisions made in the initial project ESIA, ESIA Certificate Conditions of Approval by issued by NEMA, and any associated Environmental and Social Assessments undertaken during project planning, implementation and operation. The C-ESMP shall cover all project activities to be undertaken by the Contractors, including the main project linear works, supporting facilities such as Camps, Equipment Storage Yards, Materials sites (gravel, sand, clay, stone aggregates, etc).
- iv. Review the Contractors' work programs (in acceptable and compatible software) and method statements while highlighting areas that may pose a risk to works scope, quality and timely completion. Identify the key milestones and the critical path activities. Analyze relevance of

activities and consistency with project works Programme and provide advice to eliminate unnecessary/redundant activities.

- v. Review Contractor's proposed resources (labour/staff, equipment and materials), utilization, deployment, productivity and efficiency. Undertake a detailed works analysis and ensure the detailed works project schedule presents realistic resource utilization and deployment and productivity rates (labour & equipment) for each activity to attain the target outputs and is synchronized with the work programme.
- vi. Review and make recommendations to the Contractor's procurement schedule.
- vii. Ensure that the Contractor's procurement schedule indicates all materials are from the right source, quality and of sufficient quantities.
- viii. Inspection and assessment of proposed works sites, quarry and borrow areas and materials for the project;
- ix. Carryout Environmental, Social, Health and Safety due diligence during acquisition and operation of all the supporting facilities by the Contractors, including technical supervision of conduct of applicable statutory assessments. The Consultants shall review TORs for all Assessments to ensure technical adequacy of the prepared ESIAs/ ESMPs reports before submission to MWE/MAAIF, NEMA and/or to the Bank for clearance;
- x. Ensure that the Contractor conducts the necessary environmental and social assessments, and obtains the requisite statutory approvals (such as licenses, certificates, permits, etc) for any proposed auxiliary facilities including campsites, equipment yards, borrow pits, quarry sites, dumpsites, before establishments and/or installation of equipment, etc.
- xi. Prepare a risk management plan for the construction project. Carry out risk identification for potential delays, disruptions, disputes arising from compensation events, reliability of materials sources and delivery and unforeseen ground conditions and environmental hazards and their potential impacts on construction methods. Undertake analysis/assessment of potential risk identified and evaluate effects (qualitatively and quantitatively) and ranking of occurrence and classify and major, moderate or minor. Draw-up risk response to circumstances to include possibilities for risk avoidance, transfer or controllable/minimization.
- xii. Ensure that the Contractor conforms with the legal, health and safety standards and all safe guards' requirements.
- xiii. Review Construction Supervision and Quality Assurance Plan (CSQAP), understand the requirements of CSQAP and reflect the requirements in the proposed supervision methodology.
- xiv. Review the Environmental and Social Monitoring Plan (ESMP), outline and disseminate the mitigating/enhancing, monitoring, consultative and institutional measures required to prevent, minimize, mitigate or compensate for adverse environmental and social impacts or enhance the beneficial impacts.
- xv. Prepare minimum safety standards for workers. Ensure tools and guidelines for safeguard procedures specifying minimum safety procedures are available and accessible to all sites staff for consultants, contractors and workers.

- xvi. Develop and establish construction management systems and procedures for correspondences and notices among Employer/Consultant/Contractor ensuring effective administrative link between the owner and contractor; for site management documentation, reporting, duties and responsibilities of key consultant's staff, site approvals etc. ensuring that the construction work is carried out in accordance with the contract design and specifications, typically with a team including full-time specialists, quality control inspectors, field technicians, and quantity surveyors.
- xvii. Develop and establish a Quality Control and Quality Assurance System and review and approve the contractor's Quality Assurance Plan.
- xviii. Review and approve the contractor's method statements before construction as required in the technical specifications for all important elements of the project and check for any non-compliant methods, equipment, or materials to be corrected before work commencement. Handle contractor's claims in a timely manner and advise the owner accordingly.

2.2.2 Construction Supervision phase

The Consultant shall deploy a full-time supervision team on site. The team shall be responsible for supervising the entire construction process of the Off-farm pipe network up to the Block for Matanda Irrigation Scheme. During the entire construction process, the Consultant shall work in close cooperation with the Employer's project team.

During the construction period, the Consultant's tasks shall include, but not be limited to the following:

- i. Supervise the Contractors' actual work progress versus the planned work programme and ensure that delays are kept to a minimum and, that the Contractor at their cost takes measures to make up for time lost and pull the project back to planned schedule. In addition, the Consultant is required to keep a monthly updated work program in liaison with Contractor.
- ii. Review and approve the contractor's method statements before construction as required in the technical specifications for all important elements of the project and check for any non-compliant methods, equipment, or materials to be corrected before work commencement. Handle contractor's claims in a timely manner and advise the owner accordingly.
- iii. Timely issue to the Contractors all the necessary correspondences related to information, instructions, clarifications and suggestions to ensure consistency in quality, positive progress and planned costs.
- iv. Inspect, determine and approve the part of works before, during and after construction of part and, or whole of the works to ensure all time compliance with the specifications and standards.
- v. Review and make recommendations to the Contractor's procurement schedule, and supervise the Contractors' procurements, ensuring that all materials are from the right source, quality and of sufficient quantities.
- vi. Inspect and assess all proposed works sites, quarry and borrow areas and materials for the project;
- vii. Review Contractors' proposed resources (labor/staff, equipment and materials), utilization, deployment, productivity and efficiency. Ensure the detailed works activities schedule presents the

resource utilization and deployment for the target outputs and is synchronized with the work programme, and updated on a monthly basis.

- viii. Supervise the Contractors' construction activities, ensuring that all construction is undertaken as designed, or in accordance with client-approved variations to the original design, and that all quality standards are met.
- ix. Advise the owner on variation orders.
- x. Undertake and prepare revised designs, improvements or modifications as necessary during construction.
- xi. Review and approve any amendments to designs from the Contractor.
- xii. Ensure that the Contractor has issued insurance of all personnel for accidents liabilities during construction.
- xiii. Inspect and certify all completed works. Certify payment certificates for payments of completed works or parts thereof. Ad measure and certify all quantities invoiced by the Contractor. Prepare the contractor's payment statement including final certificate in accordance with General Conditions of Contract and Conditions of Particular application.
- xiv. Ensure that the Contractors perform tests and provide reports from approved laboratories according to the approved and agreed upon quality standards to the client, and approve the materials procured by the contractor for the works to ensure that they comply with design assumptions and specifications.
- xv. Undertake independent tests or inspections as considered necessary to confirm that the construction is completed in accordance with the design intent.
- xvi. Periodically review the status of the Contractors' real versus required staffing, equipment, insurance, status of performance securities, advance payment guarantees and recommend appropriate actions to the client. In addition, the Consultant will check the status of expiry of the performance bond and advance payment guarantee and recommend appropriate actions (if applicable) to the Employer.
- xvii. State all methods and procedures that are intended to ensure robust quality control, execute all procedures accordingly, and report on all quality control undertakings and their results to the client.
- xviii. In addition to continuous construction supervision, schedule and organize a weekly formal inspection of activities with the Contractors' representatives and agree with the Contractors on progress made.
- xix. Undertake regular delay surveys to facilitate acquisition of specific site production and productivity of the works (labor and equipment) or materials availability for the Contractor. Monitor and document Contractor inefficiencies, disruptions and delays and determine problems and advise on solutions to improve works progress rates.
- xx. Periodically prepare a risk management plan for the construction project. Carry out risk identification for potential delays, disruptions, disputes arising from compensation events, reliability of materials sources and delivery and unforeseen ground conditions and environmental hazards and their potential impacts on construction methods. Undertake analysis/assessment of potential risk

identified and evaluate effects (qualitatively and quantitatively) and ranking of occurrence and classify as major, moderate or minor. Draw-up risk response to circumstances to include possibilities for risk avoidance, transfer or controllable/minimization.

- xxi. Develop and maintain a project progress reporting format that is both, concise and in accordance with the Employer's requirements.
- xxii. Monthly progress reporting to the client, and immediate reporting shall any issues be identified that could affect the project completion schedule. This shall include arrangement for site meetings as and when they may be required.
- xxiii. Monitor the value of works executed against payments made to the Contractor and report to the Employer monthly consistency against programme of expenditure and works giving reasons and recommendations.
- xxiv. In consultation with the client, and if necessary, prepare variation orders.
- xxv. Schedule and organize witness-testing events, including contractual tests for the completed works.
- xxvi. Maintain daily site records on prevailing weather conditions, labour productivity, availability and operational condition of key plant, plant productivity, daily activity outputs, and disputes between employers and staff as well as between contractor and local residents, and all other observations that may be of importance in case of any arbitration or legal disputes.
- xxvii. Advise the Employer on contractual obligations and establish early warning systems to minimize occurrence from potential compensation events and subsequent claims for time extension and/or costs.
- xxviii. Ensure that the contractor meets Environment, Social, Health and Safety requirements (ESHS) as indicated in Annexes 1 and 2, and in the project ESIA/ESMP.
- xxix. Ensure that the contractor works within the environmental and social frameworks as detailed in the project's environmental social impact assessment (ESIA) and environmental and social management plan (ESMP) and the Resettlement Action Plan (RAP). Document and verify any complaints and grievances from project affected persons/workers. Ensure adherence to the NEMA Certificate of Approval Conditions.
- xxx. Ensure that there is timely and coordinated response to environmental and social issues – a functional system of reporting safeguard issues in place and issues of concern by different stakeholders regularly discussed and responded to.
- xxxi. Develop and maintain an Environmental and Social Compliance management "Tracker" to document implementation C-ESMP and instructions issued during project implementation by the Contractors;
- xxxii. Develop and maintain an Accident Log during project implementation and undertake to report serious and severe accidents to the Employer within 24 hours of occurrence.
- xxxiii. Document the responses to environmental and social issues of concern raised by different stakeholders.
- xxxiv. Ensure range and nature of safety measures at works sites and their supervision are in place and implemented.

- xxxv. Ensure preparation of quality and timely environmental and social reports on regular monthly basis.
- xxxvi. The Consultant shall guide the Contractors on compiling Operation and Maintenance Manual and shall forward three (3) copies of the Manual to the Client as shall be provided for in the Works Contract.
- xxxvii. Commission and approve completed systems and facilitate hand over to Employer.
- xxxviii. Prepare snag lists after substantial completion of works.
- xxxix. Prepare environmental and social audits and certification with regulatory authority.
 - xl. Prepare the ‘substantial completion report’ prior to technical handover.
 - xli. Facilitate technical commissioning.

2.2.3 Defects Liability Phase (DLP)

The Consultant shall ensure and maintain three monthly/quarterly supervision and monitoring during the Defects Liability Period. During the entire period, the consultant shall work in close cooperation with relevant operational staff, as nominated by the local authorities, communities and Employer. During the Defects Liability Period, the consultant’s task shall include, but not be limited to the following:

- xv. Supervise and update the Contractor’s snag list, as agreed and contained in the substantial completion report.
- xvi. Monitor the performance of all hydraulic works and equipment, notify both the contractor and the client on defects identified, and recommend remedial actions.
- xvii. Supervise and certify the remedying of any defects that become apparent during the Defects Liability Phase.
- xviii. Review and supervise the agreed upon ‘on the job’ training programme of operational staff by the Contractors.
- xix. Ensure that the Contractors supply complete sets of all works manuals, drawings, models, warranties, and other relevant documentation to the Employer. The supervision Consultant shall point out all items missing and recommend actions to be taken to the Employer.
- xx. Review, approve, and certify ‘As-Built’ drawings.
- xxi. Compile and document the schemes Asset Register in GIS
- xxii. Review and certify the Final Statement of Accounts.
- xxiii. Develop and maintain a Defects Liability reporting format that is both, concise and in accordance with the Employer’s requirements.
- xxiv. Hold regular scheduled meetings with the Contractors and Employer where all defects identified are recorded and a time schedule for remedying these shall be agreed.
- xxv. Prepare monthly progress reporting to the Employer on the operational status of scheme.
- xxvi. Prepare Final Completion Report, including the design modifications (detailed analysis).

- xxvii. Assist the Employer in the final handover and acceptance process, including all associated administrative work, such as the discharge certificate (Defects Liability Certificate) for the Contractor.
- xxviii. Update Asset Register.

3. ORGANISATION OF THE ASSIGNMENT

3.1 Contractual Arrangement

The contract signed between the Client and the Consultant shall be time based for the Construction Supervision of the Matanda dam and Irrigation Scheme Pipe Network.

3.1.1 Preparation of Financial Proposal

The Consultants shall prepare financial proposal indicating the supervision and associated costs for both dam works and pipe network.

3.2 Liaison with Client

MWE shall nominate members to constitute a contract management team headed by a Contract Management Team leader. The Contract management team shall carry out all contract management oversight activities, supervisory roles and review, sign-off and approval of consultant's reports. It will be the consultant's duty to maintain close contact with the Contract Management Team leader on all aspects of work. As a matter of principle, all formal communications relating to the work will be directed to the attention of the Contract Management Team leader.

MWE shall nominate an engineer who shall be the Clients Resident Supervisor, responsible for the day-to-day coordination and monitoring of the project activities. As such, the engineer shall closely work with the consultant during the supervision stages to ensure that all the technical requirements of the project are fully met. In particular, the engineer, under the guidance of the Contract Management Team leader, shall review and provide the Client's input, comments and guidance on the work plans, methodologies and reports prepared by the consultant for quality assurance and achievement of set objectives. The MWE shall also assign a resident sociologist and environment safeguard specialist responsible for supervision of EHS and social aspects on the project.

3.3 Firm Qualifications, Logistical Setup and Staffing

Minimum of 10 years of core business as a consultant in undertaking and Construction supervision for water storage dams, bulk water conveyance and farm irrigation systems.

The Consultant should also demonstrate experience in carrying out at least two (2) similar assignments in the last 10 years. Similar assignments defined as those for undertaking construction supervision for water storage dams and bulk conveyance systems and design of on-farm distribution networks of a value of at least US\$ 2 Million.

Within the technical proposal, the consultant shall elaborate on the envisaged logistical setup and deployment of appropriate skills for execution of the assignment. The consultant shall present the staffing schedule in a manner that clearly shows the stage and duration where each of the proposed team members is planned to be involved in the project.

An organogram reflecting the responsibilities of each staff member and line management setup of the proposed team shall be part of the proposal. It is recommended that the consultant integrates local expertise into the project execution team.

In the course of implementation of the assignment, all the proposed personnel must be available for this assignment. Staff changes shall not be accepted, except in exceptional circumstances (and at the discretion of the Client).

Tables 1 and 2 show the required personnel and the estimated time inputs for the respective Assignments. As a minimum, the key personnel shall be required to undertake this assignment within the stipulated timeframe. The Consultant is free to propose additional staff beyond the minimum stipulated and also propose additional time, provided a clear justification is provided in the technical proposal.

Table 1: List of required personnel with minimum time inputs for Construction Supervision of Matanda Dam

Expert	General experience (years)	Specific experience (years)	Estimated Time input (Man-Months) Construction Supervision for Matanda Dam
1. Key Staff			
i. Project Manager/Team Leader	15	10	30
ii. Resident Engineer	15	10	38
iii. Geotechnical Engineer	10	5	12
iv. Hydraulic Engineer	10	5	12
v. Electro-mechanical Engineer	10	5	12
vi. Land Surveyor	10	5	26
vii. Environmental Specialist	10	5	26
viii. Social development specialist	10	5	26
2. Mandatory Non-Key Staff			
i. Assistant Resident Engineer – Dam	7	5	36
ii. Clerk of Works – Dam (2No.)	5	3	48
Total			266

Table 2: List of required personnel with minimum time inputs for Construction Supervision of Matanda Irrigation Scheme Pipe Network

Expert	General experience (years)	Specific experience (years)	Estimated input Months) Construction Supervision for the Irrigation Network
1. Key Staff			
i. Project Manager/Team Leader	15	10	0
ii. Resident Engineer	15	10	0
iii. Land Surveyor	10	5	0
iv. Electro-mechanical Engineer	10	5	0
v. Water Supply Engineer	10	5	12
vi. Environmental Specialist	10	5	20
vii. Social development specialist	10	5	20
2. Mandatory Non-Key Staff			
i. Assistant Resident Engineer – Pipe Network	7	5	30
ii. Clerk of Works – Pipe Network (2No.)	5	3	36
Total			118

Table 3a: Minimum qualifications and experience of key personnel Construction Supervision of Matanda Dam

No.	Position	Minimum qualifications and experience
1	Project Manager/Team Leader.	<p>Education: Bachelors degree in Civil / Hydraulic Engineering or other relevant discipline and Masters in Civil Engineering or Construction Management or Project Management.</p> <p>General experience: Minimum of 15 years working experience</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 10 years' experience in planning and implementation (design and construction supervision) of water for production infrastructure projects; irrigation schemes and earth dams b. Experience as Project Manager or Team Leader on not less than 2 previous projects similar in scale and content to this one. c. Experience in implementation of projects in developing countries d. Must be a Registered Engineer in Uganda or any other recognized engineering body.
2	Hydraulic Engineer	Education:

No.	Position	Minimum qualifications and experience
		<p>Bachelors degree in civil/hydraulic engineering or other relevant discipline and Masters degree in Hydraulic Engineering.</p> <p>General experience:</p> <p>Minimum of 10 years working experience</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 5 years' experience in the field of hydraulic engineering b. Experience as Hydraulic Engineer on not less than 2 previous projects involving similar works and infrastructure
3	Geotechnical/Structural Engineer	<p>Education:</p> <p>Bachelors degree in Civil Engineering or other relevant discipline and Master's degree in Geotechnical/Structural Engineering.</p> <p>General experience:</p> <p>Minimum of 10 years working experience</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 5 years' experience in the field of Geotechnical Engineering b. Experience as Geotechnical Engineer on not less than 2 previous projects involving similar geotechnical scope works. c. Must be a Registered Engineer in Uganda or any other recognized engineering body.
4	Electro-mechanical Engineer	<p>Education:</p> <p>Bachelors degree in Mechanical Engineering or other relevant discipline and Master's degree in Electro-mechanical Engineering.</p> <p>General experience:</p> <p>Minimum of 10 years working experience</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 5 years' experience in the field of Electro-mechanical Engineering b. Experience as Electro-mechanical Engineer on not less than 2 previous projects involving similar infrastructure.
5	Social development specialist	<p>Education:</p> <p>A Bachelors degree in Sociology, Development Studies or related fields, and a Masters Degree in Sociology, Development Studies or related fields.</p> <p>General experience:</p> <p>Minimum of 10 years working experience covering a range of socio-economic and gender issues, including resettlement, social inclusion, stakeholder engagement, and SEA/SH</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 5 years' experience as a Social Development Expert

No.	Position	Minimum qualifications and experience
		<p>b. Experience as Social Development Expert on atleast 1 previous project involving similar infrastructure.</p> <p>c. Previous experience working on World Bank funded projects will be an added advantage</p>
6	Environmental Specialist	<p>Education: Bachelors degree in Environmental Sciences/ Engineering or equivalent</p> <p>General experience: Minimum of 10 years working experience. Experience with World Bank environmental policies added advantage.</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 5 years' relevant experience in assessment and mitigation of environmental impacts on infrastructure projects b. Experience in delivering good international industry practice with respect to Environment, Social, Health and Safety (ESHS). c. Experience in supervision of at least 1 infrastructure project, managing associated Environment, Social, Health and Safety aspects d. Hold a Certificate in Health and Safety Management from a recognized Training Institution, such as NEBOSH, OSHA, etc.
7	Resident Engineer	<p>Education: Bachelors degree in Civil/Hydraulic Engineering or other relevant discipline. Postgraduate degree in Construction Management added advantage.</p> <p>General experience: Minimum of 15 years working experience</p> <p>Specific experience:</p> <ul style="list-style-type: none"> a. 10 years' experience in construction supervision of dams; concrete dams and earth dams b. Experience as Resident Engineer on not less than two previous projects (similar in scale and content to this one) with at least one in a developing country c. Shall be a Registered Engineer in Uganda or any other recognized engineering society
8	Assistant Resident Engineer - Dam	<p>Education: Bachelors degree in Civil/Hydraulic Engineering or other relevant discipline. Postgraduate degree in Construction Management added advantage</p> <p>General experience: Minimum of 7 years working experience</p>

No.	Position	Minimum qualifications and experience
		Specific experience: <ul style="list-style-type: none"> a. 5years' experience in construction supervision of dams; concrete dams and earth dams b. Experience as Resident Engineer/Assistant Resident Engineer on at least one previous project (similar in scale and content to this one) in a developing country
9	Land Surveyor	Education: Bachelors degree in Surveying. General experience: Minimum of 10 years working experience in cadastral and topographic surveying among others. Specific experience: <ul style="list-style-type: none"> a. 5 years' experience in land cadastral and topographical surveying b. Experience in surveying works on at least two previous Water for Production Infrastructure projects; irrigation schemes and dams in Uganda.
10	Clerk of Works – Dam (2No.)	Education: Higher diploma in Civil Engineering or related field. Bachelors degree in relevant field is added advantage. General experience: Minimum of 5 years working experience Specific experience: <ul style="list-style-type: none"> a. 3 years' experience in construction supervision b. Experience in construction supervision on at least one previous Water for Production Infrastructure project; irrigation scheme and dam in Uganda.

Table 3a: Minimum qualifications and experience of key personnel for Construction Supervision of Matanda Pipe network

No.	Position	Minimum qualifications and experience
1	Project Manager/Team Leader.	Same Expert cited in table 3a above
2	Resident Engineer	Same Expert cited in table 3a above
3	Land Surveyor	Same Expert cited in table 3a above
4	Electro-mechanical Engineer	Same Expert cited in table 3a above
5	Water Supply Engineer	Education: Bachelors degree in Civil/Water/Hydraulic Engineering or other relevant discipline and Masters degree in Water/ Hydraulic Engineering.

No.	Position	Minimum qualifications and experience
		<p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: a. 5 years' experience in the field of Irrigation and drainage engineering b. Experience as Water/Hydraulic Engineer on not less than 2 previous projects involving similar works.</p>
6	Social development specialist	<p>Education: A Bachelors degree in Sociology, Development Studies or related fields, and a Masters Degree in Sociology, Development Studies or related fields.</p> <p>General experience: Minimum of 10 years working experience covering a range of socio-economic and gender issues, including resettlement, social inclusion, stakeholder engagement, and SEA/SH</p> <p>Specific experience: a. 5 years' experience as a Social Development Expert b. Experience as Social Development Expert on atleast 1 previous projects involving similar infrastructure. c. Previous experience working on World Bank funded projects will be an added advantage</p>
7	Environmental Specialist	<p>Education: Bachelors degree in Environmental Sciences/ Engineering or equivalent</p> <p>General experience: Minimum of 10 years working experience. Experience with World Bank environmental policies added advantage.</p> <p>Specific experience: a. 5 years' relevant experience in assessment and mitigation of environmental impacts on infrastructure projects b. Experience in delivering good international industry practice with respect to Environment, Social, Health and Safety (ESHS). c. Experience in supervision of at least 1 previous project involving similar infrastructure, managing associated Environment, Social, Health and Safety aspects d. Hold a Certificate in Health and Safety Management from a recognized Training Institution, such as NEBOSH, OSHA, etc.</p>
8	Assistant Engineer – Resident Pipe network	<p>Education: Bachelors degree in Civil/Hydraulic Engineering or other relevant discipline. Postgraduate degree in Construction Management added advantage</p> <p>General experience: Minimum of 7 years working experience</p> <p>Specific experience:</p>

No.	Position	Minimum qualifications and experience
		a. 5years' experience in construction supervision of Water Supply Infrastructure including similar pipe networks b. Experience as Resident Engineer/ Assistant Resident Engineer on at least one previous project (similar in scale and content to this one) in the Sub-Saharan Africa region
9	Clerks of Works – Pipe Network (2No.)	Education: Higher diploma in Civil Engineering or related field. Bachelors degree in relevant field is added advantage. General experience: Minimum of 5 years working experience Specific experience: a. 3 years' experience in construction supervision b. Experience in construction supervision of at least 1 Water Supply Infrastructure Project including similar pipe networks

Note:

- The Team Leader, Resident Engineer, Land Surveyor and Electro-Mechanical Engineer shall work simultaneously on both assignments i.e supervision of the dam construction and the supervision of the construction of Matanda off-farm pipe network.

4. DURATION OF THE ASSIGNMENT

The duration of the Consultancy Services shall be as follows:

The overall duration of the Consultancy Services shall be 38 calendar months.

The duration for the 2No. assignment packages shall be:

- Construction Supervision for Matanda Dam and Auxiliary Facilities: *Thirty-Eight (38) Calendar months disaggregated as follows: (i) pre-construction appraisal phase (2 calendar months); (ii) construction phase (24 calendar months) and (iii) defects liability phase (12 calendar months).*
- Construction Supervision for the Pipe Network up to the Block: *Thirty-Two (32) calendar months disaggregated as follows: (i) pre-construction appraisal phase (2 calendar months); (ii) construction phase (18 calendar months) and (iii) defects liability phase (12 months).*

The Construction Supervision for the Pipe Network up to the Block assignment will commence about six months after the commencement of the Construction Supervision for Matanda Dam and Auxiliary Facilities. The Consultant shall take this account in preparing the work program for each assignment i.e one for the construction supervision for Matanda dam and the other for the construction supervision of Matanda off-farm network.

It is the responsibility of the Consultant to establish a detailed work program within the above time estimates. The staff time inputs shall accordingly be provided in accordance with the Consultant's professional judgment and knowledge of the local conditions and needs.

5. REPORTING AND MEETING REQUIREMENTS

5.1 The Consultant Shall Report to the Following

The Project Coordinator – Irrigation for Climate Resilience Project
Attn: Eng. Henry Kizito
Ministry of Water and Environment
Plot 3-7, Kabalega Crescent, Luzira, Kampala, Uganda
E-mail: henry.kizito@mwe.go.ug, kizitohl@yahoo.co.uk,

Reporting Requirements – General

The Consultant shall hand over all data collected during the course of the assignment to the Client in formats approved by the client. Furthermore, all calculation sheets must be made available to the Client at the end of the project and, on request, at any stage of the project.

5.1.1 Reporting Requirements – Pre-Construction Appraisal Report

Given that both supervision assignments i.e., for Matanda Dam, and the Pipe Network, have closely similar implementation methodologies, the same reporting requirements shall apply for each of them. Therefore, during the course of each of the assignments, the Consultant shall submit the following reports whose minimum requirements under each are also elaborated.

This report shall present:

- i) **Work Program Analysis** – include the adequacy of the detailed work program to ensure consistent, realistic and timely completion of the defined scope and desired quality through Critical Path Analysis.
- ii) **Resource Assessment** – include resource procurement scheduling, utilisation and reliability, optimisation of productivity and efficiency to achieve target outputs and milestones of detailed works program.
- iii) **Construction Risk Management Plan** – this shall elaborate the identification, analysis/assessment, response and mitigation/minimization of potential risks to the construction project works including unforeseen conditions and environmental hazards.
- iv) **Construction Management System** – elaborate the construction management protocols, obligations, responsibilities, procedures for notices, communications, site documentation, reporting and approvals (on-site and off-site).

- v) ***Safeguards Review*** – including status of compliance with legal, health, safety and all safeguards and a review of the Contractors ESMPs and ESAP stipulating procedures, tools and methods to be followed for the construction works.
- vi) ***Quality Control and Quality Assurance System*** – shall elaborate the specific quality control mechanism and quality assurance system to be established.

5.1.2 Reporting Requirements – Construction Supervision phase

- i. ***Monthly construction progress reports:*** The monthly progress reports shall state the status of project implementation (i.e., actual vs. planned physical progress; actual vs. planned expenditures), financial information, all agreed and all new variation and compensation events, all issues requiring client attention, environmental and social safeguards, health and safety information, and other information that may have an impact on project progress. The report shall include the Engineer’s opinion of the current physical progress, quality of works and future prospects on timely completion and costs. The report shall include a Gantt chart, a detailed works schedule with resources inputs, productivity rates and outputs for each works activity. It shall also include photographic evidence of progress. In addition, the report shall project cash flows and work progress over the next three months.
- ii. ***Substantial works completion report:*** The substantial completion report shall state the project scope, principal activities by the consultant and the contractor (including deployment of resources during project implementation), the contractor’s performance, all project relevant observations of the consultant, major issues that were encountered during project implementation and how these were solved, the project schedule citing all delays if any, and financial information. Most important, the substantial completion report shall include a list with all snags to be addressed during the Defects Liability Period, if any, and propose a time schedule for addressing the issues that have been identified.
- iii. ***Operational manuals:*** The consultant shall ensure that suppliers / manufacturers / the contractor submit all operational manuals to the client in the formats and numbers of copies specified agreed at substantial completion. In addition, all equipment supplied including those from abroad shall be accompanied by warranties and guarantees for at least ten (10) years.
- iv. ***As-built drawings:*** The supervision consultant shall submit all ‘as built drawings’ to the client in the format and numbers of copies specified at substantial completion.
- v. ***Asset register update:*** The supervision consultant shall collect data on all rehabilitated and new assets for updating the client’s asset register for each of the schemes. The software used for this purpose shall be agreed with the client. Data on the location of all civil structures shall be handed to the client as in ArcView GIS, or a format agreeable to the client.

- vi. *Hydraulic models and associated design modification reports:*** If found necessary and if agreed by the Client, the Consultant shall build a hydraulic model of the irrigation scheme infrastructure. A model shall be built as part of the project. The Consultant shall submit a ‘model build and verification report’, all calculations sheets, and all hydraulic models (verified model, needs model, and options models). The hydraulic models shall be in software that is to be agreed with the client.
- vii. *Safeguards Reports:*** Shall state the periodic compliance to all legal, health, safety and all safeguards requirements. The evaluation of the ESMP shall be presented indicating the potential impacts and measures undertaken to mitigate or minimise their effects on a monthly basis and for the entire construction period.
- viii. *Incident Reports:*** The consultant shall be required to be part of the reporting of incidents to the client as per the classification guidance provided in Annex 4

5.1.3 *Reporting Requirements – Defects Liability Phase*

During the Defects Liability Phase, the consultant shall submit reports as stated in Table 4. The reports shall, as a minimum, meet the following requirements:

i. Quarterly Monitoring Reports

The interim progress report shall state progress of the contractor on addressing items on the snag list, all observations on the performance of the project installations, system weaknesses and defects, and warranty issues. In addition, the report shall report the consultant’s and / or the contractor’s progress on the undertaking of staff training. The reports shall also include progress on safeguard management including on provisions in abstraction and discharge permits and grievance management.

ii. Completion of Training Report

The completion of training report shall state the training obligations of the Consultant and the contractor, as agreed with the client, the type and duration of training activities undertaken, the number of participants in each training and their professional background, training outputs and achievements, as well as recommendations for further / continued training if any.

iii. Final Completion Report

The final completion report shall include the same type of information as outlined for the ‘substantial completion report’. In addition, it shall show the status of all outstanding actions that were to be completed during the Defects Liability Period.

Summary of reporting Requirements

As indicated in **Tables 4a and 4b below**, the Consultant will be required to produce and submit the following principal reports and documents in the quantities and timing indicated. At each reporting stage,

the Consultant shall also be required to submit to the Client an electronic copy, using the software specified in **Tables 4a and 4b below:**

Table 4a: Summary of reporting requirements for Construction Supervision for Matanda Dam and Auxiliary Facilities

Description	Timeline for submission from contract effectiveness	No. of hard copies	Electronic copies to MWE contact
Construction Supervision			
Pre-Construction Appraisal Report	By the end of month 2	4	Word; Excel (all tables), MS Project (time schedules)
Monthly construction progress reports	Monthly from commencement of works	4	Word; Excel (all tables), MS Project (time schedules)
Substantial construction works completion report, including the following; i. Operations Manuals ii. Assets register iii. Hydraulic Models iv. As-built drawings	By End of month 24	4	Word; Excel (all tables); Epanet (Hydraulic models); CAD (all drawings); ArcViewGIS (location of all new & rehabilitated assets)
Defects Liability Monitoring report (quarterly)	Quarterly starting from commencement of Defects Liability period	4	Word; Excel (all tables)
Final completion report and completion of training report	One month after completion of Defects Liability period	4	Word; Excel (all tables)

Table 4b: Summary of reporting requirements for Construction Supervision for Matanda Pipe Network

Description	Timeline for submission from contract effectiveness	No. of hard copies	Electronic copies to MWE contact
Construction Supervision			
Pre-Construction Appraisal Report	By the end of month 2	4	Word; Excel (all tables), MS Project (time schedules)
Monthly construction progress reports	Monthly from commencement of works	4	Word; Excel (all tables), MS Project (time schedules)

Description	Timeline for submission from contract effectiveness	No. of hard copies	Electronic copies to MWE contact
Substantial construction works completion report, including the following; i. Operations Manuals ii. Assets register iii. Hydraulic Models iv. As-built drawings	By End of month 18	4	Word; Excel (all tables); Epanet (Hydraulic models); CAD (all drawings); ArcViewGIS (location of all new & rehabilitated assets)
Defects Liability Monitoring report (quarterly)	Quarterly starting from commencement of Defects Liability period	4	Word; Excel (all tables)
Final completion report and completion of training report	One month after completion of Defects Liability period	4	Word; Excel (all tables)

5.2 Stakeholders engagement and Involvement

For ensuring organisational and stakeholder wide appreciation and ownership of the project outputs, the consultant shall be required to organise meetings for presentation of reports and review of progress of works to key stakeholders comprising of Central and Local Government officials and farmers' representatives at monthly site meetings to be held at the Contractor's site camp.

During Construction Phase, monthly site meetings will be conducted. The site meetings will be held at the consultant's project site office. Relevant stakeholders invited to the site meetings will include Kanungu District representatives, community leaders, and the Client's representative. The meetings will entail field visits to the project construction sites conducted and coordinated by the consultant and a sit-down discussion session chaired by the client, following COVID 19 SOPs and guidelines. The consultant will be responsible for arranging meeting venues.

6. DATA TO BE PROVIDED BY THE CLIENT

The Client will provide free of charge the following existing information, data, reports and maps in the custody of the Client and will assist the Consultant in obtaining some of the relevant information and materials from governmental institutions and state authorities as far as possible. The data shall include;

- i) Engineering studies, feasibility study and detailed design reports and tender documents prepared by M/s AARVEE Associates, Engineers and Planners in association with HP Devoc International Civil Engineering Limited.
- ii) ESIA & RAP prepared by M/s Air Water Earth.
- iii) NEMA Approval Certificate for Construction of Matanda Irrigation Scheme
- iv) ICRP Environmental and Social Management Framework

The information, data, reports, etc., will be available for the consultant's unlimited use during execution of the proposed services.

7. CAPACITY BUILDING

For purposes of capacity building and ensuring adequate direct involvement of the client in delivering the final project objectives, the client will assign staff that shall be agreed upon with the consultant prior to commencement of the consultancy services.

The Consultant shall work with and train designated staff with the aim of developing capacity and knowledge transfer. Training will include key areas related to the assignment such as field investigations, training in software and tools used in project management, training in application of FIDIC contracts for construction projects and operation and management of farm irrigation systems etc. The training measures are aimed at improving the performance of the designated technical staff. The Consultant shall propose training topics in the technical proposal which will be further defined during consultative meetings with respective entities. For tendering purposes, the tentative number of individuals to be trained is 10No. Project Staff.

The proposal shall include the proposed approach and methodology for the knowledge transfer throughout the assignment, the proposed training obligations of the consultant, the type and duration of training activities to be undertaken, the optimum number of participants in each training, methodology for monitoring and evaluation of trainees, and any post training support and resources.

The consultant in consultation with the Client will organise site visits, inspections and witness testing.

8. SERVICES AND FACILITIES TO BE PROVIDED BY THE CONTRACTOR

Upon commencement of the works contract, the Contractor will provide the following services to the supervision consultant:

1. A fully furnished site office.
2. Survey equipment.
3. In-situ soil testing laboratory equipment
4. Transportation vehicles as specified for official work of the Consultant.

The Consultant will meet the cost of the provision of transport during the pre-construction appraisal stage (up to nine months) and should cost for them if deemed necessary by the consultant.

9. ACTIONS REQUIRING CLIENT CLEARANCE DURING CONSTRUCTION SUPERVISION

Under both assignments, the Consultant shall note that taking any action under the civil works contracts designating the Consultant as “Engineer” for which action pursuant to such civil works contracts to the written approval of the Client as “Employer” is required for the following actions:

1. Use of provisional sums
2. Variations to works that result in a cost greater than 0%
3. Location/ siting of Workers’ Campsites

4. Stone Quarries
5. Construction ESMPs developed by the Contractors

10. ENVIRONMENTAL AND SOCIAL POLICY

The client has an Environmental and Social Policy that will be adhered to during the implementation of the project. The policy is provided in Annex 2

11. CODE OF CONDUCT

The code of conduct in Annex 3 has been set out to take into account considerations of Environment, Social and Health issues, Occupation Health and Safety of experts, client's and contractor's personnel and the community, including dismissal, or referral to legal authorities.

The Consultant shall develop a code of conduct for their staff to adhere to. The code of conduct shall be acceptable to the Client. The Code of Conduct shall be signed by each Consultant's personnel including key experts, non-key experts and support staff to indicate that they have:

1. received a copy of the code;
2. had the code explained to them;
3. acknowledged that adherence to this Code of Conduct is a condition of employment; and,
4. Understood that violations of the Code can result in serious consequences, up to and shall

ANNEX 1: ENVIRONMENT, SOCIAL, HEALTH AND SAFETY (ESHS)

The Consultant will ensure the Contractor's ESHS performance is in accordance with good international industry practice and delivers the Contractor's ESHS obligations. This includes

1. *recruitment of qualified personnel in the positions of Environmental Specialist/Officer, Health and Safety Specialist/Officer, Social Development Officer;*
2. *review the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 6 months);*
3. *review all other applicable contractor's documents related to ES aspects including the health and safety manual, security management plan and SEA prevention and response action plan;*
4. *review and consider the ES risks and impacts of any design change proposals and advise if there are implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;*
5. *undertake, as required, audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities under its contract, to verify the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH);*
6. *undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings and other ES related documentation, as necessary, to confirm the Contractor's compliance with ES requirements (including relevant requirements on SEA/SH);*

7. *determine remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor's ES obligations;*
8. *ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations;*
9. *ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;*
10. *review and critique, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;*
11. *undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ES issues;*
12. *establish and maintain a grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g., of those reporting allegations of SEA and/or SH.*
13. *Ensure that contractor develops and implements a Labor Influx Management Plan and Workers' Camp & Accommodation Management Plans as part of C-ESMP. This shall include the following actions: all workers to sign employment contract including Code of Conduct (Annex H in ESIA– example); establish a Grievance Committee for Workers; sensitize workers on community based social behavior and conduct; sensitize workers to not engage in sexual relations with underage girls and married women;*
14. *carry-out the following activities consistent with the Works contract to be supervised, including but not limited to the following:*
 - (a) *support the Works employer to organize an SEA/SH conference, ensure appropriate representation in the conference and follow-up on any agreed actions by the attendees;*
 - (b) *monitor contractor's compliance with its SEA/SH Prevention and Response Obligations in the Works contract, and take appropriate contractual actions if non-compliance is identified, including upon identification of potential non-compliance by a dispute board;*
 - (c) *ensure that any allegation of SEA and/or SH that are received by the Consultant are documented, maintaining appropriate confidentiality, and promptly submitted to the Employer and the Contractor;*
 - (d) *prior to its engagement for the Works, verify that, any proposed subcontractor not named in the contract, is qualified in accordance with the provisions of the SEA/ SH performance declaration for sub-contractors;*
 - (e) *provide appropriate support and relevant documents that a dispute board may need in reviewing SEA/SH contractual compliance;*

ANNEX 2: ENVIRONMENTAL AND SOCIAL POLICY

ENVIRONMENTAL AND SOCIAL (ES) REQUIREMENTS

The Ministry of Water and Environment's Environmental and Social Safeguards Policy 2018 presented below will apply to these Projects:

The Ministry of Water and Environment's Environmental and Social Safeguards Policy 2018 presented below will apply to these Projects:



**The Republic of
Uganda**

MINISTRY OF WATER AND ENVIRONMENT

ENVIRONMENT AND SOCIAL SAFEGUARDS POLICY

Ministry of Water and Environment Plot

22/28 Port Bell Road, Luzira P.O. Box

20026, Kampala

Tel: +256-414-220229

2018

Forward

The Ministry of Water and Environment (MWE) prepared the Environmental and Social Safeguards (ESS) Policy Framework, to ensure that, in implementing development programs, positive social impacts are maximized while negative ones are minimized or avoided. Experience, has shown that different Entities encounter risks therefore the appropriate social safeguards should always be incorporated in their programmes.

Currently the MWE follows the Uganda Environmental Impact Assessment guidelines derived from the National Environment Management policy and Act (1994) as well as donor specific Environmental and Social Safeguard Frameworks (ESMF) as may be required by specific projects to address ESS issues arising from projects being implemented by the Ministry.

This framework will be applied to all projects/programmes funded by Government of Uganda, Development Partners including Climate Financing such as Adaptation and Green Climate Fund, for which the MWE has overall responsibility for monitoring their implementation. The Ministry at the same time will ensure transparency and accessibility of information, in addition to facilitating the resolutions of disputes with respect to environmental and social risks.

This ESS Policy Framework was prepared in a participatory manner involving all stakeholders, leading to ownership and readiness to implement it for sustainable social benefits.

I therefore, on behalf of the Ministry of Water and Environment and all executing entities wish to express our commitment and readiness to implement the ESS Policy requirements.



Alfred Okot Okidi
Permanent Secretary

Executive Summary

Currently, the Environmental and Social issues are being addressed basing on the National Environment Management Policy and other guiding documents including the Environment Impact Assessment (EIA) guidelines and other Tools developed by National Environment Management Authority (NEMA) while some projects have been using the World Bank Environment and Social Safeguards Policies and other donor -specific ES policies. These are normally actualized through development of Environment and Social Management Frameworks (ESMF) for specific projects and programmes. Other key existing laws and policies relating to the safety of environment and people are prescribed in the Uganda Constitution (1995), the National Environment Management Policy (1994), the Resettlement Policy, the Environment Management Act (1994), National Climate Change Policy (2015), National Gender Policy (2007), Equal opportunities Policy (2008), National Land Policy (2013), Water Policy (1997) among others.

In order to harmonize the current trend, MWE has developed an ESS framework based on 15 ESS principles. The Environmental and Social-Safeguards Framework (ESSF), document is intended to provide the general framework within which Government and Donor funded projects in the Ministry are to be implemented / executed, as far as consideration of Environmental and Social Safeguards are concerned. At this stage, all MWE's projects and other executing entities will be required to follow this framework to ensure that ESS aspects are adequately addressed. Where the need arises, project specific ESMF will be developed to ensure maximum benefits to the intended communities without compromising the 15 ESS principles.

The ESS is aimed to ensure that in implementing development programs, positive outcomes are maximized and negative outcomes are minimized. This framework will therefore ensure integration of environmental and social concerns in all stages of project development and all levels including national, district and local levels, with full participation of the people as means of minimizing environmental and social impacts. It will further ensure identification of key environmental and social issues/aspects that will affect or will be affected by the projects/programmes and ensuring that risks are screened against the 15 principles as well as specification of appropriate roles and responsibilities, and outlining the necessary reporting procedures, for managing and monitoring environmental and social concerns including compliance; grievance mechanism, and establishment of institutional capacity building requirements to successfully implement the ESS as well as monitoring to ensure compliance.

There are 15 principles which apply to MWE's ESS Policy which determine the scope of risk and impact assessments. Some principles always apply to all projects (*), some may or may not be relevant for a specific project/programme. The ESS principles are;

1. Compliance with the Law*-
2. Access and Equity
3. Marginalized and Vulnerable Groups-
4. Human Rights*
5. Gender Equality and Women's Empowerment
6. Core Labour Rights*
7. Indigenous Peoples
8. Involuntary Resettlement-
9. Protection of Natural Habitats

10. Conservation of Biological Diversity
11. Climate Change -
12. Pollution Prevention and Resource Efficiency-
13. Public Health
14. Physical and Cultural Heritage-
15. Lands and Soil Conservation-

At project formulation stage, each development project must highlight key environmental and social impacts both negative and positive impacts. For positive impacts enhancement measures are suggested whereas for negative impacts mitigation measures must be suggested to minimize these negative impacts on the environment and the communities in which the project is to be implemented.

The Ministry will screen all proposed projects and programmes to determine their potential to cause environmental or social harm, undertake Environmental and Social Assessments for all projects and programmes that have the potential to cause environmental or social harm and develop Environmental and Social Management Plans that identifies measures necessary to avoid, minimize, or mitigate the potential environmental and social risks and lastly monitor, evaluate and report to ensure that all environmental and social risks identified during project and programme assessment and design are adequately addressed during and after implementation. The framework also looks at Public Disclosure and Consultations as well as the grievance handling mechanisms.

Acronyms

AF	Adaptation Fund
CCD	Climate Change Department
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Safeguard
EIA	Environment Impact Assessment GHG
	Greenhouse Gas Emissions
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MWE	Ministry of Water and Environment
MEMD	Ministry of Energy and Mineral Development,
MPED	Ministry of Finance, Planning and Economic Development
NWSC	National Water and Sewerage Corporation
NDP-II	National Development Plan II
NEMA	National Environment Management Authority
NFA	National Forestry Authority
TPM	Top Policy Management
UNMA	Uganda National Meteorological Authority

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1.0 Introduction

The Ministry of Water and Environment (MWE) is a lead institution for the Water and Environment Sector. It is responsible for the overall coordination, policy formulation, setting standards, inspection, monitoring, and technical back-up and initiating legislation. It also monitors and evaluates sector development programmes to keep track of their performance as well as efficiency and effectiveness in service delivery.

The Water and Environment Sector encompasses managing water as a resource, establishing water infrastructure for development, harnessing weather and climate and promoting ecosystems and biodiversity resiliencies. **The Vision** is *"Sound management and sustainable utilisation of Water and Environment resources for the betterment of the population of Uganda."*

Its Mission is *"To promote and ensure the rational and sustainable utilisation, development and effective management of water and environment resources for socio-economic development of the country"*. The **Mandate** of the Ministry is derived from the Constitution of the Republic of Uganda (1995) and the Local Governments Act, CAP 243 and includes initiating legislation, policy formulation, setting standards, inspections, monitoring, and coordination and providing back up technical support to water and environment sub sectors.

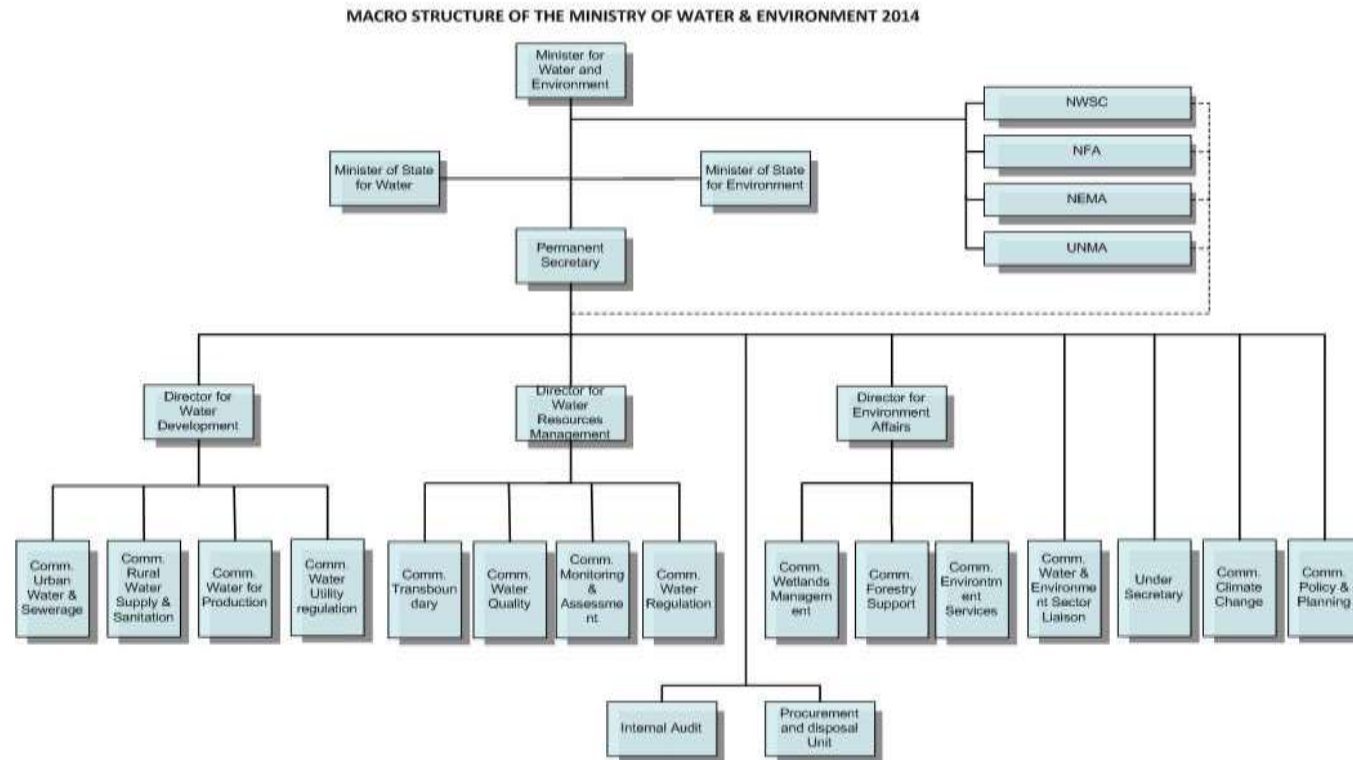
1.1 Institutional Framework

The Ministry is comprised of three of Water Resources Management (DWRM), Directorate of Water Development (DWD) and the Directorate of Environmental Affairs (DEA). In addition, the Ministry is supported by stand-alone departments in support to the technical departments namely the Finance and Administration, Water and Environment Sector Liaison, Policy and Planning and the Climate Change Department.

The ministry has affiliate semi-autonomous Institutions including the National Water and Sewerage Corporation which is a public and state owned utility currently providing water supply and sewerage services in large urban towns, the National Forestry Authority which is mandated to manage Central Forest Reserves and supply high quality forestry related products and services, the National Environment Management Authority responsible for ensuring sound environmental management practices for sustainable development as well as the Uganda National Meteorological Authority (UNMA) responsible for monitoring weather and climate, maintaining a climate database and providing regular advisories on the state of the weather and climate to government and any other clients including Agriculture sector, transport, disaster preparedness and the public. **(Figure 1)**. Other key stakeholders include the Local Government, Donors, Civil Society Organisations, Private Sector and Local Governments are key implementers in the delivery of services in the sector.

The sector is guided by the Top Policy Management (TPM) headed by the Senior Minister and assisted by two Ministers of State for Water and Environment respectively. In addition is the Water and Environment Sector Working Group (WESWG) that is chaired by the Permanent Secretary, assisted by two co-chairs persons representing Water and Sanitation donor group and Environment and Natural Resources donor group. The WESWG is responsible for the overall sector coordination, resource mobilization and allocation as well as reviewing of progress. The Water and Sanitation Sub-Sector Working Group (WSSWG) and the Environment and Natural Resources Subsector Working Group (ENR-SWG) are responsible for the sector planning and priority setting, implementation, monitoring, supervision and management of their respective subsectors in support to the WESWG.

Figure 1: Macro Structure of Ministry Water and Environment



1.2 Strategic Objectives

In order to achieve its vision, the sector is guided by the following strategic objectives in the implementation of its policies and programs;

- i. To provide safe water within easy reach and hygienic sanitation facilities based on management responsibility and ownership by users to 79 percent of the population in rural areas and 100 percent in urban population by the year 2020, with 95 percent effective use and functionality of the facilities.
- ii. To provide viable urban Water Supply and Sewerage/Sanitation systems for domestic, industrial and commercial uses.
- iii. To develop water supply for production/multipurpose use for socio-economic development, modernize agriculture and mitigate the effects of climate change.
- iv. To manage the water resources of Uganda in a wise, integrated, sustainable and coordinated manner so as to secure water of adequate quantity and quality to meet all social and economic needs of present and future generations.
- v. To promote a sustainable productive Natural Resource Base (NRB) and healthy environment for improved livelihoods, poverty eradication and economic growth.
- vi. To develop capacity and promote sustainable harnessing and use of climate and weather resources for socio-economic development of Uganda.'
- vii. To coordinate and ensure compliance with Government policy, legislation, standards and regulations in the Ministry of Water and Environment and the affiliated agencies/institutions implementing or supporting programs related to Water and Environment.

2.0 Justification for Environmental and Social Safeguards Framework

The Ministry of Water and Environment has been implementing a number of projects and programs which inevitably affect the environment and vulnerable groups. Environmental and social issues have been addressed basing on the National Environment Management policy and other guiding documents including the Environment Impact Assessment (EIA) guidelines and other Tools developed by National Environment Management Authority (NEMA) while some projects have been using the World Bank Environment and Social Safeguards Policies and other donor ES policies. These are normally actualized through development of Environment and Social Management Frameworks (ESMF) for specific projects and programmes.

This Environmental and Social Safeguards Framework has been formulated to facilitate the MWE to effectively address the environmental and social issues for projects and programmes funded by the Adaptation Fund upon its accreditation in a harmonized and coherent manner in order to minimize negative Environmental and social impacts on the Environment and beneficiary communities during and after projects/programmes implementation.

2.1 Objectives of Environment and Social Safeguards Framework

This Environment and Social Safeguards Framework is to be used by the Ministry to ensure that all environmental and social safeguards are adequately addressed as required by the Adaptation Fund. The goal is to avoid unnecessary environment and social harm as a result of implementation of Adaptation Fund projects by the ministry which is a key requirement of the fund.

This Environment and Social Safeguards framework aims specifically at the following:

- i. To ensure integration of environmental and social concerns in all stages of project development and all levels including national, district and local levels, with full participation of the people as means of minimising environmental and social impacts
- ii. To identify key environmental and social issues/aspects that will affect or will be affected by the projects/programmes and ensuring that risks are screened against Adaptation Fund 15 principles;
- iii. To specify appropriate roles and responsibilities, and outlining the necessary reporting procedures, for managing and monitoring environmental and social concerns including compliance; and
- iv. To establish institutional capacity building requirements to successfully implement the ESS, with particular focus on monitoring framework for its implementation and compliance;

The following flow chart describes the process of ensuring that the ESS process is adhered to:

Fig 1: Demonstration of the adherence to the ESS process



3.0 Policy and Legal Framework

This Environment and Social Safeguards Framework is aligned to the principles relating to the safety of environment, and the people as enshrined in various laws and policies including among others;

3.1 The Constitution of the Republic of Uganda (1995)

The overarching policy document for ESS in Uganda is the Constitution of the Republic of Uganda, 1995 states that:

- i. The State shall ensure gender balance and fair representation of marginalized groups on all constitutional and other bodies (Constitution of the Republic of Uganda, 1995, Chapter V).
- ii. The State shall take all necessary steps to involve the people in the formulation and implementation of development plans and programs which affect them (Constitution of the Republic of Uganda, 1995, Chapter X).
- iii. The State shall protect important natural resources, including land, water, wetlands, minerals, oil, fauna and flora on behalf of the people of Uganda (Constitution of the Republic of Uganda, 1995, Chapter XII).

3.2 The National Environmental Management Policy (1994)

The National Environment Management Policy is a multi-sector crosscutting policy that is found in nearly every other policy. The National Environment Policy overall goal is 'to encourage sustainable development by wise use of natural resources while enhancing environmental quality without compromising the ability of future generations to meet their own needs'. The policy has six policy objectives, 18 guiding principles, 14 cross-sector policies and 4 (four) sector policies. The key objectives of the Policy are to:

- i. Enhance health and quality of life through sustainable development, sound environmental management and wise use of natural resources;
- ii. Encourage participatory integration of environmental concerns in all development policies, planning, and activities at national, district and local levels;
- iii. Conserve, preserve and restore ecosystems and maintain ecological processes and life support systems, especially conservation of national biological diversity;
- iv. Optimize resource use and achieve a sustainable level of resource consumption;
- v. Raise public awareness, sensitization and advocacy for a linkage between environment and development;
- vi. Ensure individual and community participation in environmental improvement activities.

The key underlying principles that support the policy include: - every person has a constitutional right to a clean environment; sustainable natural resource use; security of land tenure; the use of environmentally friendly technologies; enforcement of environmentally friendly laws, involvement of gender and vulnerable groups, integration of environmental concerns in all sectors, involvement of the communities in decision making and meeting international and regional obligations.

3.3 National Development Plan II (NDPII 2015-2020)

The Policy is also consistent with the National Development Plan (NDP-II) for the period of 2015-2020 which highlights for the following: i) protecting, restoring, and maintaining the integrity of degraded fragile ecosystems; ii) increasing sustainable use of environment and natural resources; iii) increasing national forest cover and economic productivity of forests; iv) increasing the national wetland coverage; v) increasing the functionality and usage of meteorological information systems; and vi) increasing the country's resilience to the impacts of climate change. Furthermore, the NDPII also advocates for decent employment and labour productivity, provides social protection services, promotion of youth employment and participation, promote equality and women empowerment, and strengthening institutional capacity and redressing the imbalance and promoting equal opportunities for all.

3.4 The Local Governments Act, 1997

The Local Governments Act, 1997 implements the government's decentralization policy. The Local Government Act devolves some functions from the Central Government to district. The most relevant sections of the Local Government Act are summarised below.

Section 31 (1) (b) of the Local Government Act provides that a local government shall within its area of jurisdiction 'provide services as it deems fit' except 'the functions, powers and services' reserved to the Central Government under Part I of the Second Schedule to the Local Government Act. Item 7 of Part II of the Second Schedule provides that the function of water resources management is reserved to the Central Government. Under the same Act, the general water resource management policy is a function reserved to the Central Government under the Local Government Act. Part II of the Second Schedule to the Local Government Act shows that supply of water is a decentralised function.

3.5 Legislative Framework for Environmental Assessment Category and its Processes within the Water and Environment sector.

The National Environmental Act, 1995 is the principal law governing environmental management and conservation in Uganda. A number of supporting regulations are also applicable to water resources management and include:

- a. The Water Act, Cap 152, 1997;
- b. The Land Act Cap 227, 1998;
- c. The Water Resources Regulations, 1998;
- d. The Water (Waste Discharge) Regulations, 1998;
- e. The Environmental Impact Assessment Regulations, 1998;
- f. The National Environment (Waste Management) Regulations, 1999;
- g. The National Environment (Standards for Discharge of Effluent into water or on land) Regulations, 1999;
- h. The National Environment (Wetlands, River banks and Lake Shores Management) Regulations, 2000.
- i. Draft Standards for Air Quality Management, 2007;
- j. The National Environment (Noise Standards and Control) Regulations, 2003;
- k. National Environment Instrument (delegation of waste discharge functions) 1999;
- l. National Environment Notice (designation of Environmental Inspectors), 2000;
- m. National Policy for the Conservation and Management of Wetland Resources, 1995; and
- n. The National Environmental Management Policy, 1994;
- o. National Climate Change Policy (2015)

Other relevant Laws and Policies include;

Other laws and policies that are relevant to the implementation of this Environment and social framework include: The National Environment Act (1994), the National Irrigation Policy (2018), National Gender Policy (2007), Petroleum Supply Act (2003), Equal Opportunities Policy (2008), National Land Policy (2013), National Land Use Policy (2010) Employment Act (2006), Occupational Safety and Health Act (2006); among others.

4.0 Environment and Social Safeguard (ESS) Principles

4.1 Statement of Commitment

This Environmental and Social Safeguards Framework of the Ministry of Water and Environment of Uganda highlights the importance of managing environmental and social performance for all Ministry supported or implemented projects and programmes. The Ministry of Water and Environment is committed to avoiding, minimizing, or mitigating adverse environmental and social impacts associated with its projects. All proposed MWE projects and programmes will be subject to review and screening during preparation, and they will be fully assessed, designed, implemented, monitored and reviewed accordingly to ensure that all environmental and social issues are adequately addressed. This requirement will be applied to all Government and Donor funded projects for which the Ministry has overall responsibility for management and results. The Ministry is also committed to ensuring transparency and accessibility of information, in addition to facilitating the resolution of disputes, with respect to environmental and social risks.

4.2 Environment and Social Safeguard Principles

This Environmental and social safeguards Framework is crucial for ensuring that the projects and programmes being supported or implemented by the Ministry do not unnecessarily harm the environment, public health or vulnerable communities. The Ministry shall ensure that all projects and programmes it designs and implements directly or through other organizations, agencies and lower local governments conform to the following environmental and social principles, although it is recognized that depending on the nature and scale of a project or programme all of the principles may not be relevant to every project or programme.

4.2.1 Compliance with the Law*

The Ministry of water and Environment as an implementing entity (IE) will provide, when relevant, a description of the legal and regulatory framework for any project activity that may require prior permission such as environmental permits, water abstraction /extraction permits especially during the construction of water Irrigation Schemes and water for production facilities.

4.2.2 Labour Laws and Working Conditions

Ensure that its projects and programmes comply with National labour laws and with the objectives of the International Labor Organization (ILO) Standards. This includes fully complying with relevant National legislation including: Employment Act (2006), Equal Opportunities Commission Act (2007), Occupational Safety and Health Act (2006) among others. This is triggered since the construction works will require the recruitment of a labour force to dig the trenches, lay pipes and undertake the required construction and rehabilitation works. As with all works related to water projects, these might expose employees to occupational safety risk and infections. This occupational safety risk will be mitigated through the selection and effective use of mechanical equipment and personal protective equipment. Work procedures, training, and awareness creation/sensitisation will be implemented.

4.2.3 Access and Equity

Projects and programmes implemented or supported by the Ministry shall provide fair and equitable access to benefits in a manner that is inclusive and does not impede access to basic health services, clean water and sanitation, energy, education, housing, safe and decent working conditions, and land rights. These Projects or programmes should not exacerbate existing inequities, particularly with respect to marginalized or vulnerable groups.

4.2.4 Marginalized and Vulnerable Groups

All projects and programmes implemented or supported by the Ministry shall avoid imposing any disproportionate adverse impacts on marginalized and vulnerable groups including children, women and girls, the elderly, indigenous people, tribal groups, internally displaced people, refugees, people living with disabilities, and people living with HIV/AIDS. During project or programme assessment the Ministry shall assess and consider particular impacts on marginalized and vulnerable groups. This includes fully complying with relevant national legislation including the HIV/ AIDS Policy 2011, and the National Policy Framework on Social Protection (November 2015) aimed at reducing social vulnerabilities.

4.2.5 Human Rights

The projects and programmes will be designed and implemented in a manner that will promote, protect and fulfil universal respect for, and observance of, human rights for all as recognized by the United Nations. The Ministry will undertake robust environmental and social due diligence so that its projects and programmes do not cause, promote, contribute to, perpetuate, or exacerbate adverse human rights impacts.

4.2.6 Gender Equality and Women's Empowerment

Projects and programmes implemented or supported by the Ministry shall be designed and implemented in such a way that both women and men (a) have equal opportunities to participate as per the Fund Gender Policy (refer to Adaptation Fund Gender Policy: Annex 4 for details); (b) receive comparable social and economic benefits; and (c) do not suffer disproportionate adverse effects during the development process. This includes fully complying with relevant national legislation including National Gender Policy, 1997; Equal Opportunities Commission Act; and Gender Seal that was launched in 2017 to recognize entities that adhere to gender equality standards. Like other Ministries, the Ministry of Water and Environment shall ensure that planning, budgeting and resource allocation adheres to requirements of Gender Compliance by the Ministry of Finance, Planning and Economic Development.

4.2.7 Indigenous Peoples

Projects and programmes undertaken by the ministry shall avoid adverse impacts on indigenous peoples, and when avoidance is not possible, will minimize, mitigate and/or compensate appropriately and equitably for such impacts, in a consistent way and improve outcomes over time; promote benefits and opportunities; and respect and preserve indigenous culture, including the indigenous peoples' rights to lands, territories, resources, knowledge systems, and traditional livelihoods and practices.

All Ministry projects and programmes shall support the full and effective participation of indigenous peoples and the design and implementation of activities will be guided by the

rights and responsibilities set forth in the United Nations Declaration on the Rights of Indigenous Peoples including, of particular importance, the right to free, prior and informed consent, which will be implemented by the Ministry all in applicable circumstances. It will ensure that all projects and programmes it implements or support are consistent with the rights and responsibilities set forth in the UN-Declaration on the Rights of Indigenous Peoples and other applicable international and National instruments relating to indigenous peoples. Uganda Resettlement I Land Acquisition Policy Framework, 2002.

4.2.8 Involuntary Resettlement

The ministry undertakes to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts. Projects and programmes shall be designed and implemented in a way that avoids or minimizes the need for involuntary resettlement. When limited involuntary resettlement is unavoidable, due process shall be observed so that displaced persons shall be informed of their rights, consulted on their options, and offered technically, economically, and socially feasible resettlement alternatives or fair and adequate compensation. It shall promote participation of displaced people in resettlement planning and implementation, and its key economic objective is to assist displaced persons in their efforts to improve or at least restore their incomes and standards of living after displacement. The Ministry shall promote fair and timely compensation and other resettlement measures to achieve its objectives and requires that all projects prepare adequate resettlement planning instruments prior to appraisal of proposed projects.

4.2.9 Protection of Natural Habitats and Conservation of Biological Diversity

The Ministry shall not design, implement or support projects and programmes that involve unjustified conversion or degradation of critical natural habitats, including those that are (a) legally protected; (b) officially proposed for protection; (c) recognized by authoritative sources for their high conservation value, including as critical habitat; or (d) recognized as protected by traditional or indigenous local communities. Also all projects and programmes shall be designed and implemented in a way that avoids any significant or unjustified reduction or loss of biological diversity or the introduction of known invasive species. The activities designed and implemented in a manner that will protect and conserve biodiversity and critical habitats, maintain the benefits of ecosystem services, and promote the sustainable use and management of living natural resources. This includes fully complying with relevant national legislation including: Water Policy (1997), Environment Management Act (1994), National Climate Change Policy (2015), and National Forestry and Tree Planting Act 2003 among others.

4.2.10 Climate Change

During preparation of projects and programmes implemented or supported by the Adaptation Fund, Green Climate Fund and other Donors, the Ministry shall ensure that projects do not result in any significant or unjustified increase in greenhouse gas emissions or other drivers of climate change. This includes fully complying with relevant national legislation including, National Climate Change Policy (2015), and National Forestry and Tree Planting Act 2003 among other. For each sub-project, an assessment of the climate change impacts shall be evaluated using the INDC guidelines. This will help identify an appropriate adaptation action including relevant activities for each sub-project as well as capacity building needs for the Executing Agency.

4.2.11 Pollution Prevention and Resource Efficiency

This is triggered by the nature of the activities that are covered under both the construction and operation phases. There is handling of oil, management of faecal sludge that could pose. Use of equipment could also result in release of Greenhouse gases. The Ministry shall ensure that its projects and programmes are designed and implemented in a way that meets applicable international standards for maximizing energy efficiency and minimizing material resource use, the production of wastes, and the release of pollutants. It shall ensure that its projects and programmes promote more sustainable use of resources, including energy and water, reduce project or programme -related greenhouse gas (GHG) emissions, and avoid or minimize adverse impacts on human health and on the environment. This includes fully complying with relevant national legislation including: National Environment Act (1994), Petroleum Supply Act (2003). National Environment (Waste Management) Regulations, 1999. Water (Waste Discharge) Regulations, 1998 as well as the National Environment (Standards for Discharge of Effluent into Water or on Land) Regulations, 1999 among others.

4.2.12 Public Health

The Ministry shall ensure that its projects and programmes are designed and implemented in a way that avoids potentially significant negative impacts on public health. This includes fully complying with relevant National legislation including: Occupational Safety and Health Act (2006) and the Public Health Act 2000.

4.2.13 Physical and Cultural Heritage

The Ministry shall ensure that its projects and programmes are designed and implemented in a way that avoids the alteration, damage, or removal of any physical cultural resources, cultural sites, and sites with unique natural values recognized as such at the community, national or international level. Projects/programmes should also not permanently interfere with existing access and use of such physical and cultural resources. It will ensure that its projects and programmes protect cultural heritage, support their preservation, and promote equitable sharing of benefits from their use. This includes fully complying with relevant national legislation including: Institution of Traditional or Cultural Leaders Act (2011), Uganda Tourism Act (2008) and the Historical Monuments Act (1968).

4.2.14 Lands and Soil Conservations

The Ministry shall ensure that its projects and programmes are designed and implemented in a way that promotes soil conservation and avoids degradation or conversion of productive lands or land that provides valuable ecosystem services.

5.0 Organizational and Implementation Approach

The Ministry of Water and Environment shall take the responsibility of ensuring that environment and social issues are mainstreamed in all its projects. The permanent Secretary of MWE with the support of the various Directors and Heads of Departments has the overall duty of ensuring that ESS are mainstreamed in all its projects/programmes implemented by the MWE and other executing agencies. Further, the ministry in collaboration with the NEMA shall ensure that proper EIAs are conducted and ESIA certificates issued. The NEMA will also conduct regular monitoring, reviewing in ensuring compliance with the ESS/ESMF for all projects.

The MWE has a fully-fledged Department of Environmental Support Services (DESS) with a Senior Environment Officer (Policy, Planning and Research) designated to coordinate compliance to E&S policy formulation and implementation. In addition, MWE has a Water and Environment Sector Liaison Department (WESLD) mandated to coordinate issues of cross cutting nature including social community engagement, gender mainstreaming, HIV/AIDS mainstreaming, pro-poor initiatives among others. The aforementioned functions are coordinated by a Principal sociologist, who works closely with other Senior Sociologists and Sociologists deployed across all departments and projects. Under the ESS Policy Framework, the Departments of Environment Support Services (DESS) and Water and Environment Sector Liaison (WESLD) shall be the Coordinating Unit and shall ensure that projects and programmes in all the three Directorates namely; Directorate of Water Resources Management (DWRM), Directorate of Water Development (DWD), Directorate of Environment Affaires (DEA) and other Executing Entities adequately integrate and address Environment and social issues in their scope. It is envisaged that projects and programmes will develop specific Environmental and Social Management Frameworks (ESMFs) being guided by this policy, that will guide the implementation and monitoring of project specific mitigation measures. Specifically,

- > Under WESLD, the key technical personnel responsible for implementation of the Social component of the ESSPF is the Principal Sociologist mandated to coordinate issues of cross cutting nature including social community engagement, gender mainstreaming, HIV/AIDS mainstreaming, pro-poor initiatives.
- > Under DESS, the key technical personnel responsible for implementation of the Environment component of the ESSPF are the Assistant Commissioner and 3 Senior Environment Officers.

All Project Coordinators have a shared responsibility for implementation of ESS policies through Social and Environment Officers. Hence, according to the ESS Policy Framework each Directorate will be assigned Focal Point Officers (FPOs) responsible for all projects within the Directorate and shall make regular reports concerning the implementation of the Environmental Social Safeguards at each project to the above mentioned Coordination Unit.

6.0 Integration Environment and social issues into projects and programmes

Integration and implementation of environment and social issues into projects and programmes shall be guided by the following procedure steps.

6.1 Screening of Environmental and Social Risks

The Ministry shall ensure that all proposed projects and programmes are screened to determine their potential to cause environmental or social harm. The purpose of screening is to identify potential environmental and social impacts and risks, taking into consideration the AF 15 Principles of the Environment and Social Safeguards Policy above. The screening process shall consider all potential direct, indirect, trans-boundary, and cumulative impacts in the project's or programme's area of influence that could result from the proposed project or programme.

All proposed projects and programmes shall be categorized according to the scale, nature and severity of their potential environmental and social impacts. Projects or programmes likely to have significant adverse environmental or social impacts that are for example diverse, widespread, or irreversible shall be categorized as Category **A** projects/programmes. Those with potential adverse impacts that are less adverse than Category **4** projects and programmes, because for example they are fewer in number, smaller in scale, less widespread, reversible or easily mitigated shall be categorized as Category **B** whereas those projects and programmes with no adverse environmental or not have potential significant social impacts should be categorized as Category **C** or **D** respectively as described in table 6.1.

The screening shall help in determining the extent to which the project or programme requires further environmental and social assessment, mitigation, and management. The results of the environmental screening shall be included in the project or programme proposals submitted by the Ministry to the Adaptation Fund.

Table 6.1: Requirements for Screening/ Categorization of Projects

Category	Description
Category A: ESSF	An EIA is normally required because the project may have diverse significant impacts. Projects in this category could include: water projects requiring water to a level more than 400m ³ in any period of twenty-four hours, or projects requiring using motorized pumps; storage dams, barrages, weirs, valley tanks and dams; river diversions and inter-basin water transfer among others.
Category B: ESSF	A limited environmental analysis is appropriate, as the project impacts can be easily identified and for which mitigation measures can be easily prescribed and included in the design and implementation of the project. Projects in this category could include: rural water supply, large earth reservoirs, but not located in very sensitive areas, big gravity flow schemes,
Category C: ESSF	Environmental analysis is normally unnecessary, as the project is unlikely to have significant environmental impacts. A project brief is enough. This could include project location in less sensitive areas or where many such schemes are in the same locality and their synergetic effects have potential impacts.
Category D: ESSF	Small projects which do not have potential significant impacts and for which separate EIAs are not required, as the environment is the major focus of project preparation. These could include borehole drilling, hand augured shallow wells, protected springs and earth reservoir construction.

6.2 Environmental and Social Assessment

The Ministry shall ensure that for all projects programmes that have the potential to cause environmental or social harm (i.e. all Category A and B projects or programmes), the implementing entity shall prepare an environmental and social assessment that identifies any

environmental or social risks, including any potential risks associated with the Fund's environmental and social principles outlined above.

The assessment shall (i) consider all potential direct, indirect, trans boundary, and cumulative impacts and risks that could result from the proposed project or programme; (ii) assess alternatives to the project programme; and (iii) assess possible measures to avoid, minimize, or mitigate environmental and social risks of the proposed project or programme. As a

general rule, the environmental and social assessment shall be completed before the project programme proposal submission to the Adaptation Fund, Green Climate Fund and any other funding agency. In some Category A&B projects programmes where the proposed activities requiring such assessment represent a minor part of the project, and when inclusion in the proposal is not feasible, a timeline for completing the environmental and social assessment before actual implementation begins shall be incorporated in the agreement between the Board and the Ministry following the project or programme approval, and reported through the annual project programme performance report. A copy of the environmental and social assessment shall be provided to the funding entity as soon as the assessment is completed.

Environmental and Social Management Plan. The Ministry shall develop environment and social management plans for projects basing on the findings of the environmental and social assessments that identify those measures and actions, assessment shall be accompanied by an environmental and social management plan that identifies those measures necessary to avoid, minimize, or mitigate the potential environmental and social risks. The Ministry commits to develop and implement these plans for all projects and programmes under its docket and this will be reflected in routine reporting and monitoring Reports.

7.0 Monitoring, Reporting, and Evaluation

The Ministry's and project specific Monitoring and Evaluation systems shall address all environmental and social risks identified during project or programme assessment, design, and implementation. Project or programme performance reports shall include a section on the status of implementation of any environmental and social management plans, including those measures required to avoid, minimize, or mitigate environmental and social risks. The reports shall also include, if necessary, a description of any corrective actions that are deemed necessary. The mid-term and terminal evaluation reports shall also include an evaluation of the project or programme performance with respect to environmental and social risks.

8.0 Public Disclosure and Consultation

The Ministry shall identify stakeholders and involve them as early as possible in planning any project or programmes supported by the various funding agencies including AF and GCF. The results of the environmental and social screening and a draft environmental and social assessment, including any proposed management plans, shall be made available for public consultations that are timely, effective, inclusive, and held free of coercion and in an appropriate way for communities that are directly affected by the proposed project or programme. Ministry shall publicly disclose the final environmental and social assessment through the Ministry's website and hold stakeholders' meetings targeting all project-affected people and other stakeholders to disseminate the findings where feasible. Project or programme performance reports including the status on implementation of environmental and social measures shall be publicly disclosed. Any significant proposed changes in the project or programme during implementation shall be made available for effective and timely public consultation with directly affected communities.

9.0 Grievance Mechanism

The Ministry shall establish Grievance handling mechanisms for all projects and programmes active at all levels. The communities to be affected or likely to be affected by projects or programmes shall be informed of the existence grievance and redress mechanism at the

earliest opportunity of the stakeholder engagement process and in an understandable format and in all relevant languages. The details for sending complaints containing the contact information and the appropriate modes by which these will be received shall be provided by the Ministry and disseminated with other involved institutions.

The grievance and redress mechanism shall receive and facilitate the resolution of concerns and grievances about the environmental and social performance of projects and programmes and will seek to resolve complaints in a manner that is satisfactory to the complainants and other relevant parties that will be identified, depending on the nature of the complaint. The Redress Mechanism will address the grievances and complaints filed by people and communities who may be or have been affected by the adverse impacts in connection to the potential failures projects or programmes

The mechanism shall facilitate the resolution of grievances promptly through an accessible, fair, transparent and constructive process. It will also be culturally appropriate and readily accessible, at no cost to the public, and without retribution to the individuals, groups, or communities that raised the issue or concern. The mechanism will not impede the access to judicial or other administrative remedies that may be available through the country systems. The existing system of using the Ministry website and hotline will be explored. The Ministry will respond promptly to all such complaints in reference to the procedures provided in the Ministry's Clients Charter.

Annex A: Glossary

1. **Adaptation** -Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
2. **Afforestation**- The direct, human-induced conversion of land that has been unfrosted for at least 50 years to forested land through planting, seeding and/or human induced promotion of natural seed sources; This is distinct from reforestation, which is defined as the conversion of land that has been unfrosted since at least 31 December 1989 to forested land.
3. **Climate change** -Any significant change in measures of climate, such as temperature, precipitation or wind, lasting for an extended period (decades or longer); This report refers to climate change induced by human activities that change the atmosphere's composition (e.g., burning fossil fuels) or the land's surface (e.g., deforestation, reforestation, urbanization, desertification, etc.).
4. **Cumulative impacts** - result from the incremental impact, on areas or resources used or directly affected by the project, from other existing, planned or reasonably defined developments at the time the risks and impacts are identified.
5. **Disadvantaged or vulnerable** - refers to those who may be more likely to be adversely affected by the project impacts and or more limited than others in their ability to take advantage of a project's benefits. Such an individual group is also more likely to be excluded from unable to participate fully in the mainstream consultation process and as such may require specific measures and or assistance to do so.
6. **Due diligence** in the context of environmental and social management system, means the process of investigating potential investments to confirm all facts, such as reviewing environmental and social safeguards, audits, assessments, and compliance before consideration of funding or entering into an agreement with another.
7. **Environmental and social assessment** means the assessment of environmental and social risks, impacts and opportunities undertaken by the accredited entities in a manner that follows good international industry practices, identifies best alternatives and allows for an integrated and balanced view of the environmental and social risks and impacts. This type of assessments may include specific impacts assessment, audits, and due diligence studies, among others.
8. **Environmental and social impact assessment (ESIA)** - refers to a process or tool based on an integrated assessment where the scale and type of potential biophysical and social impacts of projects, programs and/or policy initiatives, are predicted, acknowledged and evaluated. It also involves evaluating alternatives and designing appropriate mitigation, management and monitoring measures to manage the predicted potential impacts.
9. **Environmental and social management frameworks (ESMF)**- describes the roles and responsibilities and the processes to manage environmental and social risks and impacts including screening, preparation, implementation and monitoring of subprojects.

10. **Environmental and social impacts** - refer to any change, potential or actual, to (i) the physical, natural, or cultural environment, and (ii) impacts on surrounding community and workers, resulting from the activities to be supported.
11. **Environmental and social risk**- is a combination of the probability of certain hazard occurrences and the severity of impacts resulting from such an occurrence.
12. **Environmental and social management system (ESMS)**- refers to a set of management processes and procedures that allow an organization to identify, analyse, control and reduce the environmental and social impacts of its activities in a consistent way and to improve performance in this regard over time. For the purposes of this document, "ESMS" refers to the environmental and social management system of MWE. When used in the long form, "environmental and social management system", it refers to the entities' management system.
13. **Environmental and social management plan (ESMP)** - refers to a document that contains a list and description of measures that have been identified for avoiding adverse environmental and social impacts, or minimising them to acceptable levels, or to mitigate and compensate them and usually the main output of the ESIA process.
14. **Environmental and social safeguards (ESS)** - refers to a set of standards that specifies the desired outcomes and the specific requirements to achieve these outcomes through means that are appropriate to the nature and scale of the activity and commensurate with the level of environmental and social risks and/or impacts. 11. Involuntary resettlement - means physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, including those that lead to loss of income sources or other means of livelihood), or both, caused by project-related land acquisition or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.
15. **Land acquisition**- refers to all methods of obtaining land for project purposes, which may include outright purchase, expropriation of property and acquisition of access rights, such as easements or rights of way.
16. **Mitigation**- The reduction and/or avoidance of emission of greenhouse gases into the atmosphere, through financing and implementing low-carbon technologies, programmes and projects.
17. **Mitigation hierarchy**- as described in the ESS standards that set prioritized steps for limiting adverse impacts through avoidance, minimization, restoration and compensation as well as opportunities for culturally appropriate and sustainable development benefits.
18. **Stakeholders**- refers to individuals or groups who: (a) are affected or likely to be affected by the activities; and (b) may have an interest in the activities (other interested parties). The stakeholders of an activity will vary depending on the details of the activity and may include local communities, national and local authorities, neighboring projects, and non-governmental organizations.
19. **Greenhouse gas (GHG)** - Any gas that absorbs infrared radiation in the atmosphere, including (but not limited to) water vapour, carbon dioxide (CO₂), methane (CH₄), nitrous oxide

(N20), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydro chlorofluorocarbons (HCFCs), ozone (O₃), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

ANNEX 3: CODE OF CONDUCT

This code of conduct is to be followed by all Consultant's Experts. It shall be read together with the Environment and Social Policy, the World Bank Group Environment Health and Safety Guidelines. The experts are shall;

1. Be Compliant with applicable laws, rules, and regulations of the Republic of Uganda.
2. Be Compliant with applicable health and safety requirements to protect the local community (including vulnerable and disadvantaged groups), the Consultant's Experts, the Client's personnel, and the Contractor's personnel, including sub-contractors and day workers (including wearing prescribed personal protective equipment, preventing avoidable accidents and a duty to report conditions or practices that pose a safety hazard or threaten the environment)
3. Not use of illegal substances
4. Be non-discriminatory in dealing with the local community (including vulnerable and disadvantaged groups), the Consultant's Experts, the Client's personnel, and the Contractor's personnel, including sub-contractors and day workers (for example, on the basis of family status, ethnicity, race, gender, religion, language, marital status, age, disability (physical and mental), sexual orientation, gender identity, political conviction or social, civic, or health status)
5. Have acceptable and appropriate interactions with the local community(ies), members of the local community (ies), and any affected person(s) (for example to convey an attitude of respect, including to their culture and traditions)
6. Avoid unethical and unbecoming behavior such as use of rude, abusive and obscene language, indecent dressing, hard supervision and sexual suggestive gestures which constitute sexual harassment (for example to prohibit use of language or behavior, in particular towards women and/or children, that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate). A child / child means any person(s) under the age of 18 years.
7. Avoid violence, including sexual and/or gender-based violence (for example acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion, and deprivation of liberty)
8. Avoid exploitation including sexual exploitation and abuse (for example the prohibition of the exchange of money, employment, goods, or services for sex, including sexual favors or other forms of humiliating, degrading behavior, exploitative behavior or abuse of power)

9. Promote protection of children (including prohibitions against sexual activity or abuse, or otherwise unacceptable behavior towards children, limiting interactions with children, and ensuring their safety in project areas)
10. Ensure sanitation requirements are provided like toilets are acceptable and approved and are gender sensitive (for example, to ensure workers use specified sanitary facilities provided by their employer and not open areas)
11. Avoid conflicts of interest (such that benefits, contracts, or employment, or any sort of preferential treatment or favors, are not provided to any person with whom there is a financial, family, or personal connection).
12. Respect reasonable work instructions (including regarding environmental and social norms).
13. Protect and use any project property properly (for example, to prohibit theft, carelessness or waste).
14. Report any violations of this Code.
15. Ensure that there is non-retaliation against personnel who report violations of the Code, if that report is made in good faith.