



REPUBLIC OF UGANDA

MINISTRY OF WATER AND ENVIRONMENT

INTEGRATED WATER MANAGEMENT AND DEVELOPMENT PROJECT

PROJECT ID NO: P163782

Request for Bids

**NON-CONSULTANCY SERVICES FOR SUPPORTING COMMUNITIES TO
IMPLEMENT PRIORITY CATCHMENT MANAGEMENT MEASURES IN:**

LOT 1: LWAKHAKHA SUB CATCHMENT

LOT 2: ASWA II SUB CATCHMENT

LOT 3: KOCHI SUB CATCHMENT

LOT 4: MIDDLE/LOWER AWOJA SUB CATCHMENT

RFB No: MWE/NCONS/19-20/0007

Project: Integrated Water Management and Development Project (IWMDP)

Employer: Ministry of Water and Environment

Country: Uganda

OCTOBER 2020

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Part I – Bidding Procedures

Section I - Instructions to Bidders

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Section I - Instructions to Bidders

A. General

1. Scope of Bid

1.1 In connection with the Specific Procurement Notice - Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified in the BDS, issues this bidding document for the delivery of Non-Consulting Services, as specified in Section VII, Employer's Requirements. The name, identification and number of lots (contracts) of this RFB procurement are specified in the BDS.

1.2 Throughout this bidding document:

(a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the BDS, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;

(b) if the context so requires, "singular" means "plural" and vice versa; and

(c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays;

(d) "ES" means environmental and social, as applicable, (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH));

(e) "Sexual Exploitation and Abuse" "(SEA)" means the following:

Sexual Exploitation is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another.

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.

(f) "Sexual Harassment" "(SH)" is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Service Provider's Personnel with other Service Provider's or Employer's Personnel;

(g) “Service Provider’s Personnel” is as defined in GCC Sub-Clause 1.1; and

(h) “Employer’s Personnel” is as defined in GCC Sub-Clause 1.1.

A non-exhaustive list of (i) behaviors which constitute SEA and (ii) behaviors which constitute SH is attached to the Code of Conduct form in Section IV

1.3 The successful Bidder will be expected to complete the performance of the Services by the Intended Completion Date provided in the BDS.

2. Source of Funds

2.1 The Borrower or Recipient (hereinafter called “Borrower”) specified **in the BDS** has applied for or received financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called “the Bank”) in an amount specified **in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this bidding document is issued.

2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment or materials if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

3.1 The Bank requires compliance with the Bank’s Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG’s Sanctions Framework, as set forth in Section VI.

3.2 In further pursuance of this policy, Bidders shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

4.1 A Bidder may be a firm that is a private entity, a state-owned entity

or institution subject to ITB 4.6, or any combination of such entities in the form of a Joint Venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.

- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - (b) receives or has received any direct or indirect subsidy from another Bidder; or
 - (c) has the same legal representative as another Bidder; or
 - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this Bidding process; or

- (e) or any of its affiliates participated as a service provider in the preparation of the Employer's Requirements (including Activities Schedules, Performance Specifications and Drawings) for the Non-Consulting Services that are the subject of the Bid; or
 - (f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower for the Contract implementation; or
 - (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the Contract.
- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a subcontractor. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member, may participate as a sub-contractor in more than one Bid.
- 4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with its

prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.

- 4.6 Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they: (i) are legally and financially autonomous; (ii) operate under commercial law; and (iii) are not under supervision of the Employer.
- 4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing Declaration or Proposal-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.9 This Bidding is open for all eligible Bidders, unless otherwise specified in ITB 18.4.
- 4.10 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.11 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment; (a) relates to fraud or corruption, and (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.

5. Qualification of the Bidder

- 5.1 All Bidders shall provide in Section IV, Bidding Forms, a preliminary description of the proposed work method and schedule,

including drawings and charts, as necessary.

- 5.2 In the event that prequalification of Bidders has been undertaken as stated in ITB 18.4, the provisions on qualifications of the Section III, Evaluation and Qualification Criteria shall not apply.

B. Contents of Bidding Document

6. Sections of Bidding Document

- 6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 9.

PART 1: Bidding Procedures

- Section I - Instructions to Bidders (ITB)
- Section II - Bid Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

PART 2: Employer's Requirements

- Section VII - Employer's Requirements

PART 3: Contract

- Section VIII - General Conditions of Contract (GCC)
- Section IX - Special Conditions of Contract (SCC)
- Section X - Contract Forms

- 6.2 The Specific Procurement Notice - Request for Bids (RFB) or the notice to prequalified Bidders, as the case may be issued by the Employer is not part of this bidding document.

- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 9. In case of any contradiction, documents obtained directly from the Employer shall prevail.

- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all

information or documentation as is required by the bidding document.

- 7. Site Visit** 7.1 The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the locations of required Services and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the Services. The costs of visiting the locations of required Services and its surroundings shall be at the Bidder's own expense.
- 8. Clarification of Bidding Document** 8.1 A Bidder requiring any clarification of the bidding document shall contact the Employer in writing at the Employer's address specified **in the BDS**. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified **in the BDS**. The Employer shall forward copies of its response to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified **in the BDS**, the Employer shall also promptly publish its response at the web page identified **in the BDS**. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 9 and ITB 23.2.
- 9. Amendment of Bidding Document** 9.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding document by issuing addenda.
- 9.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Employer in accordance with ITB 6.3. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 8.1.
- 9.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer shall extend, as necessary, the deadline for submission of Bids, in accordance with ITB 23.2 below.

C. Preparation of Bids

- 10. Cost of Bidding** 10.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.
- 11. Language of Bid** 11.1 The Bid as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer shall be written in

the language specified **in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified **in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

12. Documents Comprising the Bid

12.1 The Bid shall comprise the following:

- (a) **Letter of Bid** prepared in accordance with ITB 13;
- (b) **Schedules:** priced Activity Schedule completed in accordance with ITB 13 and ITB 15;
- (c) **Bid Security or Bid-Securing Declaration** in accordance with ITB 20.1;
- (d) **Alternative Bid:** if permissible in accordance with ITB 14;
- (e) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 21.3;
- (f) **Qualifications:** documentary evidence in accordance with ITB 18 establishing the Bidder's qualifications to perform the Contract if its Bid is accepted;
- (g) **Bidder's Eligibility:** documentary evidence in accordance with ITB 18 establishing the Bidder's eligibility to Bid;
- (h) **Conformity:** documentary evidence in accordance with ITB 17, that the Services conform to the bidding document; and
- (i) any other document required **in the BDS**.

12.2 In addition to the requirements under ITB 12.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

12.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

13. Letter of Bid and Activity Schedule

13.1 The Letter of Bid and priced Activity Schedule shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 21.3.

All blank spaces shall be filled in with the information requested.

14. Alternative Bids

- 14.1 Unless otherwise indicated **in the BDS**, alternative Bids shall not be considered. If alternatives are permitted, only the technical alternatives, if any, of the Most Advantageous Bidder shall be considered by the Employer.
- 14.2 When alternative times for completion are explicitly invited, a statement to that effect will be included **in the BDS** and the method of evaluating different time schedules will be described in Section III, Evaluation and Qualification Criteria.
- 14.3 When specified **in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Services, and such parts will be identified **in the BDS**, as will the method for their evaluating, and described in Section VII, Employer's Requirements.

15. Bid Prices and Discounts

- 15.1 The prices and discounts (including any price reduction) quoted by the Bidder in the Letter of Bid and in the Activity Schedule(s) shall conform to the requirements specified below.
- 15.2 All lots (contracts) and items must be listed and priced separately in the Activity Schedule(s).
- 15.3 The Contract shall be for the Services, as described in Appendix A to the Contract and in the Specifications (or Terms of Reference), based on the priced Activity Schedule, submitted by the Bidder.
- 15.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid in accordance with ITB 13.1.
- 15.5 The Bidder shall fill in rates and prices for all items of the Services described in the in Specifications (or Terms of Reference), and listed in the Activity Schedule in Section VII, Employer's Requirements. Items for which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Activity Schedule.
- 15.6 All duties, taxes, and other levies payable by the Service Provider under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Bids, shall be included in the total Bid price submitted by the Bidder.
- 15.7 If provided for **in the BDS**, the rates and prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract in accordance with and the provisions of Clause 6.6 of the General Conditions of Contract and/or Special Conditions of Contract. The Bidder shall submit with the Bid all the information required under the Special Conditions of Contract and of the General Conditions of

Contract.

- 15.8 For the purpose of determining the remuneration due for additional Services, a breakdown of the lump-sum price shall be provided by the Bidder in the form of Appendices D and E to the Contract.
- 16. Currencies of Bid and Payment**
- 16.1 The currency(ies) of the Bid and the currency(ies) of payments shall be the same. The Bidder shall quote in the currency of the Employer's Country the portion of the Bid price that corresponds to expenditures incurred in the currency of the Employer's Country, unless otherwise specified **in the BDS**.
- 16.2 The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Employer's Country.
- 16.3 Bidders may be required by the Employer to justify their foreign currency requirements and to substantiate that the amounts included in the Lump-sum are reasonable and responsive to ITB 16.1 and 16.2.
- 17. Documents Establishing Conformity of Services**
- 17.1 To establish the conformity of the Non-Consulting Services to the bidding document, the Bidder shall furnish as part of its Bid the documentary evidence that Services provided conform to the technical specifications and standards specified in Section VII, Employer's Requirements.
- 17.2 Standards for provision of the Non-Consulting Services are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality provided that it demonstrates, to the Employer's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Employer's Requirements.
- 18. Documents Establishing the Eligibility and Qualifications of the Bidder**
- 18.1 To establish Bidder's their eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.
- 18.2 The documentary evidence of the Bidder's qualifications to perform the Contract if its Bid is accepted shall establish to the Employer's satisfaction that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.
- 18.3 All Bidders shall provide in Section IV, Bidding Forms, a preliminary description of the proposed methodology, work plan and schedule.
- 18.4 In the event that prequalification of Bidders has been undertaken as stated **in the BDS**, only Bids from prequalified Bidders shall be considered for award of Contract. These qualified Bidders should submit with their Bids any information updating their original

prequalification applications or, alternatively, confirm in their Bids that the originally submitted prequalification information remains essentially correct as of the date of Bid submission.

18.5 If prequalification has not taken place before Bidding, the qualification criteria for the Bidders are specified in Section III, Evaluation and Qualification Criteria.

**19. Period of
Validity of
Bids**

19.1 Bids shall remain valid until the date specified **in the BDS** or any extended date if amended by the Employer in accordance with ITB 9. A Bid that is not valid until the date specified **in the BDS**, or any extended date if amended by the Employer in accordance with ITB 9, shall be rejected by the Employer as nonresponsive.

19.2 In exceptional circumstances, prior to the date of expiration of the Bid validity, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 20, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 19.3.

19.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity specified in accordance with ITB 19.1, the Contract price shall be determined as follows:

- (a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor specified **in the BDS**;
- (b) in the case of adjustable price contracts, no adjustment shall be made; or
- (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

20. Bid Security

20.1 The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid security, as specified **in the BDS**, in original form and, in the case of a Bid Security, in the amount and currency specified **in the BDS**.

20.2 A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.

20.3 If a Bid Security is specified pursuant to ITB 20.1, the Bid Security shall be a demand guarantee, and in any of the following forms at the Bidder's option:

- (a) an unconditional guarantee issued by a bank or non-bank

financial institution (such as an insurance, bonding or surety company);

- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) another security specified **in the BDS**,

from a reputable source and an eligible country. If the unconditional guarantee is issued by a non-bank financial institution located outside the Employer's Country, the issuing non-bank financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable, unless the Employer has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original date of expiry of the Bid validity, or beyond any extended date if requested under ITB 19.2.

20.4 If a Bid Security is specified pursuant to ITB 20.1, any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Employer as non-responsive.

20.5 If a Bid Security is specified pursuant to ITB 20.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security pursuant to ITB 46.

20.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.

20.7 The Bid Security may be forfeited:

- (a) if a Bidder withdraws its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid or any extended date provided by the Bidder; or
- (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 45; or
 - (ii) furnish a performance security in accordance with ITB 46.

20.8 The Bid Security or Bid-Securing Declaration of a JV must be in the

name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of Bidding, the Bid security or Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 12.2.

- 20.9 If a Bid Security is not required in the BDS, pursuant to ITB 20.1, and
- (a) if a Bidder withdraws its Bid prior to the expiry date of the Bid validity specified by the Bidder on the Letter of Bid, or any extended date provided by the Bidder; or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 45; or
 - (ii) furnish a performance security in accordance with ITB 46;

the Borrower may, if provided for **in the BDS**, declare the Bidder ineligible to be awarded a contract by the Employer for a period of time as stated **in the BDS**.

21. Format and Signing of Bid

- 21.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 12, bound with the volume containing the Form of Bid, and clearly marked “Original.” In addition, the Bidder shall submit copies of the Bid, in the number specified **in the BDS**, and clearly marked as “Copies.” In the event of discrepancy between them, the original shall prevail.
- 21.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 21.3 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified **in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.
- 21.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

- 21.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

22. Sealing and Marking of Bids

- 22.1 The Bidder shall deliver the Bid in a single, sealed envelope. Within the single envelope the Bidder shall place the following separate, sealed envelopes:

- (a) in an envelope marked "ORIGINAL", all documents comprising the Bid, as described in ITB 12; and
- (b) in an envelope marked "COPIES", all required copies of the Bid; and
- (c) if alternative Bids are permitted in accordance with ITB 14, and if relevant:
 - (i) in an envelope marked "ORIGINAL - ALTERNATIVE BID", the alternative Bid; and
 - (ii) in the envelope marked "COPIES – ALTERNATIVE BID" all required copies of the alternative Bid.

- 22.2 The inner and outer envelopes shall:

- (a) bear the name and address of the Bidder;
- (b) be addressed to the Employer in accordance with ITB 23.1;
- (c) bear the specific identification of this Bidding process specified in accordance with BDS 1.1; and
- (d) bear a warning not to open before the time and date for Bid opening.

- 22.3 If all envelopes are not sealed and marked as required, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

23. Deadline for Submission of Bids

- 23.1 Bids must be received by the Employer at the address and no later than the date and time specified **in the BDS**. When so specified **in the BDS**, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids electronically shall follow the electronic Bid submission procedures specified **in the BDS**.

- 23.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 9, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall

thereafter be subject to the deadline as extended.

- 24. Late Bids**
- 24.1 The Employer shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 23. Any Bid received by the Employer after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.
- 25. Withdrawal, Substitution and Modification of Bids**
- 25.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB 21.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
- (a) prepared and submitted in accordance with ITB 21 and ITB 22 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” or “MODIFICATION;” and
 - (b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 23.
- 25.2 Bids requested to be withdrawn in accordance with ITB 25.1 shall be returned unopened to the Bidders.
- 25.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the date of expiry of the Bid validity specified by the Bidder on the Letter of Bid or any extended date thereof.
- 26. Bid Opening**
- 26.1 Except as in the cases specified in ITB 23 and ITB 25.2, the Employer shall, at the Bid opening, publicly open and read out all Bids received by the deadline at the date, time and place specified **in the BDS** in the presence of Bidders’ designated representatives and anyone who choose to attend. Any specific electronic Bid opening procedures required if electronic bidding is permitted in accordance with ITB 23.1, shall be as specified **in the BDS**.
- 26.2 First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal envelope does not contain a copy of the “power of attorney” confirming the signature as a person duly authorized to sign on behalf of the Bidder, the corresponding Bid will be opened. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid

opening.

- 26.3 Next, envelopes marked “SUBSTITUTION” shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.
- 26.4 Next, envelopes marked “MODIFICATION” shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening.
- 26.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Prices, per lot (contract) if applicable, including any discounts and alternative Bids; the presence or absence of a Bid Security or Bid-Securing Declaration, if required; and any other details as the Employer may consider appropriate.
- 26.6 Only Bids, alternative Bids and discounts that are opened and read out at Bid opening shall be considered further. The Letter of Bid and the priced Activity Schedule are to be initialed by representatives of the Employer attending Bid opening in the manner specified **in the BDS**.
- 26.7 The Employer shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 24.1).
- 26.8 The Employer shall prepare a record of the Bid opening that shall include, as a minimum:
- (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
 - (b) the Bid Price, per lot (contract) if applicable, including any discounts; and
 - (c) any alternative Bids;
 - (d) the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required.
- 26.9 The Bidders’ representatives who are present shall be requested to sign the record. The omission of a Bidder’s signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

- 27. Confidentiality** 27.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on the Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 41.
- 27.2 Any effort by a Bidder to influence the Employer in the evaluation or contract award decisions may result in the rejection of its Bid.
- 27.3 Notwithstanding ITB 27.2, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Employer on any matter related to the Bidding process, it should do so in writing.
- 28. Clarification of Bids** 28.1 To assist in the examination, evaluation, and comparison of Bids, and qualification of the Bidders, the Employer may, at the Employer's discretion, ask any Bidder for clarification of its Bid including breakdowns of the prices in the Activity Schedule, and other information that the Employer may require. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 32.
- 28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
- 29. Deviations, Reservations, and Omissions** 29.1 During the evaluation of Bids, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified in the bidding document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
- 30. Determination of Responsiveness** 30.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 12.
- 30.2 A substantially responsive Bid is one that meets the requirements of

the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

- (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality, or performance of the Non-Consulting Services specified in the Contract; or
 - (ii) limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

30.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 17 and ITB 18, in particular, to confirm that all requirements of Section VII, Employer's Requirements have been met without any material deviation or reservation, or omission.

30.4 If a Bid is not substantially responsive to the requirements of bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

31. Nonconformities, Errors and Omissions

31.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid.

31.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

31.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component by adding the average price of the item or component quoted by substantially responsive Bidders. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use its best estimate.

- 32. Correction of Arithmetical Errors**
- 32.1 Provided that the Bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:
- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
 - (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 32.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 32.1, shall result in the rejection of the Bid.
- 33. Conversion to Single Currency**
- 33.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as specified **in the BDS**.
- 34. Margin of Preference**
- 34.1 A margin of preference shall not apply.
- 35. Evaluation of Bids**
- 35.1 The Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies, the Employer shall determine the Most Advantageous Bid. This is the Bid of the Bidder that meets the qualification criteria and whose Bid has been determined to be:
- (a) substantially responsive to the bidding document; and
 - (b) the lowest evaluated cost.
- 35.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid cost by adjusting the Bid price as follows:
- (a) price adjustment for correction of arithmetic errors in accordance with ITB 32.1;
 - (b) price adjustment due to discounts offered in accordance with

ITB 15.4;

- (c) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITB 33;
- (d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31.3;
- (e) excluding provisional sums and the provision, if any, for contingencies in the Activity Schedule but including Daywork, when requested in the Specifications (or Terms of Reference); and
- (f) the additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria.

35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

35.4 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the Letter of Bid, is specified in Section III, Evaluation and Qualification Criteria.

36. Comparison of Bids

36.1 The Employer shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 35.2 to determine the Bid that has the lowest evaluated cost.

37. Abnormally Low Bids

37.1 An Abnormally Low Bid is one where the Bid price, in combination with other constituent elements of the Bid, appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid price.

37.2 In the event of identification of a potentially Abnormally Low Bid, the Employer shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document.

37.3 After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Employer shall reject the Bid.

- 38. Qualification of the Bidder**
- 38.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated cost and substantially responsive Bid is eligible and meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 38.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 18. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors or any other firm(s) different from the Bidder that submitted the Bid.
- 38.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Employer shall proceed to the Bidder who offers a substantially responsive Bid with the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 39. Employer's Right to Accept Any Bid, and to Reject Any or All Bids**
- 39.1 The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.
- 40. Standstill Period**
- 40.1 The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 44. The Standstill Period commences the day after the date the Employer has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply
- 41. Notification of Intention to Award**
- 41.1 The Employer shall send to each Bidder, the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
- (a) the name and address of the Bidder submitting the successful Bid;
 - (b) the Contract price of the successful Bid;
 - (c) the names of all Bidders who submitted Bids, and their Bid prices as readout and as evaluated;
 - (d) a statement of the reason(s) the Bid (of the unsuccessful Bidder

to whom the notification is addressed) was unsuccessful;

- (e) the expiry date of the Standstill Period; and
- (f) instructions on how to request a debriefing or submit a complaint during the standstill period.

F. Award of Contract

42. Award Criteria

42.1 Subject to ITB 39, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid. This is the Bid of the Bidder that meets the qualification criteria and whose Bid has been determined to be:

- (a) substantially responsive to the bidding document; and
- (b) the lowest evaluated cost.

43. Notification of Award

43.1 Prior to the date of expiry of the Bid validity and upon expiry of the Standstill Period, specified in ITB 40.1, or any extension thereof, and, upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Service Provider in consideration of the execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").

43.2 Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information:

- (a) name and address of the Employer;
- (b) name and reference number of the contract being awarded, and the selection method used;
- (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
- (d) name of Bidders whose Bids were rejected and the reasons for their rejection;
- (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope; and
- (f) successful Bidder's Beneficial Ownership Disclosure Form, if

specified in BDS ITB 45.1.

43.3 The Contract Award Notice shall be published on the Employer's website with free access if available, or in at least one newspaper of national circulation in the Employer's Country, or in the official gazette. The Employer shall also publish the contract award notice in UNDB online.

43.4 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

44. Debriefing by the Employer

44.1 On receipt of the Borrower's Notification of Intention to Award referred to in ITB 41, an unsuccessful Bidder has three (3) Business Days to make a written request to the Employer for a debriefing. The Employer shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

44.2 Where a request for debriefing is received within the deadline, the Employer shall provide a debriefing within five (5) Business Days, unless the Employer decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Employer shall promptly inform, by the quickest means available, all Bidders of the extended standstill period.

44.3 Where a request for debriefing is received by the Employer later than the three (3)-Business Day deadline, the Employer should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.

44.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidder shall bear their own costs of attending such a debriefing meeting.

45. Signing of Contract

45.1 The Employer shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement, and, if specified in the BDS, a request to submit the Beneficial Ownership Disclosure Form providing additional information on its beneficial ownership. The Beneficial Ownership Disclosure Form, if so requested, shall be submitted within eight (8) Business Days of receiving this request.

- 45.2 The successful Bidder shall sign, date and return to the Employer, the Contract Agreement within twenty-eight (28) days of its receipt.
- 46. Performance Security**
- 46.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC 3.9, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country, unless the Employer has agreed in writing that a correspondent financial institution is not required.
- 46.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid.
- 47. Adjudicator**
- 47.1 The Employer proposes the person named **in the BDS** to be appointed as Adjudicator under the Contract, at an hourly fee specified **in the BDS**, plus reimbursable expenses. If the Bidder disagrees with this Bid, the Bidder should so state in the Bid. If, in the Letter of Acceptance, the Employer has not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by the Appointing Authority designated in the Special Conditions of Contract at the request of either party.
- 48. Procurement Related Complaint**
- 48.1 The procedures for making a Procurement-related Complaint are as specified in the BDS.

Section II - Bid Data Sheet (BDS)

The following specific data for the Non-Consulting Services to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. General
ITB 1.1	<p>The reference number of the Request for Bids (RFB) is: <i>MWE/NCONS/19-20/0007</i></p> <p>The Employer is: <u>Ministry of Water and Environment</u></p> <p>The name of the RFB is: <i>Non-consultancy services for Supporting Communities to Implement Priority Catchment Management Measures</i></p> <p>The number and identification of lots (contracts) comprising this RFB is:</p> <ul style="list-style-type: none"> <i>i. Lot 1: Supporting Communities in Lwakhakha Sub Catchment to Implement Priority Catchment Management Measures</i> <i>ii. Lot 2: Supporting Communities in Aswa II Sub Catchment to Implement Priority Catchment Management Measures</i> <i>iii. Lot 3: Supporting Communities in Kochi Sub Catchment to Implement Priority Catchment Management Measures</i> <i>iv. Lot 4: Supporting Communities in Middle/lower Awoja Sub Catchment to Implement Priority Catchment Management Measures</i>
ITB 1.3	The Intended Completion Date is: 24 Months for each lot from the effective date
ITB 2.1	<p>The Borrower is: <i>Government of Uganda</i></p> <p>Loan or Financing Agreement amount: <i>US\$ 280.00 million</i></p> <p>The name of the Project is: Integrated Water Management and Development Project (IWMDP)</p>
ITB 4.1	Maximum number of members in the Joint Venture (JV) shall be: <i>Two(2)</i>
ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr .

<p>ITB 7.1</p>	<p>A site visit conducted by the Employer <i>shall be</i> organized. The Bidder, at the Bidder's own cost, is encouraged to visit and examine the locations of required Services and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the Services. A site visit shall be conducted as follows:</p> <table border="1"> <tr> <td>Lot 1 (Lwakhakha):</td> <td> Meeting point: <i>Namisindwa District Offices</i> Date: <i>October 26, 2020 at 10:00am</i> Contact Person: Maximo Twinomuhangi- Team Leader Kyoga WMZ- 0772659001 </td> </tr> <tr> <td>Lot 2 (Aswa II):</td> <td> Meeting point: <i>UNWMZ Offices in Lira</i> Date: <i>October 28, 2020 at 10:00am</i> Contact Person: Richard Musota- Team Leader Upper Nile WMZ- 0772520966 </td> </tr> <tr> <td>Lot 3 (Kochi):</td> <td> Meeting Point: <i>Yumbe district Offices</i> Date: <i>October 30, 2020 at 10:00am</i> Contact Person: Richard Musota- Team Leader Upper Nile WMZ- 0772520966 </td> </tr> <tr> <td>Lot 4 (Middle/Lower Awoja):</td> <td> Meeting Point: <i>Bukedea district Offices</i> Date: <i>October 27, 2020 at 10:00am</i> Contact Person: Maximo Twinomuhangi- Team Leader Kyoga WMZ- 0772659001 </td> </tr> </table> <p>A Pre-Bid meeting (for all the lots) <i>shall</i> take place at the following date, time and place: Date: <i>November 03, 2020</i> Time: <i>10:00am</i> Place: <i>Ministry of Water and Environment Headquarters (Auditorium, 2nd floor)</i></p>	Lot 1 (Lwakhakha):	Meeting point: <i>Namisindwa District Offices</i> Date: <i>October 26, 2020 at 10:00am</i> Contact Person: Maximo Twinomuhangi- Team Leader Kyoga WMZ- 0772659001	Lot 2 (Aswa II):	Meeting point: <i>UNWMZ Offices in Lira</i> Date: <i>October 28, 2020 at 10:00am</i> Contact Person: Richard Musota- Team Leader Upper Nile WMZ- 0772520966	Lot 3 (Kochi):	Meeting Point: <i>Yumbe district Offices</i> Date: <i>October 30, 2020 at 10:00am</i> Contact Person: Richard Musota- Team Leader Upper Nile WMZ- 0772520966	Lot 4 (Middle/Lower Awoja):	Meeting Point: <i>Bukedea district Offices</i> Date: <i>October 27, 2020 at 10:00am</i> Contact Person: Maximo Twinomuhangi- Team Leader Kyoga WMZ- 0772659001
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Lot 4 (Middle/Lower Awoja):	Meeting Point: <i>Bukedea district Offices</i> Date: <i>October 27, 2020 at 10:00am</i> Contact Person: Maximo Twinomuhangi- Team Leader Kyoga WMZ- 0772659001								
	<p>B. Contents of Bidding Document</p>								
<p>ITB 8.1</p>	<p>For <u>Clarification of Bid purposes</u> only, the Employer's address is:</p> <p style="padding-left: 40px;">The Head, Procurement and Disposal Unit Ministry of Water and Environment Headquarters Plot 3-7, Kabalega Crescent, Luzira Email: kateregga9@hotmail.com; copy to: aig732@gmail.com</p> <p>Requests for clarification should be received by the Employer no later than:</p>								

	<i>Ten (10) calendar days prior to the submission deadline.</i>
	C. Preparation of Bids
ITB 11.1	<p>The language of the Bid is: <u>English</u>.</p> <p>All correspondence exchange shall be in <u>English</u> language.</p> <p>Language for translation of supporting documents and printed literature is <u>English</u>.</p>
ITB 12.1 (i)	<p>The Bidder shall submit the following additional documents in its Bid:</p> <p>Code of Conduct for Service Provider’s Personnel</p> <p>The Bidder shall submit its Code of Conduct that will apply to the Service Provider’s Personnel (as defined in GCC Sub- Clause 1.1) employed for the execution of Services (defined in GCC Sub- Clause 1.1) at the locations in the Employer’s country where the Services are required, to ensure compliance with the Service Provider’s Environmental and/or Social, as applicable, obligations under the Contract. The code of conduct shall adhere to, and be compliant with, the World Bank Environment and Social Policies and the World Bank Group Environment Health and Safety Guidelines. The Bidder shall use for this purpose the Code of Conduct form provided in Section IV. No substantial modifications shall be made to this form, except that the Bidder may introduce additional requirements, including as necessary to take into account specific Contract issues/risks.</p> <p>Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks</p> <p>The Bidder shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks including:</p> <ul style="list-style-type: none"> <i>i. Sexual Exploitation, and Abuse (SEA) prevention and response action plan</i>
ITB 14.1	Alternative Bids <i>shall not be</i> considered.
ITB 14.2	Alternative times for completion <i>shall not be</i> permitted.
ITB 14.3	Alternative technical solutions shall be permitted for the following parts of the Services: N/A
ITB 15.7	The prices quoted by the Bidder <i>shall not</i> be subject to adjustment during the performance of the Contract.

ITB 16.1	The Bidder <i>is</i> required to quote in the currency of the Employer's Country the portion of the Bid price that corresponds to expenditures incurred in that currency.
ITB 18.4	Prequalification <i>has not been</i> undertaken.
ITB 19.1	<i>The Bid shall be valid until: 24th March 2021</i>
ITB 19.3 (a)	The Bid price shall be adjusted by the following factor(s): N/A
ITB 20.1	<p>A Bid Security <i>shall be</i> required.</p> <p>The amount and currency of the Bid Security shall be:</p> <ul style="list-style-type: none"> i. Lot 1: UGX 57,000,000 or the equivalent in freely convertible currency ii. Lot 2: UGX 106,000,000 or the equivalent in freely convertible currency iii. Lot 3: UGX 107,000,000 or the equivalent in freely convertible currency iv. Lot 4: UGX 128,000,000 or the equivalent in freely convertible currency
ITB 20.3 (d)	Other types of acceptable securities: <u>None</u>
ITB 21.1	In addition to the original of the Bid, the number of copies is: 03
ITB 21.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Powers of Attorney.
D. Submission and Opening of Bids	
ITB 23.1	<p>For <u>Bid submission purposes</u> only, the Employer's address is:</p> <p style="padding-left: 40px;">Procurement and Disposal Unit Ministry of Water and Environment Headquarters Plot 3-7, Kabalega Crescent, Luzira Kampala, Uganda</p> <p>The Proposals must be submitted no later than:</p> <p>Date: 23rd November, 2020</p> <p>Time: <u>11:00 hours Ugandan Time</u></p> <p>In addition to the submission of bids as per ITC 23.1, the Service Providers <i>shall</i> have the option of submitting their Bids by the following means:</p>

	<p>Option 1 The Service Provider may send the bid by e-mail to their Embassy if they are willing to assist. The Embassy may print the bid from the scanned copy of the bid and submit the bid with a letter from the Embassy confirming authenticity of the service provider and the bid. The scanned copy with the letter from the Embassy will be accepted as original. The Service Provider is responsible to submit the complete bid and the Employer bears no responsibility. The Embassy should be advised to maintain confidentiality particularly when they are printing bids from multiple Service Provider</p> <p>Option 2 The Service Provider may send the bid by e-mail to their local representative along with scanned copy of the authorization to sign (Power of Attorney - POA) the bid. The local representative could print and sign the bid based on the scanned copy of the authorization to sign (Power of Attorney) the bid and submit. The scanned copy of authorization to sign will be accepted instead of original authorization to sign the bid as contemplated in ITC 21.3.</p> <p>Important Note:</p> <ul style="list-style-type: none"> (i) <i>If the Service Providers follows Option2, the service provider shall send the original authorization to sign the bid (Power of Attorney) for Employer's record as per address given in ITC BDS 21.3</i> (ii) <i>A Service Provider should ideally submit a bid using one of the above options for submission. However, due to Covid-19 Pandemic and restrictions and for the purposes of ensuring timely delivery of the bid to the employer, if a Service Provider submits a bid using more than one of available options listed above, then whichever bid is received last prior to the deadline for bid submission, shall be considered the final bid from the Service Provider</i> (iii) <i>Regardless of the method used for submission, a bid must reach the address above by the deadline for submission. Late bids shall be rejected.</i>
ITB 26.1	<p>The Bid opening shall take place at: Ministry of Water and Environment Headquarters Plot 3-7, Kabalega Crescent, Luzira Kampala, Uganda 23rd November, 2020 Time: <u>11:10am Ugandan Time</u></p>

	<p><i>Due to limitations on gatherings/meetings beyond 5 people in the Ministry of Water and Environment Headquarters as a result of COVID-19 pandemic and to comply with the Standard Operating Procedures (SOPs) put in place to avoid the spread of Corona virus, Service Providers may participate in bid opening meeting through a virtual link (e.g. WebEx platform).</i></p> <p><i>The link details for the bid opening shall be communicated to all Service providers who obtained the bid directly from the MWE at least one (1) week before bid opening date.</i></p>
ITB 26.6	The Letter of Bid and priced Activity Schedule shall be initialed by 02 representatives of the Employer conducting Bid opening. Each Bid shall be initialed by all representatives and shall be numbered, any modification to the unit or total price shall be initialed by the Representative of the Employer.
E. Evaluation and Comparison of Bids	
ITB 33.1	<p>The currency that shall be used for Bid evaluation and comparison purposes to convert at the selling exchange rate all Bid prices expressed in various currencies into a single currency is: <i>Uganda Shillings</i></p> <p>The source of exchange rate shall be: <i>Bank of Uganda</i></p> <p>the date for the exchange rate shall be deadline of bid submission</p>
F. Award of Contract	
ITB 45.1	The successful Bidder <i>shall not</i> submit the Beneficial Ownership Disclosure Form.
ITB 47	The Adjudicator proposed by the Employer is <i>Prof. Jackson Mwakali</i> . The hourly fee for this proposed Adjudicator shall be <i>US\$50</i> . The biographical data of the proposed Adjudicator is indicated in the CV attached to this document.
ITB 48.1	<p>The procedures for making a Procurement-related Complaint are detailed in the “Procurement Regulations for IPF Borrowers (Annex III).” If a Bidder wishes to make a Procurement-related Complaint, the Bidder should submit its complaint following these procedures, in writing (by the quickest means available, that is either by email or fax), to:</p> <p>Title/position: <i>Head, Procurement and Disposal Unit</i></p> <p>Client: <i>Ministry of Water and Environment</i></p> <p>Email address: kateregga9@hotmail.com copy to aig732@gmail.com</p>

Section III - Evaluation and Qualification Criteria

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The Employer shall use the criteria and methodologies listed in this Section to evaluate Bids. By applying these criteria and methodologies, the Employer shall determine the Most Advantageous Bid. This is the Bid that has been determined to be:

- (a) substantially responsive to the bidding document, and
- (b) the lowest evaluated cost.

1. Evaluation (ITB 35.2(f))

In addition to the criteria listed in ITB 35.2 (a) to (e) the following criteria shall apply:

1.1 Adequacy of Technical Proposal

Evaluation of the Bidder's Technical Proposal will include an assessment of the Bidder's technical capacity to mobilize key equipment and personnel for the contract consistent with its proposal regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VII, Employer's Requirements.

1.2 Multiple Contracts

Pursuant to ITB 35.4 of the Instructions to Bidders, if Services are grouped in multiple contracts, evaluation will be as follows:

Award Criteria for Multiple Contracts [ITB 35.4]:

Lots

Bidders have the option to Bid for any one or more lots. Bids will be evaluated lot-wise, taking into account discounts offered, if any, after considering all possible combination of lots. The contract(s) will be awarded to the Bidder or Bidders offering the lowest evaluated cost to the Employer for combined lots, subject to the selected Bidder(s) meeting the aggregate required qualification requirements for lot or combination of lots as the case may be.

1.3 Alternative Times for Completion

An alternative Completion Time, if permitted under ITB 14.2, will be evaluated as follows: N/A

1.4 Alternative Technical Solutions for specified parts of the Services

If permitted under ITB 14.3, will be evaluated as follows: N/A

2. Qualification

2.1 All Bidders shall include the following information and documents with their Bids:

- (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) total monetary value of Services performed for each of the last five years;
- (c) experience in Services of a similar nature and size for each of the last five years, and details of Services under way or contractually committed; and names and address of clients who may be contacted for further information on those contracts;
- (d) list of major items of equipment proposed to carry out the Contract;
- (e) qualifications and experience of key site management and technical personnel proposed for the Contract;
- (f) reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;
- (g) evidence of adequacy of working capital for this Contract (access to line(s) of credit and availability of other financial resources);
- (h) authority to the Employer to seek references from the Bidder's bankers;
- (i) information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount;
- (j) proposals for subcontracting components of the Services amounting to more than 10 percent of the Contract Price; and
- (k) Environmental and Social (ES) past performance declaration (see below at the end of this section).

Bids submitted by a joint venture of two or more firms as members shall comply with the following requirements:

- (a) the Bid shall include all the information listed above for each joint venture member;
- (b) the Bid shall be signed so as to be legally binding on all members;
- (c) the Bid shall include a copy of the agreement entered into by the joint venture members defining the division of assignments to each member and establishing that all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; alternatively, a Letter of Intent to execute a joint venture agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed agreement;
- (d) one of the members shall be nominated as being in charge, authorized to incur liabilities, and receive instructions for and on behalf of any and all members of the joint venture; and

- (e) the execution of the entire Contract, including payment, shall be done exclusively with the member in charge.

2.2 Minimum Qualification Requirements

To qualify for award of the Contract, Bidders shall meet the following minimum qualifying criteria:

- (a) annual volume of Services of at least the amount specified **in Table a below**;
- (b) experience as service provider in the provision of at least two service contracts of a nature and complexity similar to the Services over the last 5 years (to comply with this requirement, Services contracts cited should be at least 70 percent complete) as specified **in Table a below**;
- (c) proposals for the timely acquisition (own, lease, hire, etc.) of the essential equipment listed **in Table a below**;
- (d) Suitably qualified key personnel specified below **in Table a** as well as other key personnel that the Bidder considers appropriate to perform the Services;

and

- (e) liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of no less than the amount specified **below**.

A consistent history of litigation or arbitration awards against the Bidder or any member of a Joint Venture may result in disqualification.

Table a: Qualification Requirements

No.	Joint Ventures	The information needed for Bids submitted by joint ventures is as follows: As above
1	Annual Volume	The minimum required annual volume of Services for the successful Bidder in any of the last five years shall be: Lot 1: US\$300,000 Lot 2: US\$500,000 Lot 3: US\$500,000 Lot 4: US\$600,000
2	Experience	The experience required to be demonstrated by the Bidder should include as a minimum that he has executed during the last 5 years the following: <u>Lot 1:</u> a. 50km of riverbanks restored in the last five years, b. 5km of degraded gullies treated in the last five years, c. 100ha of degraded land afforested in the last five years, and d. 100ha of land under soil and water conservation in the last five years.

		<p><u>Lot 2:</u></p> <p>a. 200km of riverbanks restored in the last five years, b. 300ha of degraded wetlands restored in the last five years, c. 500ha of degraded land afforested in the last five years, and d. 100ha of land under soil and water conservation in the last five years.</p> <p><u>Lot 3:</u></p> <p>a. 150km of riverbanks restored in the last five years, b. 50ha of degraded wetlands restored in the last five years, c. 300ha of degraded land afforested in the last five years, and d. 150ha of land under soil and water conservation in the last five years.</p> <p><u>Lot 4:</u></p> <p>a. 10km of riverbanks restored in the last five years, b. 800ha of degraded wetlands restored in the last five years, c. 1000ha of degraded land afforested in the last five years, and d. 200ha of land under soil and water conservation in the last five years.</p>																													
3	Essential Equipment	The essential equipment to be made available for the Contract by the successful Bidder shall be: None																													
4	Key Personnel	<table border="1"> <thead> <tr> <th rowspan="2"><i>Expert</i></th> <th colspan="4"><i>Required no. for Lot:</i></th> </tr> <tr> <th><u>1</u></th> <th><u>2</u></th> <th><u>3</u></th> <th><u>4</u></th> </tr> </thead> <tbody> <tr> <td><i>Water/Environmental Management expert (team Leader):</i> A master's degree in Water or Environmental Engineering / Management / Science or related field with 8 years of general experience, 5 years of Specific experience in undertaking water related environmental assessments and in environment management planning. Experience in use of Geographical Information System tools will be an advantage.</td> <td><u>01</u></td> <td><u>01</u></td> <td><u>01</u></td> <td><u>02</u></td> </tr> <tr> <td><i>Forestry/Tree growing Experts:</i> The Forestry/Tree growing Expert should have a Bachelor's degree in Forestry with experience of 10 years in tree growing. A minimum of 3 years' experience in training farmers in tree planting and agroforestry at community level will be needed.</td> <td><u>01</u></td> <td><u>01</u></td> <td><u>01</u></td> <td><u>02</u></td> </tr> <tr> <td><i>Soil and Water Conservation Expert:</i> The Soil and Water Conservation Expert should have a Bachelor's degree in natural resources/ water resources management, Agriculture, or related field with experience of not less than 10 years in natural resources/water resources management. 3 years specific experience in construction of soil and water conservation structures, as well as community involvement and training farmers in catchment restoration measures will be needed.</td> <td><u>01</u></td> <td><u>01</u></td> <td><u>01</u></td> <td><u>02</u></td> </tr> <tr> <td><i>Community Development Expert:</i> The Community Development Specialist shall hold at a minimum a Bachelor Degree in social sciences, social works & administration, development studies or community psychology. A Master's Degree in those fields will be an added advantage. The proposed expert should have at least 5years of working experience, of which 3 years should have been in natural resources management. The expert should have experience in undertaking impact, social and gender analysis. S/He should be knowledgeable in preparing appropriate awareness programs. The</td> <td><u>01</u></td> <td><u>01</u></td> <td><u>01</u></td> <td><u>02</u></td> </tr> </tbody> </table>	<i>Expert</i>	<i>Required no. for Lot:</i>				<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<i>Water/Environmental Management expert (team Leader):</i> A master's degree in Water or Environmental Engineering / Management / Science or related field with 8 years of general experience, 5 years of Specific experience in undertaking water related environmental assessments and in environment management planning. Experience in use of Geographical Information System tools will be an advantage.	<u>01</u>	<u>01</u>	<u>01</u>	<u>02</u>	<i>Forestry/Tree growing Experts:</i> The Forestry/Tree growing Expert should have a Bachelor's degree in Forestry with experience of 10 years in tree growing. A minimum of 3 years' experience in training farmers in tree planting and agroforestry at community level will be needed.	<u>01</u>	<u>01</u>	<u>01</u>	<u>02</u>	<i>Soil and Water Conservation Expert:</i> The Soil and Water Conservation Expert should have a Bachelor's degree in natural resources/ water resources management, Agriculture, or related field with experience of not less than 10 years in natural resources/water resources management. 3 years specific experience in construction of soil and water conservation structures, as well as community involvement and training farmers in catchment restoration measures will be needed.	<u>01</u>	<u>01</u>	<u>01</u>	<u>02</u>	<i>Community Development Expert:</i> The Community Development Specialist shall hold at a minimum a Bachelor Degree in social sciences, social works & administration, development studies or community psychology. A Master's Degree in those fields will be an added advantage. The proposed expert should have at least 5years of working experience, of which 3 years should have been in natural resources management. The expert should have experience in undertaking impact, social and gender analysis. S/He should be knowledgeable in preparing appropriate awareness programs. The	<u>01</u>	<u>01</u>	<u>01</u>	<u>02</u>
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		<p>Expert shall be responsible for mobilizing and sensitization of communities during the project implementation process.</p> <p>The experts are expected to have local experience and knowledge of conditions in the sub catchment. Ability to speak the local language by Community Development Expert will be required. The Service Provider shall include other technical, non-technical and support staff and any other additional expertise required to execute the assignment successfully.</p> <p>NOTE: The implementation of the 4 lots shall be done simultaneously and therefore the Service Providers that intend to bid for more than one lot should note the following:</p> <ul style="list-style-type: none"> a) The Service Provider MUST submit different staff for each of the lots bid for. b) If the Service Provider submits the same personnel for more than one lot, the personnel will be considered available for the proposal submitted first, and considered unavailable for the other proposal(s) and disqualified on that basis. The Service Provider should note this and ensure conformity 				
5	Liquid Assets	<p>The minimum amount of liquid assets and/or credit facilities net of other contractual commitments of the successful Bidder shall be:</p> <p>Lot 1: US\$800,000 Lot 2: US\$1,200,000 Lot 3: US\$1,200,000 Lot 4: US\$1,500,000</p>				
6	Subcontractors	Subcontractors' experience <i>shall not</i> be taken into account.				

2.3 Assessment of Joint Ventures

The figures for each of the members of a joint venture shall be added together to determine the Bidder's compliance with the minimum qualifying criteria of (a), (b) and (e); however, for a joint venture to qualify the member in charge must meet at least 70 % of those minimum criteria for an individual Bidder and other members at least 50% of the criteria. Failure to comply with this requirement will result in rejection of the joint venture's Bid.

2.4 Sub Contractors

Subcontractors' experience and resources *will not be taken* into account in determining the Bidder's compliance with the qualifying criteria, unless otherwise stated in the Qualification Requirements above.

Declaration: Environmental and Social (ES) past performance

The Bidder (if joint venture, each member of a joint venture) shall declare, using the form in Section IV, any contract that has been suspended or terminated and/or performance security called by an employer, in the past five years, for reasons of breach of environmental or social (including Sexual Exploitation and Abuse) contractual obligations. The Employer may use this information to seek further information or clarifications in carrying out its due diligence.

Section IV- Bidding Forms

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Letter of Bid

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: *All italicized text is to help Bidders in preparing this form.*

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of RFB process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

We, the undersigned, declare that:

To: *[insert complete name of Employer]*

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with ITB 9;
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Employer based on execution of a Bid-Securing Declaration or Proposal-Securing Declaration in the Employer's Country in accordance with ITB 4.7;
- (d) **Conformity:** We offer to provide the Non-Consulting Services in conformity with the bidding document of the following: *[insert a brief description of the Non-Consulting Services]*;
- (e) **Bid Price:** The total price of our Bid, excluding any discounts offered in item (f) below is: *[Insert one of the options below as appropriate]*
 Option 1, in case of one lot: Total price is: *[insert the total price of the Bid in words and figures, indicating the various amounts and the respective currencies]*;

Or

Option 2, in case of multiple lots: (a) Total price of each lot *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*; and (b) Total price of all lots (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;

- (f) **Discounts:** The discounts offered and the methodology for their application are:

- (i) The discounts offered are: *[Specify in detail each discount offered.]*
- (ii) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts];*
- (g) **Bid Validity Period:** Our Bid shall be valid until *[insert day, month and year in accordance with ITB 19.1]*, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) **Performance Security:** If our Bid is accepted, we commit to obtain a Performance Security in accordance with the bidding document;
- (i) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other Bid(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 14;
- (j) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Employer’s Country laws or official regulations or pursuant to a decision of the United Nations Security Council;
- (k) **State-owned enterprise or institution:** *[select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6];*
- (l) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate “none.”)

- (m) *[Delete if not appropriate, or amend to suit]* We confirm that we understand the provisions relating to Standstill Period as described in this bidding document and the Procurement Regulations.

- (n) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (o) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
- (p) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.

Name of the Bidder: *[insert complete name of the Bidder]

Name of the person duly authorized to sign the Bid on behalf of the Bidder: **[insert complete name of person duly authorized to sign the Bid]

Title of the person signing the Bid: [insert complete title of the person signing the Bid]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] **day of** [insert month], [insert year]

Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of Bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

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1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each member : <i>[insert legal name of each member in JV]</i>
3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the agency of the Employer
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 45.1, the successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]</i>

Bidder's JV Members Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture]].

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of Bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Employer, in accordance with ITB 4.6.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 45.1, the successful Bidder shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.]</i>

Qualification Information

1. Individual Bidders or Individual Members of Joint Ventures

- 1.1 Constitution or legal status of Bidder: *[attach copy]*
- Place of registration: *[insert]*
- Principal place of business: *[insert]*
- Power of attorney of signatory of Bid: *[attach]*
- 1.2 Total annual volume of Services performed in five years, in the internationally traded currency specified **in the BDS**: *[insert]*
- 1.3 Services performed as prime Service Provider on the provision of Services of a similar nature and volume over the last five years. The values should be indicated in the same currency used for Item 1.2 above. Also list details of Services under way or committed, including expected completion date.

Project name and country	Name of employer and contact person	Type of Services provided and year of completion	Value of contract
(a)			
(b)			

- 1.4 Major items of Service Provider's Equipment proposed for carrying out the Services. List all information requested below.

Item of equipment	Description, make, and age (years)	Condition (new, good, poor) and number available	Owned, leased (from whom?), or to be purchased (from whom?)
(a)			
(b)			

- 1.5 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer to GCC Clause 4.1.

Position	Name	Years of experience (general)	Years of experience in proposed position
(a)			
(b)			

1.6 Proposed subcontracts and firms involved. Refer to GCC Clause 3.5.

Sections of the Services	Value of subcontract	Subcontractor (name and address)	Experience in providing similar Services
(a)			
(b)			

1.7 Financial reports for the last five years: balance sheets, profit and loss statements, auditors’ reports, etc. List below and attach copies.

1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of support documents. We certify/confirm that we comply with eligibility requirements as per ITB 4.

1.9 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Employer.

1.10 Information regarding any litigation, current or within the last five years, in which the Bidder is or has been involved.

Other party(ies)	Cause of dispute	Details of litigation award	Amount involved
(a)			
(b)			

1.11 Statement of compliance with the requirements of ITB 4.2.

1.12 Proposed Program (service work method and schedule). Descriptions, drawings, and charts, as necessary, to comply with the requirements of the bidding document.

2. Joint Ventures

2.1 The information listed in 1.1 - 1.11 above shall be provided for each member of the joint venture.

2.2 The information in 1.12 above shall be provided for the joint venture.

2.3 Attach the power of attorney of the signatory(ies) of the Bid authorizing signature of the Bid on behalf of the joint venture.

2.4 Attach the Agreement among all members of the joint venture (and which is legally binding on all members), which shows that

- (a) all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms;
- (b) one of the members will be nominated as being in charge, authorized to incur liabilities, and receive instructions for and on behalf of any and all members of the joint venture; and
- (c) the execution of the entire Contract, including payment, shall be done exclusively with the member in charge.

3. Additional Requirements

- 3.1 Bidders should provide any additional information required **in the BDS.**

Environmental and Social Performance Declaration

[Note to the Employer: Include this form if applicable in accordance with Section III]

[The following table shall be filled in for the Bidder and each member of a Joint Venture]

Bidder’s Name: *[insert full name]*
 Date: *[insert day, month, year]*
 Joint Venture Member’s Name: *[insert full name]*
 RFB No. and title: *[insert RFB number and title]*
 Page *[insert page number]* of *[insert total number]* pages

Environmental and Social Performance Declaration			
<input type="checkbox"/> No suspension or termination of contract: An employer has not suspended or terminated a contract and/or called the performance security for a contract for reasons related to Environmental or Social (ES) performance, in the past five years.			
<input type="checkbox"/> Declaration of suspension or termination of contract: The following contract(s) has/have been suspended or terminated and/or Performance Security called by an employer(s) for reasons related to Environmental or Social (ES) performance, in the past five years. Details are described below:			
Year	Suspended or terminated portion of contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s) e.g. gender-based violence; sexual exploitation or sexual abuse breaches]</i>	<i>[insert amount]</i>
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for suspension or termination: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
...	...	<i>[list all applicable contracts]</i>	...

Performance Security called by an employer(s) for reasons related to ES performance		
Year	Contract Identification	Total Contract Amount (current value, currency, exchange rate and US\$ equivalent)
<i>[insert year]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for calling of performance security: <i>[indicate main reason(s) e.g. gender-based violence; sexual exploitation, or sexual abuse breaches]</i>	<i>[insert amount]</i>

Schedule Forms

The Bidder shall fill in the Forms below in accordance with the instructions indicated.

Activity Schedule

(Please refer to Section VII (3) for detailed item description)

The list of line items in column 1 of the Activity Schedules shall coincide with the List of Non-Consulting Services specified in Section VII (3)

Currencies in accordance with ITB 16						Date: _____
						RFB No: _____
						Alternative No: _____
						Page N° _____ of _____
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
<i>[insert number of the Service]</i>	<i>[insert name of Services]</i>		<i>[insert delivery date at place of final destination per Service]</i>	<i>[insert number of units]</i>	<i>[insert unit price per unit]</i>	<i>[insert total price per unit]</i>
Total Bid Price						

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*

Method Statement

(Provide a detailed description of the proposed method statement to execute the works)

The Bidder shall submit comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) as required by ITB 12.1 (i) of the Bid Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Service Provider, and its Subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including those as may be more fully described in the Employer's Requirements in Section VII.

Code of Conduct for Service Provider's Personnel Form (ES)

CODE OF CONDUCT FOR SERVICE PROVIDER'S PERSONNEL

We are the Service Provider, [enter name of Service Provider]. We have signed a contract with [enter name of Employer] for [enter description of the Services]. The Services will be carried out at [enter the locations in the Employer's country where the Services are required, as applicable]. Our contract requires us to implement measures to address *environmental and social risks* [**Note to Employer:** *depending on the nature of the contract and assessed risks, this may be replaced with social risks*], related to the Services.

This Code of Conduct is part of our measures to deal with environmental and social risks [**Note to Employer:** *depending on the nature of the contract and assessed risks, this may be replaced with social risks*] related to the Services.

All personnel that we utilize in the execution of the Services, including the staff, labor and other

Note to the Bidder:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

employees of us and each Subcontractor, and any other personnel assisting us in the execution of the Services, are referred to as Service Provider's Personnel.

This Code of Conduct identifies the behavior that we require from the Service Provider's Personnel employed for the execution of the Services at the locations in the Employer's country where the Services are provided.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Service Provider's Personnel employed for the execution of the Services at the locations in the Employer's country where the Services are provided shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Service Provider's Personnel and any other person;
3. maintain a safe working environment including by:

- a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
 5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
 6. not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Service Provider's or Employer's Personnel;
 7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
 8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
 9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
 10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Abuse, and Sexual Harassment (SH);
 11. report violations of this Code of Conduct; and
 12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of applicable grievance mechanism for Service Provider's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the individual, with relevant experience, designated by the Service provider to handle these matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Service Provider's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all

due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate. There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by the Service Provider’s Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR SERVICE PROVIDER’S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Service Provider’s contact person(s) with relevant experience*] requesting an explanation.

Name of Service Provider’s Personnel: [insert name] Signature:

Date: (day month year): _____

Countersignature of authorized representative of the Service Provider:

Signature: _____

Date: (day month year): _____

ATTACHMENT 1: Behaviors constituting SEA and behaviors constituting SH

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM**BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND
BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)**

The following non-exhaustive list is intended to illustrate types of prohibited behaviors.

(1) **Examples of sexual exploitation and abuse** include, but are not limited to:

- A Service Provider's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Service Provider's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Service Provider's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Service Provider's Personnel denies a person access to the locations where the Services are executed unless he/she performs a sexual favor.
- A Service Provider's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) **Examples of sexual harassment in a work context**

- A Service Provider's Personnel comment on the appearance of another Service Provider's Personnel (either positive or negative) and sexual desirability.
- When a Service Provider's Personnel complains about comments made by another Service Provider's Personnel on his/her appearance, the other Service Provider's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Service Provider's Personnel or Employer's Personnel by another Service Provider's Personnel.
- A Service Provider's Personnel tells another Service Provider's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

Work Plan

The Service provide shall provide the work plan including and not limited to:

1. Site Organization

Provide a detailed description/illustration of the proposed site organization in terms of personnel, materials storage, etc.

2. Mobilization Schedule

Provide a detailed description/illustration of the proposed mobilization schedule for materials, equipment, labour etc. including sources.

Others - implementation Schedule

Provide a detailed description/illustration of the proposed implementation schedule.

Form of Bid Security **(Bank Guarantee)**

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Employer to insert its name and address]*

RFB No.: *[Employer to insert reference number for the Request for Bids]*

Alternative No.: *[Insert identification No if this is a Bid for an alternative]*

Date: *[Insert date of issue]*

BID GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _____ *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of _____ under Request for Bids No. _____ ("the RFB").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid prior to the Bid validity expiry date set forth in the Bidder's Letter of Bid, or any extended date provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary prior to the expiry date of the Bid validity or any extension thereto provided by the Applicant, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract agreement; or (b) if the Applicant is not the

successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the expiry date of the Bid validity.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[Signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

Form of Bid Security (Bid Bond): Not applicable

[The Surety shall fill in this Bid Bond Form in accordance with the instructions indicated.]

BOND NO. _____

BY THIS BOND *[name of Bidder]* as Principal (hereinafter called “the Principal”), and *[name, legal title, and address of surety]*, **authorized to transact business in** *[name of country of Employer]*, as Surety (hereinafter called “the Surety”), are held and firmly bound unto *[name of Employer]* as Obligee (hereinafter called “the Employer”) in the sum of *[amount of Bond]*¹ *[amount in words]*, for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted or will submit a written Bid to the Employer dated the ____ day of _____, 20__, for the supply of *[name of Contract]* (hereinafter called the “Bid”).

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

- (a) withdraws its Bid prior to the Bid validity expiry date set forth in the Principal’s Letter of Bid, or any extended date provided by the Principal; or
- (b) having been notified of the acceptance of its Bid by the Employer prior to the expiry date of the Bid validity or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to Bidders (“ITB”) of the Employer’s bidding document.

then the Surety undertakes to immediately pay to the Employer up to the above amount upon receipt of the Employer’s first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 28 days after the date of expiry of the Bid validity set forth in the Principal’s Letter of Bid or any extension thereto provided by the Principal.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this ____ day of _____ 20__.

Principal: _____ Surety: _____
 Corporate Seal (where appropriate)

(Signature)
(Printed name and title)

(Signature)
(Printed name and title)

¹ The amount of the Bond shall be denominated in the currency of the Employer’s Country or the equivalent amount in a freely convertible currency.

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Services in Bank-Financed Procurement

In reference to ITB 4.8, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8 (a) *[insert a list of the countries following approval by the Bank to apply the restriction or state “none”]*

Under ITB 4.8 (b) *[insert a list of the countries following approval by the Bank to apply the restriction or state “none”]*

Section VI - Fraud and Corruption

(Section VI shall not be modified)

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

- i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

Part II – Employer’s Requirement

Section VII - Activity Schedule

1. Project area and technical specifications

The technical requirements and specifications, including the project area coverage, general information, scope and other requirements as well as product and deliverables for each lot are provided in the ANNEX I below.

2. Project Time Schedule:

The Service provider must comply with the Time Schedules for different deliverables as provided in ANNEX I below.

The assignment will be undertaken over a maximum period of 24 calendar months for each Lot.

3. Price Schedule (Bill of Quantities)

The Price schedule(s) for each lot is elaborated below:

7.1: Activity Schedule - LOT 1 (Lwakhakha)

Currencies in accordance with ITB 16						Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
Schedule 1: General Items							
A	General Items						
A.1	Organize four 5-day exchange visits and study tours to other catchments (one in each of the 4 WMZs) for farmers and communities responsible for restoration activities (with maximum of 50 people per visit).	No. of Visits	Month 19	4			
A.2	Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchment.	Months	Monthly	24			
A.3	Allow provisional sum of Ug.shs. 50,000,000 for IEC materials throughout the project	Ls	Quarterly	1			
A.4	Allow provisional sum of Ug. shs. 10,000,000 for provision of as built drawings and maps including operation and maintenance manuals	Ls	Month 20	1			
A.5	Allow provisional sum of Ug. shs. 2,000,000 for monthly involvement of CMCs and SCMCs members in project activities	Months	Monthly	24			
A.6	Allow provisional sum of Ug. shs. 10,000,000 for monthly site meetings	Months	Monthly	24			
A.7	Establish, maintain site sign-boards untill the issue of the Taking-over Certificate	No.	Month 2	4			
Sub Total Schedule 1							
Schedule 2: Support communities to restore degraded stretches of riverbanks through use of catchment management measures							
B	Restore 72 km (36 km on each side) of the degraded stretches of the major rivers in Lwakhakha sub-catchment through use of catchment management measures						
B.1	Mobilise 300 community members, and raise their awareness on the importance of river bank protection, restoration, and management to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 5	6			
B.2	Conduct trainings for 300 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans. (50 members per training for 2 days)	no. of trainings	Month 7	6			
B.3	Provide tools to communities to implement the riverbank protection and restoration action plans:						

¹ Delivery Date from the date of signing of agreement

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
a	Hoes incl. handles	No.	Month 7	300		
b	Spades	No.	Month 7	200		
c	Panga	No.	Month 7	200		
d	Pick axes	No.	Month 7	50		
e	Gum boots	No.	Month 7	300		
f	Sledge hammer (5kg)	No.	Month 7	50		
g	Wheel barrows	No.	Month 7	50		
B.4	Provide 47,520 indigenous tree seedlings of average height of 30cm (obtained from tree nurseries in the catchment) to Communities					
a	Musisi	No.	Month 9	11880		
b	Bathdavia	No.	Month 9	11880		
c	Muvule	No.	Month 9	11880		
d	Mahogany	No.	Month 9	11880		
B.5	Demarcate off and re-vegetate 36 km buffer zone/stretch on both sides of the river using live markers like indigenous trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoilt during transportation + replacement planting).	Km	Month 14	72		
B.6	Procure 10,800 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil).	no. of sacks	Month 13	10,800		
B.7	Stabilize 36 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.	Km	Month 16	72		
B.8	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8		
B.9	Carry out quarterly technical inspections and monitoring of the interventions after establishment to ensure high survival rate of trees (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	4		
Sub Total Schedule 2						
Schedule 3: Support communities to treat and restore degraded stretches of gullies to control erosion, siltation and destruction of property						
C	Treat 6.73km stretch of gullies to control erosion, siltation and destruction of property in Lwakhakha sub-Catchment					
C.1	Mobilise 300 community members and create awareness on the importance of gully protection, treatment and management and ably participate in the gully treatment process (50 members per meeting)	no. of meetings	Month 10	6		
C.2	Conduct trainings for 300 selected community members to undertake and adopt gully protection,	no. of	Month 12	6		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	treatment and management measures including use of gully plugging (stones and sacks of soil), gully reshaping, planting grass strips, soil and water conservation measures upstream of the gullies (50 members per training for 3 days)	trainings				
C.3	Provide tools (wheelbarrows, Hoes, spades, Peak Axes, Pangas etc.) to communities for use in treating deep gullies;					
a	Hoes incl. handles	No.	Month 12	300		
b	Spades	No.	Month 12	200		
c	Panga	No.	Month 12	200		
d	Pick axes	No.	Month 12	50		
e	Gum boots	No.	Month 12	300		
f	Sledge hammer (5kg)	No.	Month 12	50		
g	Wheel barrows	No.	Month 12	50		
C.4	Provide 50kg-Sisal Sacks filled with humus soil (each km to be treated with 300 sacks with soil) to communities for use in for repairing 6.73km of collapsed gully sides	no. of sacks	Month 13	4,038		
C.5	Repair 6.73km of collapsed gully sides with Sisal Sacks	Km	Month 17	6.73		
C.6	Provide 2,700 indigenous tree seedlings with an average height of 30cm to communities and stabilise the sacks with the tree seedlings (400 seedlings per km):					
a	Musisi	No.	Month 17	675		
b	Bathdavia	No.	Month 17	675		
c	Muvule	No.	Month 17	675		
d	Mahogany	No.	Month 17	675		
C.7	Establish 5km of soil bunds of 0.6m wide x 0.4m deep upstream of the gullies constructed along contour lines and stabilised with grass to control runoff, and increase infiltration	km	Month 19	5		
C.8	Provide, plant and manage 3,3650 vetiver slips at a spacing of 20cm for gully treatment inclusive of reshaping	no. of slips	Month 19	33,650		
C.9	Provide 810m ³ of hard-core/stone boulders, gabion-wire mesh gauge 10, binding wire and cement mortar	M3	Month 19	810		
C.10	Install 440m ³ gully plugs of 6.0(W) x 2.0(D) x 0.8 (T)m to a depth not exceeding 2.0m at a minimum spacing of 50m	M3	Month 19	440		
C.11	Install 370m ³ gully plugs of 5.0 (W) x 3.0(D) x 1.0(T)m to a depth above 2.0m but not exceeding 4.0m (at a minimum spacing of 50m)	M3	Month 19	370		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
C.12	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	10		
C.13	Carry out quarterly technical inspections and monitoring of the treated gullies after establishment to ensure effective functioning of the structures established. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	4		
Sub Total Schedule 3						
Schedule 4: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.						
D	Promote and support establishment of soil and water conservation measures on 150 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation					
D.1	Mobilise 500 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities (50 members per meeting)	No. of meetings	Month 3	10		
D.2	Conduct trainings for 400 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)	no. of trainings	Month 5	8		
D.3	Provide tools to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.):					
a	Hoes incl. handles	No.	Month 5	400		
b	Spades	No.	Month 5	150		
c	Panga	No.	Month 5	150		
d	Pick axes	No.	Month 5	50		
e	Gum boots	No.	Month 5	400		
f	Sledge hammer (5kg)	No.	Month 5	50		
g	Wheel barrows	No.	Month 5	50		
D.4	Establish 30km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation	km	Month 6	30		
D.5	Establish 250 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep to trap and store runoff for soil and water conservation in the landscape	Pits	Month 7	250		
D.6	Establish 15km of stone bunds of specific dimensions (0.4m wide x 0.5m deep) per demonstration site	Km	Month 7	15		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	including preparation of base					
D.7	Provide Tree seedlings for establishing tree lines:					
a	Grevillea	No.	Month 7	600		
b	Mahogany	No.	Month 7	600		
c	Jack fruit	No.	Month 7	600		
d	Guavas	No.	Month 7	600		
e	Avocado	No.	Month 7	600		
D.8	Establish 15km of tree lines (200 trees per km)	Km	Month 8	15		
D.9	Establish 15km of contour terraces: length not exceeding 350 m for one direction of flow, 3-4m wide @ 0.1-0.5% grade	Km	Month 8	15		
D.10	Establish 15km grass strips to stabilise the soil and stone bunds, and terraces (each km is covered by 5000 vetiver slips)	km	Month 8	15		
D.11	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6		
D.12	Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
E	Establish 01 demonstration site for control of landslides in the most affected sub-counties in Lwakhakha sub-catchment (Bukokho and Bumbo) through use of catchment management measures					
E.1	Conduct trainings for 200 community members in Vetiver systems application in each sub county as both a sustainability and adoption strategy (50 members per training for 2 days)	No. of Trainings	Month 7	4		
E.2	Provide tools and materials (wheelbarrows, Handles, Spades, Pangas, etc.) to communities to implement vetiver systems for landslide control:					
a	Hoes incl. handles	No.	Month 7	200		
b	Spades	No.	Month 7	80		
c	Panga	No.	Month 7	100		
d	Pick axes	No.	Month 7	50		
e	Gum boots	No.	Month 7	200		
f	Sledge hammer (5kg)	No.	Month 7	25		
g	Wheel barrows	No.	Month 7	25		
E.3	Provide, plant and manage 20,000 vetiver slips to form grass bunds/strips for slope stabilization, runoff	Slips	Month 9	20,000		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	control, soil and water conservation and land rehabilitation					
F	Demonstrate Water Source Protection Measures on 20 water sources to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge					
F.1	Conduct sensitization meetings and establish water user committees for each of the 20 water sources (1 meeting of about 50 members per source)	No. of meetings	Month 4	20		
F.2	Train 20 water user committees on water point source protection using MWE guidelines (20 members/committee, 1 Training/committee)	No. of trainings	Month 5	20		
F.3	Provide tools to communities to implement water source protection measures:					
a	Hoes incl. handles	No.	Month 5	1000		
b	Spades	No.	Month 5	200		
c	Pangas	No.	Month 5	400		
d	Pick axes	No.	Month 5	100		
e	Gum boots	No.	Month 5	1000		
g	Wheel barrows	No.	Month 5	80		
F.4	Establish 0.25km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation per water point source:	km	Month 7	5		
F.5	Stabilise 0.25km of soil bunds with Vetiver grass per water source. Each km of soil bunds is covered by 1250 vetiver grass slips	Km	Month 7	5		
F.6	Establish a fence (of dimensions 15 x 15m) meters around the water points using procured treated poles, and Chain link 13.5 gauge 1.8x15m	Pcs	Month 7	20		
					Sub Total Schedule 4	
Schedule 5: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)						
G	Establishment of 3 Tree nurseries in the micro catchments each with a production capacity of 90,000 seedlings over a period of 2 years for sustenance of tree growing					
G.1	Conduct trainings for 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)	No. of Trainings	Month 3	3		
G.2	Procure and supply 60kgs of assorted seed to nurseries for raising seedlings	Kgs	Month 4	60		
G.3	Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance:					
Tools and Equipment						
a	wheel barrow	No.	Month 5	15		
b	Spades	No.	Month 5	30		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
d	Hand hoe and handle	No.	Month 5	30		
e	Bow Saw	No.	Month 5	15		
f	Liner Nylon	Rolls	Month 5	6		
g	Watering cans	No.	Month 5	9		
h	Plastic buckets	No.	Month 5	9		
i	Rakes	No.	Month 5	9		
j	Root pruning knives	No.	Month 5	15		
k	Grafting Knives	No.	Month 5	15		
l	Brooms	No.	Month 5	9		
m	Pangas	No.	Month 5	30		
n	Horse pipes	m	Month 5	150		
o	Knapsack sprayers	No.	Month 5	6		
p	Protective gear (overalls and gumboots)	No.	Month 5	30		
q	Water tank (5,000 litres) Gentex type	No.	Month 5	3		
r	Plastic gutters big size	No.	Month 5	20		
s	Gutter Holders	No.	Month 5	30		
t	Elbows 3"	No.	Month 5	15		
u	Plastic pipe 3"	No.	Month 5	15		
v	Water traps	No.	Month 5	15		
Nursery materials						
a	Fence (Chain link 13.5 gauge 1.8x15M)	Rolls	Month 5	21		
b	Eucalyptus fencing poles (and cross pieces)	No.	Month 5	150		
c	Papyrus-made shade mats	m2	Month 5	675		
d	Light Weight Nursery Shade Nets (Shade Rate: 50%, Material: HDPE, Sail Finishing: Polished)	m2	Month 5	444		
e	Bamboo reeds	No.	Month 5	450		
f	Nails -assorted sizes (4")	Kgs	Month 5	9		
g	Soil	ton	Month 5	3		
h	Potting Paper (3")	Kgs	Month 5	150		
i	Potting Paper (4")	Kgs	Month 5	150		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____		
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
j	Fungicides	Litre	Month 5	30			
k	Pesticides	Litre	Month 5	30			
G.4	Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	2			
H	Restoration of 200 ha of degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)						
H.1	Mobilise and sensitize 300 households to engage in tree growing initiatives (50 members per meeting)	No. of meetings	Month 4	6			
H.2	Conduct trainings for 300 households in tree growing and forest management for restoration (50 members per training for 2 days)	No. of Trainings	Month 5	6			
H.3	Provide tools and materials to 300 households for use during tree growing:						
a	Hoes incl. handles	No.	Month 7	300			
b	Spades	No.	Month 7	200			
c	Panga	No.	Month 7	200			
d	Pick axes	No.	Month 7	50			
e	Gum boots	No.	Month 7	300			
f	Sledge hammer (5kg)	No.	Month 7	50			
g	Wheel barrows	No.	Month 7	50			
H.4	Provide 80,000 tree seedlings of average height of 30cm to communities:						
a	Musisi	No.	Month 8	8000			
b	Teak	No.	Month 8	6500			
c	Bathdavia	No.	Month 8	7500			
a	Muvule	No.	Month 8	6000			
b	Taminalia	No.	Month 8	6500			
c	Pine	No.	Month 8	8500			
a	Grevillea	No.	Month 8	7500			
b	Mahogany	No.	Month 8	7000			
c	Jack fruit	No.	Month 8	6500			
a	Guavas	No.	Month 8	9000			

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
b	Avocado	No.	Month 8	7000		
H.5	Plant 80,000 tree seedlings of average height of 30cm to communities and restore 200 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.	ha	Month 11	200		
H.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6		
H.7	Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. (10 Senior technical officials from MWE, DLGs).	Months	quarterly	6		
H.8	Facilitate (for 5 days) 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing	no. of people	Month 10	150		
Sub Total Schedule 5						
Schedule 6: Support communities to establish and promote alternative income generating activities for improved livelihoods.						
I	Integration of livelihood options in the investment measures: Support Bee-keeping as a Livelihood Improvement Measure					
I.1	Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment (50 members per meeting)	No. of meetings	Month 8	2		
I.2	Conduct 2 trainings to 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing (50 members per training for 2 days)	No. of Trainings	Month 10	2		
I.3	Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:-					
a)	25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)	No.	Month 12	250		
c)	1 Smoker pump (metallic) for 10 groups	No.	Month 12	10		
d)	02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups	No.	Month 12	20		
e)	1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups	No.	Month 12	10		
f)	1 Air tight Bucket (20lts for each of 10 groups)	No.	Month 12	10		
g)	1 Kg of bee wax for each of 10 groups	No.	Month 12	10		
h)	1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups	No.	Month 12	10		
i)	1 bee knife and 1 Bee brush for each of 10 groups	No.	Month 12	20		
I.4	Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives and facilitate them (labour) to install hives at least 1-1.5m above ground and at 5m interval	No. of apiaries	Month 15	10		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	(distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).					
I.5	Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores). (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
J	Integration of livelihood options in the investment measures: Promote fodder production					
J.1	Conduct 2 trainings to 100 selected farmers in fodder growing and management (weeding, manuring, protection, harvesting- Coppicing, Pollarding, and Side pruning). (50 members per training for 2 days)	No. of Trainings	Month 10	2		
J.2	Provide 10 Kgs seed/seedlings of 30cm height to selected farmers for fodder grass growing at 1.5 m spacing along contours	Kgs	Month 12	60		
K	Integration of livelihood options in the investment measures: Promote energy saving technologies - e.g. cook stoves					
K.1	Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)	no. of meetings	Month 7	10		
K.2	Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1day training per group)	no. of trainings	Month 9	3		
K.3	Provide materials and equipment to women groups and facilitate them (labour) to construct 2000 cookstoves for households:					
a	Hoes incl. handles	No.	Month 13	9		
b	Spades	No.	Month 13	6		
c	Panga	No.	Month 13	9		
d	Moulds	No.	Month 13	6		
e	Wheel barrows	No.	Month 13	6		
f)	Jerrycans	No.	Month 13	6		
g	String	No.	Month 13	6		
h)	Measuring Tape	No.	Month 13	6		
K.4	Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
L	Integration of livelihood options in the investment measures: Promote fish farming for livelihood enhancement					
L.1	Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)	No. of meetings	Month 17	4		
L.2	Conduct One training (2-day) for each of the 3 famer groups of 20-40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).	no. of trainings	Month 19	3		
L.3	Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) to each of the farmer groups:					
a	Hoes incl. handles	No.	Month 19	60		
b	Spades	No.	Month 19	120		
c	Panga	No.	Month 19	60		
d	Pick axes	No.	Month 19	120		
e	Gum boots	No.	Month 19	120		
f	Wheel barrows	No.	Month 19	120		
L.4	Construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m ²) of the pond base	No. of ponds	Month 23	3		
L.5	Prepare the 3 ponds to receive fish: fill the pond with water; fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level); - if using compost, add about 10 kg per 100 m ² - if using animal manure, add per 100 m ² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure - if using plant wastes only, keep the fertilizing crib full and pack this material tightly in each crib	No. of ponds	Month 23	3		
L.6	Stock the 3 ponds each with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes	Fingerlings	Month 24	13500		
L.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8		
L.8	Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6	Months	Monthly	6		

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	Months. (10 Senior technical officials from MWE, DLGs).					
Sub Total Schedule 6						

COST SUMMARY for Lot 1

Cost Category	Amount (UGX)
Sub Total Schedule 1	
Sub Total Schedule 2	
Sub Total Schedule 3	
Sub Total Schedule 4	
Sub Total Schedule 5	
Sub Total Schedule 6	
GRAND TOTAL	

7.2 Activity Schedule: LOT 2 (Aswa II)

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
Schedule 1: General Items						
A	General Items					
A.1	Organize four 5-day exchange visits and study tours to other catchments (one in each of the 4 WMZs) for farmers and communities responsible for restoration activities (with maximum of 50 people per visit).	No. of Visits	Month 19	4		
A.2	Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchment.	Months	Monthly	24		
A.3	Allow provisional sum of Ug. shs. 50,000,000 for IEC materials throughout the project	Ls	Quarterly	1		
A.4	Allow provisional sum of Ug. shs. 10,000,000 for provision of as built drawings and maps including operation and maintenance manuals	Ls	Month 20	1		
A.5	Allow provisional sum of Ug. shs. 2,000,000 for monthly involvement of CMCs and SCMCs members in project activities	Months	Monthly	24		
A.6	Allow provisional sum of Ug. shs. 10,000,000 for monthly site meetings	Months	Monthly	24		
A.7	Establish, maintain site sign-boards untill the issue of the Taking-over Certificate	No.	Month 2	4		
					Sub Total Schedule 1	
Schedule 2: Support communities to restore degraded stretches of riverbanks in Aswa II sub-catchment through use of catchment management measures						
B	Restore 280km (140 km on each side) of the degraded stretches of the major rivers in Aswa II sub-catchment through use of catchment management measures					
B.1	Mobilise 700 community members, raise their awareness on the importance of river bank protection, restoration and management to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 5	14		
B.2	Conduct trainings for 700 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans (50 members per training for 2 days)	no. of trainings	Month 7	14		
B.3	Provide tools to communities for use in implementing the riverbank protection and restoration action plans:					
a	Hoes incl. handles	No.	Month 7	550		
b	Spades	No.	Month 7	200		
c	Panga	No.	Month 7	300		
d	Pick axes	No.	Month 7	150		
e	Gum boots	No.	Month 7	600		

¹ Delivery Date from the date of signing of agreement

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
f	Sledge hammer (5kg)	No.	Month 7	150					
g	Wheel barrows	No.	Month 7	150					
B.4	Provide 184,800 indigenous tree seedlings of an average height of 30cm (obtained from tree nurseries in the catchment) to Communities:								
a	Musisi	No.	Month 9	46200					
b	Bathdavia	No.	Month 9	46200					
c	Muvule	No.	Month 9	46200					
d	Mahogany	No.	Month 9	46200					
B.5	Demarcate off and re-vegetate 280km buffer zone/stretch on both sides of the river using live markers like indigenous trees, and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoilt during transportation + replacement planting).	Km	Month 14	280					
B.6	Procure 42,000 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil)	no. of sacks	Month 13	42,000					
B.7	Stabilize 140 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.	Km	Month 16	280					
B.8	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	12					
B.9	Organise sub-catchment level meeting for 200 people involving districts to prepare standard operating procedures (SOPs) for responsible sand mining.	no. of meetings	Month 14	3					
B.10	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival rate of trees. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	4					
						Sub Total Schedule 2			
Schedule 3: Support demarcation and restoration of degraded Wetlands to perform their ecological and socio-economic functions in Aswa II sub-Catchment									
C	Restore 500ha of the degraded wetlands in Aswa II sub-catchment through use of catchment management measures								
C.1	Conduct awareness raising meetings targeting 500 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 10	10					
C.2	Conduct trainings for 500 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)	no. of trainings	Month 12	10					
C.3	Provide tools to communities to implement wetland protection and restoration action plans:								
a	Hoes incl. handles	No.	Month 12	400					
b	Spades	No.	Month 12	200					

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
c	Panga	No.	Month 12	200					
d	Pick axes	No.	Month 12	150					
e	Gum boots	No.	Month 12	400					
f	Wheel barrows	No.	Month 12	150					
C.3	Procure 40,000 Sisal stems as local planting materials to demarcate the 500ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)	no. of Stems	Month 13	40,000					
C.4	Demarcate off 500ha buffer zone of the wetland using sisal stems (80 stems per ha at a spacing of 5m by 5m)	Ha	Month 18	500					
C.5	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	9					
C.6	Engage (for 5 days) and strengthen 300 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment	No. of people	Month 16	300					
C.7	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	3					
						Sub Total Schedule 3			
Schedule 4: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.									
D	Promote and support establishment of soil and water conservation measures on 110 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation								
D.1	Mobilise 450 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities (50 members per meeting)	no. of meetings	Month 3	9					
D.2	Conduct trainings for 350 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)	no. of trainings	Month 5	7					
D.3	Provide tools to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.):								
a	Hoes incl. handles	No.	Month 6	350					

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
b	Spades	No.	Month 6	120					
c	Panga	No.	Month 6	120					
d	Pick axes	No.	Month 6	40					
e	Gum boots	No.	Month 6	350					
f	Sledge hammer (5kg)	No.	Month 6	30					
g	Wheel barrows	No.	Month 6	40					
D.4	Establish 10 Ha the soil and water conservation structures at selected farm sites to serve as training and demonstration centres.	Ha	Month 7	10					
D.5	Support individual farmers to establish 100 Ha similar soil and water conservation structures on the hotspots identified on their individual land.	Ha	Month 10	100					
D.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	9					
D.7	Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2					
Sub Total Schedule 4									
Schedule 5: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)									
E	Establishment of 3 Tree nurseries in the micro catchments each with a production capacity of 90,000 seedlings over a period of 2 years for sustenance of tree growing								
E.1	Conduct trainings to 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)	No. of Trainings	Month 3	3					
E.2	Procure and supply 60kgs of assorted seed to nurseries for raising seedlings	Kgs	Month 4	60					
E.3	Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance:								
Tools and Equipment									
a	wheel barrow	No.	Month 5	15					
b	Spades	No.	Month 5	30					
c	Hand hoe and handle	No.	Month 5	30					
d	Bow Saw	No.	Month 5	15					
e	Liner Nylon	Rolls	Month 5	6					
f	Watering cans	No.	Month 5	9					
g	Plastic buckets	No.	Month 5	9					
h	Rakes	No.	Month 5	9					
i	Root pruning knives	No.	Month 5	15					
j	Grafting Knives	No.	Month 5	15					

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
k	Brooms	No.	Month 5	9					
l	Pangas	No.	Month 5	30					
m	Horse pipes	m	Month 5	150					
n	Knapsack sprayers	No.	Month 5	6					
o	Protective gear (overalls and gumboots)	No.	Month 5	30					
p	Water tank (5,000 litres) Gentex type	No.	Month 5	3					
q	Plastic gutters big size	No.	Month 5	20					
r	Gutter Holders	No.	Month 5	30					
s	Elbows 3"	No.	Month 5	15					
t	Plastic pipe 3"	No.	Month 5	15					
u	Water traps	No.	Month 5	15					
Nursery materials									
a	Fence (Chain link 13.5 gauge 1.8x15M)	Rolls	Month 5	21					
b	Eucalyptus fencing poles (and cross pieces)	No.	Month 5	150					
c	Papyrus-made shade mats	m ²	Month 5	675					
d	Light Weight Nursery Shade Nets (Shade Rate: 50%, Material: HDPE, Sail Finishing: Polished)	m ²	Month 5	444					
e	Bamboo reeds	No.	Month 5	450					
f	Nails -assorted sizes (4")	Kgs	Month 5	9					
g	Soil	ton	Month 5	3					
h	Potting Paper (3")	Kgs	Month 5	150					
i	Potting Paper (4")	Kgs	Month 5	150					
j	Fungicides	Litre	Month 5	30					
k	Pesticides	Litre	Month 5	30					
E.4	Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	2					
F	Restoration of 800 ha of degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)								
F.1	Mobilise and sensitize 500 households to engage in tree growing initiatives (50 members per meeting)	No. of meetings	Month 4	10					
F.2	Conduct trainings for 500 households in tree growing and forest management for restoration (50 members per training for 2 days)	No. of Trainings	Month 5	10					
E.3	Provide tools and materials to 500 households for use during tree growing:								

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
a	Hoes incl. handles	No.	Month 7	500					
b	Spades	No.	Month 7	300					
c	Panga	No.	Month 7	300					
d	Pick axes	No.	Month 7	100					
e	Gum boots	No.	Month 7	500					
f	Sledge hammer (5kg)	No.	Month 7	50					
g	Wheel barrows	No.	Month 7	100					
F.4	Provide 320,000 tree seedlings of average height of 30cm to communities:								
a	Musisi	No.	Month 8	32,000					
b	Teak	No.	Month 8	26,000					
c	Bathdavia	No.	Month 8	30,000					
a	Muvule	No.	Month 8	24,000					
b	Taminalia	No.	Month 8	26,000					
c	Pine	No.	Month 8	34,000					
a	Grevillea	No.	Month 8	30,000					
b	Mahogany	No.	Month 8	28,000					
c	Jack fruit	No.	Month 8	26,000					
a	Guavas	No.	Month 8	36,000					
b	Avocado	No.	Month 8	28,000					
F.5	Plant 320,000 tree seedlings of average height of 30cm to communities and restore 1000 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.	ha	Month 11	800					
F.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8					
F.7	Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. (10 Senior technical officials from MWE, DLGs).	Quarter	quarterly	4					
F.6	Facilitate (for 5 days) 200 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing	no. of people	Month 10	200					
						Sub Total Schedule 5			
Schedule 6: Task 5: support communities to establish and promote alternative income generating activities for improved livelihoods.									
G	Support Bee-keeping as alternative income generating activity								
G.1	Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment. (50 members per meeting)	No. of meetings	Month 8	2					
G.2	Conduct trainings for 100 selected farmers in bee keeping and siting of apiary; Hives deployment and	No. of	Month 10	2					

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing including value-addition. (50 members per training for 2 days)	Trainings				
G.3	Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:-					
a)	25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)	No.	Month 12	250		
c)	1 Smoker pump (metallic) for 10 groups	No.	Month 12	10		
d)	02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups	No.	Month 12	20		
e)	1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups	No.	Month 12	10		
f)	1 Air tight Bucket (20lts for each of 10 groups)	No.	Month 12	10		
g)	1 Kg of bee wax for each of 10 groups	No.	Month 12	10		
h)	1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups	No.	Month 12	10		
i)	1 bee knife and 1 Bee brush for each of 10 groups	No.	Month 12	20		
G.4	Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives and facilitate them (labour) to install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).	No. of apiaries	Month 15	10		
G.5	Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores). (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
H	Support energy saving technologies (e.g. improved cookstoves) as alternative income generating activity					
H.1	Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)	no. of meetings	Month 7	10		
H.2	Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1-day training per group)	no. of trainings	Month 9	3		
H.3	Provide materials and equipment to women groups and facilitate them (labour) to construct 2000 cookstoves for households:					
a	Hoes incl. handles	No.	Month 13	9		
b	Spades	No.	Month 13	6		
c	Panga	No.	Month 13	9		
d	Moulds	No.	Month 13	6		

Currencies in accordance with ITB 16						Date: _____	7
						RFB No: _____	
						Alternative No: _____	
						Page N° _____ of _____	
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
e	Wheel barrows	No.	Month 13	6			
f)	Jerrycans	No.	Month 13	6			
g	String	No.	Month 13	6			
h)	Measuring Tape	No.	Month 13	6			
H.4	Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2			
I	Support fruit growing as alternative income generating activity						
I.1	Identify and mobilise 100 fruit growing farmers, sensitise and engage the farmers to form 4 groups. (50 members per meeting)	no. of meetings	Month 12	2			
I.2	Conduct 1 training to each of the farmer groups in eco-agriculture/agronomic practices (including soil and water conservation, pests and diseases control, fruit tree management, organic farming, post-harvest handling). (1no. training per group for 2 days, 25members per group)	No. of trainings	Month 13	4			
I.3	Provide 2500 orange seedlings of average height of 30cm per group and plant and maintain the seedlings (at a spacing of 4m x 4m) under technical supervision.	Seedlings	Month 14	2500			
I.4	Provide technical support to fruit farmers and conduct on farm monitoring per farmer per month for the first 6 Months. (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6			
J	Promote fish farming as alternative income generating activity						
J.1	Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)	no. of meetings	Month 17	4			
J.2	Conduct One training (2-day) for each of the 3 famer groups of 40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).	no. of trainings	Month 19	3			
J.3	Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) to each of the farmer groups:						
a	Hoes incl. handles	No.	Month 19	60			
b	Spades	No.	Month 19	120			
c	Panga	No.	Month 19	60			
d	Pick axes	No.	Month 19	120			
e	Gum boots	No.	Month 19	120			
f	Wheel barrows	No.	Month 19	120			
J.4	Construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m ²) of the pond	No. of ponds	Month 23	3			

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
	base								
J.5	Prepare the 3 ponds to receive fish: fill the pond with water; fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level); - if using compost, add about 10 kg per 100 m ² - if using animal manure, add per 100 m ² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure - if using plant wastes only, keep the fertilizing crib full and pack this material tightly in each crib	No. of ponds	Month 23	3					
J.6	Stock the 3 ponds each with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes	Fingerlings	Month 24	13500					
J.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8					
J.8	Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months. (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6					
Sub Total Schedule 6									

COST SUMMARY for Lot 2

Cost Category	Amount (UGX)
Sub Total Schedule 1	
Sub Total Schedule 2	
Sub Total Schedule 3	
Sub Total Schedule 4	
Sub Total Schedule 5	
Sub Total Schedule 6	
GRAND TOTAL	

7.3 Activity Schedule - LOT 3 (Kochi)

Currencies in accordance with ITB 16					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
Schedule 1: General Items						
A	General Items					
A.1	Organize four 5-day exchange visits and study tours to other catchments (one in each of the 4 WMZs) for farmers and communities responsible for restoration activities (with maximum of 50 people per visit).	No. of Visits	Month 19	4		
A.2	Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchment.	Months	Monthly	24		
A.3	Allow provisional sum of Ug. shs. 50,000,000 for IEC materials throughout the project	Ls	Quarterly	1		
A.4	Allow provisional sum of Ug. shs. 10,000,000 for provision of as built drawings and maps including operation and maintenance manuals	Ls	Month 20	1		
A.5	Allow provisional sum of Ug. shs. 2,000,000 for monthly involvement of CMCs and SCMCs members in project activities	Months	Monthly	24		
A.6	Allow provisional sum of Ug. shs. 10,000,000 for monthly site meetings	Months	Monthly	24		
A.7	Establish, maintain site sign-boards until the issue of the Taking-over Certificate	No.	Month 2	4		
					Sub Total Schedule 1	
Schedule 2: Support communities to restore degraded stretches of riverbanks in Kochi sub-catchment through use of catchment management measures						
B	Restore 268 km (134 km on each side) of the degraded stretches of the major rivers in Kochi sub-catchment through use of catchment management measures					
B.1	Mobilise 650 community members, raise their awareness on the importance of river bank protection, restoration and management to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 5	13		
B.2	Conduct trainings for 650 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans. (50 members per training for 2 days)	no. of trainings	Month 7	13		
B.3	Provide tools to communities for use in implementing the riverbank protection and restoration action plans:					
a	Hoes incl. handles	No.	Month 7	500		
b	Spades	No.	Month 7	200		
c	Panga	No.	Month 7	300		

¹ Delivery Date from the date of signing of agreement

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
d	Pick axes	No.	Month 7	150					
e	Gum boots	No.	Month 7	500					
f	Sledge hammer (5kg)	No.	Month 7	150					
g	Wheel barrows	No.	Month 7	150					
B.4	Provide 176,880 indigenous tree seedlings of an average height of 30cm to Communities:								
a	Musisi	No.	Month 9	44220					
b	Bathdavia	No.	Month 9	44220					
c	Muvule	No.	Month 9	44220					
d	Mahogany	No.	Month 9	44220					
B.5	Demarcate off and re-vegetate 268km buffer zone/stretch on both sides of the river using live markers like indigenous trees, and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoilt during transportation + replacement planting).	Km	Month 14	268					
B.6	Procure 40,200 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil)	no. of sacks	Month 13	40,200					
B.7	Stabilize 134 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.	km	Month 16	268					
B.8	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	12					
B.9	Organise sub-catchment level meeting for 200 people involving districts to prepare standard operating procedures (SOPs) for responsible sand mining.	no. of meetings	Month 14	3					
B.10	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival rate of trees. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	4					
						Sub Total Schedule 2			
Schedule 3: Support demarcation and restoration of degraded Wetlands to perform their ecological and socio-economic functions in Kochi sub-Catchment									
C	Restore 110ha of the degraded wetlands in Kochi sub-catchment through use of catchment management measures								
C.1	Conduct awareness raising meetings targeting 300 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 10	6					
C.2	Conduct trainings for 300 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)	no. of trainings	Month 12	6					
B.3	Provide tools to communities to implement wetland protection and restoration action plans.								

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
a	Hoes incl. handles	No.	Month 12	300					
b	Spades	No.	Month 12	80					
c	Panga	No.	Month 12	120					
d	Pick axes	No.	Month 12	50					
e	Gum boots	No.	Month 12	300					
f	Wheel barrows	No.	Month 12	50					
C.3	Procure 8,800 Sisal stems as local planting materials to demarcate the 110ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)	no. of stems	Month 13	8800					
C.4	Demarcate off 110ha buffer zone of the wetland using sisal stems (80 stems per ha at a spacing of 5m by 5m)	Ha	Month 18	110					
C.5	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6					
C.6	Engage (for 5 days) and strengthen 200 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment	No. of people	Month 16	200					
C.7	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	3					
						Sub Total Schedule 3			
Schedule 4: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.									
D	Promote and support establishment of soil and water conservation measures on 260 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation								
D.1	Mobilise 600 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities. (50 members per meeting)	No. of meetings	Month 3	12					
D.2	Conduct trainings for 500 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)	no. of trainings	Month 5	10					
D.3	Provide tools to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.):								
a	Hoes incl. handles	No.	Month 6	500					

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
b	Spades	No.	Month 6	300					
c	Panga	No.	Month 6	300					
d	Pick axes	No.	Month 6	200					
e	Gum boots	No.	Month 6	500					
f	Sledge hammer (5kg)	No.	Month 6	100					
g	Wheel barrows	No.	Month 6	150					
D.4	Establish 10 Ha the soil and water conservation structures at selected farm sites to serve as training and demonstration centres.	Ha	Month 7	10					
D.5	Support individual farmers to establish 250 Ha similar soil and water conservation structures on the hotspots identified on their individual land.	Ha	Month 10	250					
D.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8					
D.7	Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2					
						Sub Total Schedule 4			
Schedule 5: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)									
E	Establishment of 3 Tree nurseries in the micro catchments each with a production capacity of 90,000 seedlings over a period of 2 years for sustenance of tree growing								
E.1	Conduct trainings to 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)	No. of Trainings	Month 3	3					
E.2	Procure and supply 60kgs of assorted seed to nurseries for raising seedlings	Kgs	Month 4	60					
E.3	Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance:								
a	wheel barrow	No.	Month 5	15					
b	Spades	No.	Month 5	30					
c	Hand hoe and handle	No.	Month 5	30					
d	Bow Saw	No.	Month 5	15					
e	Liner Nylon	Rolls	Month 5	6					
f	Watering cans	No.	Month 5	9					
g	Plastic buckets	No.	Month 5	9					
h	Rakes	No.	Month 5	9					
i	Root pruning knives	No.	Month 5	15					
j	Grafting Knives	No.	Month 5	15					

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
k	Brooms	No.	Month 5	9					
l	Pangas	No.	Month 5	30					
m	Horse pipes	m	Month 5	150					
n	Knapsack sprayers	No.	Month 5	6					
o	Protective gear (overalls and gumboots)	No.	Month 5	30					
p	Water tank (5,000 litres) Gentex type	No.	Month 5	3					
q	Plastic gutters big size	No.	Month 5	20					
r	Gutter Holders	No.	Month 5	30					
s	Elbows 3"	No.	Month 5	15					
t	Plastic pipe 3"	No.	Month 5	15					
u	Water traps	No.	Month 5	15					
Nursery materials									
a	Fence (Chain link 13.5 gauge 1.8x15M)	Rolls	Month 5	21					
b	Eucalyptus fencing poles (and cross pieces)	No.	Month 5	150					
c	Papyrus-made shade mats	m2	Month 5	675					
d	Light Weight Nursery Shade Nets (Shade Rate: 50%, Material: HDPE, Sail Finishing: Polished)	m2	Month 5	444					
e	Bamboo reeds	No.	Month 5	450					
f	Nails -assorted sizes (4")	Kgs	Month 5	9					
g	Soil	ton	Month 5	3					
h	Potting Paper (3")	Kgs	Month 5	150					
i	Potting Paper (4")	Kgs	Month 5	150					
j	Fungicides	Litre	Month 5	30					
k	Pesticides	Litre	Month 5	30					
E.4	Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	2					
F	Restoration of 500 ha of degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)								
F.1	Mobilise and sensitize 400 households in 2 meetings to engage in tree growing initiatives (50 members per meeting)	No. of meetings	Month 4	8					
F.2	Conduct trainings to 400 households in tree growing and forest management for restoration (50 members per training for 2 days)	No. of Trainings	Month 5	8					
F.3	Provide tools and materials) to 400 households for use during tree growing:								

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
a	Hoes incl. handles	No.	Month 7	300					
b	Spades	No.	Month 7	100					
c	Panga	No.	Month 7	100					
d	Pick axes	No.	Month 7	50					
e	Gum boots	No.	Month 7	300					
f	Sledge hammer (5kg)	No.	Month 7	50					
g	Wheel barrows	No.	Month 7	50					
F.4	Provide 200,000 tree seedlings of average height of 30cm to communities:								
a	Musisi	No.	Month 8	20,000					
b	Teak	No.	Month 8	16,250					
c	Bathdavia	No.	Month 8	18,750					
a	Muvule	No.	Month 8	15,000					
b	Taminalia	No.	Month 8	16,250					
c	Pine	No.	Month 8	21,250					
a	Grevillea	No.	Month 8	18,750					
b	Mahogany	No.	Month 8	17,500					
c	Jack fruit	No.	Month 8	16,250					
a	Guavas	No.	Month 8	22,500					
b	Avocado	No.	Month 8	17,500					
F.5	Plant 200,000 tree seedlings of average height of 30cm to communities and restore 1000 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.	ha	Month 11	500					
F.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	7					
F.7	Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. (10 Senior technical officials from MWE, DLGs).	Quarter	quarterly	4					
F.8	Facilitate (for 5 days) 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing	no. of people	Month 10	150					
						Sub Total Schedule 5			
Schedule 6: Support communities to establish and promote alternative income generating activities for improved livelihoods.									
G	Support Bee-keeping as alternative income generating activity								
G.1	Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment. (50 members per meeting)	no. of meetings	Month 8	2					
G.2	Conduct trainings for 100 selected farmers in bee keeping and siting of apiary; Hives deployment and	No. of	Month 10	2					

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
1	2	3	4	5	6	7			
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
	baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing. (50 members per training for 2 days)	Trainings							
G.3	Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as: -								
a)	25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)	No.	Month 12	250					
c)	1 Smoker pump (metallic) for 10 groups	No.	Month 12	10					
d)	02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups	No.	Month 12	20					
e)	1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups	No.	Month 12	10					
f)	1 Air tight Bucket (20lts for each of 10 groups)	No.	Month 12	10					
g)	1 Kg of bee wax for each of 10 groups	No.	Month 12	10					
h)	1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups	No.	Month 12	10					
i)	1 bee knife and 1 Bee brush for each of 10 groups	No.	Month 12	20					
G.4	Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives and facilitate them (labour) to install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).	No of apiaries	Month 15	10					
G.5	Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores). (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2					
H	Support fruit growing as alternative income generating activity								
H.1	Identify and mobilise 100 fruit growing farmers, sensitise and engage the farmers to form 4 groups (50 members per meeting)	no. of meetings	Month 12	2					
H.2	Conduct 1 training to each of the farmer groups in eco-agriculture/agronomic practices (including soil and water conservation, pests and diseases control, fruit tree management, organic farming, post-harvest handling). (1no. training per group for 2 days, 25members per group)	No. of trainings	Month 13	4					
H.3	Provide 2500 orange seedlings of average height of 30cm per group and plant and maintain the seedlings (at a spacing of 4m x 4m) under technical supervision.	Seedlings	Month 14	2500					
H.4	Provide technical support to fruit farmers and conduct on farm monitoring per farmer per month for the	Months	Monthly	6					

Currencies in accordance with ITB 16						Date: _____	7
						RFB No: _____	
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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	first 6 Months. (10 Senior technical officials from MWE, DLGs).						
I	Support energy saving technologies (e.g. improved cookstoves) as alternative income generating activity						
I.1	Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)	no. of meetings	Month 7	10			
I.2	Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1-day training per group)	no. of trainings	Month 9	3			
I.3	Provide materials and equipment to women groups and facilitate them (labour) to construct 2000 cookstoves for households.						
a	Hoes incl. handles	No.	Month 13	9			
b	Spades	No.	Month 13	6			
c	Panga	No.	Month 13	9			
d	Moulds	No.	Month 13	6			
e	Wheel barrows	No.	Month 13	6			
f)	Jerrycans	No.	Month 13	6			
g	String	No.	Month 13	6			
h)	Measuring Tape	No.	Month 13	6			
I.4	Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2			
J	Promote fish farming as alternative income generating activity						
J.1	Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)	No. of meetings	Month 17	4			
J.2	Conduct One training (2-day) for each of the 3 farmer groups of 40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).	no. of trainings	Month 19	3			
J.3	Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) to each of the farmer groups:						
a	Hoes incl. handles	No.	Month 19	60			
b	Spades	No.	Month 19	120			
c	Panga	No.	Month 19	60			
d	Pick axes	No.	Month 19	120			
e	Gum boots	No.	Month 19	120			
f	Wheel barrows	No.	Month 19	120			
J.4	Construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm	No. of	Month 23	3			

Currencies in accordance with ITB 16						Date: _____	RFB No: _____	Alternative No: _____	Page N° _____ of _____
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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)			
	(lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m ²) of the pond base	ponds							
J.5	Prepare the 3 ponds to receive fish: fill the pond with water; fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level); - if using compost, add about 10 kg per 100 m ² - if using animal manure, add per 100 m ² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure - if using plant wastes only, keep the fertilizing crib full and pack this material tightly in each crib	No. of ponds	Month 23	3					
J.6	Stock the 3 ponds each with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes	Fingerlings	Month 24	13500					
J.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8					
J.8	Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months. (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6					
Sub Total Schedule 6									

COST SUMMARY for Lot 3

Cost Category	Amount (UGX)
Sub Total Schedule 1	
Sub Total Schedule 2	
Sub Total Schedule 3	
Sub Total Schedule 4	
Sub Total Schedule 5	
Sub Total Schedule 6	
GRAND TOTAL	

7.4: Activity Schedule - LOT 4 (Middle-Lower Awoja)

Currencies in accordance with ITB 16						Date: _____	
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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
Schedule 1: General Items							
A	General Items						
A.1	Organize four 5-day exchange visits and study tours to other catchments (one in each of the 4 WMZs) for farmers and communities responsible for restoration activities in each of the two sub catchments (with at least 50 people per visit).	No. of Visits	Month 19	8			
A.2	Organise monthly 1-hour local radio talk shows on the ongoing activities in each of the 2 sub catchments.	Months	Monthly	24			
A.3	Allow provisional sum of Ug. shs. 50,000,000 for IEC materials throughout the project in each of the sub catchments	Ls	Quarterly	2			
A.4	Allow provisional sum of Ug. shs. 10,000,000 for provision of as built drawings and maps including operation and maintenance manuals	Ls	Month 20	2			
A.5	Allow provisional sum of Ug. shs. 4,000,000 for monthly involvement of CMCs and SCMCs members in project activities	Months	Monthly	24			
A.6	Allow provisional sum of Ug. shs. 10,000,000 for monthly site meetings	Months	Monthly	24			
A.7	Establish, maintain site sign-boards until the issue of the Taking-over Certificate	No.	Month 2	8			
						Sub Total Schedule 1	
Schedule 2: Support communities to restore degraded stretches of riverbanks in Lake Okolitorom sub-catchment through use of catchment management measures							
B	Restore 13.4 km (6.7 km on each side) of the degraded stretches of the major rivers in Lake Okolitorom catchment through use of catchment management measures						
B.1	Mobilise 300 community members, raise their awareness on the importance of river bank protection, restoration and management to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 5	6			
B.2	Conduct trainings for 200 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans. (50	no. of trainings	Month 7	4			

¹ Delivery Date from the date of signing of agreement

Currencies in accordance with ITB 16						Date: _____	
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						Page N° _____ of _____	
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	members per training for 2 days)						
B.3	Provide tools to communities for use in implementing the riverbank protection and restoration action plans:						
a	Hoes incl. handles	No.	Month 7	200			
b	Spades	No.	Month 7	100			
c	Panga	No.	Month 7	80			
d	Pick axes	No.	Month 7	30			
e	Gum boots	No.	Month 7	200			
f	Sledge hammer (5kg)	No.	Month 7	30			
g	Wheel barrows	No.	Month 7	30			
B.4	Provide 8844 indigenous tree seedlings of an average height of 30cm to Communities:						
a	Musisi	No.	Month 9	2211			
b	Bathdavia	No.	Month 9	2211			
c	Muvule	No.	Month 9	2211			
d	Mahogany	No.	Month 9	2211			
B.5	Demarcate off and re-vegetate 13.4km buffer zone/stretch on both sides of the river using live markers like indigenous trees, and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoilt during transportation + replacement planting).	Km	Month 14	13.4			
B.6	Procure 2,010 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil)	no. of sacks	Month 13	2,010			
B.7	Stabilize 6.7 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.	no. of slips	Month 16	13			
B.8	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6			
B.9	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival rate of trees (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	4			
						Sub Total Schedule 2	
Schedule 3: Support demarcation and restoration of degraded Wetlands to perform their ecological and socio-economic functions in Apeduru-Apapai sub-catchment							
C	Restore 369.5ha of the degraded wetlands in Apeduru-Apapai sub-catchment through use of catchment management measures						
C.1	Conduct awareness raising meetings targeting 400 community people and the leadership on the	No. of	Month 10	8			

Currencies in accordance with ITB 16						Date: _____	
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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)	meetings					
C.2	Conduct trainings for 400 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)	no. of trainings	Month 12	8			
C.3	Provide tools to communities to implement wetland protection and restoration action plans.						
a	Hoes incl. handles	No.	Month 12	400			
b	Spades	No.	Month 12	100			
c	Panga	No.	Month 12	100			
d	Pick axes	No.	Month 12	100			
e	Gum boots	No.	Month 12	400			
f	Wheel barrows	No.	Month 12	100			
C.4	Procure 29,560 Sisal stems as local planting materials to demarcate the 110ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)	No.	Month 13	29560			
C.5	Demarcate off 369.5ha buffer zone of the wetland using sisal stems (80 stems per ha at a spacing of 5m by 5m)	Ha	Month 18	369.5			
C.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6			
C.7	Engage (for 5 days) and strengthen 300 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment	no. meetings	Month 16	3			
C.8	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	3			
Sub Total Schedule 3							
Schedule 4: Support demarcation and restoration of degraded Wetlands to perform their ecological and socio-economic functions in Lake Okolitorom sub-catchment							
D	Restore 623ha of the degraded wetlands in Lake Okolitorom sub-catchment through use of catchment management measures						
D.1	Conduct awareness raising meetings targeting 650 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)	No. of meetings	Month 10	13			

Currencies in accordance with ITB 16						Date:	
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1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
D.2	Conduct trainings for 650 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)	no. of trainings	Month 12	13			
D.3	Provide tools to communities to implement wetland protection and restoration action plans:						
a	Hoes incl. handles	No.	Month 12	550			
b	Spades	No.	Month 12	300			
c	Panga	No.	Month 12	200			
d	Pick axes	No.	Month 12	150			
e	Gum boots	No.	Month 12	600			
f	Wheel barrows	No.	Month 12	150			
D.4	Procure 49,840 Sisal stems as local planting materials to demarcate the 110ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)	No.	Month 13	49840			
D.5	Demarcate off 623ha buffer zone of the wetland using sisal stems (80 stems per ha at a spacing of 5m by 5m)	Ha	Month 18	369.5			
D.6	Allow for client's participation in the project activities (2 staff)	Months	Monthly	10			
D.7	Engage (for 5 days) and strengthen 300 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment	no. meetings	Month 16	3			
D.8	Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	4			
						Sub Total Schedule 4	
Schedule 5: Support communities to implement soil and water conservation measures on priority hotspots in Apeduru-Apapi Sub catchment							
E	Promote and support establishment of soil and water conservation measures on 200 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation in Apeduru-Apapi Sub catchment						
E.1	Mobilise 500 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities. (50 members per meeting)	No. of meetings	Month 3	10			
E.2	Conduct trainings for 400 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms:	no. of trainings	Month 5	8			

Currencies in accordance with ITB 16						Date: _____
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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)					
E.3	Provide tools to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.):					
a	Hoes incl. handles	No.	Month 5	400		
b	Spades	No.	Month 5	150		
c	Panga	No.	Month 5	150		
d	Pick axes	No.	Month 5	50		
e	Gum boots	No.	Month 5	400		
f	Sledge hammer (5kg)	No.	Month 5	50		
g	Wheel barrows	No.	Month 5	50		
E.4	Establish 30km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation	km	Month 6	30		
E.5	Establish 1,500 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep to trap and store runoff for soil and water conservation in the landscape	Pits	Month 7	1500		
E.6	Establish 30km grass strips to stabilise the soil and stone bunds, and terraces (each km is covered by 5000 vetiver slips)	km	Month 7	30		
E.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6		
E.8	Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
F	Establish 01 demonstration site for control of floods in 02 most affected sub-counties in Apeduru Apapai sub-catchment through use of catchment management measures					
F.1	Mobilise 300 community members and raise their awareness on sustainable management of water resources to control floods (50 members per meeting)	No.of meetings	Month 7	6		
F.2	Conduct trainings for 200 community members from selected communities to undertake and adopt flood control measures (50 members per training for 2 days)	No. of Trainings	Month 8	4		

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
F.3	Establish 20km of soil bunds/water diversion channels (0.6m wide x 0.4m deep) upstream of most flood prone spots in each sub-county	km	Month 9	20		
F.4	Provide Tree seedlings for establishing tree lines:					
a	Grevillea	No.	Month 8	400		
b	Mahogany	No.	Month 8	400		
c	Jack fruit	No.	Month 8	400		
d	Guavas	No.	Month 8	400		
e	Avocado	No.	Month 8	400		
F.5	Establish 10km of tree lines to stabilize the soil bunds in each of the hotspot (200 trees in each Km)	km	Month 8	10		
F.6	Establish 400 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep upstream of most flood prone spots in each sub-county	Pits	Month 8	400		
F.7	Establish 20km of grass strips to stabilize the soil bunds, that will serve as fodder for animals in each of the sub-counties (1 km is covered with 25,000 grass slips)	km	Month 9	20		
F8	Establish 200 drainage/farm ponds (2x2mx1) in each of the sub-county to drain off water	Ponds	Month 11	200		
G	Demonstrate Water Source Protection Measures on 15 water sources to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge in Apeduru-Apapai sub-catchment					
G.1	Conduct sensitization meetings and establish water user committees for each of the 15 water sources (1 meeting of about 50 members per source)	No. of meetings	Month 4	15		
G.2	Train 15 water user committees on water point source protection using MWE guidelines (20 members/committee, 1 Training/committee)	No. of Trainings	Month 5	15		
G.3	Provide tools to communities to implement water source protection measures:					
a	Hoes incl. handles	No.	Month 5	750		
b	Spades	No.	Month 5	200		
c	Panga	No.	Month 5	400		
d	Pick axes	No.	Month 5	100		
e	Gum boots	No.	Month 5	750		
g	Wheel barrows	No.	Month 5	60		
G.4	Establish 0.25km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation per	km	Month 7	3		

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	water point source						
G.5	Stablise 0.25km of soil bunds with Vetiver grass per water source. Each km of soil bunds is covered by 1250 vetiver grass slips	Km	Month 7	3			
G.6	Establish a fence (of dimensions 15 x 15m) meters around the water points using procured treated poles, and Chain link 13.5 gauge 1.8x15m	Pcs	Month 7	15			
Sub Total Schedule 5							
Schedule 6: Support communities to implement soil and water conservation measures on priority hotspots in L. Okolitorom Sub catchment							
H	Promote and support establishment of soil and water conservation measures on 120 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation in L. Okolitorom Sub catchment						
H.1	Mobilise 450 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities. (50 members per meeting)	No. of meetings	Month 3	2			
H.2	Conduct trainings for 350 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)	no. of trainings	Month 5	2			
H.3	Provide tools to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.):						
a	Hoes incl. handles	No.	Month 5	350			
b	Spades	No.	Month 5	120			
c	Panga	No.	Month 5	120			
d	Pick axes	No.	Month 5	40			
e	Gum boots	No.	Month 5	350			
f	Sledge hammer (5kg)	No.	Month 5	30			
g	Wheel barrows	No.	Month 5	40			
H.4	Establish 6km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation	km	Month 6	6			
H.5	Establish 120 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m	Pits	Month 7	120			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	deep to trap and store runoff for soil and water conservation in the landscape						
H.6	Establish 6km grass strips to stabilise the soil and stone bunds, and terraces (each km is covered by 5000 vetiver slips)	km	Month 7	6			
H.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	6			
H.8	Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2			
I	Establish 01 demonstration site for control of floods in 1 most affected sub-counties in L. Okolitorom sub-catchment through use of catchment management measures						
I.1	Mobilise 200 community members and raise their awareness on sustainable management of water resources to control floods (50 members per meeting)	No. of meetings	Month 7	4			
I.2	Conduct trainings for 150 community members from selected communities to undertake and adopt flood control measures (50 members per training for 2 days)	No. of Trainings	Month 8	3			
I.3	Establish 2km of soil bunds/water diversion channels (0.6m wide x 0.4m deep) upstream of most flood prone spots in each sub-county	km	Month 9	2			
I.4	Provide Tree seedlings for establishing tree lines:						
a	Grevillea	No.	Month 8	50			
b	Mahogany	No.	Month 8	50			
c	Jack fruit	No.	Month 8	50			
d	Guavas	No.	Month 8	50			
e	Avocado	No.	Month 8	50			
I.4	Establish 2km of tree lines to stabilize the soil bands in each of the hotspot (200 trees in each Km)	km	Month 8	2			
I.5	Establish 20 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep upstream of most flood prone spots in each sub-county	Pits	Month 8	20			
I.6	Establish 2km of grass strips to stabilize the soil bunds, that will serve as fodder for animals in each of the sub-counties (1 km is covered with 25,000 grass slips)	km	Month 9	2			
J	Establish 01 demonstration site for control of landslides in the most affected sub-counties in Lake Okolitorom sub-catchment (Bumalimba) through use of catchment						

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	management measures						
J.1	Conduct 2 trainings to 100 community members in Vetiver systems application in each sub county as both a sustainability and adoption strategy	No. of Trainings	Month 5	2			
J.2	Provide tools to communities to implement vetiver systems for landslide control						
a	Hoes incl. handles	No.	Month 5	100			
b	Spades	No.	Month 5	50			
c	Panga	No.	Month 5	50			
d	Gum boots	No.	Month 5	100			
e	Wheel barrows	No.	Month 5	20			
J.3	Provide, plant and manage 10,000 vetiver slips to form grass bunds/strips for slope stabilization, runoff control, soil and water conservation and land rehabilitation	Slips	Month 5	20,000			
K	Demonstrate Water Source Protection Measures on 20 water sources to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge in L. Okolitorom Sub catchment						
K.1	Conduct sensitization meetings and establish water user committees for each of the 20 water sources (1 meeting of about 50 members per source)	No. of meetings	Month 4	20			
K.2	Train 20 water user committees on water point source protection using MWE guidelines (20 members/committee, 1 Training/committee)	No. of trainings	Month 5	20			
K.3	Provide tools to communities to implement water source protection measures:						
a	Hoes incl. handles	No.	Month 5	1000			
b	Spades	No.	Month 5	200			
c	Panga	No.	Month 5	400			
d	Pick axes	No.	Month 5	100			
e	Gum boots	No.	Month 5	1000			
g	Wheel barrows	No.	Month 5	80			
K.4	Establish 0.25km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation per water point source:	km	Month 7	5			
K.5	Stabilise 0.25km of soil bunds with Vetiver grass per water source. Each km of soil bunds is covered by 1250 vetiver grass slips	Km	Month 7	5			
K.6	Establish a fence (of dimensions 15 x 15m) meters around the water points using procured	Pcs	Month 7	20			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	treated poles, and Chain link 13.5 gauge 1.8x15m						
Sub Total Schedule 6							
Schedule 7: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry) in Apeduru-Apapai Sub catchment							
L	Establishment of 3 Tree nurseries in the micro catchments each with a production capacity of 90,000 seedlings over a period of 2 years for sustenance of tree growing in Apeduru-Apapai						
L.1	Conduct trainings for 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)	No. of Trainings	Month 3	3			
L.2	Procure and supply 60kgs of assorted seed to nurseries for raising seedlings	Kgs	Month 4	60			
L.3	Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance:						
	Tools and Equipment						
a	wheel barrow	No.	Month 5	15			
b	Spades	No.	Month 5	30			
d	Hand hoe and handle	No.	Month 5	30			
e	Bow Saw	No.	Month 5	15			
f	Liner Nylon	Rolls	Month 5	6			
g	Watering cans	No.	Month 5	9			
h	Plastic buckets	No.	Month 5	9			
i	Rakes	No.	Month 5	9			
j	Root pruning knives	No.	Month 5	15			
k	Grafting Knives	No.	Month 5	15			
l	Brooms	No.	Month 5	9			
m	Pangas	No.	Month 5	30			
n	Horse pipes	m	Month 5	150			
o	Knapsack sprayers	No.	Month 5	6			
p	Protective gear (overalls and gumboots)	No.	Month 5	30			
q	Water tank (5,000 litres) Gentex type	No.	Month 5	3			
r	Plastic gutters big size	No.	Month 5	20			
s	Gutter Holders	No.	Month 5	30			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
t	Elbows 3"	No.	Month 5	15			
u	Plastic pipe 3"	No.	Month 5	15			
v	Water traps	No.	Month 5	15			
Nursery materials							
a	Fence (Chain link 13.5 gauge 1.8x15M)	Rolls	Month 5	21			
b	Eucalyptus fencing poles (and cross pieces)	No.	Month 5	150			
c	Papyrus-made shade mats	m ²	Month 5	675			
d	Light Weight Nursery Shade Nets (Shade Rate: 50%, Material: HDPE, Sail Finishing: Polished)	m ²	Month 5	444			
e	Bamboo reeds	No.	Month 5	450			
f	Nails -assorted sizes (4")	Kgs	Month 5	9			
g	Soil	ton	Month 5	3			
h	Potting Paper (3")	Kgs	Month 5	150			
i	Potting Paper (4")	Kgs	Month 5	150			
j	Fungicides	Litre	Month 5	30			
k	Pesticides	Litre	Month 5	30			
L.4	Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	2			
M	Restoration of 800 ha of degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry) in Apeduru-Apapai						
M.1	Mobilise and sensitize 500 households to engage in tree growing initiatives (50 members per meeting)	No. of meetings	Month 4	10			
M.2	Conduct trainings for 500 households in tree growing and forest management for restoration (50 members per training for 2 days)	No. of Trainings	Month 5	10			
M.3	Provide tools and materials to 500 households for use during tree growing:						
a	Hoes incl. handles	No.	Month 7	500			
b	Spades	No.	Month 7	300			
c	Panga	No.	Month 7	300			
d	Pick axes	No.	Month 7	100			
e	Gum boots	No.	Month 7	500			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
f	Sledge hammer (5kg)	No.	Month 7	50			
g	Wheel barrows	No.	Month 7	100			
M.4	Provide 320,000 tree seedlings of average height of 30cm to communities:						
a	Musisi	No.	Month 8	32,000			
b	Teak	No.	Month 8	26,000			
c	Bathdavia	No.	Month 8	30,000			
a	Muvule	No.	Month 8	24,000			
b	Taminalia	No.	Month 8	26,000			
c	Pine	No.	Month 8	34,000			
a	Grevillea	No.	Month 8	30,000			
b	Mahogany	No.	Month 8	28,000			
c	Jack fruit	No.	Month 8	26,000			
a	Guavas	No.	Month 8	36,000			
b	Avocado	No.	Month 8	28,000			
M.5	Plant 320,000 tree seedlings of average height of 30cm to communities and restore 1000 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.	ha	Month 11	800			
M.6	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8			
M.7	Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. (10 Senior technical officials from MWE, DLGs).	Quarter	quarterly	4			
M.8	Facilitate (for 5 days) 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing	no. of people	Month 10	150			
Sub Total Schedule 7							
Schedule 8: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry) in L. Okolitorom Sub catchment							
N	Establishment of 3 Tree nurseries in the micro catchments each with a production capacity of 90,000 seedlings over a period of 2 years for sustenance of tree growing in L. Okolitorom						
N.1	Conduct trainings for 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)	No. of Trainings	Month 3	3			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
N.2	Procure and supply 60kgs of assorted seed to nurseries for raising seedlings	Kgs	Month 4	60			
N.3	Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance:						
	Tools and Equipment						
a	wheel barrow	No.	Month 5	15			
b	Spades	No.	Month 5	30			
d	Hand hoe and handle	No.	Month 5	30			
e	Bow Saw	No.	Month 5	15			
f	Liner Nylon	Rolls	Month 5	6			
g	Watering cans	No.	Month 5	9			
h	Plastic buckets	No.	Month 5	9			
i	Rakes	No.	Month 5	9			
j	Root pruning knives	No.	Month 5	15			
k	Grafting Knives	No.	Month 5	15			
l	Brooms	No.	Month 5	9			
m	Pangas	No.	Month 5	30			
n	Horse pipes	m	Month 5	150			
o	Knapsack sprayers	No.	Month 5	6			
p	Protective gear (overalls and gumboots)	No.	Month 5	30			
q	Water tank (5,000 litres) Gentex type	No.	Month 5	3			
r	Plastic gutters big size	No.	Month 5	20			
s	Gutter Holders	No.	Month 5	30			
t	Elbows 3"	No.	Month 5	15			
u	Plastic pipe 3"	No.	Month 5	15			
v	Water traps	No.	Month 5	15			
	Nursery materials						
a	Fence (Chain link 13.5 gauge 1.8x15M)	Rolls	Month 5	21			
b	Eucalyptus fencing poles (and cross pieces)	No.	Month 5	150			
c	Papyrus-made shade mats	m2	Month 5	675			
d	Light Weight Nursery Shade Nets (Shade Rate: 50%, Material: HDPE, Sail Finishing: Polished)	m2	Month 5	444			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
e	Bamboo reeds	No.	Month 5	450			
f	Nails -assorted sizes (4")	Kgs	Month 5	9			
g	Soil	ton	Month 5	3			
h	Potting Paper (3")	Kgs	Month 5	150			
i	Potting Paper (4")	Kgs	Month 5	150			
j	Fungicides	Litre	Month 5	30			
k	Pesticides	Litre	Month 5	30			
N.4	Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. (10 Senior technical officials from MWE, DLGs).	No. of Quarters	quarterly	2			
O	Restoration of 648 ha of degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry) in L. Okolitorom						
O.1	Mobilise and sensitize 400 households to engage in tree growing initiatives (50 members per meeting)	No. of meetings	Month 4	8			
O.2	Conduct trainings for 400 households in tree growing and forest management for restoration (50 members per training for 2 days)	No. of Trainings	Month 5	8			
O.3	Provide tools and materials to 400 households for use during tree growing:						
a	Hoes incl. handles	No.	Month 7	400			
b	Spades	No.	Month 7	200			
c	Panga	No.	Month 7	150			
d	Pick axes	No.	Month 7	50			
e	Gum boots	No.	Month 7	400			
f	Sledge hammer (5kg)	No.	Month 7	50			
g	Wheel barrows	No.	Month 7	50			
O.4	Provide 259,200 tree seedlings of average height of 30cm to communities:						
a	Musisi	No.	Month 8	25,920			
b	Teak	No.	Month 8	21,060			
c	Bathdavia	No.	Month 8	24,300			
a	Muvule	No.	Month 8	19,440			
b	Taminalia	No.	Month 8	21,060			

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
c	Pine	No.	Month 8	27,540		
a	Grevillea	No.	Month 8	24,300		
b	Mahogany	No.	Month 8	22,680		
c	Jack fruit	No.	Month 8	21,060		
a	Guavas	No.	Month 8	29,160		
b	Avocado	No.	Month 8	22,680		
O.5	Plant 259,200 tree seedlings and restore 648 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.	Ha	Month 11	648		
O.6	Allow for client's participation in the project activities (2 staff)	Months	Monthly	8		
O.7	Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. (10 Senior technical officials from MWE, DLGs).	Quarter	quarterly	4		
O.8	Facilitate (for 5 days) 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing	no. of people	Month 10	150		
					Sub Total Schedule 8	
Schedule 9: Support communities to establish and promote alternative income generating activities for improved livelihoods in Apeduru-Apapai sub catchment						
P	Integration of livelihood options in the investment measures: Support Bee-keeping as a Livelihood Improvement Measure					
P.1	Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment (50 members per meeting)	No. of meetings	Month 8	2		
P.2	Conduct 2 trainings to 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing (50 members per training for 2 days)	No. of Trainings	Month 10	2		
P.3	Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as: -					
a)	25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)	No.	Month 12	250		
c)	1 Smoker pump (metallic) for 10 groups	No.	Month 12	10		
d)	02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups	No.	Month 12	20		
e)	1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups	No.	Month 12	10		
f)	1 Air tight Bucket (20lts for each of 10 groups)	No.	Month 12	10		
g)	1 Kg of bee wax for each of 10 groups	No.	Month 12	10		

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
h)	1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups	No.	Month 12	10		
i)	1 bee knife and 1 Bee brush for each of 10 groups	No.	Month 12	20		
P.4	Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives and facilitate them (labour) to install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).	No of apiaries	Month 15	10		
P.5	Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores). (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
Q	Integration of livelihood options in the investment measures: Promote fodder production					
Q.1	Conduct 2 trainings to 100 selected farmers in fodder growing and management (weeding, manuring, protection, harvesting- Coppicing, Pollarding, and Side pruning). (50 members per training for 2 days)	No. of Trainings	Month 10	2		
Q.2	Provide 10 Kgs seed/seedlings of 30cm height to selected farmers for fodder grass growing at 1.5 m spacing along contours	Kgs	Month 12	60		
R	Integration of livelihood options in the investment measures: Promote energy saving technologies - e.g. cook stoves					
R.1	Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)	no. of meetings	Month 7	10		
R.2	Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1-day training per group)	no. of trainings	Month 9	3		
R.3	Provide materials and equipment to women groups and facilitate them (labour) to construct 2000 cookstoves for households:					
a	Hoes incl. handles	No.	Month 13	9		
b	Spades	No.	Month 13	6		
c	Panga	No.	Month 13	9		
d	Moulds	No.	Month 13	6		

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Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
e	Wheel barrows	No.	Month 13	6			
f)	Jerrycans	No.	Month 13	6			
g	String	No.	Month 13	6			
h)	Measuring Tape	No.	Month 13	6			
R.4	Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective. (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2			
S	Integration of livelihood options in the investment measures: Promote fish farming for livelihood enhancement						
S.1	Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)	No. of meetings	Month 17	4			
S.2	Conduct One training (2-day) for each of the 3 famer groups of 20-40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).	no. of trainings	Month 19	3			
S.3	Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) to the community groups:						
a	Hoes incl. handles	No.	Month 19	60			
b	Spades	No.	Month 19	120			
c	Panga	No.	Month 19	60			
d	Pick axes	No.	Month 19	120			
e	Gum boots	No.	Month 19	120			
f	Wheel barrows	No.	Month 19	120			
S.4	Construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m ²) of the pond base	No.	Month 23	3			
S.5	Prepare the 3 ponds to receive fish: fill the pond with water; fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level); - if using compost, add about 10 kg per 100 m ² - if using animal manure, add per 100 m ² one of the following: 2-3 kg of chicken droppings, or 8-	No. of ponds	Month 23	3			

Currencies in accordance with ITB 16						Date:
						RFB No:
						Alternative No:
						Page N° _____ of _____
1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	10 kg of pig manure, or 10-15 kg of cow manure - if using plant wastes only, keep the fertilizing crib full and pack this material tightly in each crib					
S.6	Stock the 3 ponds each with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes	Fingerlings	Month 24	13500		
S.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8		
S.8	Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months. (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6		
T	Establish micro irrigation schemes on farmer's land in Apeduru-Apapai					
T.1	Mobilise 250 community members, create awareness and engage the selected farmers to form 5 farmer groups of 30 members each. (50 members per meeting)	No. of meetings	Month 13	5		
T.2	Train the 05 farmer groups in the use and management of the micro irrigation equipment (handling, operation and maintenance, storage and usage) - 1-day training per group of 30 members	No. of trainings	Month 14	5		
T.3	Procure and install 05 kits of the Rain-gun sprinkler irrigation system, with galvanized Steel and movable motorised pump suitable for all field crops, fruits and vegetables. Its specifications are: <ul style="list-style-type: none"> ▸ Inlet size- 1.5 Inches ▸ 7.5 (Horse Pipe) HP Motor pump with only one rain gun ▸ Nozzle size- 12mm ▸ Pressure- 2 to 5kg/cm² ▸ Discharge-240 to 440 litres per minute (LPM) covering an area of 100 feet radius ▸ High density polyethylene (HDPE) Pipe- 63mm of Nominal pressure (PN)16 	No	Month 14	5		
T.4	Provide quarterly technical backstopping to the farmers and monitor the effectiveness of the micro irrigation equipment (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
Sub Total Schedule 9						
Schedule 10: Support communities to establish and promote alternative income generating activities for improved livelihoods in L. Okolitorom sub catchment						
U	Integration of livelihood options in the investment measures: Support Bee-keeping as a Livelihood Improvement Measure					
U.1	Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/	No.of	Month 8	2		

Currencies in accordance with ITB 16						Date: _____	
						RFB No: _____	
						Alternative No: _____	
						Page N° _____ of _____	
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	apiary establishment (50 members per meeting)	meetings					
U.2	Conduct 2 trainings to 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing (50 members per training for 2 days)	No. of Trainings	Month 10	2			
U.3	Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:-						
a)	25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)	No.	Month 12	250			
c)	1 Smoker pump (metallic) for 10 groups	No.	Month 12	10			
d)	02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups	No.	Month 12	20			
e)	1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups	No.	Month 12	10			
f)	1 Air tight Bucket (20lts for each of 10 groups)	No.	Month 12	10			
g)	1 Kg of bee wax for each of 10 groups	No.	Month 12	10			
h)	1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups	No.	Month 12	10			
i)	1 bee knife and 1 Bee brush for each of 10 groups	No.	Month 12	20			
U.4	Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives and facilitate them (labour) to install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).	No of apiaries	Month 15	10			
U.5	Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores). (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2			
V	Integration of livelihood options in the investment measures: Support 60 farmers in fruit growing as alternative income generating activity						
V.1	Identify and mobilise 60 fruit growing farmers, sensitise and engage the farmers to form 2 groups 60 members per meeting)	No of meetings	Month 13	1			
V.2	Conduct trainings to the farmer groups in eco-agriculture/agronomic practices (including soil and	No. of	Month 14	2			

Currencies in accordance with ITB 16						Date:	
						RFB No:	
						Alternative No:	
						Page N°	of
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
	water conservation, pests and diseases control, fruit tree management, organic farming, post-harvest handling). (30 members per group, 1 training per group for 2 days)	trainings					
V.3	Provide 3000 orange seedlings of average height of 30cm per group and plant and maintain the seedlings (at a spacing of 4m x 4m) under technical supervision.	Seedlings	Month 16	3000			
V.4	Provide technical support to fruit farmers and conduct on farm monitoring per farmer per month for the first 6 Months. (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6			
W	Integration of livelihood options in the investment measures: Strengthen the coffee value chain						
W.1	Identify and mobilise 3 groups (ave. 30 members per group) of willing coffee growing farmers and raise their awareness of the importance of good coffee growing practices. (1 meeting per group)	No of meetings	Month 13	3			
W.2	Conduct trainings to each of the 3 groups to undertake and adopt best coffee growing practices including Organic farming (nature-based management technologies), good agronomic practices including soil and water conservation, organic pest and disease control (1 training per group for 1 day)	No. of trainings	Month 14	3			
W.3	Provide 13500 arabic coffee seedlings of average height of 30cm per group and facilitate them (labour) to plant and maintain the seedlings (at a spacing of 3m x 3m) under technical supervision.	Seedlings	Month 16	13,500			
W.4	Provide 1 high productivity Manual type Coffee Pulper to each of the groups for wet coffee processing to ensure good quality seed and link farmers to the available markets entities through bulk marketing (Specs. Production capacity: 200kg/hr, Peeling rate: >99%-99.5%, Body material: Cast Iron/ steel sheet, Dim: 540mm (l) x 310mm (w) x 570mm (h), voltage: by hand.	No.	Month 16	3			
W.5	Provide Technical backstopping to the farmers on monthly basis and monitoring to ensure the coffee value chain is enhanced (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6			
X	Integration of livelihood options in the investment measures: Promote fish farming for livelihood enhancement						
X.1	Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)	No. of meetings	Month 17	4			
X.2	Conduct One training (2-day) for each of the 3 famer groups of 20-40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).	no. of trainings	Month 19	3			
X.3	Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) to the community groups:						

Currencies in accordance with ITB 16						Date: _____	
						RFB No: _____	
						Alternative No: _____	
						Page N° _____ of _____	
1	2	3	4	5	6	7	
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)	
a	Hoes incl. handles	No.	Month 19	60			
b	Spades	No.	Month 19	120			
c	Panga	No.	Month 19	60			
d	Pick axes	No.	Month 19	120			
e	Gum boots	No.	Month 19	120			
f	Wheel barrows	No.	Month 19	120			
X.4	Construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m ²) of the pond base	No.	Month 23	3			
X.5	Prepare the 3 ponds to receive fish: fill the pond with water; fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level); - if using compost, add about 10 kg per 100 m ² - if using animal manure, add per 100 m ² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure - if using plant wastes only, keep the fertilizing crib full and pack this material tightly in each crib	No. of ponds	Month 23	3			
X.6	Stock the 3 ponds each with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes	Fingerlings	Month 24	13500			
X.7	Allow provisional sum of shs. 5,600,000 for monthly client's participation in the project activities (2 staff)	Months	Monthly	8			
X.8	Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months. (10 Senior technical officials from MWE, DLGs).	Months	Monthly	6			
Y	Establish micro irrigation schemes on farmer's land in Okolirorom						
Y.1	Mobilise 250 community members, create awareness and engage the selected farmers to form 5 farmer groups of 30 members each. (50 members per meeting)	No. of meetings	Month 13	5			
Y.2	Train the 05 farmer groups in the use and management of the micro irrigation equipment (handling, operation and maintenance, storage and usage) - 1-day training per group of 30	No. of trainings	Month 14	5			

Currencies in accordance with ITB 16						Date: _____
						RFB No: _____
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1	2	3	4	5	6	7
Service N°	Description of Services	Unit	Delivery Date ¹	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6)
	members					
Y.3	Procure 05 kits of the Rain-gun sprinkler irrigation system, with galvanized Steel and movable motorised pump suitable for all field crops, fruits and vegetables. Its specifications are: ↳ Inlet size- 1.5 Inches ↳ 7.5 (Horse Pipe) HP Motor pump with only one rain gun ↳ Nozzle size- 12mm ↳ Pressure- 2 to 5kg/cm2 ↳ Discharge-240 to 440 litres per minute (LPM) covering an area of 100 feet radius ↳ High density polyethylene (HDPE) Pipe- 63mm of Nominal pressure (PN)16	No	Month 14	5		
Y.4	Provide quarterly technical backstopping to the farmers and monitor the effectiveness of the micro irrigation equipment (10 Senior technical officials from MWE, DLGs).	Quarters	quarterly	2		
Sub Total Schedule 10						

COST SUMMARY for Lot 4

Cost Category	Amount (UGX)
Sub Total Schedule 1	
Sub Total Schedule 2	
Sub Total Schedule 3	
Sub Total Schedule 4	
Sub Total Schedule 5	
Sub Total Schedule 6	
Sub Total Schedule 7	
Sub Total Schedule 8	
Sub Total Schedule 9	
Sub Total Schedule 10	
GRAND TOTAL	

Part III – Conditions of Contract and Contract Forms

Section VIII - General Conditions of Contract

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Section VIII - General Conditions of Contract

A. General Provisions

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) The Adjudicator is the person appointed jointly by the Employer and the Service Provider to resolve disputes in the first instance, as provided for in Sub-Clause 8.2 hereunder.
- (b) “Activity Schedule” is the priced and completed list of items of Services to be performed by the Service Provider forming part of his Bid;
- (c) “Bank” means the International Bank for Reconstruction and Development, Washington, D.C., U.S.A.;
- (c) “Association” means the International Development Association, Washington, D.C., U.S.A.;
- (d) “Completion Date” means the date of completion of the Services by the Service Provider as certified by the Employer
- (e) “Contract” means the Contract signed by the Parties, to which these General Conditions of Contract (GCC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (f) “Contract Price” means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (g) “Dayworks” means varied work inputs subject to payment on a time basis for the Service Provider’s employees and equipment, in addition to payments for associated materials and administration.
- (h) “Employer” means the party who employs the Service Provider
- (i) “Employer’s Personnel” means all staff, labor and other employees of the Employer engaged in fulfilling the Employer’s obligations under the Contract; and any other personnel identified as Employer’s Personnel, by a notice from the Employer to the Service provider.
- (j) “ES” means Environmental and Social, as applicable, (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)).

- (k) “Foreign Currency” means any currency other than the currency of the country of the Employer;
- (l) “GCC” means these General Conditions of Contract;
- (m) “Government” means the Government of the Employer’s Country;
- (n) “Local Currency” means the currency of the country of the Employer;
- (o) “Member,” in case the Service Provider consist of a joint venture of more than one entity, means any of these entities; “Members” means all these entities, and “Member in Charge” means the entity specified in the SC to act on their behalf in exercising all the Service Provider’ rights and obligations towards the Employer under this Contract;
- (p) “Party” means the Employer or the Service Provider, as the case may be, and “Parties” means both of them;
- (q) “Service Provider” is a person or corporate body whose Bid to provide the Services has been accepted by the Employer;
- (r) “Service Provider’s Bid” means the completed Bidding Document submitted by the Service Provider to the Employer
- (s) “Service Provider’s Personnel” means all personnel whom the Service Provider utilizes in the execution of the Services, including the staff, labor and other employees of the Service Provider and each Subcontractor; and any other personnel assisting the Service Provider in the execution of the Services;
- (t) “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented;
- (u) “Specifications” means the specifications of the service included in the Bidding Document submitted by the Service Provider to the Employer
- (v) “Services” means the work to be performed by the Service Provider pursuant to this Contract, as described in Appendix A; and in the Specifications and Schedule of Activities included in the Service Provider’s Bid.
- (w) “Sexual Exploitation and Abuse” “(SEA)” means the following:
 - Sexual Exploitation is defined as any actual or attempted

abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another.

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.

(x) “Sexual Harassment” “(SH)” is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Service Provider’s Personnel with other Service Provider’s Personnel or Employer’s Personnel;

(y) “Subcontractor” means any entity to which the Service Provider subcontracts any part of the Services in accordance with the provisions of Sub-Clauses 3.5 and 4.

- 1.2 Applicable Law** The Contract shall be interpreted in accordance with the laws of the Employer’s Country, unless otherwise **specified in the Special Conditions of Contract (SCC)**.
- 1.3 Language** This Contract has been executed in the language **specified in the SCC**, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.
- 1.4 Notices** Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address **specified in the SCC**.
- 1.5 Location** The Services shall be performed at such locations as are specified in Appendix A, in the specifications and, where the location of a particular task is not so specified, at such locations, whether in the Government’s country or elsewhere, as the Employer may approve.
- 1.6 Authorized Representatives** Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Employer or the Service Provider may be taken or executed by the officials **specified in the SCC**.

1.7 Inspection and Audit by the Bank Pursuant to paragraph 2.2 e. of Attachment 1 to the General Conditions, the Service Provider shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the Bank. The Service Provider's and its Subcontractors' and subconsultants' attention is drawn to Sub-Clause 3.10 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

1.8 Taxes and Duties The Service Provider, Subcontractors, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the Applicable Law, the amount of which is deemed to have been included in the Contract Price.

2. Commencement, Completion, Modification, and Termination of Contract

2.1 Effectiveness of Contract This Contract shall come into effect on the date the Contract is signed by both parties or such other later date as may be **stated in the SCC.**

2.2 Commencement of Services

2.2.1 Program

Before commencement of the Services, the Service Provider shall submit to the Employer for approval a Program showing the general methods, arrangements, order and timing for all activities. Such submission to the Employer shall include any applicable environmental and social management plan to manage environmental and social risks and impacts.

The Services shall be carried out in accordance with the approved Program as updated.

2.2.2 Starting Date

The Service Provider shall start carrying out the Services thirty (30) days after the date the Contract becomes effective, or at such other date as may be **specified in the SCC.**

2.3 Intended Completion Date

Unless terminated earlier pursuant to Sub-Clause 2.6, the Service Provider shall complete the activities by the Intended Completion Date, as is **specified in the SCC.** If the Service Provider does not

complete the activities by the Intended Completion Date, it shall be liable to pay liquidated damage as per Sub-Clause 3.8. In this case, the Completion Date will be the date of completion of all activities.

2.4 Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the Parties and shall not be effective until the consent of the Bank or of the Association, as the case may be, has been obtained.

2.4.1 Value Engineering

The Service Provider may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;

- (a) the proposed change(s), and a description of the difference to the existing contract requirements;
- (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs, if applicable) the Employer may incur in implementing the value engineering proposal; and
- (c) a description of any effect(s) of the change on performance/functionality.

The Employer may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerates the delivery period; or
- (b) reduces the Contract Price or the life cycle costs to the Employer; or
- (c) improves the quality, efficiency, safety or sustainability of the services; or
- (d) yields any other benefits to the Employer,

without compromising the necessary functions of the Services.

If the value engineering proposal is approved by the Employer and results in:

- (a) a reduction of the Contract Price; the amount to be paid to the Service Provider shall be the percentage specified in the

SCC of the reduction in the Contract Price; or

- (b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Service Provider shall be the full increase in the Contract Price.

2.5 Force Majeure

2.5.1 Definition

For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Party and which makes a Party’s performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

2.5.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

2.5.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.5.4 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Service Provider shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

2.6 Termination

2.6.1 By the Employer

The Employer may terminate this Contract, by not less than thirty (30) days' written notice of termination to the Service Provider, to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Sub-Clause 2.6.1:

- (a) if the Service Provider does not remedy a failure in the performance of its obligations under the Contract, within thirty (30) days after being notified or within any further period as the Employer may have subsequently approved in writing;
- (b) if the Service Provider become insolvent or bankrupt;
- (c) if, as the result of Force Majeure, the Service Provider is unable to perform a material portion of the Services for a period of not less than sixty (60) days; or
- (d) if the Service Provider, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in paragraph 2.2 a. of Attachment 1 to the GCC, in competing for or in executing the Contract

2.6.2 By the Service Provider

The Service Provider may terminate this Contract, by not less than thirty (30) days' written notice to the Employer, such notice to be given after the occurrence of any of the events specified in paragraphs (a) and (b) of this Sub-Clause 2.6.2:

- (a) if the Employer fails to pay any monies due to the Service Provider pursuant to this Contract and not subject to dispute pursuant to Clause 7 within forty-five (45) days after receiving written notice from the Service Provider that such payment is overdue; or
- (b) if, as the result of Force Majeure, the Service Provider is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

2.6.3 Suspension of Loan or Credit

In the event that the World Bank suspends the loan or Credit to the Employer, from which part of the payments to the Service Provider are being made:

- (a) The Employer is obligated to notify the Service Provider of such suspension within 7 days of having received the World Bank's suspension notice.
- (b) If the Service Provider has not received sums due to by the due date stated in the SCC in accordance with Sub-Clause 6.5 the Service Provider may immediately issue a 14-day

termination notice.

2.6.4 Payment upon Termination Upon termination of this Contract pursuant to Sub-Clauses 2.6.1 or 2.6.2, the Employer shall make the following payments to the Service Provider:

- (a) remuneration pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination;
- (b) except in the case of termination pursuant to paragraphs (a), (b), (d) of Sub-Clause 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Service Provider's Personnel.

3. Obligations of the Service Provider

3.1 General

The Service Provider shall perform the Services in accordance with the Specifications and the Activity Schedule, and carry out its obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods.

The Service Provider shall always act, in respect of any matter relating to this Contract or to the Services, as faithful adviser to the Employer, and shall at all times support and safeguard the Employer's legitimate interests in any dealings with Subcontractors or third parties.

The Service Provider shall require that its Subcontractors execute the Services in accordance with the Contract, including complying with any applicable ES requirements and the obligations set out in GCC Sub-Clause 3.12.

3.2 Conflict of Interests

3.2.1 Service Provider Not to Benefit from Commissions and Discounts.

The remuneration of the Service Provider pursuant to Clause 6 shall constitute the Service Provider's sole remuneration in connection with this Contract or the Services, and the Service Provider shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Service Provider shall use their best efforts to ensure that the Service Provider's Personnel, any Subcontractors, and agents of

either of them similarly shall not receive any such additional remuneration.

3.2.2 Service Provider and Affiliates Not to be Otherwise Interested in Project

The Service Provider agree that, during the term of this Contract and after its termination, the Service Provider and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing goods, works, or Services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

3.2.3 Prohibition of Conflicting Activities

Neither the Service Provider nor its Subcontractors nor the Personnel shall engage, either directly or indirectly, in any business or professional activity that would conflict with the activities assigned to them under this Contract. The Service provider has an obligation and shall ensure that its Service Provider's Personnel and Sub-consultants shall have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the Employer, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Service provider or the termination of its Contract.

3.3 Confidentiality

The Service Provider, its Subcontractors, and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Employer's business or operations without the prior written consent of the Employer.

3.4 Insurance to be Taken Out by the Service Provider

The Service Provider (a) shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at its (or the Subcontractors', as the case may be) own cost but on terms and conditions approved by the Employer, insurance against the risks, and for the coverage, as shall be **specified in the SCC**; and (b) at the Employer's request, shall provide evidence to the Employer showing that such insurance has been taken out and maintained and that the current premiums have been paid.

3.5 Service Provider's Actions Requiring Employer's Prior Approval

The Service Provider shall obtain the Employer's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the performance of any part of the Services,
- (b) appointing such members of the Personnel not listed by name in Appendix C ("Key Personnel and

Subcontractors”),

- (c) changing the Program of activities; and
- (d) any other action that may be **specified in the SCC**.

3.6 Reporting Obligations

The Service Provider shall submit to the Employer the reports and documents specified in Appendix B in the form, in the numbers, and within the periods set forth in the said Appendix.

If specified in Appendix B, the reporting requirements shall include applicable environmental and social aspects.

The Service Provider shall inform the Employer immediately of any allegation, incident or accident in the locations in the Employer’s country where the Services are executed, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer’s Personnel or Service Provider’s Personnel. This includes, but is not limited to, any incident or accident causing fatality or serious injury; significant adverse effects or damage to private property; or any allegation of SEA and/or SH. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information.

The Service Provider, upon becoming aware of the allegation, incident or accident, shall also immediately inform the Employer of any such incident or accident on the Subcontractors’ or suppliers’ premises relating to the Services which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Employer’s Personnel or Service Provider’s, its Subcontractors’ and suppliers’ Personnel. The notification shall provide sufficient detail regarding such incidents or accidents. The Service provider shall provide full details of such incidents or accidents to the Employer within the timeframe agreed with the Employer.

The Service Provider shall require its Subcontractors and suppliers to immediately notify the Service Provider of any incidents or accidents referred to in this Sub- Clause.

3.7 Documents Prepared by the Service Provider to Be the Property of the Employer

All plans, drawings, specifications, designs, reports, and other documents and software submitted by the Service Provider in accordance with Sub-Clause 3.6 shall become and remain the property of the Employer, and the Service Provider shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to the Employer,

together with a detailed inventory thereof. The Service Provider may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be **specified in the SCC**.

3.8 Liquidated Damages

3.8.1 Payments of Liquidated Damages

The Service Provider shall pay liquidated damages to the Employer at the rate per day **stated in the SCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount **defined in the SCC**. The Employer may deduct liquidated damages from payments due to the Service Provider. Payment of liquidated damages shall not affect the Service Provider's liabilities.

3.8.2 Correction for Overpayment

If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Service Provider by adjusting the next payment certificate. The Service Provider shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in Sub-Clause 6.5.

3.8.3 Lack of performance penalty

If the Service Provider has not corrected a Defect within the time specified in the Employer's notice, a penalty for Lack of performance will be paid by the Service Provider. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as described in Sub-Clause 7.2 and **specified in the SCC**.

3.9 Performance Security

If required as **specified in the SCC**, the Service Provider shall provide to the Employer a Performance Security for the performance of the Contract, in the amount **specified in the SCC** and no later than the date specified in the Letter of acceptance.

As **specified in the SCC**, the Performance Security, if required, shall be denominated in the currency(ies) of the Contract, or in a freely convertible currency acceptable to the Employer; and shall be in one of the format stipulated by the Employer in the **SCC**, or in another format acceptable to the Employer.

The performance Security shall be valid until a date 28 days from the Completion Date of the Contract in case of a bank guarantee, and until one year from the Completion Date of the

Contract in the case of a Performance Bond.

3.10 Fraud and Corruption

The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in the Attachment 1 to the GCC.

The Employer requires the Service Provider to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

3.11 Sustainable Procurement

The Service Provider shall conform to the sustainable procurement contractual provisions, if and as specified in the SCC.

3.12 Code of Conduct

The Service Provider shall have a Code of Conduct for the Service Provider's Personnel employed for the execution of the Services at the locations in the Employer's country where the Services are provided.

The Service Provider shall take all necessary measures to ensure that each Service Provider's Personnel is made aware of the Code of Conduct including specific behaviors that are prohibited, and understands the consequences of engaging in such prohibited behaviors.

These measures include providing instructions and documentation that can be understood by the Service Provider's Personnel and seeking to obtain that person's signature acknowledging receipt of such instructions and/or documentation, as appropriate.

The Service Provider shall also ensure, as applicable, that the Code of Conduct is visibly displayed in locations in the Employer's country where the Services are executed as well as in areas outside the locations accessible to the local community and any project affected people. The posted Code of Conduct shall be provided in languages comprehensible to Service Provider's Personnel, Employer's Personnel and the local community.

The Service Provider's Management Strategy and Implementation Plans, as applicable, shall include appropriate processes for the Service Provider to verify compliance with these obligations.

4. Service Provider's Personnel

4.1 Description of Personnel

The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Service Provider's Key Personnel are described in Appendix C. The Key Personnel and Subcontractors listed by title as well as by name in Appendix C are hereby approved by the Employer.

4.2 Removal and/or Replacement of Personnel

(a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Service Provider, it becomes necessary to replace any of the Key Personnel, the Service Provider shall provide as a replacement a person of equivalent or better qualifications.

(b) The Employer may require the Service Provider to remove (or cause to be removed) a Service Provider's Personnel, who:

- (i) persists in any misconduct or lack of care;
- (ii) carries out duties incompetently or negligently;
- (iii) fails to comply with any provision of the Contract;
- (iv) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;
- (v) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Contract;
- (vi) has been recruited from the Employer's Personnel;
- (vii) undertakes behavior which breaches the Code of Conduct (ES), as applicable.

As appropriate, the Service provider shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience.

Notwithstanding any requirement from the Employer to remove or cause to remove any person, the Service provider shall take immediate action as appropriate in response to any violation of (i) through (vii) above. Such immediate action shall include removing (or causing to be removed) from the locations where the Services are carried out, any Service Provider's Personnel who engages in (i), (ii), (iii), (iv), (v) or (vii) above or has been recruited as stated

in (vi) above.

- (c) The Service Provider shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

5. Obligations of the Employer

5.1 Assistance and Exemptions The Employer shall use its best efforts to ensure that the Government shall provide the Service Provider such assistance and exemptions as **specified in the SCC.**

5.2 Change in the Applicable Law If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the Services rendered by the Service Provider, then the remuneration and reimbursable expenses otherwise payable to the Service Provider under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Sub-Clauses 6.2 (a) or (b), as the case may be.

5.3 Services and Facilities The Employer shall make available to the Service Provider the Services and Facilities listed under Appendix F.

6. Payments to the Service Provider

6.1 Lump-Sum Remuneration The Service Provider's remuneration shall not exceed the Contract Price and shall be a fixed lump-sum including all Subcontractors' costs, and all other costs incurred by the Service Provider in carrying out the Services described in Appendix A. Except as provided in Sub-Clause 5.2, the Contract Price may only be increased above the amounts stated in Sub-Clause 6.2 if the Parties have agreed to additional payments in accordance with Sub-Clauses 2.4 and 6.3.

6.2 Contract Price (a) The price payable in local currency is **set forth in the SCC.**

(b) The price payable in foreign currency is **set forth in the SCC.**

6.3 Payment for Additional Services, and Performance Incentive Compensation 6.3.1 For the purpose of determining the remuneration due for additional Services as may be agreed under Sub-Clause 2.4, a breakdown of the lump-sum price is provided in Appendices D and E.

6.3.2 **If the SCC so specify,** the service provider shall be paid performance incentive compensation as set out in the Performance Incentive Compensation appendix.

6.4 Terms and Payments will be made to the Service Provider according to the

Conditions of Payment payment schedule **stated in the SCC**. **Unless otherwise stated in the SCC**, the advance payment (Advance for Mobilization, Materials and Supplies) shall be made against the provision by the Service Provider of a bank guarantee for the same amount, and shall be valid for the period **stated in the SCC**. Any other payment shall be made after the conditions **listed in the SCC** for such payment have been met, and the Service Provider have submitted an invoice to the Employer specifying the amount due.

6.5 Interest on Delayed Payments If the Employer has delayed payments beyond fifteen (15) days after the due date stated in the SCC, interest shall be paid to the Service Provider for each day of delay at the rate stated in the SCC.

6.6 Price Adjustment 6.6.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC**. If so provided, the amounts certified in each payment certificate, after deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

$$P_c = A_c + B_c \frac{L_{mc}}{L_{oc}} + C_c \frac{I_{mc}}{I_{oc}}$$

Where:

P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency “c”.

A_c , B_c and C_c are coefficients specified in the SCC, representing: A_c the nonadjustable portion; B_c the adjustable portion relative to labor costs and C_c the adjustable portion for other inputs, of the Contract Price payable in that specific currency “c”; and

L_{mc} is the index prevailing at the first day of the month of the corresponding invoice date and L_{oc} is the index prevailing 28 days before Bid opening for labor; both in the specific currency “c”.

I_{mc} is the index prevailing at the first day of the month of the corresponding invoice date and I_{oc} is the index prevailing 28 days before Bid opening for other inputs payable; both in the specific currency “c”.

If a price adjustment factor is applied to payments made in a currency other than the currency of the source of the index for a particular indexed input, a correction factor Z_o/Z_n will be applied to the respective component factor of p_n for the formula of the relevant currency. Z_o is the number of units of currency

of the country of the index, equivalent to one unit of the currency payment on the date of the base index, and Z_n is the corresponding number of such currency units on the date of the current index.

6.6.2 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

6.7 Dayworks

6.7.1 If applicable, the Daywork rates in the Service Provider's Bid shall be used for small additional amounts of Services only when the Employer has given written instructions in advance for additional services to be paid in that way.

6.7.2 All work to be paid for as Dayworks shall be recorded by the Service Provider on forms approved by the Employer. Each completed form shall be verified and signed by the Employer representative as indicated in Sub-Clause 1.6 within two days of the Services being performed.

6.7.3 The Service Provider shall be paid for Dayworks subject to obtaining signed Dayworks forms as indicated in Sub-Clause 6.7.2

7. Quality Control

7.1 Identifying Defects

The principle and modalities of Inspection of the Services by the Employer shall be as **indicated in the SCC**. The Employer shall check the Service Provider's performance and notify him of any Defects that are found. Such checking shall not affect the Service Provider's responsibilities. The Employer may instruct the Service Provider to search for a Defect and to uncover and test any service that the Employer considers may have a Defect. Defect Liability Period is as **defined in the SCC**.

7.2 Correction of Defects, and Lack of Performance Penalty

- (a) The Employer shall give notice to the Service Provider of any Defects before the end of the Contract. The Defects liability period shall be extended for as long as Defects remain to be corrected.
- (b) Every time notice a Defect is given; the Service Provider shall correct the notified Defect within the length of time specified by the Employer's notice.
- (c) If the Service Provider has not corrected a Defect within the

time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, the Service Provider will pay this amount, and a Penalty for Lack of Performance calculated as described in Sub-Clause 3.8.

8. Settlement of Disputes

8.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

8.2 Dispute Settlement

8.2.1 If any dispute arises between the Employer and the Service Provider in connection with, or arising out of, the Contract or the provision of the Services, whether during carrying out the Services or after their completion, the matter shall be referred to the Adjudicator within 14 days of the notification of disagreement of one party to the other.

8.2.2 The Adjudicator shall give a decision in writing within 28 days of receipt of a notification of a dispute.

8.2.3 The Adjudicator shall be paid by the hour at the rate **specified in the BDS and SCC**, together with reimbursable expenses of the types **specified in the SCC**, and the cost shall be divided equally between the Employer and the Service Provider, whatever decision is reached by the Adjudicator. Either party may refer a decision of the Adjudicator to an Arbitrator within 28 days of the Adjudicator's written decision. If neither party refers the dispute to arbitration within the above 28 days, the Adjudicator's decision will be final and binding.

8.2.4 Unless otherwise agreed by both the Employer and the Service Provider, arbitration shall be conducted as follows:

(a) For contracts with foreign Service Providers:

unless otherwise specified in the SCC; the dispute shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce; by one or three arbitrators appointed in accordance with these Rules. The place of arbitration shall be the neutral location **stated in the SCC**; and the arbitration shall be conducted in the ruling language **stated in the SCC**;

and

(b) For contracts with national Service Providers, arbitration with proceedings conducted in accordance with the laws of the

Employer's country.

- 8.2.5 Should the Adjudicator resign or die, or should the Employer and the Service Provider agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator will be jointly appointed by the Employer and the Service Provider. In case of disagreement between the Employer and the Service Provider, within 30 days, the Adjudicator shall be designated by the Appointing Authority **designated in the SCC** at the request of either party, within 14 days of receipt of such request.

ATTACHMENT 1

Fraud and Corruption

(Text in this Attachment shall not be modified)

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

- i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

Section IX - Special Conditions of Contract

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
1.1	The words “in the Government’s country” are amended to read “ <i>in the Republic of Uganda.</i> ”
1.1(a)	The Adjudicator is <i>Prof. Jackson Mwakali</i>
1.1(e)	The contract name is _____.
1.1(h)	The Employer is <i>Ministry of Water and Environment</i>
1.1(o)	The Member in Charge is _____
1.1(q)	The Service Provider is _____
1.2	The Applicable Law is: <i>Laws of Uganda</i>
1.3	The language is <i>English</i>
1.4	<p>The addresses are:</p> <p><i>Employer: Permanent Secretary, Ministry of Water & Environment</i> <i>Attention: Commissioner, Water Resources Planning and Regulation Department</i> <i>Plot 3-7, Kabalega Crescent, Luzira, P.O. BOX 20026, Kampala, Uganda</i></p> <p>Service Provider: _____</p> <p>Attention: _____</p> <p>Telex: _____</p> <p>Facsimile: _____</p>
1.6	<p>The Authorized Representatives are:</p> <p>For the Employer: <i>Permanent Secretary, Ministry of Water & Environment</i></p> <p>For the Service Provider: _____</p>
2.1	The date on which this Contract shall come into effect is <i>date the Contract is signed by both parties</i>
2.2.2	The Starting Date for the commencement of Services is <i>14 calendar days after the date the Contract becomes effective.</i>

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
2.3	The Intended Completion Date is 24 calendar months after the Starting Date for the commencement of Services.
2.4.1	If the value engineering proposal is approved by the Employer the amount to be paid to the Service Provider shall be 50% of the reduction in the Contract Price.
3.4	<p>The risks and coverage by insurance shall be:</p> <ul style="list-style-type: none"> i. Third Party motor vehicle: <i>a minimum coverage of at least the minimum required by the laws of Uganda;</i> ii. Third Party liability: <i>a minimum coverage of at least the minimum required by the laws of Uganda</i> iii. Employer’s liability and workers’ compensation: <i>a minimum coverage of at least the minimum required by the laws of Uganda</i> iv. Professional liability: <i>a minimum coverage of <u>110% Contract Value</u></i> v. Loss or damage to equipment and property: <i>a minimum coverage of at least the minimum required by the laws of Uganda.</i>
3.5(d)	The other actions are None
3.7	<p>Restrictions on the use of documents prepared by the Service Provider are:</p> <p><i>Use of these documents, maps, diagrams, plans, databases, software, other documents, reports, supporting records or material for purposes unrelated to this Contract without the prior written approval of the Client.</i></p>
3.8.1	<p>The liquidated damages rate is 0.1 % of the final Contract Price per day</p> <p>The maximum amount of liquidated damages for the whole contract is 10% percent of the final Contract Price.</p>
3.8.3	The percentage to be used for the calculation of Lack of performance Penalty(ies) is 50% .
3.9	<p>A Performance Security shall be required</p> <p>The Performance Security shall be in the form of a Bank Guarantee.</p> <p>The amount of the Performance Security shall be: 10% of the Contract Price.</p> <p>The Performance security shall be denominated in the currencies of payment of the Contract, in accordance with their portions of the Contract Price</p> <p>If the unconditional guarantee is issued by a financial institution located outside the Employer’s Country, the issuing financial institution shall have a correspondent financial institution located in the Employer’s Country to</p>

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	make it enforceable
5.1	The assistance and exemptions provided to the Service Provider are: <i>None</i>
6.2(a)	The amount in local currency is <i>the local currency portion</i>
6.2(b)	The amount in foreign currency or currencies is <i>the foreign currency portion</i>
6.3.2	The performance incentive paid to the Service Provider shall be: <i>None</i>
6.4	<p>Payments shall be made according to the following schedule:</p> <p>A. <u>LOT 1: LWAKHAKHA</u></p> <ol style="list-style-type: none"> i. Advance for Mobilization, Materials and Supplies: 10% of the Contract Price shall be paid on the commencement date against the submission of an unconditional bank guarantee for the same. ii. Progress payments in accordance with the milestones established as follows, subject to certification by the Employer, that the Services have been rendered satisfactorily, pursuant to the performance indicators: <ol style="list-style-type: none"> 1. 1st payment: 10% of the total contract sum shall be made on submission of an acceptable Inception Report against an invoice. 2. 2nd payment: 20% of the Lump Sum Contract value after completion of the following: <ol style="list-style-type: none"> a. 3 Tree nurseries established each with a production capacity of 90,000 seedlings. b. Water Source Protection on 20 water sources demonstrated to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge. c. 130Ha of degraded land restored through soil and water conservation measures. 3. 3rd Payment: 15 % of the Lump Sum Contract value after completion of the following: <ol style="list-style-type: none"> a. 20Ha of degraded land restored through soil and water conservation measures. b. 200 ha of deforested and degraded communal and individual land restored through tree growing c. 100 households trained and supported in establishing alternative income generating (livelihood) activities 4. 4th payment: 35 % of the Lump Sum Contract value after completion of the following: <ol style="list-style-type: none"> a. 72 km of the degraded stretches of the major rivers in Lwakhakha sub-catchment restored through use of

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	<p>catchment management measures</p> <ul style="list-style-type: none"> b. 2 km stretch of gullies treated to control erosion, siltation and destruction of property c. 200 households trained and supported in establishing alternative income generating (livelihood) activities <p>5. 5th payment: 20 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> a. 4.73 km stretch of gullies treated to control erosion, siltation and destruction of property b. 100 households trained and supported in establishing alternative income generating (livelihood) activities <ul style="list-style-type: none"> i. <i>The amortization of the Advance payment mentioned above shall commence from 2nd payment and be completed on 4th Payment.</i> ii. <i>The bank guarantee for the advance payment shall be released when the advance payment has been fully amortized.</i> iii. <i>If the advance payment guarantee is issued by a financial institution located outside the Employer’s Country, the issuing financial institution shall have a correspondent financial institution located in the Employer’s Country to make it enforceable</i> <p><u>B. LOT 2: ASWA II</u></p> <ul style="list-style-type: none"> i. Advance for Mobilization, Materials and Supplies: 10% of the Contract Price shall be paid on the commencement date against the submission of a bank guarantee for the same. ii. Progress payments in accordance with the milestones established as follows, subject to certification by the Employer, that the Services have been rendered satisfactorily, pursuant to the performance indicators: <ul style="list-style-type: none"> 1. 1st payment: 10% of the total contract sum shall be made on submission of an acceptable Inception Report against an invoice. 2. 2nd payment: 20 % of the Lump Sum Contract value after completion of the following: <ul style="list-style-type: none"> ○ 3 Tree nurseries established each with a production capacity of 90,000 seedlings. ○ 10Ha of degraded land restored through soil and water conservation measures. 3. 3rd payment: 25 % of the Lump Sum Contract value after completion of the following: <ul style="list-style-type: none"> ○ 100Ha of degraded land restored through soil and water conservation measures. ○ 800 ha of deforested and degraded communal and individual land

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	<p style="text-align: center;">restored through tree growing</p> <p>4. 4th payment: 30 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 280 km of the degraded stretches of the major rivers restored through use of catchment management measures ○ 350Ha of degraded Wetlands restored to perform their ecological and socio-economic functions ○ 300 households trained and supported in establishing alternative income generating (livelihood) activities <p>5. 5th payment: 15 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 150Ha of degraded Wetlands restored to perform their ecological and socio-economic functions ○ 200 households trained and supported in establishing alternative income generating (livelihood) activities <p><i>i. The amortization of the Advance payment mentioned above shall commence from 2nd payment and be completed on 4th Payment.</i></p> <p><i>ii. The bank guarantee for the advance payment shall be released when the advance payment has been fully amortized.</i></p> <p><i>iii. If the advance payment guarantee is issued by a financial institution located outside the Employer’s Country, the issuing financial institution shall have a correspondent financial institution located in the Employer’s Country to make it enforceable</i></p> <p>C. <u>LOT 3: KOCHI</u></p> <p><i>i. Advance for Mobilization, Materials and Supplies: 10% of the Contract Price shall be paid on the commencement date against the submission of a bank guarantee for the same.</i></p> <p><i>ii. Progress payments in accordance with the milestones established as follows, subject to certification by the Employer, that the Services have been rendered satisfactorily, pursuant to the performance indicators:</i></p> <p>1. 1st payment: 10% of the total contract sum shall be made on submission of an acceptable Inception Report against an invoice.</p> <p>2. 2nd payment: 20 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 3 Tree nurseries established each with a production capacity of 90,000 seedlings. ○ 10Ha of degraded land restored through soil and water conservation measures. <p>3. 3rd Payment: 25 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 250Ha of degraded land restored through soil and water

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	<p>conservation measures.</p> <ul style="list-style-type: none"> ○ 500 ha of deforested and degraded communal and individual land restored through tree growing <p>4. 4th payment: 30 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 268 km of the degraded stretches of the major rivers restored through use of catchment management measures ○ 70Ha of degraded Wetlands restored to perform their ecological and socio-economic functions ○ 300 households trained and supported in establishing alternative income generating (livelihood) activities <p>5. 5th payment: 15 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 40Ha of degraded Wetlands restored to perform their ecological and socio-economic functions ○ 200 households trained and supported in establishing alternative income generating (livelihood) activities <p>i. <i>The amortization of the Advance payment mentioned above shall commence from 2nd payment and be completed on 4th Payment.</i></p> <p>ii. <i>The bank guarantee for the advance payment shall be released when the advance payment has been fully amortized.</i></p> <p>iii. <i>If the advance payment guarantee is issued by a financial institution located outside the Employer’s Country, the issuing financial institution shall have a correspondent financial institution located in the Employer’s Country to make it enforceable</i></p> <p>D. <u>LOT 4: MIDDLE/LOWER AWOJA</u></p> <ul style="list-style-type: none"> i. Advance for Mobilization, Materials and Supplies: 10% percent of the Contract Price shall be paid on the commencement date against the submission of a bank guarantee for the same. ii. Progress payments in accordance with the milestones established as follows, subject to certification by the Employer, that the Services have been rendered satisfactorily, pursuant to the performance indicators: <ul style="list-style-type: none"> 1. 1st payment: 10% of the total contract sum shall be made on submission of an acceptable Inception Report against an invoice. 2. 2nd payment: 20 % of the Lump Sum Contract value after completion of the following: <ul style="list-style-type: none"> ○ 6 Tree nurseries established each with a production capacity of 90,000 seedlings. ○ Water Source Protection on 35 water sources demonstrated to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge. ○ 320Ha of degraded land restored through soil and water

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	<p>conservation measures.</p> <p>3. 3rd payment: 25 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 1,448Ha of deforested and degraded communal and individual land restored through tree growing <p>4. 4th payment: 30 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 13.4 km (6.7 km on each side) of the degraded stretches of the major rivers shall be restored in L. Okolitorom Sub catchment ○ 800Ha of degraded Wetlands restored to perform their ecological and socio-economic functions ○ 600 households trained and supported in establishing alternative income generating (livelihood) activities <p>5. 5th payment: 15 % of the Lump Sum Contract value after completion of the following:</p> <ul style="list-style-type: none"> ○ 192.5 ha of degraded Wetlands restored to perform their ecological and socio-economic functions ○ 200 households trained and supported in establishing alternative income generating (livelihood) activities <p><i>i. The amortization of the Advance payments mentioned above shall commence from 2nd payment and be completed on 4th Payment for each lot.</i></p> <p><i>ii. The bank guarantee for the advance payment shall be released when the advance payment has been fully amortized.</i></p> <p><i>iii. If the advance payment guarantee is issued by a financial institution located outside the Employer’s Country, the issuing financial institution shall have a correspondent financial institution located in the Employer’s Country to make it enforceable</i></p> <p>Should the certification not be provided, or refused in writing by the employer within one month of the date of the milestone, or of the date of receipt of the corresponding invoice, the certification will be deemed to have been provided, and the progress payment will be released at such date.</p>
6.5	Payment shall be made within 60 days of receipt of the invoice and the relevant documents specified in Sub-Clause 6.4, and within 60 days in the case of the final payment.
6.6.1	The Contract <i>is not</i> subject to price adjustment
7.1	The principle and modalities of inspection of the Services by the Employer are as follows: The employer and the supervising service provider shall inspect and test the completed services to assure quality of the services and to identify any defects that require correction by the service provider

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	The Defects Liability Period is <i>6 months</i> .
8.2.3	The Adjudicator is <i>Prof. Jackson Mwakali</i> . who will be paid a rate of <i>US\$50</i> per hour of work.
8.2.4	<p>Rules of arbitration</p> <p>GCC 8.2.4 (a) shall apply.</p> <p>Place of arbitration: -----</p> <p>GCC Sub-Clause 8.2.4 (b): <i>shall apply</i>. Arbitration shall be conducted in accordance with the Arbitration and Conciliation Act Cap 4. Laws of Uganda</p>
8.2.5	The designated Appointing Authority for a new Adjudicator is <i>The President, Uganda Institution of Professional Engineers</i> .

Appendices

Appendix A - Description of the Services

Give detailed descriptions of the Services to be provided, dates for completion of various tasks, place of performance for different tasks, specific tasks to be approved by Employer, etc.

Appendix B - Schedule of Payments and Reporting Requirements

List all milestones for payments and list the format, frequency, and contents of reports or products to be delivered; persons to receive them; dates of submission; etc. If no reports are to be submitted, state here “Not applicable.”

Appendix C - Key Personnel and Subcontractors

- List under:*
- C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications of foreign Personnel to be assigned to work in the Government’s country, and staff-months for each.*
 - C-2 Same as C-1 for Key foreign Personnel to be assigned to work outside the Government’s country.*
 - C-3 List of approved Subcontractors (if already available); same information with respect to their Personnel as in C-1 or C-2.*
 - C-4 Same information as C-1 for Key local Personnel.*

Appendix D—Breakdown of Contract Price in Foreign Currency(ies)

List here the elements of cost used to arrive at the breakdown of the lump-sum price—foreign currency portion:

- 1. Rates for Equipment Usage or Rental or for Personnel (Key Personnel and other Personnel).*
- 2. Reimbursable expenditures.*

This appendix will exclusively be used for determining remuneration for additional Services.

Appendix E - Breakdown of Contract Price in Local Currency

List here the elements of cost used to arrive at the breakdown of the lump-sum price—local currency portion:

- 1. Rates for Equipment Usage or Rental or for Personnel (Key Personnel and other Personnel).*
- 2. Reimbursable expenditures.*

This appendix will exclusively be used for determining remuneration for additional Services.

Appendix F - Services and Facilities Provided by the Employer

Appendix G - Performance Incentive Compensation Appendix

Performance Incentive Compensation Appendix Provisions

ARTICLE 1- GENERAL

1.1 Documents Comprising the Performance Incentive Compensation Appendix

The Performance Incentive Compensation Appendix consists of:

- (a) the Performance Incentive Compensation Appendix Provisions;
- (b) Attachment #1 Incentive Compensation Calculation Procedure Notes; and
- (c) Attachment #2 Incentive Compensation Charts 1-[].

ARTICLE 2- THE PERFORMANCE INCENTIVE COMPENSATION

2.1 Performance Incentive Compensation Limits

- (1) The Performance Incentive Compensation paid to the Service Provider shall not exceed the equivalent of \$[] U.S. over the term of the Contract.
- (2) The actual amount paid to the service Provider as Performance Incentive Compensation shall be determined by the extent to which the Service Provider achieves the performance criteria set out in the Incentive Compensation Charts and by the application of the calculations set out in the Incentive Calculation Procedure Notes for the applicable Contract Year.
- (3) If the Service Provider fails to meet the “Excellent” rating set out in the Incentive Compensation Chart, in any Contract Year, the Service Provider will be obliged to make up the shortfall in the subsequent Contract Year, as well as meet the performance targets for that Contract Year.
- (4) Except as the Employer may, in its sole discretion, otherwise determine based on exceptional circumstances, if the Service Provider fails to attain the Maximum Annual Incentive Compensation in any Contract Year, the shortfall will not be available to the Service Provider in the subsequent Contract Years and the equivalent of \$[] U.S. per Contract Year maximum will not be increased.
- (5) For the purpose of calculating the equivalency of \$[] U.S. and \$[] U.S. pursuant to Sections 2.1(1) and 2.1(2) of this Performance Incentive Compensation Appendix, the equivalency shall be calculated as of the date of payment of the Performance Incentive Compensation.

ATTACHMENT # 1 – APPENDIX G
INCENTIVE COMPENSATION CALCULATION PROCEDURE NOTES
Not applicabe

[SAMPLE: This part is to be designed on a case by case approach]

PART A THE METHOD FOR CALCULATING PERFORMANCE INCENTIVE COMPENSATION IN EACH CONTRACT YEAR

I. The Performance Incentive Compensation for each Contract Year shall be calculated as follows:

$$\text{Compensation} = \text{Composite Score} \times 0.2 \times \text{Maximum Annual Incentive Compensation}$$

Where:

- (i) The Maximum Annual Incentive Compensation is calculated as set out in Section 2.1 of the Performance Incentive Compensation Appendix Provisions; and
- (ii) The Composite Score is calculated in accordance with “Part B-The Method for Calculating the Composite Score” of these Incentive Compensation Calculation Procedure Notes.

PART B THE METHOD FOR CALCULATING THE COMPOSITE SCORE

1. The Composite Score for each Contract Year shall be as follows:

Composite Score Total of All Weighted Scores **for the Performance Criteria**

Where:

- (i) The Weighted Score for each Performance Criterion equals Criterion Weight x Criterion Value;
- (ii) The Criterion Value is measured from “Excellent” to “Poor” with corresponding values of 5 (for “Excellent” performance) to 1 (for “Poor” performance) as set out in the Incentive Compensation Charts and evaluated based on the performance of the Service Provider;
- (iii) The Criterion Value which the Operator receives for any Performance Criterion is based upon the technical standards set out in the Incentive Compensation Charts under the headings, “Excellent”, “Very Good”, “Good”, “Fair”, and “Poor” as compared against the Operator’s actual technical standards in each Contract Year; and
- (iv) If the Service Provider’s actual performance in a Contract Year,
 - (a) exceeds the technical standards for an “Excellent” Criterion Value, then the Criterion Value shall be 5;
 - (b) is less than the technical standards for a “Poor” Criterion Value, then the

Criterion Value shall be zero; or

- (c) is in between the technical standards for two Criterion Values, then the Criterion Value shall be rounded down to the nearest whole number or 0.5 decimal point.

2. For the purpose of clarity, it is noted that there are only ten Criterion Values to be used as follows: 0, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5 and 5.

3. Notwithstanding paragraphs 1 and 2 above, with respect to the Performance Criterion relating to institutional improvements in Attachment #2 The Incentive Compensation Charts 1-8,

- (a) if the Service Provider’s actual performance in a Contract Year is less than the technical standard for a “Fair” Criterion Value, then the Criterion Value shall be zero;
- (b) for the purpose of clarity, it is noted that there are only three Criterion Values to be used as follows: 0, 2 and 5; and
- (c) each of the documents or plans listed under the Performance Criterion shall be scored with the appropriate Criterion Value and a mean average score will be taken to calculate the Criterion Value for the Performance Criterion, which shall be rounded down to the nearest whole point or 0.5 decimal point.

4. For ease of reference, the following calculation represents the calculation of the Composite Score for a hypothetical Service Provider for four performance criteria in one Contract Year.

Sample Incentive Compensation Chart

Performance Criterion		Units	Criterion Values				
			Weight				
			Excellent	Very Good	Good	Fair	Poor
1.	e.g. Electricity use [% reduction in kW. hr consumed from Base Year]	0.30	65	55	50	40	30
2.	[Criterion 2] []	0.25	20	19	17	16	15
3.	[Criterion 3] []	0.15	30	25	20	15	10
4.	[Criterion ~] []	0.30	90	85	80	75	70

The following table demonstrates the procedure for the calculation of the “**Composite Score**”, if at the end of the year the achievements of the Service Provider are as follows:

1.	[e.g. Electricity use]	57
2.	[Criterion 2]	22
3.	[Criterion 3]	29
4.	[Criterion 4]	69

Performance Incentive Compensation Appendix

Chart 1

Performance Incentive Obligations

Year [1]

Services			Criterion Values					
Apndx. Ref.	Performance Criterion	Units	Weight	Excellent 5	Very Good 4	Good 3	Fair 2	Poor 1
	[Development of Plans and Programs ¹]	Quality and Timeliness	[0.45]	Completed on time with no need for revision to the substance of the document	N/A	N/A	Completed on time but requires revision to the substance of the document	N/A
	[Energy Management]	% reduction of kilowatt hours of electricity per unit produced from Base Year	[0.25]	4	3.5	3	2.5	2
	[Computerized Billing and Collection System]	number of days after the Starting Date until the computerized billing and collection system is in place	[0.30]	140	150	160	170	180

[Note: The chart is a sample only.]

(1) In respect of the Plans and Programs each plan or program listed in Section [●] shall be given a score of either 5 (Excellent), 2 (Fair) or (0) and the average score for all plans and programs shall be multiplied by the Criteria Weight. The average score shall be rounded to the nearest .5 decimal.

**Appendix H- CODE OF CONDUCT FOR SERVICE PROVIDER'S
PERSONNEL**

Section X - Contract Forms

Table of Forms

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Notification of Intention to Award

[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid.]

[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]

For the attention of Bidder's Authorized Representative

Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]*

Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to Bidders. The Notification must be sent to all Bidders simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: *[email/fax]* on *[date]* (local time)

Notification of Intention to Award

Employer: *[insert the name of the Employer]*

Project: *[insert name of project]*

Contract title: *[insert the name of the contract]*

Country: *[insert country where RFB is issued]*

Loan No. /Credit No. / Grant No.: *[insert reference number for loan/credit/grant]*

RFB No: *[insert RFB reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Bidder

Name:	<i>[insert name of successful Bidder]</i>
Address:	<i>[insert address of the successful Bidder]</i>
Contract price:	<i>[insert contract price of the successful Bid]</i>

2. Other Bidders *[INSTRUCTIONS: insert names of all Bidders that submitted a Bid. If the Bid's price was evaluated include the evaluated price as well as the Bid price as read out.]*

Name of Bidder	Bid price	Evaluated Bid price (if applicable)
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]
[insert name]	[insert Bid price]	[insert evaluated price]

3. Reason/s why your Bid was unsuccessful

[INSTRUCTIONS: State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]

4. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).

You may request a debriefing in relation to the results of the evaluation of your Bid. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Bidder, contact details; and address the request for debriefing as follows:

Attention: [insert full name of person, if applicable]

Title/position: [insert title/position]

Agency: [insert name of Employer]

Email address: [insert email address]

Fax number: [insert fax number] *delete if not used*

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business

Days from the date of publication of the Contract Award Notice.

5. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [insert date] (local time).

Provide the contract name, reference number, name of the Bidder, contact details; and address the Procurement-related Complaint as follows:

Attention: [insert full name of person, if applicable]

Title/position: [insert title/position]

Agency: [insert name of Employer]

Email address: [insert email address]

Fax number: [insert fax number] *delete if not used*

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

Further information:

For more information see the [Procurement Regulations for IPF Borrowers \(Procurement Regulations\)](https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=4005) [https://policies.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=4005] (Annex III). You should read these provisions before preparing and submitting your complaint. In addition, the World Bank’s Guidance “[How to make a Procurement-related Complaint](http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework)” [http://www.worldbank.org/en/projects-operations/products-and-services/brief/procurement-new-framework#framework] provides a useful explanation of the process, as well as a sample letter of complaint.

In summary, there are four essential requirements:

1. You must be an ‘interested party’. In this case, that means a Bidder who submitted a Bid in this bidding process, and is the recipient of a Notification of Intention to Award.
2. The complaint can only challenge the decision to award the contract.
3. You must submit the complaint within the period stated above.
4. You must include, in your complaint, all of the information required by the Procurement Regulations (as described in Annex III).

6. Standstill Period

DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us.

On behalf of the Employer:

Signature: _____

Name: _____

Title/position: _____

Telephone: _____

Email: _____

Beneficial Ownership Disclosure Form

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form (“Form”) is to be completed by the successful Bidder¹. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- *directly or indirectly holding 25% or more of the shares*
- *directly or indirectly holding 25% or more of the voting rights*
- *directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder*

RFB No.: *[insert number of RFB process]*

Request for Bid No.: *[insert identification]*

To: *[insert complete name of Employer]*

In response to your request in the Letter of Acceptance dated *[insert date of letter of Acceptance]* to furnish additional information on beneficial ownership: *[select one option as applicable and delete the options that are not applicable]*

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Bidder (Yes / No)

<i>[include full name (last, middle, first), nationality, country of residence]</i>			
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OR

(ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions:*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder

OR

(iii) *We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]”

Name of the Bidder: **[insert complete name of the Bidder]*_____

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*_____

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*_____

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*_____

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*_____

* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to “Bidder” in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

** Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Letter of Acceptance

[letterhead paper of the Employer]

[date]

To: *[name and address of the Service Provider]*

This is to notify you that your Bid dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Special Conditions of Contract]* for the Contract Price of the equivalent of *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish (i) the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms and (ii) the additional information on beneficial ownership in accordance with BDS ITB 45.1, within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in Section X, - Contract Forms, of the bidding document.

Note: Insert one of the 3 options for the second paragraph. The first option should be used if the Bidder has not objected the name proposed for Adjudicator. The second option if the Bidder has objected the proposed Adjudicator and proposed a name for a substitute, who was accepted by the Employer. And the third option if the Bidder has objected the proposed Adjudicator and proposed a name for a substitute, who was not accepted by the Employer.

We confirm that *[insert name proposed by Employer in the Bid Data Sheet]*,

or

We accept that *[name proposed by Bidder]* be appointed as the Adjudicator

or

We do not accept that *[name proposed by Bidder]* be appointed as Adjudicator, and by sending a copy of this letter of acceptance to *[insert the name of the Appointing Authority]*, we are hereby requesting *[name]*, the Appointing Authority, to appoint the Adjudicator in accordance with ITB 47.1

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Contract

Form of Contract

[letterhead paper of the Employer]

LUMP-SUM REMUNERATION

This CONTRACT (hereinafter called the “Contract”) is made the *[day]* day of the month of *[month]*, *[year]*, between, on the one hand, *[name of Employer]* (hereinafter called the “Employer”) and, on the other hand, *[name of Service Provider]* (hereinafter called the “Service Provider”).

[Note: In the text below text in brackets is optional; all notes should be deleted in final text. If the Service Provider consist of more than one entity, the above should be partially amended to read as follows: “...(hereinafter called the “Employer”) and, on the other hand, a joint venture consisting of the following entities, each of which will be jointly and severally liable to the Employer for all the Service Provider’s obligations under this Contract, namely, [name of Service Provider] and [name of Service Provider] (hereinafter called the “Service Provider”).]

WHEREAS

- (a) the Employer has requested the Service Provider to provide certain Services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the “Services”);
- (b) the Service Provider, having represented to the Employer that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract at a contract price of.....;
- (c) the Employer has received *[or has applied for]* a loan from the International Bank for Reconstruction and Development (hereinafter called the “Bank”) *[or a credit from the International Development Association (hereinafter called the “Association”)]* towards the cost of the Services and intends to apply a portion of the proceeds of this loan *[or credit]* to eligible payments under this Contract, it being understood (i) that payments by the Bank *[or Association]* will be made only at the request of the Employer and upon approval by the Bank *[or Association]*, (ii) that such payments will be subject, in all respects, to the terms and conditions of the agreement providing for the loan *[or credit]*, and (iii) that no party other than the Employer shall derive any rights from the agreement providing for the loan *[or credit]* or have any claim to the loan *[or credit]* proceeds;

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents shall be deemed to form and be read and construed as part of this Agreement, and the priority of the documents shall be as follows:

- (a) the Letter of Acceptance;
- (b) the Service Provider’s Bid
- (c) the Special Conditions of Contract;
- (d) the General Conditions of Contract;
- (e) the Specifications;

- (f) the Priced Activity Schedule; and
- (g) The following Appendices: [*Note: If any of these Appendices are not used, the words “Not Used” should be inserted below next to the title of the Appendix and on the sheet attached hereto carrying the title of that Appendix.*]

Appendix A: Description of the Services

Appendix B: Schedule of Payments

Appendix C: Key Personnel and Subcontractors

Appendix D: Breakdown of Contract Price in Foreign Currency

Appendix E: Breakdown of Contract Price in Local Currency

Appendix F: Services and Facilities Provided by the Employer

Appendix G: Performance Incentive Compensation

Appendix H: Code of Conduct for Service Provider’s Personnel

2. The mutual rights and obligations of the Employer and the Service Provider shall be as set forth in the Contract, in particular:
- (a) the Service Provider shall carry out the Services in accordance with the provisions of the Contract; and
- (b) the Employer shall make payments to the Service Provider in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of *[name of Employer]*

[Authorized Representative]

For and on behalf of *[name of Service Provider]*

[Authorized Representative]

[Note: If the Service Provider consists of more than one entity, all these entities should appear as signatories, e.g., in the following manner:]

For and on behalf of each of the Members of the Service Provider

[name of member]

[Authorized Representative]

Performance Security

Option 1: (Bank Guarantee)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Employer]*

Date: *_ [Insert date of issue]*

PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *_ [insert name of Service Provider which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the Non-Consulting Services of *_ [insert name of contract and brief description of the Non-Consulting Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* () *[insert amount in words]*,¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

¹ *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency (ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

² *Insert the date twenty-eight days after the expected completion date as described in GCC. The Service Provider should note that in the event of an extension of this date for completion of the Contract, the Service Provider would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Service Provider might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."*

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Option 2: Performance Bond

By this Bond *[insert name of Principal]* as Principal (hereinafter called “the Service Provider”) and *[insert name of Surety]* as Surety (hereinafter called “the Surety”), are held and firmly bound unto *[insert name of Employer]* as Obligee (hereinafter called “the Service Provider”) in the amount of *[insert amount in words and figures]*, for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Service Provider and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Service Provider has entered into a written Agreement with the Employer dated the _____ day of _____, 20____, for *[name of contract and brief description of Non-Consulting Services]* in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Service Provider shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Service Provider shall be, and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer’s obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) complete the Contract in accordance with its terms and conditions; or
- (2) obtain a Bid or Bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsive Bidder, arrange for a Contract between such Bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term “Balance of the Contract Price,” as used in this paragraph, shall mean the total amount payable by Employer to the Service Provider under the Contract, less the amount properly paid by Employer to the Service Provider; or

- (3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking-Over Certificate.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors, and assigns of the Employer.

In testimony whereof, the Service Provider has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this _____ day of _____ 20 ____.

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

SIGNED ON _____ on behalf of _____

By _____ in the capacity of _____

In the presence of _____

Advance Payment Security

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Insert name and Address of Employer]*

Date: *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[insert name of Service Provider, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called “the Applicant”) has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Non-Consulting Services]* (hereinafter called “the Contract”).

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*¹ upon receipt by us of the Beneficiary’s complying demand supported by the Beneficiary’s statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than toward delivery of Services;
or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary’s bank stating that the advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant’s bank]*.

¹ *The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Employer.*

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

ANNEX I.

Performance Specifications and Drawings



THE REPUBLIC OF UGANDA

MINISTRY OF WATER AND ENVIRONMENT

**INTEGRATED WATER MANAGEMENT AND
DEVELOPMENT PROJECT (IWMDP)**

TERMS OF REFERENCE

for

**Supporting Communities in Lots 1, 2, 3, & 4 to Implement
Priority Catchment Management Measures**

Contents

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GENERAL INTRODUCTION

Government of Uganda, with funding from the World Bank is implementing Integrated Water Management and Development Project which provides support to catchment management and activities in sub-catchments of Lwakhakha (Mpologoma catchment), Lake Okolitorom and Apeduru Apapai (Awoja catchment), Kochi (Albert Nile catchment), and Aswa II (Aswa catchment). The project supports implementation of catchment management measures, including soil and water conservation, eco-system protection and restoration; livelihood improvement for the affected communities and supporting stakeholder engagement and the establishment of micro-catchment structures for sustainable management of the interventions.

Implementation of the IWMDP is fully integrated within the government structure. Thus, the water resources management component of the project is implemented by the Directorate of Water Resources Management (DWRM) through its various departments and the relevant Water Management Zones (WMZs). The task teams are composed of staff from DWRM, WMZs, relevant MWE departments and agencies, and other government ministries and agencies.

These Terms of Reference are for provision of non-consultancy services as:

- Lot 1: Supporting Communities in Lwakhakha Sub Catchment to Implement Priority Catchment Management Measures.
- Lot 2: Supporting Communities in Aswa II Sub Catchment to Implement Priority Catchment Management Measures.
- Lot 3: Supporting Communities in Kochi Sub Catchment to Implement Priority Catchment Management Measures.
- Lot 4: Supporting Communities in Middle/lower Sub Catchment to Implement Priority Catchment Management Measures.

LOT 1:

Supporting Communities in Lwakhakha Sub Catchment to Implement Priority Catchment Management Measures

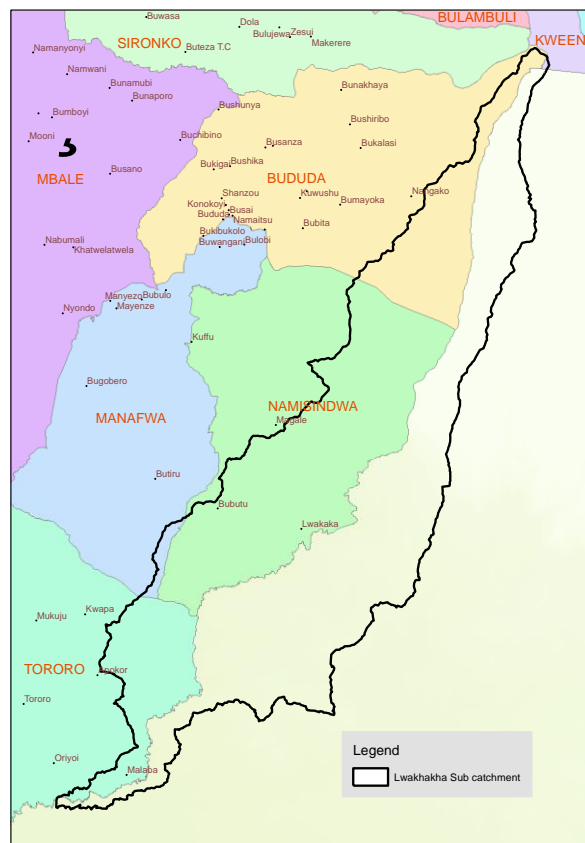
1 INTRODUCTION

Government of Uganda, with funding from the World Bank is implementing Integrated Water Management and Development Project which provides support to catchment management and restoration activities in Lwakhakha sub-catchments in Mpologoma Catchment. The project supports implementation of catchment management measures, including soil and water conservation, riverbank protection; and providing alternative livelihoods for affected communities.

1.1 LWAKHAKHA SUB CATCHMENT DESCRIPTION

1.1.1 Location

Lwakhakha Sub Catchment, is a transboundary catchment found on the Eastern Side of Mpologoma Catchment, in Kyoga Water Management Zone, comprises of majorly the district of Namisindwa, parts of Manafwa, Bududa, Kween and Tororo that occupy 57.9%, 1.9%, 21.4%, 0.1%, 18.7% of the total sub-catchment area respectively on the Ugandan side of the sub catchment. It covers a total area of 586Km² as a whole with about 362.7Km² on the Ugandan side of the sub catchment.



1.1.1 Physical Environment

a) Climate

The climate of Lwakhakha sub catchment is mainly influenced by the presence of Mt Elgon. The mountain is vital to the social and economic functioning of the area, and is a water catchment supplying millions of people in Uganda and Kenya.

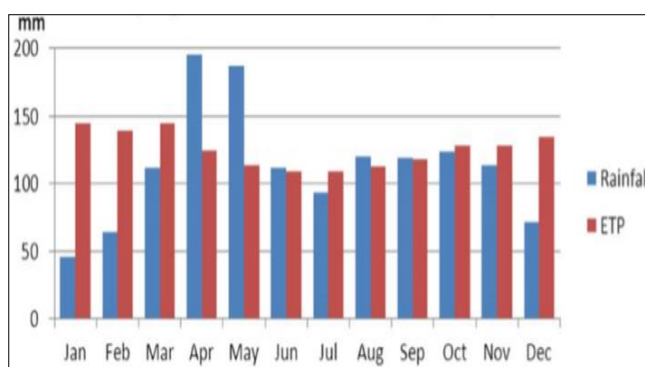
Figure 1-2: Extent of Lwakhakha Sub catchment (Districts that lie wholly / partially in Lwakhakha sub catchment)

Rainfall distribution in Lwakhakha is bimodal, allowing two crops annually, and adequate grazing

for livestock throughout the year. There is a long rainy season from March to May and a short one from October to November. The annual rainfall averages are about 1370 mm in the sub catchment. The Temperatures also vary with altitude with average of 21.6 °C. The mean minimum temperature is 12°C while the mean maximum temperature is 25°C.

Figure 1-1: Mean monthly rainfall and ETP patterns for the Sub catchment

The



humidity is relatively high with mean evaporation being between 1500mm to 2000mm in a year.

Weather changes at the in the sub catchment at a given time are irregular due to the existence of the hills, and instances are common where rainfall is pouring at the top and middle of the mountain but at the bottom, there are so signs of rain pour.

b) Topography

The relief of the sub catchment is characterized mainly with hills and stretching ranges of Mount Elgon. The highest elevation of the sub catchment is about 4170masl and is towards the top of the mountain where the river Lwakhakha starts. The lowest points of the sub catchment are about 1170masl and are located towards Tororo district. The existence of steep hills, ranges and valleys make some parts of the sub catchment difficult or incapable of access. These hills and ranges and hills have further influenced in the general, the climate of the sub catchment as well as dictated the economic and agricultural activities that can be carried out within the sub catchment.

c) Soils

The Lwakhakha sub catchment has a wide range of soil types which exhibit considerable variation in fertility and drainage properties. The flood plains have hydromorphic alluvial sand deposits with thin layer of silt loam underlain with clay supporting the growing of crops such as rice, sugar cane, millet, rice and maize. The narrow river valleys have sand deposits.

On the upper slopes of Mt. Elgon, there are essentially three soil types: Andosols (eutrophic soils of tropical regions), Nithosols (ferrisols) and the Histosols (hydromorphic soils). These soils are volcanic in origin, fertile and rich in minerals. The soils in the middle ecological zone of the sub catchment are comprised of well drained, moderately deep to very deep, reddish brown to yellow brown, friable clay. Along the river valleys, the soils consist of a complex of imperfectly drained to poorly drained, soils often underlying a topsoil of friable sandy clay loam.

d) Hydrology

The main river in Lwakhakha Sub catchment is River Lwakhakha (also known as Malaba River) that has its origins on the slopes of Mount Elgon and flows into River Mpologoma before draining into Lake Kyoga. The hydrology of the Lwakhakha sub catchment is characterized with a variety of water streams which move through the valleys in between the hills and the Elgon ranges that pour into the River Lwakhakha. A number of tributaries exist in the sub catchment that pour into R. Lwakhakha. These rivers/streams including swamps/wetlands and springs are sources of water to the communities although they are prone to contamination due to the different human activities that have been carried out within the sub catchment.

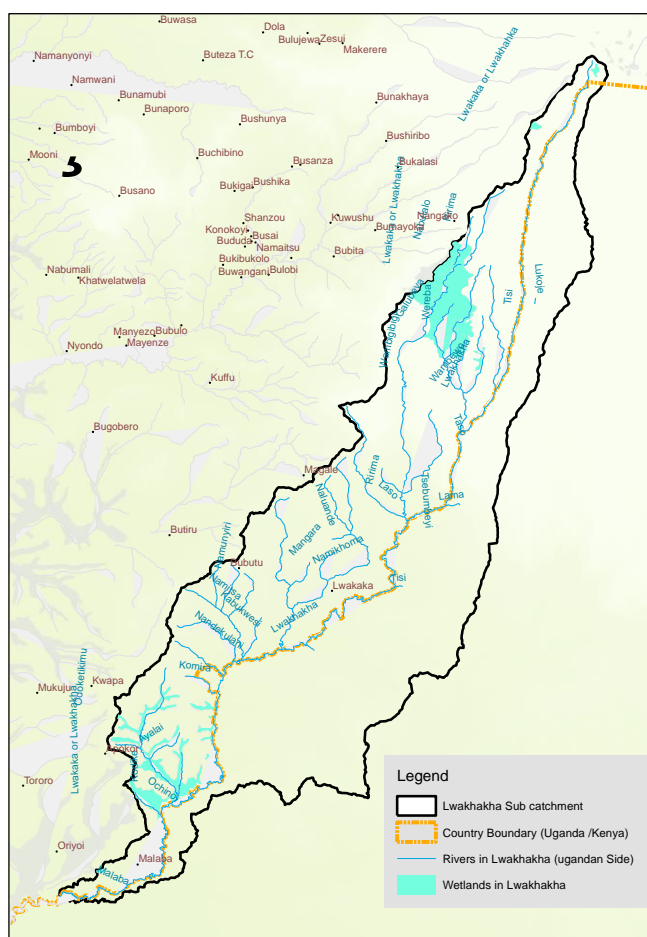


Figure 1-3: Rivers and Wetlands systems in Lwakhakha

1.1.2 Socio-Economic Environment

a) Population

The population in the Ugandan part of the Lwakhakha sub catchment is estimated at about 121,531 with 51% of the population being females. There are about 24,842 households in the sub catchment with an average household size of five (5) people per household according to the National Population and Housing Census, November 2014.

b) Ethnicity

In the Lwakhakha sub catchment, there are a variety of ethnic groups with the Bagisu the most dominant with about 90% of the population, with the Itesots making up a minority contribution and they mainly settled in the low areas of the sub catchment towards Tororo district. There are some Kenyan migrants who come to hawk different merchandise and some of them end up settling around the Lwakhakha trading centre.

c) Economic Activities and Livelihood

Most of the rural population in Lwakhakha sub catchment mainly relies on subsistence farming as their main source of livelihoods. The main crops grown are sorghum, millet, coffee, Irish potatoes, sweet potatoes, maize and beans. The agriculture is largely rain-fed and production is entirely dependent on use of traditional implements, with limitations in the quality and quantity of production. The productivity for major crops has been fairly low and has decreased over time, probably due to declining soil fertility and soil erosion. This has created a trend where the farmers resort to opening land for agriculture, with wetlands and forests falling target to land use change and degradation.

d) Land use and Land tenure

According to the land act, Uganda has about four main land tenure system which comprise of freehold, leasehold, customary and mailo land tenures. In the Lwakhakha sub catchment, the most common land tenure system is the customary land holding where the land is owned communally by mainly clans and families. Transfer of land ownership is usually through inheritance although cases where owners agree to sell to other parties have been noticed.

The terrain of the sub catchment had dictated the land use of the area with most of the population using the land for cultivation and animal grazing with homesteads mainly established on both the hill tops and the slopes of these hills. Issues of landslides and soil erosion have highly increased the unproductivity of the land in the sub catchment, but practices such as cultivation on terraces have been utilised to ensure sustainability of the lands and reduce the soil erosion and other effects due to the run off from the hills.

1.1.3 Biological Environment

a) Floral Characteristics

Due to the mountainous nature of the Lwakhakha sub catchment, the vegetation species observed tend to change due to changes in the physical factors especially changes in the climate and altitude in the different areas of the sub catchment. As elevation increases above sea level, a progressive change is observed in the climatic and vegetation zones which leads to situations where tropical savannah and grassland savannah on the plain change to tropical forest then to alpine vegetation towards the mountain Elgon summit. The different vegetation zones

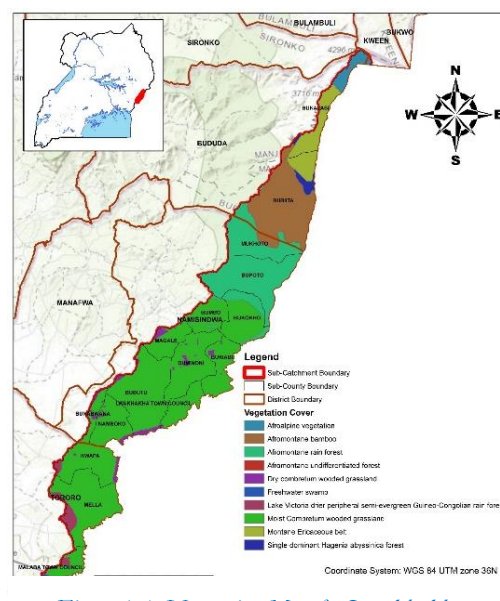


Figure 1-4: Vegetation Map for Lwakhakha

include grasses, forests and swampy vegetation bamboo a local delicacy is uniquely the dominant vegetation in the temperate zones of Mt Elgon. In the lower elevations of the sub catchment, the major vegetation is *combretum species* characteristics such as the *Ficus natalensis* (IUCN Status-LC), and as the elevation increases, the major vegetation species observed included a variety of acacia trees, *albizia coriara* (IUCN Status-Not evaluated), *Boscia salicifolia* (IUCN Status-LC), *Lantana Camara* (IUCN Status-Not evaluated), *Tithonia diversifolia* (IUCN Status-Not evaluated) and *Cascabela thevetia* (IUCN Status-LC), a few *Commiphora Africana* (IUCN Status-LC) among others.

b) Faunal Characteristics

The gazetted Mt. Elgon forest is host to a diverse number of wildlife like leopard (*Panthera pardus*, a threatened species), giant forest hog (*Hylochoerus meinertzhageni*, IUCN status - *Least concern*), waterbuck (*Kobus ellipsiprymnus*, IUCN status - *Least concern*), bushbuck (*Tragelaphus scriptus*, IUCN status - *Least concern*), duiker (*Sylvicapra grimmia*, IUCN status - *Least concern*), black and white colobus monkey (*Colobus guereza*, IUCN status - *Least concern*), blue monkey (*Cercopithecus mitis*, IUCN status - *Least concern*). Heavy mammals such as elephants and buffaloes are reportedly absent. Animal species in the catchment zones are influenced by Mt. Elgon system that harbours among other animal species monkeys, snakes and varieties of birds. Animal presence in the entire sub catchment, however, has been interfered with by human activities and settlements. On the lower altitudes, there is restriction of wildlife prominence due to human settlements and the locals have settled to rearing of cattle, goats, chicken and sheep.

1.2 SUB CATCHMENT MANAGEMENT RELATED ISSUES AND RECOMMENDED MEASURES

1.2.1 Identified issues and hotspots for interventions

The term “hotspot” means a place where there is significant land degradation resulting in lowering of the quality and quantity of water in water bodies and compromise in the ecosystem services. The hotspots and actual intervention sites for Lwakhakha Sub-Catchment are presented in Table 1.1.

Table 1-1: Confirmed catchment management issues and recommended investment measures in Lwakhakha Sub-Catchment

Issues	District	Sub County	Parish	Village	Extent of Degradation	Recommended Measures
Soil erosion / land degradation	Namisindwa	Bukokho	Soono, Bunamulindi	Lukhuna, Lirima	96.0 ha	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds, contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
		Namboko	Bumukuluma	Buyasere	60.0 ha	
		Bumwoni	Bwiire, Kisawayi	Bukhola, Mutinyi, Kongoli, Kisawayi, Buhomeli	810.0 ha	
		Lwakhakha T/C	Buhunga	Sango	120.0 ha	
		Bukiabi	Mahonge	Sihendu A & B	165.8 ha	
	Bumbo	Buwamba, Bumusome, Bumulika, Bunanyama, Buteteya, Bumbo, Buwundu		188.2 ha		
	Tororo	Kwapa	Morukebu	Morukebu A		
Deep Gully formations	Namisindwa	Lwakhakha T/C	Buhunga	Nalondo	1.5 km	<ul style="list-style-type: none"> ▪ Total Length 6.73km: <ul style="list-style-type: none"> - 1.31Km (Ave. depth of 3m, width of 5m) - 1.67Km (Ave. depth of 2m, width of 3m) - 1.75Km (Ave. depth of 3.5m, width of 4m) - 2.0Km (Ave. depth of 2m & width of 2m) Recommended measure: <ul style="list-style-type: none"> ▪ Gully treatment (Reshaping and use of vetivar systems and gully plugs). ▪ Establishment of Bio-Physical structures (soil bunds, bio swales, contour bunds and terracing etc.) for runoff control/storm water management ▪ Landscape Restoration with vetivar systems and bamboo
		Bumbo	Bunanyama	Bukimatya	2.23 km	
		Bumwoni	Bwiire	Bukhola, Mutinyi, Kongoli	1.7 km	
	Manafwa	Butubo T/B	Butubo T/B	Bumandali	0.3 km	
		Bunabwana	Nanderema, Bunambira	Kambunni, Sibanga	1.0 km	
Landslides /	Namisindwa	Bumbo	Bunanyama	Bumwali, Bunanyama	16.0 ha	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds,

Issues	District	Sub County	Parish	Village	Extent of Degradation	Recommended Measures
Mudslides						<ul style="list-style-type: none"> contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
Riverbank degradation	Namisindwa	Bukhoko	Soono, Kabole, Bunamulingi	Bushuma, Bokomi, Lirima, Makenya B, Kibitinya & Kyesome	13.0 km	<ul style="list-style-type: none"> ▪ Riverbank rehabilitation (Reshaping and use of vetivar systems), River buffer management ▪ Demarcation of the riverbanks using locally available planting materials like bamboo and indigenous tree species ▪ Sensitizing the communities on avoiding cultivation within the banks of these rivers ▪ Formulate environmental bye-laws ▪ Establish micro catchment structures to enforce the bye-laws and oversee the restoration activities.
		Namboko	Bumukuluma, Buwasiba	Buyasele, Bumateka	1.0 km	
		Bubutu	Bumulika, Namitsa, Buwambwa	Bumula, Bukibeti, Busimaolya, Namitsa, Lukhuna, Bumagasa 1, Bumagasa 2 & Buhonzo	9.0 km	
		Bumwoni	Kisawayi	Bulyuli	1.9 km	
		Lwakhakha T/C	Buwuma ward	Bumambale cell	0.5 km	
	Tororo	Malaba T/C	Malaba Ward	Malaba and Obore	1.0 km	
		Mella	Amoni	Kagura village	1.0 km	
		Kwapa	Kalait		1.0 km	
Poor Water Quality	Namisindwa	Bubutu	Bumusomi	Kisokoti	1.0 ha	<ul style="list-style-type: none"> ▪ Rehabilitation of boreholes and shallow wells and putting provisions for animal watering ▪ Drilling alternative boreholes ▪ Implementation of source protection measures (live fencing, water diversion channels, drainage pits etc.) ▪ Sensitize community members on proper handling of pesticides, herbicides and fertilizers to minimize contamination of water sources. ▪ Sensitize communities on proper handling of agriculture waste ▪ Promote the use of Ecological sanitation toilets
		Lwakhakha T/C	Buwuma ward	Kibayi Cell	1.0 ha	
		Bumwoni	Bwiri	Butemulani	1.0 ha	
		Bumbo	Buteteya	Buwambwa	1.0 ha	
Soil warping	Manafwa	Bunyiza T/C	Bunyiza Ward	Nanbafu B	20.0 ha	<ul style="list-style-type: none"> ▪ Support geological studies to confirm the causes of cracks and down warping of soils ▪ Facilitate planting of deep-rooted plants/ trees to anchor soils from movements ▪ Facilitate farmer-managed natural regeneration
	Namisindwa	Namisindwa T/C		Wandyambi cell	8.0 ha	
		Bukokho	Soono	Lukhuna, Bumweke	80.0 ha	

Issues	District	Sub County	Parish	Village	Extent of Degradation	Recommended Measures
Deforestation	Namisindwa	Bubutu	Bumusomi	Budsebweka, Kisokoti, Bushuma	88.0 ha	<ul style="list-style-type: none"> ▪ Establish tree nurseries to promote tree growing to restore degraded forest landscapes ▪ Sensitization of communities to conserve trees to reduce deforestation and increase tree cover ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation ▪ Development of byelaws and ordinances to create an enabling environment for tree growing ▪ Promote farmer managed natural regeneration to increase tree cover
		Bukiabi	Sabino	Sabino, Bukakayi	245.2 ha	
		Namboko	All parishes	All villages	205.5 ha	
		Bumwoni	Bwiri	Bwiri	165.8 ha	
	Manafwa	Bunabwana	Nanderema	Nanderema hills	122.6 ha	

2 OBJECTIVES

The overall objective of the assignment is to support communities in Lwakhakha sub catchment to implement catchment-based and community driven actions aimed at improving soil and water conservation, riverbank restoration and community livelihood improvements.

The specific objectives of the assignment are to:

- a) identify, mobilise, engage and build capacity of stakeholders and communities in undertaking catchment-based and community driven catchment management measures.
- b) support communities to restore degraded stretches of riverbanks in Lwakhakha sub-catchment through use of catchment management measures
- c) support communities to treat and restore degraded stretches of gullies to control erosion, siltation and destruction of property
- d) support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.
- e) Support communities to restore deforested and degraded land through community tree growing on individual farmers land, public land and riverbanks
- f) support communities to establish and promote alternative income generating activities for improved livelihoods.

3 SCOPE OF SERVICES

This assignment seeks to support communities in Lwakhakha sub catchment to implement catchment-based and community driven actions aimed at improving soil and water conservation, riverbank restoration and community livelihood improvements. Thus, community mobilization and sensitizations will be key to the implementation of the assignment. Sub-catchment and catchment management committees shall play a major role in this assignment and will have to be actively engaged and involved

As part of general items and cross cutting aspects, the Service Provider shall identify key stakeholders including community and Local Government representatives and develop appropriate mobilization and sensitization tools and approaches. The Service Provider shall carry out community capacity building sessions during implementation of the assignment. Meetings, radio talk shows, and guided field tours to sensitize communities on the importance of ecosystems protections and management will be organized. Interim stakeholder identification, engagement and capacity building reports will be produced at key events but stakeholder engagement and training will be a continuous process. The final report will be produced at the end of the assignment. Specifically, the service provider shall;

- Organize four 5-day exchange visits and study tours to other catchments within Uganda for farmers and communities responsible for restoration activities (with maximum of 50 people per visit).
- Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchment.
- Produce monthly progress and other associated output Reports
- Organise monthly joint onsite inspections and monitoring by client and other technical staff.
- Produce as-built drawings and maintenance guidelines for the implemented actions.
- Establish and maintain 4 site sign-boards

Task 1: Support communities to restore degraded stretches of riverbanks through use of catchment management measures

Under this task, 72 km (36 km on each side) of the degraded stretches of the major rivers in Lwakhakha sub-catchment shall be restored through use of catchment management measures. Accordingly, the Service Provider shall;

- Mobilise 300 community members, and raise their awareness on the importance of river bank protection, restoration, and management to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 300 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilization using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans. (50 members per training for 2 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axes, Pangas etc.) to communities to implement the riverbank protection and restoration action plans
- Provide 47,520 indigenous tree seedlings of average height of 30cm (obtained from tree nurseries in the catchment) to Communities
- Demarcate off and re-vegetate 36 km buffer zone/stretch on both sides of the river using live markers like indigenous trees and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoilt during transportation + replacement planting).
- Procure 10,800 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil).
- Stabilize 36 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.
- Carry out quarterly technical inspections and monitoring of the interventions after establishment to ensure high survival rate of trees. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.

Task 2: Support communities to treat and restore degraded stretches of gullies to control erosion, siltation and destruction of property

Under this task, 6.73Km stretch of gullies shall be treated to control erosion, siltation and destruction of property in Lwakhakha sub-Catchment. Accordingly, the Service Provider shall;

- Mobilise 300 community members and create awareness on the importance of gully protection, treatment and management and ably participate in the gully treatment process (50 members per meeting)
- Conduct trainings for 300 selected community members to undertake and adopt gully protection, treatment and management measures including use of gully plugging (stones and sacks of soil), gully reshaping, planting grass strips, soil and water conservation measures upstream of the gullies (50 members per training for 3 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axes, Pangas etc.) to communities for use in treating deep gullies
- Provide 50kg-Sisal Sacks filled with humus soil (each km to be treated with 300 sacks with soil) to communities for use in for repairing 6.73km of collapsed gully sides
- Repair 6.73km of collapsed gully sides with Sisal Sacks
- Provide 2,700 indigenous tree seedlings with an average height of 30cm to communities and stabilise the sacks with them tree seedlings (400 seedlings per km)
- Establish 5km of soil bunds of 0.6m wide x 0.4m deep upstream of the gullies constructed along contour lines and stabilised with grass to control runoff, and increase infiltration
- Provide, plant and manage 3,3650 vetiver slips at a spacing of 20cm for gully treatment inclusive of reshaping
- Provide 810m³ of hard-core/stone boulders, gabion-wire mesh gauge 10, binding wire and cement mortar
- Install 440m³ gully plugs of 6.0(W) x 2.0(D) x 0.8 (I)m to a depth not exceeding 2.0m at a minimum spacing of 50m

- Install 370m³ gully plugs of 5.0 (W) x 3.0(D) x 1.0(I)m to a depth above 2.0m but not exceeding 4.0m (at a minimum spacing of 50m)
- Carry out quarterly technical inspections and monitoring of the treated gullies after establishment to ensure effective functioning of the structures established. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.

Task 3: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.

Under this task, soil and water conservation measures shall be promoted and established on 150ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation. Accordingly, the Service Provider shall;

- Mobilise 500 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities (50 members per meeting)
- Conduct trainings for 400 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)
- Provide tools (wheelbarrow, Handles, Spades, Pangas, etc.) to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.)
- Establish 30km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation
- Establish 250 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep to trap and store runoff for soil and water conservation in the landscape
- Establish 15km of stone bunds of specific dimensions (0.4m wide x 0.5m deep) per demonstration site including preparation of base
- Establish 15km of tree lines (200 trees per km)
- Establish 15km of contour terraces: length not exceeding 350 m for one direction of flow, 3-4m wide @ 0.1-0.5% grade
- Establish 15 grass strips to stabilise the soil and stone bunds, and terraces (each km is covered by 5000 vetiver slips)
- Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Establish 01 demonstration site for control of landslides in the most affected sub-counties in Lwakhakha sub-catchment (Bukokho and Bumbo) through use of catchment management measures
 - *Conduct trainings for 200 community members in Vetiver systems application in each sub county as both a sustainability and adoption strategy (50 members per training for 2 days)*
 - *Provide tools and materials (wheelbarrows, Handles, Spades, Pangas, etc.) to communities to implement vetiver systems for landslide control*
 - *Provide, plant and manage 20,000 vetiver slips to form grass bunds/strips for slope stabilization, runoff control, soil and water conservation and land rehabilitation*
- Demonstrate Water Source Protection Measures on 20 water sources to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge:
 - *Conduct sensitization meetings and establish water user committees for each of the 20 water sources (1 meeting of about 50 members per source)*
 - *Train 20 water user committees on water point source protection using MWE guidelines (20 members/committee, 1 Training/committee)*

- *Provide tools to communities to implement water source protection measures*
- *Establish 0.25km of Soil bunds per water point source*
- *Stabilise 0.25km of soil bunds with Vetiver grass per water source. Each km of soil bunds is covered by 1250 vetiver grass slips*
- *Establish a fence (of dimensions 15 x 15m) meters around the water points using procured treated poles, and Chain link 13.5 gauge 1.8x15m*

Task 4: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)

Under this task, 200ha of degraded communal and individual land shall be restored through tree growing (afforestation, reforestation and agroforestry). Accordingly, the Service Provider shall;

- Establish 3 tree nurseries in the Lwakhakha catchment each with a production capacity of 90,000 seedlings;
 - *Conduct trainings for 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)*
 - *Procure and supply 60kgs of assorted seed to nurseries for raising seedlings*
 - *Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance:*
 - *Carry out quarterly inspections and monitoring to provide extension services for 6 months after establishment to ensure tree survival and growth of the seedlings. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.*
- Mobilise and sensitize 300 households to engage in tree growing initiatives (50 members per meeting)
- Conduct trainings for 300 households in tree growing and forest management for restoration (50 members per training for 2 days)
- Provide tools and materials (wheelbarrow, Handles, Spades, Pangas, etc.) to 300 households for use during tree growing.
- Provide 80,000 tree seedlings of average height of 30cm to communities
- Plant 80,000 tree seedlings of average height of 30cm to communities and restore 200 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.
- Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Facilitate 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing. During the implementation of the restoration activities, SCMCs and MCMCs will be formed. These will be the people in charge of overseeing the implementation of the activities and will continue following up even beyond the project. However, in order to ensure that the people continue being committed to the agreed actions of restoring, bye laws that don't already exist need to be developed and their enforcement needs to take place.

Task 5: Support communities to establish and promote alternative income generating activities for improved livelihoods.

Under this task, Bee-keeping, fodder production, energy saving technologies (e.g. improved cookstoves), and fish farming shall be promoted and supported as alternative income generating activities. The beneficiaries of these alternative livelihoods are the land owners along river banks, gulleys and other degraded areas to be restored. Each farmer will select the enterprise they are interested in and it is after this that the list of farmers per enterprise will be generated. Success will be measured based on the number of community members or farmers that adopt and use the different alternative income generating activities.

Accordingly, the Service Provider shall;

1. Support Bee-keeping as alternative income generating activity
 - Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment.
 - Train 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing including value-addition.
 - Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:
 - 25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)
 - 1 Smoker pump (metallic) for 10 groups
 - 02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups
 - 1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups
 - 1 Air tight Bucket (20ltrs for each of 10 groups
 - 1 Kg of bee wax for each of 10 groups
 - 1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups
 - 1 bee knife and 1 Bee brush for each of 10 groups
 - Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives. Install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).
 - Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores) and provide them with value-addition facilities such as packaging materials and branding. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
2. Support fodder production as alternative income generating activity
 - Conduct 2 trainings to 100 selected farmers in fodder growing and management (weeding, manuring, protection, harvesting- Coppicing, Pollarding, and Side pruning)
 - Provide 10 Kgs seed/seedlings of 30cm height to selected farmers for fodder grass growing at 1.5 m spacing along contours
3. Support energy saving technologies (e.g. improved cookstoves) as alternative income generating activity
 - Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)
 - Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1day training per group)
 - Provide materials and equipment (wheelbarrow, Handles, Spades, Moulds, Pangas, Strings, etc.) to women groups and facilitate them (labour) to construct 2000 cookstoves for households.
 - Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective.
4. Promote fish farming as alternative income generating activity

- Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups.
- Conduct One training (2-day) for each of the 3 farmer groups of 20-40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).
- Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) to each of the farmer groups
- Construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m²) of the pond base
- Prepare the 3 ponds to receive fish: fill the pond with water; fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level);
 - if using compost, add about 10 kg per 100 m²
 - if using animal manure, add per 100 m² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure
 - if using plant wastes only, keep the fertilizing crib full and pack this material tightly in each crib"
- Stock the 3 ponds each with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes
- Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months.

4 ORGANIZATION OF THE ASSIGNMENT

4.1 LIAISON WITH MWE/DWRM

The assignment will be coordinated by the Component Manager for Component 3 of the IWMDP. However, coordination of day to day implementation of the activities will be done by the Kyoga Water Management Zones (KWMZ) working closely with the Catchment Management Organizations consisting of Stakeholders Forums, Catchment Management Committees, Catchment Technical Committee and Secretariat and backed up by MWE staff at the national level. The WMZs and the Catchment Management Organizations will be strengthened to perform their roles of stakeholder collaboration and coordination, and guidance to the implementation of the priority interventions. This will be done through providing a platform to have regular meetings, trainings and providing them with the necessary equipment to facilitate their coordination role. The respective government agencies at both national and local levels will however take lead in implementation of interventions falling within their mandates.

All the contractual issues related to the assignment will be formally handled by the Component Manager for Component 3 of the IWMDP but will be discussed and resolved at the local level with the relevant technical staff and the WMZ and local governments as appropriate.

The service provider will produce and issue relevant reports to the Client on key deliverables of the assignment in addition to monthly reports. The monthly reports will contain details of the work done and will also identify actual and anticipated difficulties and delays in the work, the causes, and remedial measures proposed. The firm shall submit 4 hard copies of each progress and technical report to the Client.

4.2 STAFFING/PERSONNEL

Important to note is that the implementation of this assignment shall be community-driven and so the community members on ground are envisaged to execute the activities therein. Therefore, the Service Provider shall employ and pay the community members for the work done as per agreed rates based on government Labour rates and precedence set by other similar projects.

Nevertheless, the Service Provider is required to elaborate in his technical offer on the envisaged logistical set-up and deployment of appropriate expert skills for the execution of the assignment. The Service Provider should carefully review the scope of services and propose a team of well-organized competent staff, adequately equipped with the necessary skills/facilities to guide the communities in execution of the assignment, bearing in mind that a substantial amount of work in this assignment is field based.

The Service Provider will be expected to present his staffing schedule in a manner that makes it clear as to which personnel will be involved in a specific activity. A staff organogram reflecting the envisioned activities should, therefore, be presented.

4.2.1 Staffing Requirements

The Service Provider shall identify and deploy a team necessary to carry out the assignment and should describe clearly the functions of each team member. The Service Provider is however expected to provide a team, composed of the following key staff.

- Water/Environmental Management expert (team leader)
- Forestry/Tree growing Specialist
- Soil and Water Conservation Specialist
- Community Development Specialist

The Service Provider is at liberty to propose additional staff/competencies/short-term specialists as deemed appropriate for the successful execution of the assignment.

4.2.2 Staffing Qualifications

The key personnel shall have minimum academic qualifications and experience as stipulated below:

- 1 No. Water/Environmental Management expert (team Leader): A master's degree in Water or Environmental Engineering / Management / Science or related field with 8 years of general experience, 5 years of Specific experience in undertaking water related environmental assessments and in environment management planning. Experience in use of Geographical Information System tools will be an advantage.
- 1 No. Forestry/Tree growing Experts: The Forestry/Tree growing Expert should have a Bachelor's degree in Forestry with experience of 10 years in tree growing. A minimum of 3 years' experience in training farmers in tree planting and agroforestry at community level will be needed.
- 1 No. Soil and Water Conservation Experts: The Soil and Water Conservation Expert should have a Bachelor's degree in natural resources/ water resources management, Agriculture, or related field with experience of not less than 10 years in natural resources/water resources management. 3 years specific experience in construction of soil and water conservation structures, as well as community involvement and training farmers in catchment restoration measures will be needed.
- 1 No. Community Development Experts: The Community Development Specialist shall hold at a minimum a bachelor's degree in social sciences, social works & administration, development studies or community psychology. A Master's Degree in those fields will be an added advantage. The proposed expert should have at least 5 years of working experience, of which 3 years should have been in natural resources management. The expert should

have experience in undertaking impact, social and gender analysis. S/He should be knowledgeable in preparing appropriate awareness programs. The Expert shall be responsible for mobilizing and sensitization of communities during the project implementation process.

The experts are expected to have local experience and knowledge of conditions in the sub catchment. Ability to speak the local language by Community Development Expert will be required. The Service Provider may seek any additional expertise required for the assignment that may not be available among the team members.

4.2.3 Familiarization with the Assignment

To familiarize with the services to be provided under this assignment, the prospective bidder is advised to visit the project areas. However, it should be understood that any cost incurred in this regard shall not be a reimbursable expense to the Service Provider.

The prospective bidder shall review the project documents, including but not limited to the environmental and social briefs prepared for the area, as well as the Environmental and Social Management Framework (ESMF).

5 QUALIFICATION OF THE SERVICE PROVIDER

The service provider should meet the following minimum requirements:

- ii. Copies of original documents defining the constitution or legal status including documentary evidence for example articles of association, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- iii. Total monetary value of Services of a minimum average of US\$800,000 performed for within the last five years;
- iv. Minimum experience in Services of a similar nature and scope for the last five years, and details of Services under way or contractually committed; and names and address of clients who shall be contacted for further information on those contracts. The required scope shall be a total of at least;
 - a. 50km of riverbanks restored in the last five years,
 - b. 5km of degraded gullies treated in the last five years,
 - c. 100ha of degraded land afforested in the last five years, and
 - d. 100ha of land under soil and water conservation in the last five years.
- v. Qualifications and experience of the key experts/ personnel as specified in section 4.1 above.

6 REPORTS AND SCHEDULE OF DELIVERIES

The assignment will be undertaken over a maximum period of 24 calendar months.

It is however, the responsibility of the Service Provider to establish a detailed work program within the above time frame. This should be guided by his professional judgment of the assignment's requirements and knowledge of the local conditions and needs. The detailed schedule for the required reporting is contained in Table 6.1.

Table 6-1: Reporting/ Delivery Schedule

Deliverable No.	Timing after Commencement	Content	No. of Copies of Reports
D.1	Month 2	Inception Report containing the Service Provider's mobilization, updated	4

Deliverable No.	Timing after Commencement	Content	No. of Copies of Reports
		work plan and schedule for the provision of the services. Should include any major inconsistency in the TOR, and other challenges that have become apparent during this period, methodology and time schedule for the services and the proposed content and structure of the various reports.	
D.2	Month 5	3 Tree nurseries established each with a production capacity of 90,000 seedlings	4
D.3	Month 7	Water Source Protection on 20 water sources demonstrated to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge.	4
D.4	Month 9	Establishment of soil and water conservation measures on 150 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation promoted and supported	4
D.5	Month 11	200 ha of deforested and degraded communal and individual land restored through tree growing (afforestation, reforestation and agroforestry)	4
D.6	Month 16	72 km of the degraded stretches of the major rivers in Lwakhakha sub-catchment restored through use of catchment management measures	4
D.7	Month 19	6.73km stretch of gullies treated to control erosion, siltation and destruction of property in Lwakhakha sub-Catchment	4
D.8	Month 24	400 households trained and supported in establishing alternative income generating (livelihood) activities	4
D.9	Monthly	A report (1-2 pg maximum) comprising of a narrative or graphic presentation, showing details of the Service Provider's progress, changes in the assignment schedule, impediments and proposed remedies, in addition to documentation on lessons learned.	4
D.10	Every 4 months	Stakeholder identification, mobilisation, engagement and capacity building Reports	4

The Service Provider is encouraged to assess the appropriateness of the suggested milestones and comment upon realistic expectations, especially with regard to the allocated time frames for the activities, and propose his own assessment and work plan as part of his proposal.

All reports have to be submitted in both soft (*MS Word, PDF*) and hard copy. The hard copies will be prepared in DIN A4 format, except for plans and drawings which should be prepared in DIN A3 format. The reports should be clearly labelled, i.e. title of the study indicated, for easy identification and documentation purposes. All reports shall be prepared in the English language.

The Service Provider shall work closely with the Client with the aim of capacity building and knowledge transfer.

The time provided is only indicative of the expected time used for each item but the order of implementation will be explained by the service provider with justification in the technical proposal.

All reports will be submitted to:

The Director, Directorate of Water Resources Management
P.O. Box 20026, Luzira-Kampala
Tel: 0414 321342

For the attention of: Manager, IWMDP Component 3 (WRM)

A Task Force will be appointed to supervise the implementation of this activity and coordinate the day to day activities.

7 DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

To the extent possible, the Client will provide free of charge all existing information, data, reports and maps in her custody and will assist the Service Provider in obtaining other relevant information and materials from governmental institutions and state authorities as far as possible. However, it is the duty of the Service Provider to check availability, quality and suitability of this information. The information, data, reports etc. as mentioned above will be available for the Service Provider 's unlimited use during execution of the proposed services.

LOT 2:

Supporting Communities in Aswa II Sub Catchment to Implement Priority Catchment Management Measures

1 INTRODUCTION

Government of Uganda, with funding from the World Bank is implementing Integrated Water Management and Development Project which provides support to catchment management and restoration activities in Aswa II sub-catchment in Aswa Catchment. The project supports implementation of catchment management measures, including soil and water conservation, river bank and wetland protection; and providing alternative livelihoods for affected communities.

1.1 SUB CATCHMENT DESCRIPTION

1.1.1 Location

The project is located in Aswa II sub catchment. The sub catchment extends on the south-western side of the main Aswa Catchment; covering a surface area of 1,588km² and encompasses parts of Gulu, Omoro, Pader, Oyam, Kole and Lira districts. The sub-catchment lies within the plateau with altitude ranging from 900 to 1,100 masl.

1.1.2 Physical Environment

a) Climate

Aswa II sub-catchment registers an average annual rainfall of about 1,200mm, the highest single annual amount being slightly more than 1,420mm and the lowest being about 1,000mm. Figure 1.1 shows the mean monthly rainfall pattern for the Sub catchment.

Temperature analysis indicates highest values between January and March (31-33°C) and the lowest between July and August (27-29°C). This area experiences high rates of evapotranspiration, which has a resultant effect on runoff, groundwater recharge and dry season flows, increasing drought risks.

b) Topography

The Sub-catchment lies within the plateau with altitude ranging from 900 to 1,200 masl. The sub-catchment is generally a landscape of open plains, and the relative relief is seldom more than 21 to 30 metres. The inter-fluves are broad and covered with murrum, and the valleys are wide. Occasionally the



Figure 1-1: Extent of Aswa II Sub catchment (Districts that lie wholly / partially in Aswa II sub catchment)

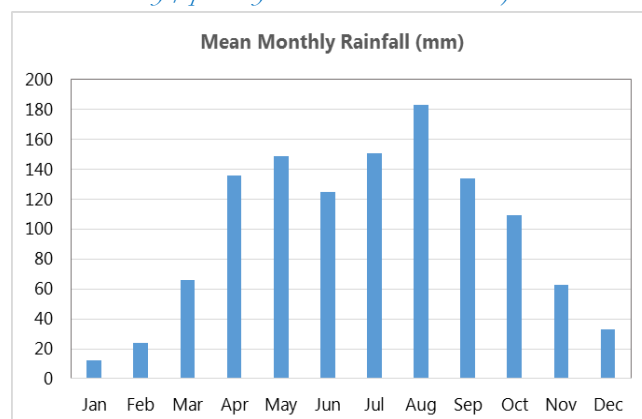


Figure 1-2: Mean monthly rainfall pattern for the Sub catchment

plains are punctuated by rock out-crops or hills such as Te-Arie (in Aler parish, Ogur subcounty of Lira District); Walela rock in Walela parish (Aromo subcounty, Lira District) and Awere hill in Palaro parish (Odek subcounty of Omoro District).

c) Geology and Soils

Unlike many parts of Uganda, Aswa II sub catchment is entirely composed of Cainozoic rocks of Pleistocene to recent (rock formations of between 1 million to 10,000 years to recent), and only a small portion of other rocks. The latter comprise mobilized and intrusive granites found in Alito sub-county where the railway runs across it.

The attributes of the Cainozoic rocks include the presence of sediments, alluvium, black soils and moraines; particularly associated with wetlands. In general, the soils are categorized as ferruginous sandy loam. The soil has a high percentage of sandy soil and therefore it is vulnerable to erosion. Since the soil is sandy in nature, it has a low water retention capacity and a high rate of water infiltration and this implies the moisture content of the soil is generally low. The color of the soil is grayish brown in many places but gray clay with poor drainage. The poor drainage of the soils in the swampy area coupled with the high-water retention capacity makes swampy areas water logged

d) Drainage

River Aswa drainage system is the focus of Aswa II Sub-catchment. The sub-catchment is traversed by a wealth of streams that originate from Lira (Ogur, Agweng and Aromo Subcounties); Kole (Alito and Okwerodot subcounties); Oyam (Otwal and Aleka sub-counties) and Pader (Awere subcounty). The main streams that flow to River Aswa include:

- River Aleka, which originates from Oyam District (Otwal and Aleka sub-counties) and flows into River Aswa (Moroto) in Aromo subcounty;
- River Agwar also originates from Oyam District (Otwal and Aleka sub-counties) and joins River Aswa in Aromo subcounty;
- River Achake, fed by smaller streams from Lira District (Ogur and Agweng subcounties) and Kole District (Alito and Okwerodot subcounties), and joins River Agwar in Aromo subcounty before flowing into River Aswa.
- River Aromo, which marks the boundary between Aromo and Odek subcounties, flows directly into River Aswa;
- River Angole, which is fed by many streams within Awere subcounty of Pader District;
- In Omoro District, the main rivers include, among others, Odek, Agweno, Lukoto, Dawa and Chome. River Chome is fed by many streams from Lalogi and Odek subcounties, and forms the boundary between the two subcounties. It is also the boundary between Odek and Paicho subcounties.
- In Gulu District (Paicho subcounty), River Ogwari joins Chome before flowing into River Achwa. Others include Layeye, Larwodo, Labunyang and Aworang.

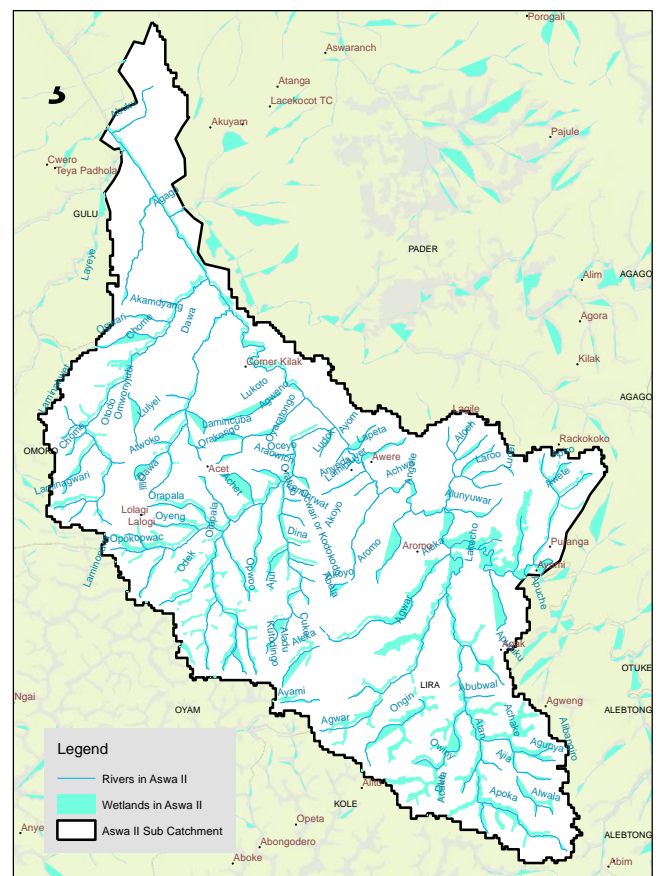


Figure 1-3: Rivers and Wetlands systems in Aswa II sub catchment

Associated with these rivers and streams are a number of wetlands.

1.1.3 Socio-Economic Environment

a) Population

According to the National Population and Housing Census 2014 (UBOS, 2014), Aswa II has a total population of 376,975 people (with 184,152 males and 192,823 females). These are structured in 76,105 households. The average size of the household is 5 people, which is slightly higher than the national average of 4.7 (UBOS, 2017)¹².

b) Main economic activities

The main economic activity within the sub-catchment is agriculture. Over 90% of the population depends on subsistence agriculture. The crops grown include cotton, sunflower, simsim, cassava, millet, sorghum, potatoes, soy bean, pigeon peas, etc. Crop production is largely rain fed. Profitability from cultivation in the basin is low with high risks of exposure to floods and drought and loss of yields. Grazing and pastoralism are practiced under the same conditions of agriculture and they are therefore completely depending on rain water for water points and grassland availability.



A sunflower garden near Acaling swamp (36 N 464457 284959)



A horticulture garden on the immediate banks of Owacha stream (36 N 478113 291411)



Charcoal burning adjacent to Angole stream (36 N 484471 296268)



Eucalyptus woodlot near Barwot swamp (36 N 479308 271561)

Figure 1-4: Different economic activities in the Aswa II sub catchment

1.1.4 Biological Environment

a) Vegetation

The Aswa II sub catchment lies in areas described by Langdale-Brown et al. (1964) as dry Butryospermum parkland dominated by *Combretum molle*, *Combretum collinum*, *Terminalia glaucescens*, *Vitex paradoxa* and *Acacia hockii* with tall grasses and *Cyperus papyrus* wetlands. These areas are dominated by the following grasses: *Hyparrhenia filipendula*, *Hyperthelia dissoluta* and *Brachiaria brizantha* among which the tree cover varies from 5% to 40%. The ground vegetation is

¹² UBOS (2017) The Uganda National Household Survey 2016/17.

dominated by *Brachiaria brizantha*, *Hyperthelia dissoluta*, *Chloris gayana*, *Sporobolus africana*, *Setaria sphacelata*, *Pennisetum polystachion*, *Cyperus distans* and *Brachiaria decumbens*. The characteristic wooded grassland communities consist of mainly *Lonchocarpus laxiflorus*, *Acacia hockii*, *Balanites aegyptiaca*, *Combretum collinum*, *Hymenocardia acida*, and *Piliostigma thonningii*. Other common species include *Combretum binderanum*, *Terminalia glauscecens*, *Hoslundia opposita*, *Maytenus senegalensis*, *Securidaca longipedunculata* and *Ximenia americana* and *Vitellaria paradoxa*.

According to the IUCN Status, most of the species have been classified as Least Concern (LC) while a few have not been evaluated.

The natural vegetation has increasingly been degraded through factors such as charcoal burning and agricultural expansion. During the twenty years of insurgency in Northern Uganda, the areas around the Internally Displaced Camps (IDPs) experienced deforestation and forest degradation. Because of the high concentration of the populations, such areas experienced high losses of woodlands due to extraction of building materials, fuelwood (both for domestic and commercial purposes, and agriculture and agricultural activities). The effect is still felt, especially in most parts of Lira District, which was relatively safer during the insurgency. Currently there are only a few patches of woodland forests left mainly in parts of Pader, Omoro and Gulu Districts (Paicho subcounty), and along River Aswa. Some natural trees can still be seen scattered within the farmlands. The return of communities to their land (around 2006-2007) increased the loss of forest cover as they opened up land for agriculture. There have been some efforts of tree planting under agroforestry system for species like *Grevillea*, *Gmelina*, fruit trees (mangoes, citrus, jack fruit) and woodlots of pine and eucalyptus.

b) Large mammals

The Aswa II sub-catchment has a rich fauna diversity. However, it has been reduced over the past years as a result of increased human activity like hunting, Tsetse fly control and habitat destruction through cultivation, grazing and settlement. The most common mammals in the area are as indicated in Table 1-1 below.

Table 1-1: Common mammal in Aswa II sub-catchment

English name	Scientific name	IUCN Status
Vervet Monkey	<i>Chlorocebus pygerythrus</i>	Least Concern
Olive Baboon	<i>Papio Anubis</i>	Least Concern
Guereza (Black & White) Colobus	<i>Colobus guereza</i>	Least Concern
Aardvark (Ant Bear)	<i>Orycteropus afer</i>	Least Concern
Red River Hog	<i>Potamochoerus porcus</i>	Least Concern
Bushbuck	<i>Tragelaphus scriptus</i>	Least Concern
Common (Bush) Duiker	<i>Sylvicapra grimmia</i>	Least Concern
Oribi	<i>Ourebia ourebi</i>	Least Concern

c) Birds

According to previous studies, 84 species of birds have previously been recorded in the project area comprising 30 species along major roads, 46 species in fallow areas, and 31 species in along streams. Species with a preference for some level of forest cover dominated the records and in addition a few water birds. Seven species of conservation concern (Brown Snake Eagle, Spot-flanked Barbet, White-headed Saw-wing, Grey-capped Warbler, Papyrus Gonolek, Golden-backed Weaver and Cardinal Quelea) were recorded in the study area. Of these the Papyrus Gonolek (*Laniarius mufumbiri*) is categorized as near threatened according to IUCN 2013. The common birds are indicated in Table 1-2 below.

Table 1-2: Common birds in Aswa II sub-catchment

Species	Status	Habit	Regional	IUCN Status
Brown Snake Eagle <i>Circaetus cinereus</i>	R(B)		R-NT	least Concern
Spot-flanked arbet <i>Tricholaema lacrymosa</i>	RB		R-RR	least Concern
White-headed Saw-wing <i>Psalidoprocne albiceps</i>	RB, AfM/NB	f	R-RR	least Concern
Grey-capped Warbler <i>Eminia lepida</i>	RB	fW	R-RR	least Concern

Papyrus Gonolek <i>Laniarius mufumbiri</i>	R(B)	W	R-NT/RR	Near Threatened
Golden-backed Weaver <i>Ploceus jacksoni</i>	RB	W	R-RR	least Concern
Cardinal Quelea <i>Quelea cardinalis</i>	RB		R-RR	least Concern

- Status: habitat and threat category are based on Wilson (1994) and Carswell et al (2005); RB – resident breeder, R (B) – resident, breeding not proved (but likely), AfM/B – intra-African migrant, breeding, NB – not breeding
- Habitat: - W – always resident in or near water, w – often resident or observed in or near water, F – Forest resident, f – resident in and near forests
- Regional threat status (based on Carswell et al 2005) R-NT – regionally near-threatened
- R-RR- species of regional responsibility

d) Reptiles

The sub-catchment is located in an area which experiences hot temperatures, generally above 25°C during most times of the year. This favours the thriving of reptiles since these generally depend on the surrounding environment for temperature regulation. The most common reptiles here are shown in Table 1-3 below.

Table 1-3: Common reptiles in Aswa II sub-catchment

Species	Common Name	Conservation Status
<i>Agama agama</i>	Orange-headed agama	Not evaluated-IUCN
<i>Bitis gabonica</i>	Gaboon viper	Not evaluated-IUCN
<i>Bitis nasicornis</i>	Rhinoceros viper	Not evaluated-IUCN
<i>Chamaeleo gracilis</i>	Slender Chameleon	Least Concern (LC)
<i>Crocodylus niloticus</i>	Nile crocodile	Least Concern (LC)
<i>Dendroaspis jamesoni kaimosae</i>	Western forest green mamba	Not evaluated-IUCN
<i>Geochelone pqrdaqlis</i>	Leopard tortoise	Not evaluated-IUCN
<i>Hemidactylus brooki</i>	Brook's House gecko	Least Concern (LC)
<i>Kinixys belliana</i>	Bell's hinged tortoise	Not evaluated-IUCN
<i>Leptotyphlops scutifrons</i>	Peter's worm snake	Not evaluated-IUCN
<i>Naja melanoleuca</i>	Forest/water cobra	Not evaluated-IUCN
<i>Python sebae</i>	Rock python	Not evaluated-IUCN
<i>Thelotornis kirtlandi</i>	Twig snake	Least Concern (LC)
<i>Typhlops lineolatus</i>	Lineolate blind snake	Not evaluated-IUCN
<i>Typhlops punctatus</i>	Spotted blind snake	Not evaluated-IUCN
<i>Varanus niloticus</i>	Nile monitor	Not evaluated-IUCN

e) Amphibians

The Aswa sub catchment has a large network of stream, rivers, wetlands and flood plains. Such an environment acts as a good habitat for amphibians since it favours their reproduction and all other activities including feeding. Some of the amphibians identified here are as indicated in Table 1-4 below.

Table 1-4: Common amphibians in Aswa II sub-catchment

Species	Common Name	Conservation Status (IUCN)
<i>Afrizalus osorioi</i>	Osorio's spiny reed frog	Least Concern (LC)
<i>Amietia angolensis</i>	Angola River Frog	Least Concern (LC)
<i>Bufo vittatus</i>		Data deficient
<i>Hemisis marmoratus</i>	Marbled snout burrower	Least Concern (LC)
<i>Hoplobatrachus occipitalis</i>	Crowned bullfrog	Least Concern (LC)
<i>Hyperolius pusillus</i>		Least Concern (LC)
<i>Hyperolius viridiflavus</i>	Common reed frog	Least Concern (LC)
<i>Kassina senegalensis</i>		Least Concern (LC)
<i>Leptopelis bocagii</i>		Least Concern (LC)
<i>Phrynobatrachus natalensis</i>	Natal dwarf puddle frog	Least Concern (LC)
<i>Ptychadena porosissima</i>		Least Concern (LC)
<i>Xenopus victorianus</i>	Mwanza frog	Least Concern (LC)

1.2 SUB CATCHMENT MANAGEMENT RELATED ISSUES AND RECOMMENDED MEASURES

1.2.1 Identified issues and hotspots for interventions

The term “hotspot” means a place where there is significant land degradation resulting in lowering of the quality and quantity of water in water bodies and compromise in the ecosystem services. The hotspots and actual intervention sites for Aswa II Sub-Catchment are presented in Table 1-5.

Table 1-5: Confirmed catchment management issues and recommended investment measures in Kochi Sub Catchment

District	Subcounty	Hotspot	Key Issues	Management Measures
Lira	Aromo	<ul style="list-style-type: none"> ○ Otara Parish: River Achwa/Moroto (Angole A village) ○ Otara parish: River Aswa.,Angole A &B village, Ogot village, Angole stream ○ Bar Pii parish: Aleka stream and associated wetland. Dam Odoca village, Acoli Dumu village ○ Apuce Parish: Apuce wetland, Aliro village, Apuce B village, Awiny ipany village 	<ul style="list-style-type: none"> ○ Deforestation along 30 Km stretch of River Aswa stretching from Angole A to Apuce ○ Encroachment and degradation of wetland system for cultivation ○ Deforestation due to agricultural expansion ○ Flooding during rainy season ○ Riverbank and wetland degradation through agricultural practices ○ Collapsed river banks at Angole A ○ Siltation/sedimentation of rivers/streams and dams due to soil erosion 	<ul style="list-style-type: none"> ○ Construction of gabions for river bank stabilization ○ Demarcation and re-vegetation of river bank along Angole A, Angole B, Acutkumu and Apuce ○ Demarcation and re-vegetation of Aswa river bank along Angole A, Angole B, Acutkumu and Apuce (30 km) ○ Demarcation and re-vegetation of Angole stream and wetlands (3.21km) ○ Restoration of degraded wetlands / flood area – Angole A & B villages) ○ Construction of gabions on River Aswa at Angole A for river bank stabilization ○ Soil and water conservation measures ○ Agroforestry in Angole A, B and Ogot villages ○ Bee-keeping
	Agweng	<ul style="list-style-type: none"> ○ Angolocom parish: Angolocom village, Apitalito wetland ○ Te-Adwong parish: Acake / Amie dyel wetland, Amie dyel village, Ajour village, Aweipiny village ○ Te-Oburu parish: Atubu stream, Teoburu village, Awiaumu village, Abongoamone village 	<ul style="list-style-type: none"> ○ Encroachment of riverbank and wetland for agriculture and cattle grazing ○ Loss of forest cover in associated villages ○ Soil erosion in cultivated lands leading to siltation and sedimentation of the stream and wetland 	<ul style="list-style-type: none"> ○ Restoration of degraded riverbank and wetland (3 km) ○ Soil and water conservation measures ○ Agroforestry ○ Bee keeping
	Ogur	<ul style="list-style-type: none"> ○ Apoka parish: Omono anyira gedo – Alwala stream, Omono anyira gedo village ○ Okwaloamara parish: Acan pe winyo abwote village, Okwaloamara A Village, Alibangiro wetland 	<ul style="list-style-type: none"> ○ Encroachment of riverbank and wetland for agricultural expansion ○ Soil erosion on cultivated into the wetland and riverbank leading to siltation and sedimentation ○ Loss of forest cover due to agricultural expansion 	<ul style="list-style-type: none"> ○ Restoration of degraded wetlands and riverbanks (5.05km) ○ Soil and water conservation measures ○ Agroforestry ○ Bee keeping

Oyam	Otwal	<ul style="list-style-type: none"> ○ Anyomolyec parish: Acanling wetland, Aryo Dong lye wetland, Ader / Angolo stream, Acanling village, Barwino village, Aryo Dong lye village ○ Anyomolyec parish: Tegweng/Opangul stream and wetland 	<ul style="list-style-type: none"> ○ Riverbank and wetland degradation due to agricultural expansion ○ Loss of forest cover due to charcoal burning and agricultural expansion ○ Soil erosion from cultivated land leading to siltation and sedimentation of the wetlands and Ader/Angolo stream ○ Floods usually experienced during the rain seasons 	<ul style="list-style-type: none"> ○ Restoration of wetlands (2.30km) ○ Demarcation and re-vegetation of banks of Ader/Angolo streams (5.66km) ○ Soil and water conservation measures in adjacent villages ○ Agroforestry ○ Bee keeping
	Aleka	<ul style="list-style-type: none"> ○ Alibi parish: Aleka stream, Agwar stream, Barlanyo village, Alengo village, Ogaro village, Barokango village 	<ul style="list-style-type: none"> ○ Riverbank degradation due to agricultural expansion ○ Destabilized river banks ○ Loss of forest cover due to charcoal burning and agricultural expansion ○ • Soil erosion from cultivated land leading to siltation and sedimentation of the wetlands and Ader/Angolo stream 	<ul style="list-style-type: none"> ○ Demarcation and re-vegetation of river banks for Rivers Aleka and Agwar ○ Restoration of wetlands along Rivers Aleka and Agwar ○ Construction of gabions for river bank stabilization along Aleka stream and River Agwar ○ Soil and water conservation measures in adjacent villages ○ Agroforestry
Kole	Okwerodot	<ul style="list-style-type: none"> ○ Adellogo parish: Dula stream, Acake stream, Acake Dam, Akongolo stream, Dula B village, Awobe-Ode A village, Awobe–Ode B village ○ Adellogo parish: Wangabam Stream, Alege village, Barilec village, Lelamun village, Lai village 	<ul style="list-style-type: none"> ○ Degradation of the riverbanks and associated wetlands, with garden within the riverbanks ○ Loss of forest cover due to tree cutting for agricultural expansion ○ • Siltation and sedimentation of river Acake and associated streams due to soil erosion in adjacent villages 	<ul style="list-style-type: none"> ○ Restoration of degraded wetlands ○ Demarcation and re-vegetation of riverbanks (8.01km) ○ Soil and water conservation measures ○ Agroforestry
	Alito	<ul style="list-style-type: none"> ○ Alito parish: Bar Rwot wetland and stream, Bar Rwot village ○ Apioguro parish: Atan Dam/stream, Amintato A Village, Amintato B village, Abungenga village, Tekulu village 	<ul style="list-style-type: none"> ○ Encroachment of wetland for agricultural activities ○ Siltation of streams and rivers due to soil erosion ○ Loss of forest cover within the riverbanks and adjacent villages 	<ul style="list-style-type: none"> ○ Restoration of degraded wetlands ○ Demarcation and re-vegetation of river banks ○ Soil and Water Conservation Measures ○ Agroforestry ○ Bee keeping
Pader	Awere	<ul style="list-style-type: none"> ○ Rackoko, Lagile and Angole parishes: Angole stream, including along Bolo dam, Atedre and Lamina pur villages, Angolelaroo village, Lunyiri East village, Laliya laroo village 	<ul style="list-style-type: none"> ○ Degradation of riverbanks and wetland ○ Deforestation due to charcoal burning and agricultural expansion 	<ul style="list-style-type: none"> ○ Demarcation and re-vegetation of banks of rivers and streams (5.64km) ○ Soil and Water ○ Conservation Measures ○ Agroforestry
	Puranga	<ul style="list-style-type: none"> ○ Parwech Parish: Owete / Agrikasa, Omona village 	<ul style="list-style-type: none"> ○ Seasonal flooding 	<ul style="list-style-type: none"> ○ Soil and water conservation measures

	Angangura	<ul style="list-style-type: none"> ○ Kalawiya, Abuku stream, Jupa village 	<ul style="list-style-type: none"> ○ Soil erosion, ○ Deforestation 	<ul style="list-style-type: none"> ○ Soil and water conservation measures ○ Establishment of woodlots
Omoro	Odek	<ul style="list-style-type: none"> ○ Palaro parish: Odek Centre village, Odek stream and associated Agweng tino and Lawor streams ○ Palaro parish: Ludok wetland ○ Lamola Parish: Akoyo stream ○ Lamola Parish: Awaci Stream ○ BinyaParish: Dawa stream ○ Binya Parish: Chome river 	<ul style="list-style-type: none"> ○ Degradation of riverbanks and wetlands ○ Deforestation ○ Soil erosion on cultivated lands 	<ul style="list-style-type: none"> ○ Demarcation and re- vegetation of banks of rivers and streams (14.2km) ○ Soil and water conservation measures ○ Restoration of degraded wetlands ○ Fish ponds for livelihood enhancement ○ Construction of gabions for river bank stabilization ○ Reforestation /Afforestation
	Lalogi	<ul style="list-style-type: none"> ○ Gem Parish: Gowoke stream and adjoining wetland in Opaki village 	<ul style="list-style-type: none"> ○ Degradation of river banks and wetland ○ Deforestation 	<ul style="list-style-type: none"> ○ Demarcation and re- vegetation of river banks
		<ul style="list-style-type: none"> ○ Jaka and Idobo Parishes: Come river in Ocim village 	<ul style="list-style-type: none"> ○ River bank degradation ○ Deforestation 	<ul style="list-style-type: none"> ○ Demarcation and re- vegetation of river bank ○ Afforestation and reforestation of Jaka and Idobo parishes
Gulu	Paicho	<ul style="list-style-type: none"> ○ Omel Parish 	<ul style="list-style-type: none"> ○ Deforestation through charcoal burning and agricultural expansion ○ Soil erosion in cultivated land ○ Collapsing river bank 	<ul style="list-style-type: none"> ○ Soil and water conservation measures ○ Reforestation /Afforestation ○ Construct gabions to protect river banks

2 OBJECTIVES

The overall objective of the assignment is to support communities in Aswa II sub catchment to implement catchment-based and community driven actions to improve soil and water conservation, riverbank restoration and community livelihood improvements.

The specific objectives of the assignment are to:

- a) identify, mobilise, engage and build capacity of stakeholders and communities in undertaking catchment-based and community driven catchment management measures.
- b) support communities to restore degraded hotspot wetlands and riverbanks in Aswa II sub catchment
- c) support communities to implement soil and water conservation measures on priority hotspots in the sub catchment.
- d) Support communities to restore deforested and degraded land through community tree growing on individual farmers land, public land and riverbanks
- e) support communities to establish and promote alternative income generating activities for improved livelihoods.

3 SCOPE OF SERVICES

This assignment seeks to support communities in Aswa II sub catchment to implement catchment-based and community driven actions to improve soil and water conservation, riverbank restoration and community livelihood improvements. Thus, community mobilization and sensitizations will be key to the implementation of the assignment. Sub-catchment and catchment management committees shall play a major role in this assignment and the Service Provider is requested to engage and involve them accordingly.

As part of general items and cross cutting aspects, the Service Provider shall identify key stakeholders including community and Local Government representatives and develop appropriate mobilization and sensitization tools and approaches. The Service Provider shall carry out community capacity building sessions during implementation of the assignment. Meetings, radio talk shows, and guided field tours to sensitize communities on the importance of ecosystems protections and management will be organized. Interim stakeholder identification, engagement and capacity building reports will be produced at key events but stakeholder engagement and training will be a continuous process. The final report will be produced at the end of the assignment. Specifically, the service provider shall;

- Organise four 5-day exchange visits and study tours to other catchments within Uganda for farmers and communities responsible for restoration activities (with at least 50 people per visit).
- Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchment.
- Produce monthly progress and other associated output Reports
- Organise monthly joint onsite inspections and monitoring by client and other technical staff.
- Produce as-built drawings and maintenance guidelines for the implemented actions.
- Establish and maintain 4 site sign-boards

Task 1: Support communities to restore degraded stretches of riverbanks in Aswa II sub-catchment through use of catchment management measures

Under this task, 280km (140 km on each side) of the degraded stretches of the major rivers in Aswa II sub-catchment shall be restored through use of catchment management measures. Accordingly, the Service Provider shall;

- Mobilise 700 community members, raise their awareness on the importance of river bank protection, restoration and management to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 700 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans (50 members per training for 2 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axe, Pangas etc.) to communities for use in implementing the riverbank protection and restoration action plans
- Provide 184,800 indigenous tree seedlings of an average height of 30cm (obtained from tree nurseries in the catchment) to Communities
- Demarcate off and re-vegetate 280km buffer zone/stretch on both sides of the river using live markers like indigenous trees, and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoilt during transportation + replacement planting).
- Procure 42,000 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil)
- Stabilize 140 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.
- Organise sub-catchment level meeting for 200 people involving districts to prepare standard operating procedures (SOPs) for responsible sand mining.
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival rate of trees. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.

Task 2: Support demarcation and restoration of degraded Wetlands to perform their ecological and socio-economic functions in Aswa II sub-Catchment

Under this task, 500ha of the degraded wetlands in Aswa II sub-catchment shall be restored through use of catchment management measures. Accordingly, the Service Provider shall;

- Conduct awareness raising meetings targeting 500 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 500 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)
- Provide tools to communities to implement wetland protection and restoration action plans
- Procure 40,000 Sisal stems as local planting materials to demarcate the 500ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)
- Demarcate off 500ha buffer zone of the wetland using tree lines (80 Sisal stems per ha at a spacing of 5m by 5m)
- Engage and strengthen 300 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce by laws for the demarcated wetlands in the sub catchment
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.

Task 3: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchment.

Under this task, soil and water conservation measures shall be promoted and established on 110ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation. Accordingly, the Service Provider shall;

- Mobilise 450 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities (50 members per meeting)
- Conduct trainings for 350 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)
- Provide tools (wheelbarrow, Handles, Spades, Pangas, etc.) to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.)
- Establish 10 Ha of soil and water conservation structures at selected farm sites to serve as training and demonstration centres.
- Support individual farmers to establish 100 Ha similar soil and water conservation structures on the hotspots identified on their individual land.
- Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.

Task 4: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)

Under this task, 800ha of degraded communal and individual land shall be restored through tree growing (afforestation, reforestation and agroforestry). Accordingly, the Service Provider shall;

- Establish 3 tree nurseries in the Aswa II catchment each with a production capacity of 90,000 indigenous tree seedlings;
 - Conduct trainings to 150 selected individuals and groups in nursery establishment and management
 - Procure and supply 60kgs of seed to nurseries for raising seedlings
 - Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance
 - Carry out quarterly inspections and monitoring to provide extension services for 6 months after establishment to ensure tree survival and growth of the seedlings. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.
- Mobilise and sensitize 500 households to engage in tree growing initiatives (50 members per meeting)
- Conduct trainings for 500 households in tree growing and forest management for restoration (50 members per training for 2 days)
- Provide tools and materials (wheelbarrow, Handles, Spades, Pangas, etc.) to 500 households for use during tree growing.
- Provide 320,000 tree seedlings of average height of 30cm to communities
- Plant 320,000 tree seedlings of average height of 30cm to communities and restore 1000 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.
- Carry out quarterly inspections and monitoring to provide extension services after establishment to ensure tree survival and growth. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.
- Facilitate 200 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing. During the implementation of the restoration

activities, SCMCs and MCMCs will be formed. These will be the people in charge of overseeing the implementation of the activities and will continue following up even beyond the project. However, in order to ensure that the people continue being committed to the agreed actions of restoring, by laws that don't already exist need to be developed and their enforcement needs to take place.

Task 5: Support communities to establish and promote alternative income generating activities for improved livelihoods.

Under this task, Bee-keeping, energy saving technologies (e.g. improved cookstoves), fruit growing, and fish farming as alternative income generating activities shall be promoted and supported. The beneficiaries of these alternative livelihoods are the land owners along river banks, and other degraded areas to be restored. Each community member or farmer will select the enterprise they are interested in and it is after this that the list of farmers per enterprise will be generated. Success will be measured based on the number of community members or farmers that adopt and use the different alternative income generating activities.

Accordingly, the Service Provider shall;

5. Support Bee-keeping as alternative income generating activity
 - Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment.
 - Train 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing including value-addition.
 - Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:
 - 25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)
 - 1 Smoker pump (metallic) for 10 groups
 - 02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups
 - 1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups
 - 1 Air tight Bucket (20lts for each of 10 groups)
 - 1 Kg of bee wax for each of 10 groups
 - 1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups
 - 1 bee knife and 1 Bee brush for each of 10 groups
 - Provide bee colonies to the selected farmers to start beekeeping and establish apiaries each with 25 bee hives. Install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis – mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).
 - Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores) and provide them with value-addition facilities such as packaging materials and branding.
6. Support energy saving technologies (e.g. improved cookstoves) as alternative income generating activity
 - Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)

- Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1-day training per group)
 - Provide materials and equipment (wheelbarrow, Handles, Spades, Moulds, Pangas, Strings, etc.) to women groups and facilitate them (labour) to construct 2000 cookstoves for households.
 - Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.
7. Support fruit growing as alternative income generating activity
- Identify and mobilise 100 fruit growing farmers, sensitise and engage the farmers to form 4 groups
 - Conduct one training to each of the farmer groups in eco-agriculture/agronomic practices (including soil and water conservation, pests and diseases control, fruit tree management, organic farming, post-harvest handling).
 - Provide 2500 orange seedlings of average height of 30cm per group to plant and maintain the seedlings (at a spacing of 4m x 4m) under technical supervision.
 - Provide technical support to fruit farmers that includes disease/pest control and prevention and conduct on farm monitoring per farmer per month for the first 6 Months.
8. Promote fish farming as alternative income generating activity
- Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)
 - Conduct One training (2-day) for each of the 3 farmer groups of 40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).
 - Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) and facilitate each of the 3 groups (labour) to construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m²) of the pond base
 - Prepare the 3 ponds to receive fish:
 - fill the pond with water;
 - fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level);
 - if you use compost, add about 10 kg per 100 m²
 - if you use animal manure, add per 100 m² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure
 - if you use plant wastes only, keep the fertilizing crib full
 - pack this material tightly in each crib
 - Stock the 3 ponds with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm) per square meter of pond area and feed fish once a day with local by-products and wastes
 - Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months.

4 ORGANIZATION OF THE ASSIGNMENT

4.1 LIAISON WITH MWE/DWRM

The assignment will be coordinated by the Component Manager for Component 3 of the IWMDP. However, coordination of day to day implementation of the activities will be done by the Upper Nile Water Management Zones (UNWMZ) working closely with the Catchment Management Organizations consisting of Stakeholders Forums, Catchment Management Committees, Catchment Technical Committee and Secretariat and backed up by MWE staff at the national level. The WMZs and the Catchment Management Organizations will be strengthened to perform their roles of stakeholder collaboration and coordination, and guidance to the implementation of the priority interventions. This will be done through providing a platform to have regular meetings, trainings and providing them with the necessary equipment to facilitate their coordination role. The respective government agencies at both national and local levels will however take lead in implementation of interventions falling within their mandates.

All the contractual issues related to the assignment will be formally handled by the Component Manager for Component 3 of the IWMDP but will be discussed and resolved where possible at the local level with the relevant technical staff at the WMZ and local governments as appropriate. The service provider will produce and issue relevant reports to the Client on key deliverables of the assignment in addition to monthly reports. The monthly reports will contain details of the work done and will also identify actual and anticipated difficulties and delays in the work, the causes, and remedial measures proposed. The firm shall submit 4 hard copies of each progress and technical report to the Client.

4.2 STAFFING/PERSONNEL

Important to note is that the implementation of this assignment shall be community-driven and so the community members on ground are envisaged to execute the activities therein. Therefore, the Service Provider shall employ and pay the community members for the work done as per agreed rates based on government Labour rates and precedence set by other similar projects.

Nevertheless, the Service Provider is required to elaborate in his technical offer on the envisaged logistical set-up and deployment of appropriate expert skills for the execution of the assignment. The Service Provider should carefully review the scope of services and propose a team of well-organized competent staff, adequately equipped with the necessary skills/facilities to guide the communities in execution of the assignment, bearing in mind that a substantial amount of work in this assignment is field based.

The Service Provider will be expected to present his staffing schedule in a manner that makes it clear as to which personnel will be involved in a specific activity. A staff organogram reflecting the envisioned activities should, therefore, be presented.

4.2.1 Staffing Requirements

The Service Provider shall identify and deploy a team necessary to carry out the assignment and should describe clearly the functions of each team member. The Service Provider is however expected to provide a team, composed of the following key staff.

- Water/Environmental Management expert (team leader)
- Forestry/Tree growing Specialist
- Soil and Water Conservation Specialist
- Community Development Specialist

The Service Provider is at liberty to propose additional staff/competencies/short-term specialists as deemed appropriate for the successful execution of the assignment.

4.2.2 Staffing Qualifications

The key personnel shall have minimum academic qualifications and experience as stipulated below:

- 1 No. Water/Environmental Management expert (team Leader): A master's degree in Water/Environmental Engineering / Management / Science or related field with 8 years of general experience, 5 years of Specific experience in undertaking water related environmental assessments and in environment management planning. Experience in use of Geographical Information System tools will be an advantage.
- 1 No. Forestry/Tree growing Experts: The Forestry/Tree growing Expert should have a Bachelor's degree in Forestry with experience of 10 years in tree growing. A minimum of 3 years' experience in training farmers in tree planting and agroforestry at community level will be needed.
- 1 No. Soil and Water Conservation Experts: The Soil and Water Conservation Expert should have a Bachelor's degree in natural resources/ water resources management, Agriculture, or related field with experience of not less than 10 years in natural resources/water resources management. 3 years specific experience in construction of soil and water conservation structures, as well as community involvement and training farmers in catchment restoration measures will be needed.
- 1 No. Community Development Experts: The Community Development Specialist shall hold at a minimum a bachelor's degree in social sciences, social works & administration, development studies or community psychology. A Master's Degree in those fields will be an added advantage. The proposed expert should have at least 5years of working experience, of which 3 years should have been in natural resources management. The expert should have experience in undertaking impact, social and gender analysis. S/He should be knowledgeable in preparing appropriate awareness programs. The Expert shall be responsible for mobilizing and sensitization of communities during the project implementation process.

The experts are expected to have local experience and knowledge of conditions in the sub catchment. Ability to speak the local language by Community Development Expert will be required. The Service Provider may seek any additional expertise required for the assignment that may not be available among the team members.

4.2.3 Familiarization with the Assignment

To familiarize with the services to be provided under this assignment, the prospective bidder is advised to visit the project areas. However, it should be understood that any cost incurred in this regard shall not be a reimbursable expense to the Service Provider.

The prospective bidder shall review the project documents, including but not limited to the environmental and social briefs prepared for the area, as well as the Environmental and Social Management Framework (ESMF).

5 QUALIFICATION OF THE SERVICE PROVIDER

The service provider should meet the following minimum requirements:

- ii. Copies of original documents defining the constitution or legal status including documentary evidence for example articles of association, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;

- iii. Total monetary value of Services of a minimum average of US\$1,200,000 performed for within the last five years;
- iv. Minimum experience in Services of a similar nature and scope for the last five years, and details of Services under way or contractually committed; and names and address of clients who shall be contacted for further information on those contracts. The required scope shall be a total of atleast;
 - a. 200km of riverbanks restored in the last five years,
 - b. 300ha of degraded wetlands restored in the last five years,
 - c. 500ha of degraded land afforested in the last five years, and
 - d. 100ha of land under soil and water conservation in the last five years.
- v. Qualifications and experience of the key experts/ personnel as specified in section 4.1 above.

6 REPORTS AND SCHEDULE OF DELIVERIES

The assignment will be undertaken over a maximum period of 24 calendar months.

It is however, the responsibility of the Service Provider to establish a detailed work program within the above time frame. This should be guided by his professional judgment of the assignment's requirements and knowledge of the local conditions and needs. The detailed schedule for the required reporting is contained in Table 6-1.

Table 6-1: Reporting/ Delivery Schedule

Deliverable No.	Timing after Commencement	Content	No. of Copies of Reports
D.1	Month 2	Inception Report containing the Service Provider's mobilization, updated work plan and schedule for the provision of the services. Should include any major inconsistency in the TOR, and other challenges that have become apparent during this period, methodology and time schedule for the services and the proposed content and structure of the various reports.	4
D.2	Month 5	3 Tree nurseries established each with a production capacity of 90,000 seedlings	4
D.3	Month 10	Establishment of soil and water conservation measures on 110 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation promoted and supported	4
D.4	Month 11	800 ha of deforested and degraded communal and individual land restored through tree growing (afforestation, reforestation and agroforestry)	4
D.5	Month 16	280 km of the degraded stretches of the major rivers in Aswa II sub-catchment restored through use of catchment management measures	4
D.6	Month 18	500 ha of degraded Wetlands restored to perform their ecological and socio-economic functions in Aswa II sub-Catchment	4
D.7	Month 24	500 households trained and supported in establishing alternative income generating (livelihood) activities	4
D.8	Monthly	A report (1-2 pg maximum) comprising of a narrative or graphic presentation, showing details of the Service Provider's progress, changes in the assignment schedule, impediments and proposed remedies, in addition to documentation on lessons learned.	4
D.9	Every 4 months	Stakeholder identification, mobilisation, engagement and capacity building Reports	4

The Service Provider is encouraged to assess the appropriateness of the suggested milestones and comment upon realistic expectations, especially with regard to the allocated time frames for the activities, and propose his own assessment and work plan as part of his proposal.

All reports have to be submitted in both soft (*MS Word, PDF*) and hard copy. The hard copies will be prepared in DIN A4 format, except for plans and drawings which should be prepared in DIN A3 format. The reports should be clearly labelled, i.e. title of the study indicated, for easy identification and documentation purposes. All reports shall be prepared in the English language.

The Service Provider shall work closely with the Client with the aim of capacity building and knowledge transfer.

The time provided is only indicative of the expected time used for each item but the order of implementation will be explained by the service provider with justification in the technical proposal.

All reports will be submitted to:

The Director, Directorate of Water Resources Management
P.O. Box 20026, Luzira-Kampala
Tel: 0414 321342

For the attention of: Manager, IWMDP Component 3 (WRM)

A Task Force will be appointed to supervise the implementation of this activity and coordinate the day to day activities.

7 DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

To the extent possible, the Client will provide free of charge all existing information, data, reports and maps in her custody and will assist the Service Provider in obtaining other relevant information and materials from governmental institutions and state authorities as far as possible. However, it is the duty of the Service Provider to check availability, quality and suitability of this information. The information, data, reports etc. as mentioned above will be available for the Service Provider 's unlimited use during execution of the proposed services.

LOT 3:

Supporting Communities in Kochi Sub Catchment to Implement Priority Catchment Management Measures

1 INTRODUCTION

Government of Uganda, with funding from the World Bank is implementing Integrated Water Management and Development Project which provides support to catchment management and restoration activities in Kochi sub-catchments in Albert Nile Catchment. The project supports implementation of catchment management measures, including soil and water conservation, river bank and wetland protection; and providing alternative livelihoods for affected communities.

1.1 KOCHI SUB CATCHMENT DESCRIPTION

1.1.1 Location

Kochi Sub Catchment is one of the 12 sub catchments that form the Albert Nile Catchment in Upper Nile WMZ. It covers Koboko, Yumbe and Moyo Districts in the north-western sub-region of Uganda. The sub-catchment covers an area of 1640 km², which is about 33% of the total area of the three districts. Kochi River head waters start in Koboko District, flow through Yumbe District and enter the Albert Nile in Moyo District.

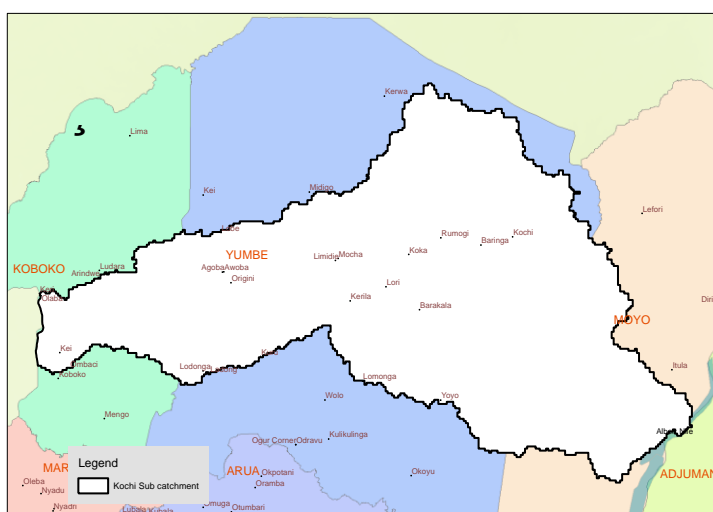


Figure 1-1: Extent of Kochi Sub catchment (Districts that lie wholly / partially in Kochi sub catchment)

1.1.2 Physical Environment

e) Climate

The sub-catchment receives a mean annual rainfall of about 1180 mm. The driest month is January while the greatest amount of precipitation occurs in August, with a difference of 178 mm between the driest and the wettest months.

Temperature analysis indicates highest values between January and March (31-33°C) and the lowest between July and August (27-29°C). This area experiences high rates of evapotranspiration, which has a resultant effect on runoff, groundwater recharge and dry season flows, increasing drought risks.

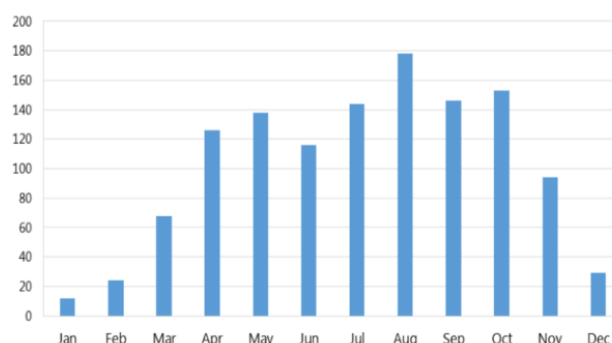


Figure 1-2: Mean monthly rainfall (mm) pattern for the Sub catchment.

f) Topography and Drainage

The sub-catchment is generally flat, with mostly gentle undulating hills¹³. In Koboko District where River Kochi originates, topography is mainly flat rolling plains occurring at 960 to 1610 metres above sea level (asl) with isolated undulating hills mainly in the western and northern parts of the District towards the Sudan boarder, and a general slight slope towards the east¹⁴. The sub-catchment's highest point is 1272 masl on the border with Congo, while the catchment's lowest point is 620 masl.

River Kochi originates in the swamps in Alabanga Village, Degiba Parish, Midia Subcounty, Koboko District near the Uganda – DR Congo border. The river flows in the Southeastern direction being joined by a number of tributaries including River Ulira, River Udoze, River Dagala, River Ibanga, River Geringa, and River Kechi. It continues through the Waka and Umvosa Wetland Systems before finally discharging into the Albert Nile at Kochi Boma Village in Waka Parish, Itula Subcounty in Moyo district.

The upper part of the Kochi Sub-Catchment is located in communal land owned by the Elibu, Godia and Agibu Clans. The wetland system there has been greatly encroached upon and it is currently being used for agriculture with the main crops being rice, sorghum, banana and yams among others.

In most of the middle parts of the Kochi Sub-Catchment (located mainly in the eastern parts of Koboko District and in Yumbe District), natural forests have been cleared for agricultural land and livestock grazing. Consequently, a large part of forests in the catchment are degraded, mainly because trees are cut down for charcoal burning and brick making as income generating activities.

In the lower parts of the sub-catchment, substantial natural resources still remain intact. The vegetation cover is composed of different species of acacia and borassus palm trees. Closer to the discharge location near the Albert Nile, the vegetation is characteristically made of wetland tree species such as *Lovoa trichiloides*, *Beilschmeidia ugandensis*, *Khaya angolensis*, *Phoenix reclinata*, *Calamus deeratus*, *Hallea stipulosa* and *Raphia fariniferagrass* and grass species such as *Glyceria maxima*, *Sagittaria*, *Typha* and *Phragmites spp.*

Most of the degradation in this part of the sub-catchment is attributable to the Morobi refugee settlements where vegetation has been cleared for agriculture and house construction. There is also a lot of soil erosion that has been triggered by poorly planned road infrastructure that has led to gully erosion. This has led to an increase in sediment load and intensity of flush floods. Coarse fractions have caused siltation of riverbeds. This in turn has increased the flooding intensity and hence riverbank erosion, which has further contributed to the siltation of river beds. Thus, it can be safely concluded that the flooding problems experienced in the low lands of Moyo District is due to the land degradation in Koboko and Yumbe where River Kochi and its tributaries originate.

g) Land Cover/ Land Use

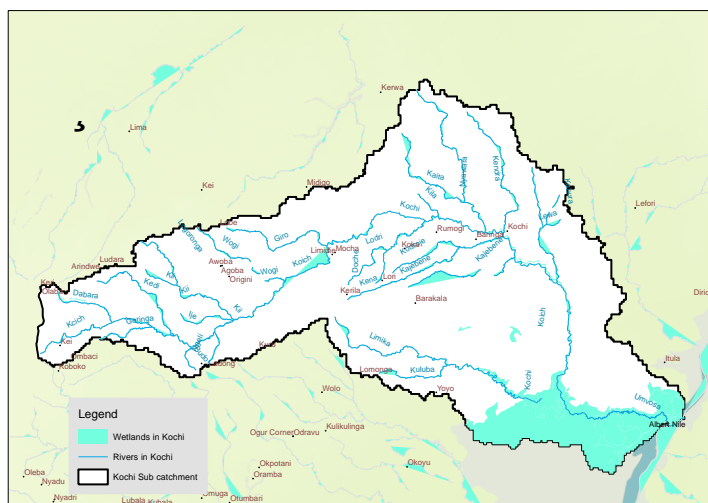


Figure 1-3: Rivers and Wetlands systems in Kochi sub catchment

¹³ Yumbe District Local Government, 2011. Yumbe District Five Year Development Plan, 2010/11-2014/15

¹⁴ Koboko District Local Government, 2011. Five-Year Development Plan, (2010/11-2014/15)

In the upper reaches of the sub-catchment (Moyo District and the western part of Yumbe District), there is intense subsistence farming, often going to the very edge of rivers. In Yumbe, there is still some grassland in the eastern parts of the district, but there is more woodland vegetation in Moyo District.

The principal form of land-use is small-scale subsistence farmland accounting for 66% of the total area of the District, and represents about 75% of the population engaged in farming activities. Grassland and woodland combined account for only 25% of the total area. Built-up area is limited and reflects the very low level of urbanization which is rated at only about 1.3% (compared to the regional average of urbanization is 5.4% and the national average is 11.3%). There are no gazetted wildlife reserves in the Districts apart from the gazetted forest reserves.

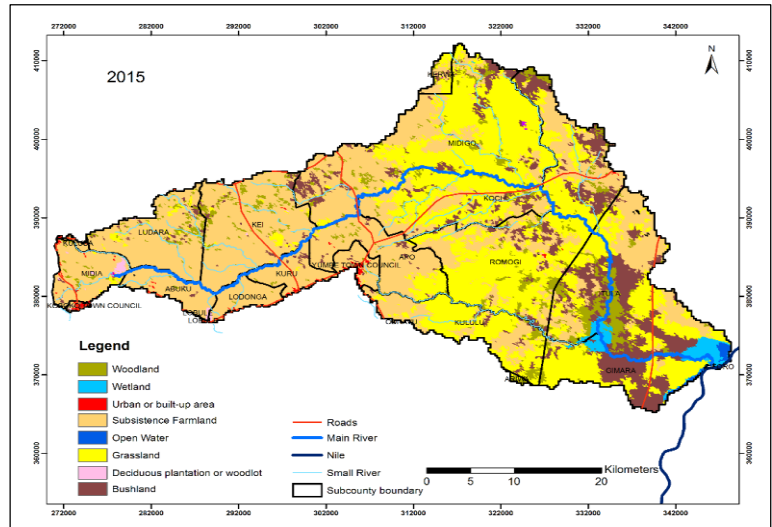


Figure 1-4: Land Use/ Land Cover Map of Kochi Sub-Catchment in 2015

1.1.3 Socio-Economic Environment

The total population of the districts that constitute the Kochi Sub-Catchment is 830,000 people distributed in 120,000 households. 51% of the people are females. 83% of the households are involved in subsistence farming, with nearly 90% involved in crop farming and 76% in livestock farming. Only 11% of the households have access to piped water, while 53% have access to boreholes.

While the sub catchment is characterized by moderate population pressure, the influx of Sudanese refugees that started in 2013 has increased the pressure. In addition, the growth rate of over 4.0 % in the sub-catchment has led to excessive land fragmentation, especially in the refugee settlements, which has pushed farming activities into marginal areas that are vulnerable to soil erosion and nutrient loss, and thus, increased encroachment of ecologically fragile areas such as wetlands, riverbanks and protected forests for farming purposes. The sub-catchment therefore experiences challenges of quantity and quality of the water resources as a result of poor land use practices, encroachment on riparian lands and wetlands, flash floods, and increased sediment loads in the water courses. Furthermore, poor disposal of human waste, especially in refugee settlements, has negatively impacted water quality.

Rain-fed agriculture is the most practiced land use with over 80% of the population depending on it. Profitability from cultivation in the sub-catchment is low, with high risks of exposure to flood and drought, and loss of yields. Grazing and pastoralism are practiced under the same conditions of agriculture, and they are therefore completely depending on rain water for water points and grassland availability.

1.1.4 Biological Environment

a) Vegetation

The Kochi sub catchment lies in an area described by Langdale-Brown *et al.* (1964) as dry *Butryospermum* parkland dominated by *Combretum molle*, *Combretum collinum*, *Terminalia glaucescens*, *Viteralia paradoxa* and *Acacia hockii* with tall grasses and *Cyperus papyrus* wetlands. These areas are dominated by the following grasses: *Hyparrhenia filipendula*, *Hypertelia dissoluta* and *Brachiaria brizantha* among which the tree cover varies from 5% to 40%. The ground vegetation is dominated

by *Brachiaria brizantha*, *Hyperthelia dissoluta*, *Chloris gayana*, *Sporobolus africana*, *Setaria sphacelata*, *Pennisetum polystachion*, *Cyperus distans* and *Brachiaria decumbens*. The characteristic wooded grassland communities consist of mainly *Lonchocarpus laxiflorus*, *Acacia hockii*, *Balanites aegyptiaca*, *Combretum collinum*, *Hymenocardia acida*, and *Piliostigma thonningii*. Other common species include *Combretum binderanum*, *Terminalia glauscecens*, *Hoslundia opposita*, *Maytenus senegalensis*, *Securidaca longipedunculata* and *Ximenia Americana* and *Vitellaria paradoxa*. According to the IUCN Status, most of the species have been classified as Least Concern (LC) while a few have not been evaluated.

b) Large mammals

Due to its proximity to the Ajai Game Reserve, there is abundance of fauna in the Kochi sub catchment although as a result of increased human activity over the years like hunting, habitat destruction through cultivation, grazing and settlement, the species abundance has been negatively affected. The most common mammals in the area are as indicated in Table 1-1 below.

Table 1-1: Most Common Mammals in Kochi Sub-Catchment

English name	Scientific name	IUCN Status
Vervet Monkey	<i>Chlorocebus pygerythrus</i>	Least Concern
Olive Baboon	<i>Papio anubis</i>	Least Concern
Guereza (Black & White) Colobus	<i>Colobus guereza</i>	Least Concern
Aardvark (Ant Bear)	<i>Orycteropus afer</i>	Least Concern
Red River Hog	<i>Potamochoerus porcus</i>	Least Concern
Bushbuck	<i>Tragelaphus scriptus</i>	Least Concern
Common (Bush) Duiker	<i>Sylvicapra grimmia</i>	Least Concern
Oribi	<i>Ourebia ourebi</i>	Least Concern

c) Birds

According to previous studies, 58 species of birds have previously been recorded in the project area, comprising 32 species along major roads, 16 species in fallow areas, and 10 species along streams. Species with a preference for some level of forest cover dominated the records, and in addition, a few water birds were recorded. Five species of conservation concern (Brown Snake Eagle, White-headed Saw-wing, Grey-capped Warbler, Papyrus Gonolek, and Golden-backed Weaver) were recorded in the sub-catchment. Of these the Papyrus Gonolek (*Laniarius mufumbiri*) is categorized as near threatened according to IUCN 2013.

d) Reptiles

Kochi Sub-Catchment is located in an area which is generally hot with temperatures generally above 30oC during most times of the year. This favours the thriving of reptiles since reptiles generally depend on the surrounding environment for temperature regulation. The most common reptiles here are shown in Table 1-2 below.

Table 1-2: Most Common Reptiles in Kochi Sub-Catchment

Species	Common Name	IUCN Status
<i>Agama agama</i>	Orange-headed agama	Not evaluated-IUCN
<i>Chamaeleo gracilis</i>	Gracile chamaeleon	Least Concern (LC)
<i>Crocodylus niloticus</i>	Nile crocodile	Least Concern (LC)
<i>Geochelone pardalis</i>	Leopard tortoise	Not evaluated-IUCN
<i>Hemidactylus brooki</i>	Brook's House gecko	Least Concern (LC)
<i>Kinixys belliana</i>	Bell's hinged tortoise	Not evaluated-IUCN
<i>Leptotyphlops scutifrons</i>	Peter's worm snake	Not evaluated-IUCN
<i>Naja melanoleuca</i>	Forest/water cobra	Not evaluated-IUCN
<i>Python sebae</i>	Rock python	Not evaluated-IUCN

e) Amphibians

Kochi Sub-Catchment has a large network of streams, rivers, wetlands and flood plains. Such an environment acts as a good habitat for amphibians since it favours their reproduction and all other activities including feeding. Some of the amphibians identified here are as indicated in Table 4-3 below.

Table 1-3: Common amphibians in Kochi sub-catchment

Species	Common Name	Conservation Status (IUCN)
<i>Hemisis marmoratus</i>	Marbled snout burrower	Least Concern (LC)
<i>Hoplobatrachus occipitalis</i>	Crowned bullfrog	Least Concern (LC)
<i>Kassina senegalensis</i>		Least Concern (LC)
<i>Leptopelis bocagii</i>		Least Concern (LC)
<i>Phrynobatrachus natalensis</i>	Natal dwarf puddle frog	Least Concern (LC)

1.2 SUB CATCHMENT MANAGEMENT RELATED ISSUES AND RECOMMENDED MEASURES

1.2.1 Identified issues and hotspots for interventions

The term “hotspot” means a place where there is significant land degradation resulting in lowering of the quality and quantity of water in water bodies and compromise in the ecosystem services. The hotspots and actual intervention sites for Kochi Sub-Catchment are presented in Table 1

Table 1-4: Confirmed catchment management issues and recommended investment measures in Kochi Sub Catchment

ISSUES	District	Sub county	Parish	Site	Recommended Measures		
Riverbank degradation and encroachment	Moyo	Itula	Waka	Gborokonyo, Omvoso, Kochi- Gboma, Kochi Central Village	<ul style="list-style-type: none"> ▪ Riverbank rehabilitation (Reshaping and use of vetivar systems), River buffer management ▪ Demarcation of the riverbanks using locally available planting materials like bamboo and indigenous tree species ▪ Sensitizing the communities on avoiding cultivation within the banks of these rivers ▪ Formulate environmental bye-laws ▪ Establish micro catchment structures to enforce the bye-laws and oversee the restoration activities. 		
	Yumbe	Kululu/ Kei	Gojuru/ Koka, Yayari	Imvenga and Okunga Villages, Bidibidi refugee settlement. Village 5 Zone 2, also referred to as Hi Amarith, Rock City, and High Peach Areas along Kodeja Stream; River Adiba			
				Midigo		Mulimbe	Crossing of river Kochi at defunct/ ramshackle bridge
				Kei		Gimere	River Kii Bridge in Matuma Village
	Koboko	Abuku	Nyai	Birindu Village/ Kochi Village			
		Lodara	Podo and longira Parishes	Kechi River bridge where Miringa Stream enters Kochi River River separates four villages in two parishes (Liji & Mandiyo Villages (Podo); Lurugo; and Cubiri (Longira)			
		Midia	Gborokolongo/ Nyori Chenku, Asunga & Dricile	Ibanga River, Raki village, Kagai Village Close to Osubu Central Forest Reserve			
Wetland degradation and encroachment	Yumbe	Kochi	Lombe	Lewa Wetland; Tributary to R. Kochi	<ul style="list-style-type: none"> ▪ Extensive sensitization of the communities on the laws and regulation on wetlands as well as the wise use of wetlands. ▪ Demarcate the degraded wetlands using locally available materials including indigenous trees, Sisal plants and bamboo to improve flood regulation ecosystem service ▪ Enforcement of the available laws and regulations on wetland usage through collaboration with all stakeholders involved. ▪ Zone the degraded wetlands to secure alternative sites/lands for animal grazing for different communities 		
		Apo	Yumbe T/C	Wolonga Village, Obubua Wetland			
		Kei/ Midigo	Tuliki/ Mutumba	Giro Wetland: 2 villages (Aiinga village, Tuluki Parish) and Midigo (Mutumba Parish), Amboji Wetland in Woyi Village			
	Koboko	Midia	Degiba	Alibaga Village, Source of river Kochi <ul style="list-style-type: none"> • At the Confluence of two wetland tributaries of Ulira and Kochi, and the villages of Arese, Yondu, and Wani 			

ISSUES	District	Sub county	Parish	Site	Recommended Measures
		Abuku	Nyai	Geringa River which begins from Geringa Village. The river is boundary Igaba Village and Loki village both in Abuku S/C	
Poor Water quality in rivers and streams	Yumbe	Kochi	Yayari, Kochi	Bidibidi refugee settlement. Village 5 Zone 2, also referred to as Hi Amarith, Rock City, and High Peach Areas along Kodeja Stream; River Adiba, Mariyo Stream in Lolo east village	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds, contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
Seasonal flooding due to activities farther upstream	Moyo	Itula	Waka	Gborokonyo, Omvoso, Kochi- Gboma, Kochi Central Village	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds, contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
Poor Road Drainage leading to development of rills and gullies	Moyo		Kali	Morobi Village, Zone, 2 Refugee Settlement	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds, contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
	Yumbe	Kochi	Yayari	Bidibidi refugee settlement. Zone 2 Swinga A	
		Kei	Gimere	River Kii Bridge in Matuma Village	

ISSUES	District	Sub county	Parish	Site	Recommended Measures
Soil erosion/ Land degradation	Koboko	Lodara	Podo and Longira Parishes	Kechi River bridge where Miringa Stream enters Kochi River River separates four villages in two parishes (Liji & Mandiyo Villages (Podo); Lurugo; and Cubiri (Longira))	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds, contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
Deforestation	Moyo	Itula	Waka	Gborokonyo, Omvoso, Kochi- Gboma, Kochi Central Village	<ul style="list-style-type: none"> ▪ Establish tree nurseries to promote tree growing ▪ Sensitize communities to conserve trees ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation ▪ Develop byelaws and ordinances to create an enabling environment for tree growing ▪ Promote farmer managed natural regeneration to increase tree cover ▪ Promotion of energy saving technologies including solar panels, energy cook stoves, Biogas ▪ Support enforcement of policies/laws
River Siltation due to Gulley/soil erosion and poor road drainage in surrounding catchments	Koboko	Midia	Gborokolongo/ Nyori Chenku	Ibanga River. Raki village	<ul style="list-style-type: none"> ▪ Establish SWC measures (Green/grey/hybrid structures like soil bunds, contour bunds, terracing, infiltration pits, half-moon bunds etc. ▪ Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management
		Abuku	Nyai	Geringa River which begins from Geringa Village. The river is boundary Igaba Village and Loki village both in Abuku S/C between	
		Lodara	Podo and Longira Parishes	Kechi River bridge where Miringa Stream enters Kochi River River separates four villages in two parishes (Liji & Mandiyo Villages (Podo); Lurugo; and Cubiri (Longira))	<ul style="list-style-type: none"> ▪ Training farmers in conservation/climate-smart Agriculture (planting basins, mulching, cover cropping, agroforestry) ▪ Facilitate tree growing for Agroforestry, Afforestation and Reforestation
		Yumbe	Kei/ Midigo	Tuliki/ Mutumba	

2 OBJECTIVES

The overall objective of the assignment is to support communities in Kochi sub catchment to implement catchment-based and community driven actions aimed at improving soil and water conservation, wetland and riverbank restoration and community livelihood improvements.

The specific objectives of the assignment are to:

- f) identify, mobilise, engage and build capacity of stakeholders and communities in undertaking catchment-based and community driven catchment management measures.
- g) support communities to restore degraded hotspot wetlands and riverbanks in Kochi sub catchment
- h) support communities to implement soil and water conservation measures on priority hotspots in the sub catchment.
- i) Support communities to restore deforested and degraded land through community tree growing on individual farmers land, public land and riverbanks
- j) support communities to establish and promote alternative income generating activities for improved livelihoods.

3 SCOPE OF SERVICES

This assignment seeks to support communities in Kochi sub catchment to implement catchment-based and community driven actions to implement catchment-based and community driven actions aimed at improving soil and water conservation, riverbank restoration and community livelihood improvements. Thus, community mobilization and sensitizations will be key to the implementation of the assignment. Sub-catchment and catchment management committees shall play a major role in this assignment and the Service Provider is requested to engage and involve them accordingly.

As part of general items and cross cutting aspects, the Service Provider shall identify key stakeholders including community and Local Government representatives and develop appropriate mobilization and sensitization tools and approaches. The Service Provider shall carry out community capacity building sessions during implementation of the assignment. Meetings, radio talk shows, and guided field tours to sensitize communities on the importance of ecosystems protections and management will be organized. Interim stakeholder identification, engagement and capacity building reports will be produced at key events but stakeholder engagement and training will be a continuous process. The final report will be produced at the end of the assignment. Specifically, the service provider shall;

- o Organise four 5-day exchange visits and study tours to other catchments within Uganda for farmers and communities responsible for restoration activities (with at least 50 people per visit).
- o Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchment.
- o Produce monthly progress and other associated output Reports
- o Organise monthly joint onsite inspections and monitoring by client and other technical staff.
- o Produce as-built drawings and maintenance guidelines for the implemented actions.
- o Establish and maintain 4 site sign-boards

Task 1: Support communities to restore degraded stretches of riverbanks in Kochi sub-catchment through use of catchment management measures

Under this task, 268 km (134 km on each side) of the degraded stretches of the major rivers in Kochi sub-catchment shall be restored through use of catchment management measures. Accordingly, the Service Provider shall;

- Mobilise 650 community members, raise their awareness on the importance of river bank protection, restoration and management to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 650 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans. (50 members per training for 2 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axe, Pangas etc.) to communities for use in implementing the riverbank protection and restoration action plans
- Provide 176,880 indigenous tree seedlings of an average height of 30cm to Communities
- Demarcate off and re-vegetate 268km buffer zone/stretch on both sides of the river using live markers like indigenous trees, and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoil during transportation + replacement planting).
- Procure 40,200 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil)
- Stabilize 134 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.
- Organise sub-catchment level meeting for 200 people involving districts to prepare standard operating procedures (SOPs) for responsible sand mining.
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival rate of trees. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.

Task 2: Support demarcation and restoration of degraded Wetlands to perform their ecological and socio-economic functions in Kochi sub-Catchment

Under this task, 110ha of the degraded wetlands in Kochi sub-catchment shall be restored through use of catchment management measures. Accordingly, the Service Provider shall;

- Conduct awareness raising meetings targeting 300 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 300 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)
- Provide tools to communities to implement wetland protection and restoration action plans.
- Procure 8,800 Sisal stems as local planting materials to demarcate the 110ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)
- Demarcate off 110ha buffer zone of the wetland using tree lines (80 tree seedlings per ha at a spacing of 5m by 5m)
- Engage and strengthen 200 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.

Task 3: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.

Under this task, soil and water conservation measures shall be promoted and established on 260ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation. Accordingly, the Service Provider shall;

- Mobilise 600 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities.(50 members per meeting)
- Conduct trainings for 500 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)
- Provide tools (wheelbarrow, Handles, Spades, Pangas, etc.) to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.)
- Establish 10 Ha of soil and water conservation structures at selected farm sites to serve as training and demonstration centres.
- Support individual farmers to establish 250 Ha similar soil and water conservation structures on the hotspots identified on their individual land.
- Carry out quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.

Task 4: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)

Under this task, 500ha of degraded communal and individual land shall be restored through tree growing (afforestation, reforestation and agroforestry). Accordingly, the Service Provider shall;

- Establish 3 tree nurseries in the Lwakhakha catchment each with a production capacity of 90,000 seedlings;
 - Conduct trainings to 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)
 - Procure and supply 60kgs of assorted seed to nurseries for raising seedlings
 - Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance
 - Carry out quarterly inspections and monitoring to provide extension services for 6 months after establishment to ensure tree survival and growth of the seedlings. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.
- Mobilise and sensitize 400 households in 2 meetings to engage in tree growing initiatives (50 members per meeting)
- Conduct trainings to 400 households in tree growing and forest management for restoration (50 members per training for 2 days)
- Provide tools and materials (wheelbarrow, Handles, Spades, Pangas, etc.) to 400 households for use during tree growing.
- Provide 200,000 assorted tree seedlings of average height of 30cm to communities
- Plant 200,000 assorted tree seedlings of average height of 30cm to communities and restore 1000 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.

- Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth. This shall remain the responsibility of the SCMC, CMC and the UNWMZ staff after the project.
- Facilitate 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing. During the implementation of the restoration activities, SCMCs and MCMCs will be formed. These will be the people in charge of overseeing the implementation of the activities and will continue following up even beyond the project. However, in order to ensure that the people continue being committed to the agreed actions of restoring, bye laws that don't already exist need to be developed and their enforcement needs to take place.

Task 5: Support communities to establish and promote alternative income generating activities for improved livelihoods.

Under this task, Bee-keeping, energy saving technologies (e.g. improved cookstoves), fruit growing, and fish farming as alternative income generating activities shall be promoted and supported. The beneficiaries of these alternative livelihoods are the land owners along river banks, and other degraded areas to be restored. Each community member or farmer will select the enterprise they are interested in and it is after this that the list of farmers per enterprise will be generated. Success will be measured based on the number of community members or farmers that adopt and use the different alternative income generating activities.

Accordingly, the Service Provider shall;

1. Support Bee-keeping as alternative income generating activity
 - Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment.
 - Train 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; Marketing including value-addition.
 - Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:
 - 25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)
 - 1 Smoker pump (metallic) for 10 groups
 - 02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups
 - 1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups
 - 1 Air tight Bucket (20ltrs for each of 10 groups)
 - 1 Kg of bee wax for each of 10 groups
 - 1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups
 - 1 bee knife and 1 Bee brush for each of 10 groups
 - Provide bee colonies to the selected farmer groups to start beekeeping and establish apiaries each with 25 bee hives. Install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).
 - Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores)

and provide them with value-addition facilities such as packaging materials and branding.

2. Support fruit growing as alternative income generating activity
 - Identify and mobilise 100 fruit growing farmers, sensitise and engage the farmers to form 4 groups (50 members per meeting)
 - Conduct 1 training to each of the farmer groups in eco-agriculture/agronomic practices (including soil and water conservation, pests and diseases control, fruit tree management, organic farming, post-harvest handling). (1no. training per group for 2 days, 25members per group)
 - Provide 2500 orange seedlings of average height of 30cm per group and plant and maintain the seedlings (at a spacing of 4m x 4m) under technical supervision.
 - Provide technical support to fruit farmers and conduct on farm monitoring per farmer per month for the first 6 Months.
3. Support energy saving technologies (e.g. improved cookstoves) as alternative income generating activity
 - Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)
 - Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1-day training per group)
 - Provide materials and equipment (wheelbarrow, Handles, Spades, Moulds, Pangas, Strings, etc.) to women groups and facilitate them (labour) to construct 2000 cookstoves for households.
 - Carry out quarterly monitoring visits with the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective.
4. Promote fish farming as alternative income generating activity
 - Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)
 - Conduct One training (2-day) for each of the 3 famer groups of 40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).
 - Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) and facilitate each of the 3 groups (labour) to construct 3 (20m x 15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m²) of the pond base
 - Prepare the 3 ponds to receive fish:
 - fill the pond with water;
 - fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level);
 - if you use compost, add about 10 kg per 100 m²
 - if you use animal manure, add per 100 m² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure
 - if you use plant wastes only, keep the fertilizing crib full
 - pack this material tightly in each crib

- Stock the 3 ponds with 4500 fish fingerlings: of average density of 1 – 5 young tilapia fish (of length 3 – 15 cm long) per square meter of pond area and feed fish once a day with local by-products and wastes
- Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months

4 ORGANIZATION OF THE ASSIGNMENT

4.1 LIAISON WITH MWE/DWRM

The assignment will be coordinated by assignment will be coordinated by the Component Manager for Component 3 of the IWMDP. However, coordination of day to day implementation of the activities will be done by the Upper Nile Water Management Zones (UNWMZ) working closely with the Catchment Management Organizations consisting of Stakeholders Forums, Catchment Management Committees, Catchment Technical Committee and Secretariat and backed up by MWE staff at the national level. The WMZs and the Catchment Management Organizations will be strengthened to perform their roles of stakeholder collaboration and coordination, and guidance to the implementation of the priority interventions. This will be done through providing a platform to have regular meetings, trainings and providing them with the necessary equipment to facilitate their coordination role. The respective government agencies at both national and local levels will however take lead in implementation of interventions falling within their mandates.

All the contractual issues related to the assignment will be formally handled by the Component Manager for Component 3 of the IWMDP but will be discussed and resolved where possible at the local level with the relevant technical staff at the WMZ and local governments as appropriate. The service provider will produce and issue relevant reports to the Client on key deliverables of the assignment in addition to monthly reports. The monthly reports will contain details of the work done and will also identify actual and anticipated difficulties and delays in the work, the causes, and remedial measures proposed. The firm shall submit 4 hard copies of each progress and technical report to the Client.

4.2 STAFFING/PERSONNEL

Important to note is that the implementation of this assignment shall be community-driven and so the community members on ground are envisaged to execute the activities therein. Therefore, the Service Provider shall employ and pay the community members for the work done as per agreed rates based on government Labour rates and precedence set by other similar projects.

Nevertheless, the Service Provider is required to elaborate in his technical offer on the envisaged logistical set-up and deployment of appropriate expert skills for the execution of the assignment. The Service Provider should carefully review the scope of services and propose a team of well-organized competent staff, adequately equipped with the necessary skills/facilities to guide the communities in execution of the assignment, bearing in mind that a substantial amount of work in this assignment is field based.

The Service Provider will be expected to present his staffing schedule in a manner that makes it clear as to which personnel will be involved in a specific activity. A staff organogram reflecting the envisioned activities should, therefore, be presented.

4.2.1 Staffing Requirements

The Service Provider shall identify and deploy a team necessary to carry out the assignment and should describe clearly the functions of each team member. The Service Provider is however expected to provide a team, composed of the following key staff.

- Water/Environmental Management expert (team leader)
- Forestry/Tree growing Specialist
- Soil and Water Conservation Specialist
- Community Development Specialist

The Service Provider is at liberty to propose additional staff/competencies/short-term specialists as deemed appropriate for the successful execution of the assignment.

4.2.2 Staffing Qualifications

The key personnel shall have minimum academic qualifications and experience as stipulated below:

- 1 No. Water/Environmental Management expert (team Leader): A master's degree in Water/Environmental Engineering / Management / Science or related field with 8 years of general experience, 5 years of Specific experience in undertaking water related environmental assessments and in environment management planning. Experience in use of Geographical Information System tools will be an advantage.
- 1 No. Forestry/Tree growing Experts: The Forestry/Tree growing Expert should have a Bachelor's degree in Forestry with experience of 10 years in tree growing. A minimum of 3 years' experience in training farmers in tree planting and agroforestry at community level will be needed.
- 1 No. Soil and Water Conservation Experts: The Soil and Water Conservation Expert should have a Bachelor's degree in natural resources/ water resources management, Agriculture, or related field with experience of not less than 10 years in natural resources/water resources management. 3 years specific experience in construction of soil and water conservation structures, as well as community involvement and training farmers in catchment restoration measures will be needed.
- 1 No. Community Development Experts: The Community Development Specialist shall hold at a minimum a bachelor's degree in social sciences, social works & administration, development studies or community psychology. A Master's Degree in those fields will be an added advantage. The proposed expert should have at least 5years of working experience, of which 3 years should have been in natural resources management. The expert should have experience in undertaking impact, social and gender analysis. S/He should be knowledgeable in preparing appropriate awareness programs. The Expert shall be responsible for mobilizing and sensitization of communities during the project implementation process.

The experts are expected to have local experience and knowledge of conditions in the sub catchment. Ability to speak the local language by Community Development Expert will be required. The Service Provider may seek any additional expertise required for the assignment that may not be available among the team members.

4.2.3 Familiarization with the Assignment

To familiarize with the services to be provided under this assignment, the prospective bidder is advised to visit the project areas. However, it should be understood that any cost incurred in this regard shall not be a reimbursable expense to the Service Provider.

The prospective bidder shall review the project documents, including but not limited to the environmental and social briefs prepared for the area, as well as the Environmental and Social Management Framework (ESMF).

5 QUALIFICATION OF THE SERVICE PROVIDER

The service provider should meet the following minimum requirements:

- ii. Copies of original documents defining the constitution or legal status including documentary evidence for example articles of association, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- iii. Total monetary value of Services of a minimum average of US\$1,200,000 performed for within the last five years;
- iv. Minimum experience in Services of a similar nature and scope for the last five years, and details of Services under way or contractually committed; and names and address of clients who shall be contacted for further information on those contracts. The required scope shall be a total of atleast;
 - a. 150km of riverbanks restored in the last five years,
 - b. 50ha of degraded wetlands restored in the last five years,
 - c. 300ha of degraded land afforested in the last five years, and
 - d. 150ha of land under soil and water conservation in the last five years.
- v. Qualifications and experience of the key experts/ personnel as specified in section 4.1 above.

6 REPORTS AND SCHEDULE OF DELIVERIES

The assignment will be undertaken over a maximum period of 24 calendar months.

It is however, the responsibility of the Service Provider to establish a detailed work program within the above time frame. This should be guided by his professional judgment of the assignment's requirements and knowledge of the local conditions and needs. The detailed schedule for the required reporting is contained in Table 6-1.

Table 6-1: Reporting/ Delivery Schedule

Deliverable No.	Timing after Commencement	Content	No. of Copies of Reports
D.1	Month 2	Inception Report containing the Service Provider's mobilization, updated work plan and schedule for the provision of the services. Should include any major inconsistency in the TOR, and other challenges that have become apparent during this period, methodology and time schedule for the services and the proposed content and structure of the various reports.	4
D.2	Month 5	3 Tree nurseries established each with a production capacity of 90,000 seedlings	4
D.3	Month 10	Establishment of soil and water conservation measures on 260 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation promoted and supported	4
D.4	Month 11	500 ha of deforested and degraded communal and individual land restored through tree growing (afforestation, reforestation and agroforestry)	4
D.5	Month 16	268 km of the degraded stretches of the major rivers in Kochi sub-catchment restored through use of catchment management measures	4
D.6	Month 18	110 ha of degraded Wetlands restored to perform their ecological and	4

Deliverable No.	Timing after Commencement	Content	No. of Copies of Reports
		socio-economic functions in Kochi sub-Catchment	
D.7	Month 24	500 households trained and supported in establishing alternative income generating (livelihood) activities	4
D.8	Monthly	A report (1-2 pg maximum) comprising of a narrative or graphic presentation, showing details of the Service Provider's progress, changes in the assignment schedule, impediments and proposed remedies, in addition to documentation on lessons learned.	4
D.9	Every 4 months	Stakeholder identification, mobilisation, engagement and capacity building Reports	4

The Service Provider is encouraged to assess the appropriateness of the suggested milestones and comment upon realistic expectations, especially with regard to the allocated time frames for the activities, and propose his own assessment and work plan as part of his proposal.

All reports have to be submitted in both soft (*MS Word, PDF*) and hard copy. The hard copies will be prepared in DIN A4 format, except for plans and drawings which should be prepared in DIN A3 format. The reports should be clearly labelled, i.e. title of the study indicated, for easy identification and documentation purposes. All reports shall be prepared in the English language.

The Service Provider shall work closely with the Client with the aim of capacity building and knowledge transfer.

The time provided is only indicative of the expected time used for each item but the order of implementation will be explained by the service provider with justification in the technical proposal.

All reports will be submitted to:

The Director, Directorate of Water Resources Management
P.O. Box 20026, Luzira-Kampala
Tel: 0414 321342

For the attention of: Manager, IWMDP Component 3 (WRM)

A Task Force will be appointed to supervise the implementation of this activity and coordinate the day to day activities.

7 DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

To the extent possible, the Client will provide free of charge all existing information, data, reports and maps in her custody and will assist the Service Provider in obtaining other relevant information and materials from governmental institutions and state authorities as far as possible. However, it is the duty of the Service Provider to check availability, quality and suitability of this information. The information, data, reports etc. as mentioned above will be available for the Service Provider's unlimited use during execution of the proposed services.

LOT 4:

Supporting Communities in Middle/Lower Awoja Sub Catchments to Implement Priority Catchment Management Measures

1 INTRODUCTION

Government of Uganda, with funding from the World Bank is implementing Integrated Water Management and Development Project which provides support to catchment management and restoration activities in middle/lower Awoja sub-catchments of Apeduru-Apapai and L. Okolitorom in Awoja Catchment. The project supports implementation of catchment management measures, including soil and water conservation, riverbank and wetland protection; and providing alternative livelihoods for affected communities.

1.1 SUB CATCHMENTS' DESCRIPTION

1.1.1 Location

Apederu-Apapai sub-catchment is located in the low-lying areas of the Awoja Catchment in Teso sub region, bordering Opeta-Bisina to the south and Mt. Napak sub-catchment to the East. The entire sub-catchment covers a total area of 878km² which comprise of the Districts of Katakwi and Napak that occupy 93.6% and 6.4% of the total sub-catchment area respectively. Important to note is that section of Napak District is mainly covered by Irii community wildlife management area, Pian Upe Wild life reserve which are protected areas with no major settlements and issues. The sub-counties covered within Katakwi District include Ongongoja, Kapujan, Usuk, Katakwi, Magoro, Omodoi, Ngariam, Palam, and Katakwi TC.

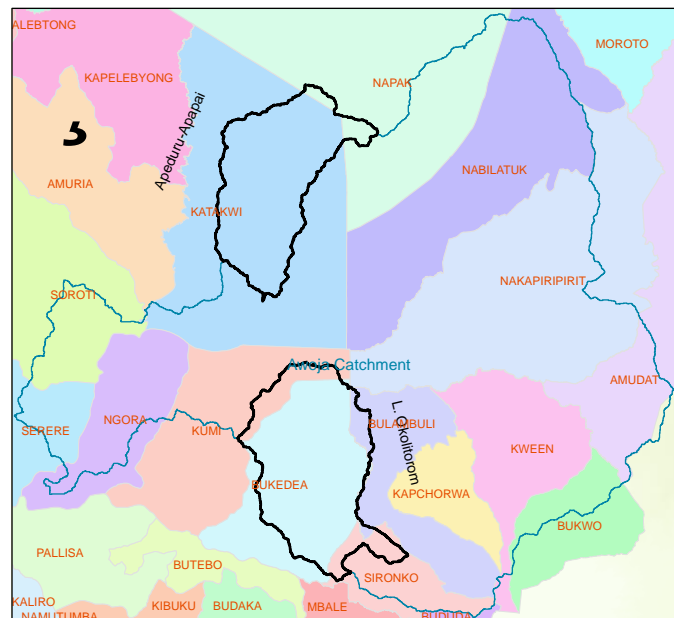


Figure 1-1: Extent of Apeduru-Apapai and L. Okolitorom Sub catchments (Districts that lie wholly / partially in the sub catchments)

Lake Okolitorom Sub Catchment is found in the mid lower part of Awoja Catchment, in vicinity of Opeta-Bisina, Chebonet-Atari, and Simu-Sisi Sub catchments, covering an area of 1035 Km². It is comprised of majorly the districts of Bukedea (76.4%), Kumi (10.9%), Sironko (7.5%), Bulambuli (5.2%) and Nakapiripiriti (0.01%).

Apederu-Apapai sub-catchment is located in the low-lying areas of the Awoja Catchment in Teso sub region, bordering Opeta-Bisina to the south and Mt. Napak sub-catchment to the East. The entire sub-catchment covers a total area of 878km² which comprise of the Districts of Katakwi and Napak that occupy 93.6% and 6.4% of the total sub-catchment area respectively. Important to note is that section of Napak District is mainly covered by Irii community wildlife management area, Pian Upe Wild life reserve which are protected areas with no major settlements and issues. The sub-

counties covered within Katakwi District include Ongongoja, Kapujan, Usuk, Katakwi, Magoro, Omodoi, Ngariam, Palam, and Katakwi TC.

1.1.2 Physical Environment

a) Climate

The climate in the project areas is characterized by two seasons i.e. wet season; March – October and dry season; November – February. The mean annual rainfall varies from 1000mm – 1500mm. The rainy season has a principal peak due around March- June and a minor peak around August – October. December and January are usually the driest months. The recent rainfall has however, been unreliable and unpredictable. The sub catchments sometimes register extremes of both very heavy rainfall and drought. In some cases, heavy rainfall is accompanied by hailstones. The Sub-catchment records a mean annual maximum temperature of 31.3°C and a mean minimum of 18°C.

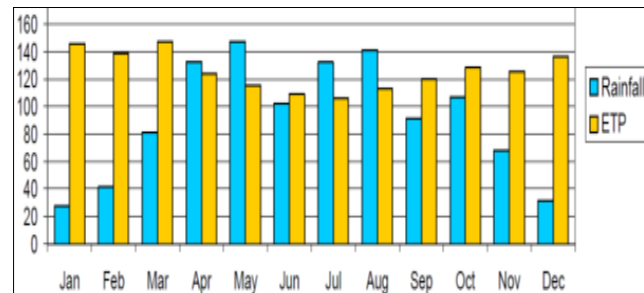


Figure 1-2: Mean monthly rainfall (mm) and ETP (mm) patterns for the Sub catchment.

b) Topography

Apeduru-Apapai sub catchment is largely flat with a few hilly areas in different locations of the sub catchment with the highest hills located at the tip of the catchment to the North East in Napak district. Generally, the sub-catchment comprises of undulating land, rocky outcrop, rivers, forests as well as wetlands. The sub catchment landscape is generally a plateau with gently undulating plains with hills and inselbergs in certain areas. The highest point of the catchment is located on top of the hills of Lotha in Napak at an elevation of about 1647 meters and the terrain reduces towards the South West to Magoro and Omodoi sub counties with the lowest point of the sub catchment at 1050 meters.

The relief of the L. Okolitorom sub catchment is dominated by the low-lying areas of the Bukedea region where most swamps are found. The highest point of the sub catchment is located on the ranges of Mt. Elgon in Bumalimba, Sironko district towards the South Eastern part of the sub catchment.

c) Soils

In Apeduru-Apapai sub catchment, the soils are mainly of ferralitic type (sandy sediments and sandy loam). They are well drained and friable. Bottomland contains widespread deposits of alluvium. The land resource is fertile and productive with the most fertile region being the area lying in the North to Eastern part of the sub-catchment.

In L. Okolitorom sub catchment, more than half of the sub catchment soils are sandy, posing a great risk of leaching and erosion especially when poor cultivation methods are used. With continuous cultivation of such soils, soil fertility is lost and yet farmers hardly add nutrients to the soil.

d) Hydrology

Surface water in Apeduru-Apapai sub catchment constitutes mainly rivers and wetlands. The major rivers in this sub-catchment are River Apeduru and River Apapai which converge and eventually discharge into Lake Bisina. These rivers typically flow from the North-East to the South-Western part of the sub-catchment, converging in Soroti district, where the catchment's outlet is situated. These rivers are used for domestic water, livestock watering, washing clothes, bathing and fishing. The rivers in the sub-catchment are surrounded by wetlands hence they are at a less risk to human interference. The key challenge affecting the rivers is riverine wetland encroachment and high levels of sediment deposition. The state of the river banks and the river siltation increase flood risk. Increased degradation of land through unfavorable land use practices, overgrazing and deforestation enhances the problem of flooding.

Lake Okolitorom sub catchment hydrological make up is largely underground water drainage system and very minimal surface water dominated by small streams flowing into various swamps of the greater Awoja wetland system in the Lake Kyoga basin. The water sources of the drainage systems are mainly surface flows from seasonal precipitation (rainfall), water sheds on the slopes of Mt Elgon and several other streams, as well as ground water discharge. Very limited open water bodies are available, the largest being Lake *Okolitorom* in Ongino Sub County, Kumi district, which is a marsh wetland dominated by grass-like vegetation and River Sironko which flows from Mt. Elgon.

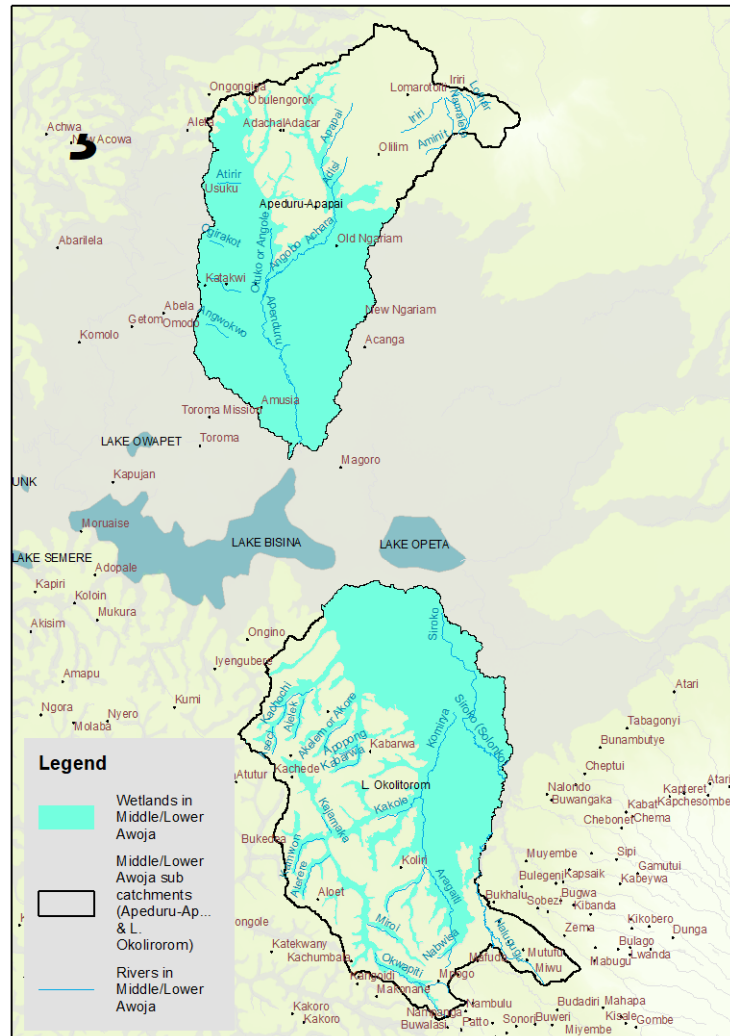


Figure 1-3: Rivers and Wetlands systems in Apeduru-Apapai and L. Okolitorom Sub catchments

1.1.3 Socio-Economic Environment

a) Population

According to the 2014 national housing and population census statistics, the population in the of the Apeduru-Apapai sub catchment is estimated at about 69,739 people, basing on the population records in the sub counties within the sub catchment, which is about 60% of the population of Katakwi district. Most of this population is located in the rural areas of the sub catchment and a few come to urban areas on a few occasions such as market days. The L. Okolitorom sub catchment population is estimated to be about 350,236 people, basing on the population records in the sub

counties within the sub catchment. This population is mainly dominated by people in Bukedea with a small portion of the population in the sub catchment from Sironko district, especially the South Western part of the district.

b) Ethnicity

In the Apeduru-Apapai sub catchment, there are a variety of ethnic groups with the Itesots as the most dominant with about 90% of the population, with the other tribes like the Karamojong making up a minority contribution and they mainly settled in the highlands near the Napak hills at the tip of the sub catchment in the North East. About 95% of the Lake Okolitorom sub catchment is found in Bukedea district and the region is dominated by Itesots, with the Bagishu the minority ethnic group and are located in the South Eastern part of the catchment in Sironko district.

c) Economic Activities and Livelihood

Most of the rural population in the Apeduru-Apapai sub catchment mainly relies on subsistence farming as their main source of livelihoods. The main crops grown are rice, maize, ground nuts, millet and sorghum. The agriculture is largely rain-fed and production is entirely dependent on use of traditional implements, with limitations in the quality and quantity of production. The productivity for major crops has been fairly low and has decreased over time, probably due to declining soil fertility and soil erosion. This has created a trend where the farmers resort to opening land for agriculture, with wetlands and forests falling target to land use change and degradation. Rearing of cattle is another common activity in the sub catchment and this is one of the leading activities driving the increased wetland degradation practices.

In Lake Okolitorom Sub Catchment, over 80% of the population depends on agriculture as a major source of livelihood. The major crops grown include both perennial and annual crops. The perennial crops include coffee as the cash crop, and bananas as food crop. The annual crops grown include maize, beans, vegetables, peas, rice, fruits (passion fruits), and sun flower on small scale, ground nuts, Sweet potatoes, and cassava.

d) Land use and Land tenure

In the project area, the most common land tenure system is the customary land holding where the land is owned communally by mainly clans and families. Transfer of land ownership is usually through inheritance although cases where owners agree to sell to other parties have been noticed. Most of the population using the land for cultivation and animal grazing.

1.1.4 Biological Environment

c) Floral Characteristics

The vegetation of Apeduru-Apapai sub-catchment largely comprises of savannah grasslands dotted with shrubs and trees. It can generally be described as a wood land / shrub land grassland vegetation dominated by *Acacia* (*IUCN status - Least concern*), *Conbretum* (*IUCN status - not evaluated*), *Piliostigma* (*IUCN status - not evaluated*), *Butyrosperum paradoxum* (*IUCN status – Least concern*) and *Hyperenia* species (*IUCN status - not evaluated*). Part of the sub catchment is located in the Karamoja cattle corridor which is typically a grassland comprised of long dry grasses such as spear grasses, elephant grasses, red oat grasses among others. These are common in the sub catchment due to the high temperatures in the area and the low rainfall rates within the region. There are a number of wetlands and therefore wetland vegetation such as wild palms, papyrus, reeds, ridges and shrubs are distributed between the different wetlands in the region. In L. Okolitorom sub-catchment, the vegetation is generally

savannah. There are woodlands found at Malera, Kolir and Bukedea Sub Counties, as well as forest plantations and reserves. The sub catchment is among those areas with the lowest tree cover in the country (UBOS 2012). It has more of scanty woodlands than forests and with no gazetted natural forests. The existing woodlands are being cleared for settlements and agricultural production.

d) Faunal Characteristics

Animal species in the project areas are influenced by Mt. Elgon system that harbours among others a diverse number of wildlife like leopard (*Panthera pardus*, a threatened species), giant forest hog (*IUCN status - Least concern*), waterbuck (*Kobus ellipsiprymnus*, *IUCN status - Least concern*), bushbuck (*Tragelaphus scriptus*, *IUCN status - Least concern*), duiker (*Sylvicapra grimmia*, *IUCN status - Least concern*), black and white colobus monkey (*Colobus guereza*, *IUCN status - Least concern*), blue monkey (*Cercopithecus mitis*, *IUCN status - Least concern*), snakes and varieties of birds. Animal presence in the entire sub catchment, however, has been interfered with by human activities and settlements. On the lower altitudes, there is restriction of wildlife prominence due to human settlements and due to the location of the project areas within the cattle corridor, the sub catchments are dominated by nomadic pastoralists, and the locals have settled to rearing of cattle, goats, chicken, pigs and sheep.

1.2 SUB CATCHMENT MANAGEMENT RELATED ISSUES AND RECOMMENDED MEASURES

1.2.1 Apeduru-Apapai: Identified issues and hotspots for interventions

The term “hotspot” means a place where there is significant land degradation resulting in lowering of the quality and quantity of water in water bodies and compromise in the ecosystem services. The hotspots and actual intervention sites for Apeduru-Apapai Sub-Catchment are presented in Table 1.

Table 1-1: Confirmed catchment management issues and recommended investment measures in Apeduru-Apapai Sub-Catchment

Confirmed priority issues	Total degraded area	Priority area for implementation ¹⁵	Location of hotspots				Recommended Measures
			District	Sub county	Parish	Village	
Wetland Degradation	369.5	316	Katakwi	Katakwi	Katakwi	Apolin, Angobo, Palam and Katakwi	<ul style="list-style-type: none"> Extensive sensitization of the communities on the laws and regulation on wetlands as well as the wise use of wetlands. Demarcate the degraded wetlands using locally available materials including indigenous trees, Sisal plants and bamboo to improve flood regulation ecosystem service Enforcement of the available laws and regulations on wetland usage through collaboration with all stakeholders involved. Zone the degraded wetlands to secure alternative sites/lands for animal grazing for different communities
					Aliakamar	Apuuton	
					Getom	Ajesai	
					Abela	Moru B/Cheele, Aboi-boi, Apesun	
					Aliakamer	Aelanyang	
				Palam	Okwamomwar	Akwaradada	
					Ngariam	Amorwongora	
				Omodoi	Amusia	Atiriri & Adokai	
					Odoot	Acoite	
Floods	1450ha	750ha	Katakwi	Palam	Palam	Arusiakan	<ul style="list-style-type: none"> Construction of valley tanks and dams in areas prone to intensified flooding to contain the water. Establish Soil bunds/water diversion channels upstream of most flood prone spots and stabilise them with grass strips Establish Percolation and infiltration pits upstream of most flood prone spots and stabilise them with grass strips Establish drainage ponds/farm ponds in the demonstration site and individual farmers land to drain off water Sensitise communities on proper agricultural practices such as afforestation, grass strips to
					Ngariam	Ngariam	
				Usuk	Aakun	Ameritele, Achanga	
					Cheleuko	Anyanga, Obwapesur, Osudio	
					Abwokodia	Otujai, Abwokodia, Ongema and Acurun	
					Adacar	Guyaguya, Adacar, Okibui and Okadonya	
				Angariam	Bisina	Agurur, Apeleun Okuso	
					Aksim	Akichira, Nyere	

¹⁵ This was determined based on criticality of the issue and sensitivity of the hotspot

Confirmed priority issues	Total degraded area	Priority area for implementation ¹⁵	Location of hotspots				Recommended Measures
			District	Sub county	Parish	Village	
				Usuk	Abwokodia	Ongema	<ul style="list-style-type: none"> contain floods and prevent destruction of crops. Sensitize and Encourage establishment of shelters on strong bases/foundations to contain the flooding and prevent destruction of homesteads.
Deforestation	10703.28	5232.38	Katakwi	Palam	Palam	Aelenyang	<ul style="list-style-type: none"> Establish tree nurseries to promote tree growing Sensitize communities to conserve trees Facilitate tree growing for Agroforestry, Afforestation and Reforestation Develop byelaws and ordinances to create an enabling environment for tree growing Promote farmer managed natural regeneration to increase tree cover Promotion of energy saving technologies including solar panels, energy cook stoves, Biogas Support enforcement of policies/laws
					Olilim	Morulinga	
				Katakwi	Dadas	Dadas, Okokoma	
				Omodoi	Omodoi	Omodoi Central	
					Angodingodi	Akism	
Water logging	20989.84	16732.86	Katakwi	Usuk	Aakum	Toibong, Ameritele	<ul style="list-style-type: none"> Establish Bio-physical structures (Cambered beds, diversion ditches, farm ponds, storage tanks, pans) to store water and reduce percolation of runoff water Growing water loving plants and trees (sugarcane, Rice, Eucalyptus) to absorb excess water. Establish soil and water conservation structures including soil bunds/water diversion channels, percolation and infiltration pits upstream of most flood prone spots and stabilise them with grass strips Tree planting, particularly of species that take up water e.g. eucalyptus
					Adacar	Adacar, Okadanya	
					Kotitok	Amoru, Adukait	
				Ngariam	Adipala	Okwee	
				Palam	Palam	Aelenyang	
Poor water quality	21.5	19.5	Katakwi	Palam	Acanga	Aeles, Oriangoi, Aelenyang	<ul style="list-style-type: none"> Rehabilitation of boreholes and shallow wells and putting provisions for animal watering Drilling alternative boreholes Implementation of source protection measures (live fencing, water diversion channels, drainage pits etc.) Sensitize community members on proper handling of pesticides, herbicides and fertilizers
					Usuk	Abwokodia	
				Aakum		Ameritele	
				Ngariam	Akisim	Akisim, Amolu, Akichira	
					Bisina	Bisina	

Confirmed priority issues	Total degraded area	Priority area for implementation ¹⁵	Location of hotspots				Recommended Measures
			District	Sub county	Parish	Village	
Poor Infrastructural Maintenance	45.1ha	32.4ha		Ngariam	Pakwi Kaikamusin Bisina	Ogugut Kaikamusin Okuso	<ul style="list-style-type: none"> to minimize contamination of water sources. Sensitize communities on proper handling of agriculture waste Promote the use of Ecological sanitation toilets
				Usuk	Abwokodia Adacar	Akworo Adacar	<ul style="list-style-type: none"> Development and implementing Source protection plans for newly commissioned infrastructure (valley dams/tanks) Construction of new valley tanks (especially those totally silted) Incorporate livestock watering points (troughs) in the designs of valley dams/tanks Establish/strengthen the water user committees to oversee the use and management of the valley tanks
				Ongongoja	Ongongoja	Oroboi	
Overgrazing	100.0ha	100ha	Katakwi	Ngariam	Odoot	Tumtum	<ul style="list-style-type: none"> Train farmers in Intensive controlled grazing Facilitate farmers to practice zero grazing
Soil Erosion	1028ha	923ha	Katakwi	Katakwi	Katakwi Aleles Aliakamer	Angobo, Apolin Agurigur, Aleles Aelenyang	<ul style="list-style-type: none"> Establish Bio-Physical structures (stone and soil bunds, grass strips, contour bunds,) for runoff control/storm water management Train farmers in conservation/climate-smart Agriculture (mulching, planting basins, cover cropping etc.) Establish soil and water conservation measures (soil bunds, infiltration pits, contour bunds and terracing, grass strips) Facilitate tree growing for Agroforestry, Afforestation and Reforestation
					Aboiboi	Aboiboi, Moru Apesur, Onguok	

1.2.2 Lake Okolitorom: Identified issues and hotspots for interventions

The term “hotspot” means a place where there is significant land degradation resulting in lowering of the quality and quantity of water in water bodies and compromise in the ecosystem services. The hotspots and actual intervention sites for Lake Okolitorom Sub-Catchment are presented in Table 2.

Table 1-2: Confirmed catchment management issues and recommended investment measures in Lake Okolitorom sub-catchment

Confirmed Issues	District	Sub County	Parish	Village	Recommended Measures
Deforestation	Bukedea	Bukedea	Kasoka, Kamon, Kokutu, Emokori, Bukedea Ward, Kokwech, Okouba, Kanyanga	Kajamaka, Kasoka, Kamon, Aputiput, Ookio, Emokori, Adiridir, Okouba, Kanyanga	<ul style="list-style-type: none"> Establish tree nurseries to promote tree growing to restore degraded forest landscapes Sensitization of communities to conserve trees to reduce
		Kabarwa	Tokor, Magara, Kakpri	Tokor, Magara, Ikiloi Toto	

Confirmed Issues	District	Sub County	Parish	Village	Recommended Measures
		Kangole	Koreng, Kangole, Kaleu	Akirim, Osanyuk, Matata, Kakero, Kaleu	<ul style="list-style-type: none"> deforestation and increase tree cover Facilitate tree growing for Agroforestry, Afforestation and Reforestation Development of byelaws and ordinances to create an enabling environment for tree growing Promote farmer managed natural regeneration to increase tree cover
	Kumi	Ongino	Kokudul, Kongora, Kanapa, Obotia, Totolim, kachelakweny	Kokudul, Kangole, Obule TC, Kanapa, Obotia, Totolim, Akolitorom	
	Sironko	Bukiise	Busate, Nalugulu	Salarila, Gadi gadi, Bukhiende	
		Bumalimba	Nandele	Kitagalu	
Flooding	Bukedea	Kabarwa	Kakori, Kabarwa, Tokor, Kodike	Samariya, Ajesan, Tokor, Kodike	<ul style="list-style-type: none"> Establish 2km - Tree lines to stabilize the soil bands in the micro-catchment Establish 20 percolation and infiltration pits in the most flood prone spots in the micro catchment Establish 2 km of grass strips to stabilize the soil bunds, that will serve as fodder for animals in each of the sub-counties Sensitization and build capacity of land owners on the maintenance of the established structures
		Kamatur	Abilaep	Abilaep	
		Kolir	Komidil, Kagoloto	Komidil, Kagoloto	
		Malere	Kokwach	Adiridir	
		Aminit	Aminit, Busaano	Aminit, Ajelel, Busaana	
	Sironko	Bukhulo	Kirombe, Sironko, Walanga,	Budama, Busukuya, Bumasike, Busiu, Bumulaha, Bumalema, Raraka, Kapwayi	
		Bukiise	Kiruru	Kiruru, Buruda	
		Sironko T/C	Kibira, Industrial	Nabirende, Kibira, Sironko valley	
Kumi	Ongino	Kanapa	Kanapa		
Stone quarrying Murram mining, and Pit sand mining	Bukedea	Kachumbala	Bududa, Nalugayi	Bududa, Nalugayi	Restore borrow pits with vetiver grass and indigenous tree species such as Measa laceolants, Vernonia shrubs, Ficus species, Combretum sp, Albyzia sp etc.
	Kumi	Ongino	Kongora, Totolim	Kangole, Totolim	
	Sironko	Bukhulo	Kirombe	Kirombe, Busukuya	
Poor Infrastructural Maintenance	Bukedea	Bukedea	Tank	Atuta	<ul style="list-style-type: none"> Development and implementing Source protection plans for newly commissioned infrastructure (valley dams/tanks) Construction of new valley tanks (especially those totally silted) Incorporate livestock watering points (troughs) in the designs of valley dams/tanks Establish/strengthen the water user committees to oversee the use and management of the valley tanks
		Kolir	Angangam	Angangam	
		Malera	Kacoc	Kacoc	
	Sironko	Bukiise	Bukiise	Bunasinje	
Riverbank degradation and diversion	Bukedea	Kamatur	Acomai		<ul style="list-style-type: none"> Riverbank rehabilitation (Reshaping and use of vetivar systems), River buffer management Demarcation of the riverbanks using locally available planting materials like bamboo and indigenous tree species Sensitizing the communities on avoiding cultivation within the banks of these rivers Formulate environmental bye-laws Establish micro catchment structures to enforce the bye-
	Sironko	Sironko town council	Industrial ward		

Confirmed Issues	District	Sub County	Parish	Village	Recommended Measures
					laws and oversee the restoration activities.
Soil Erosion	Sironko	Bumalimba	All parishes		<ul style="list-style-type: none"> • Establishment of Bio-Physical structures (stone and soil bunds, grass strips, contour bunds and terracing) for runoff control/storm water management • Training farming in conservation/climate-smart Agriculture (cover cropping, planting basins, mulching etc.) • Establishment of soil and water conservation measures (soil bunds, infiltration pits, contour bunds and terracing, grass strips) • Facilitate tree growing for Agroforestry, Afforestation and Reforestation
		Bukiise	Busate, Bukiise, Bukirindye	Nasusulu, Wolugwe, Bukirindye	
	Bukedeza	Malera	Malera, Okouba	Kokonyele, Ojasutio, Rebes	
		Kangole	Kakutot, Kakarau, Kobaale	Kakutot, Aapa, Kicir	
Wetland Degradation	Bukedeza	Kolir, Aमित, Kabarwa, Kangole	All Parishes	All villages	<ul style="list-style-type: none"> • Sensitization of communities on proper management of wetland resources • Support development of institutional frameworks to promote sustainable utilisation of wetland resources (Byelaws, Management plans, ordinances) • Demarcation of all wetlands as per the river bank, lake and wetlands regulations 2000.
	Sironko	Bukiise	Busate, Bukiise	Kisenyi & Mabale	
	Kumi	Ongino	Kodukul, Kanapa, Kongora	Kodukul, Kanapa, Kongora	

2 OBJECTIVES

The overall objective of the assignment is to support communities in middle/lower Awoja sub catchments of Apeduru-Apapai and L. Okolitorom to implement catchment-based and community driven actions aimed at improving soil and water conservation, wetland and riverbank restoration and community livelihood improvements.

The specific objectives of the assignment are to:

- a) identify, mobilise, engage and build capacity of stakeholders and communities in undertaking catchment-based and community driven catchment management measures.
- b) support communities to restore degraded hotspot wetlands and/or riverbanks in Apeduru-Apapai and L. Okolitorom Sub Catchments
- c) support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.
- d) Support communities to restore deforested and degraded land through community tree growing on individual farmers land, public land and riverbanks
- e) support communities to establish and promote alternative income generating activities for improved livelihoods.

3 SCOPE OF SERVICES

This assignment seeks to support communities in Apeduru-Apapai and L. Okolitorom sub catchments to implement catchment-based and community driven actions aimed at improving soil and water conservation, ecosystem restoration and community livelihood improvements. Thus, community mobilization and sensitizations will be key to the implementation of the assignment. Sub-catchment and catchment management committees shall play a major role in this assignment and the Service Provider is requested to engage and involve them accordingly.

As part of general items and cross cutting aspects, the Service Provider shall identify key stakeholders including community and Local Government representatives and develop appropriate mobilization and sensitization tools and approaches. The Service Provider shall carry out community capacity building sessions during implementation of the assignment. Meetings, radio talk shows, and guided field tours to sensitize communities on the importance of sub catchment protection and management will be organized. Interim stakeholder identification, engagement and capacity building reports will be produced at key events but stakeholder engagement and training will be a continuous process. The final report will be produced at the end of the assignment. Specifically, the service provider shall;

- Organize four 5-day exchange visits and study tours to other catchments within Uganda for farmers and communities responsible for restoration activities in each of the two sub catchments (with at least 50 people per visit).
- Organise monthly 1-hour local radio talk shows on the ongoing activities in the sub catchments.
- Produce monthly progress and other associated output Reports
- Organise monthly joint onsite inspections and monitoring by client and other technical staff.
- Produce as-built drawings and maintenance guidelines for the implemented actions.
- Establish and maintain 4 site sign-boards in each of the sub catchments

Task 1: Support communities to restore degraded hotspot Wetlands and/or Riverbanks in Apeduru-Apapai and L. Okolitorom Sub Catchments

In Apeduru-Apapai:

Under this task, 369.5 ha of degraded wetlands shall be restored to perform their ecological and socio-economic functions. Accordingly, the Service Provider shall;

- Conduct awareness raising meetings targeting 400 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 400 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axes, Pangas etc.) to communities to implement wetland protection and restoration action plans.
- Procure 29,560 Sisal stems as local planting materials to demarcate the 110ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)
- Demarcate off 369.5ha buffer zone of the wetland using tree lines (80 tree seedlings per ha at a spacing of 5m by 5m)
- Engage and strengthen 300 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.

In Lake Okolitorom:

Under this task, 13.4 km (6.7 km on each side) of the degraded stretches of the major rivers shall be restored through use of catchment management measures. Accordingly, the Service Provider shall;

- Mobilise 300 community members, raise their awareness on the importance of river bank protection, restoration and management to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 200 community members to undertake and adopt the river bank protection and restoration measures including river bank stabilisation using grasses, tree lines, stones and organise members to develop site specific riverbank protection and restoration action plans. (50 members per training for 2 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axe, Pangas etc.) to communities for use in implementing the riverbank protection and restoration action plans
- Provide 8844 indigenous tree seedlings of an average height of 30cm to Communities
- Demarcate off and re-vegetate 13.4km buffer zone/stretch on both sides of the river using live markers like indigenous trees, and fruit trees planted in 3 lines along the river at spacing 5m x 5m (660 tree seedlings per km, incl. 20% spoil during transportation + replacement planting).
- Procure 2,010 Sisal Sacks of size 50kgs and fill with humus soil and sand for treating severe sections before planting of vetiver grass (each km to be treated with 300 sacks with soil)
- Stabilize 6.7 km buffer zone/stretch on both sides of the rivers using vetiver grass strips (Each km is covered by 5,000 vetiver slips) at a spacing of 20cm.
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival rate of trees. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.

Still under this task, 623 ha of degraded wetlands shall be restored to perform their ecological and socio-economic functions. Accordingly, the Service Provider shall;

- Conduct awareness raising meetings targeting 650 community people and the leadership on the importance of restoration and management of wetlands to ably participate in the restoration process (50 members per meeting)
- Conduct trainings for 650 community members to undertake and adopt the wetland protection and restoration measures and organise members to develop site specific wetland protection and restoration action plans. (50 members per training for 2 days)
- Provide tools (wheelbarrows, Hoes, spades, Peak Axes, Pangas etc.) to communities to implement wetland protection and restoration action plans.
- Procure 49,840 Sisal stems as local planting materials to demarcate the 110ha (each ha to be covered with 80 suckers of sisal at a spacing of 5m by 5m)
- Demarcate off 623ha buffer zone of the wetland using tree lines (81 tree seedlings per ha at a spacing of 5m by 5m)
- Engage and strengthen 300 people of the sub catchment and micro-catchment structures to develop/enforce Wetlands management plans and enforce bye laws for the demarcated wetlands in the sub catchment
- Carry out quarterly inspections and monitoring of the interventions after establishment to ensure high survival. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.

Task 2: Support communities to implement soil and water conservation measures on priority hotspots in the sub catchments.

In Apeduru-Apapai:

Under this task, soil and water conservation measures shall be promoted and established on 200ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation. Accordingly, the Service Provider shall;

- Mobilise 500 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities. (50 members per meeting)
- Conduct trainings for 400 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming, Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)
- Provide tools (wheelbarrow, Handles, Spades, Pangas, etc.) to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.)
- Establish 30km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation
- Establish 1,500 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep to trap and store runoff for soil and water conservation in the landscape
- Establish 30km grass strips to stabilise the soil and stone bunds, and terraces (each km is covered by 5000 vetiver slips)
- Carry out Quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the

- structures established. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Establish 01 demonstration site for control of floods in 02 most affected sub-counties in Apeduru Apapai sub-catchment through use of catchment management measures
 - Mobilise 300 community members and raise their awareness on sustainable management of water resources to control floods (50 members per meeting)
 - Conduct trainings for 200 community members from selected communities to undertake and adopt flood control measures (50 members per training for 2 days)
 - Establish 20km of soil bunds/water diversion channels upstream of most flood prone spots in each sub-county
 - Establish 10km of assorted tree lines to stabilize the soil bands in each of the hotspot (200 trees in each Km)
 - Establish 400 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep upstream of most flood prone spots in each sub-county
 - Establish 20km of grass strips to stabilize the soil bunds, that will serve as fodder for animals in each of the sub-counties (1 km is covered with 25,000 grass slips)
 - Establish 400 drainage ponds/farm ponds (2x2mx1) in each of the sub-county to drain off water

 - Demonstrate Water Source Protection Measures on 15 water sources to facilitate infiltration, control groundwater pollution, reduce siltation and improve discharge in Apeduru-Apapai sub-catchment
 - Conduct sensitization meetings and establish water user committees for each of the 15 water sources (1 meeting of about 50 members per source)
 - Train 15 water user committees on water point source protection using MWE guidelines (20 members/committee, 1 Training/committee)
 - Provide tools to communities to implement water source protection measures
 - Establish 0.25km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation per water point source
 - Stabilise 0.25km of soil bunds with Vetiver grass per water source. Each km of soil bunds is covered by 1250 vetiver grass slips
 - Establish a fence (of dimensions 15 x 15m) meters around the water points using procured treated poles, and Chain link 13.5 gauge 1.8x15m

In Lake Okolitorom:

Under this task, soil and water conservation measures shall be promoted and established on 120ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation. Accordingly, the Service Provider shall;

- Mobilise 450 community members and raise their awareness on the advantages of controlling soil erosion / floods through use of water harvesting and biophysical measures to as to ably participate in the implementation activities. (50 members per meeting)
- Conduct trainings for 350 community members from selected communities to undertake and adopt on soil and water conservation practices for each of the parishes at selected farms: infiltration trenches, storm water diversion drains, percolation ditches; grow trees, shrubs grasses on contour bunds; gully control, developed terraces. Use of other agronomic measures such as cover crops, Conservation Tillage, Deep Tillage, Conservation Farming,

- Contour-Farming, Mulching, Growing of Cover Crops, Strip Cropping, Mixed Cropping, etc. (50 members per training for 3 days)
- Provide tools (wheelbarrow, Handles, Spades, Pangas, etc.) to communities for use during the establishment of water harvesting and soil and water conservation structures (terracing, soil bunds, infiltration pits etc.)
 - Establish 6km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation
 - Establish 120 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep to trap and store runoff for soil and water conservation in the landscape
 - Establish 6km grass strips to stabilise the soil and stone bunds, and terraces (each km is covered by 5000 vetiver slips)
 - Carry out Quarterly inspections and monitoring of the established structures to ensure survival and growth of the planted species and also to ensure effective functioning of the structures established. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
 - Establish 01 demonstration site for control of floods in one most affected sub-county in through use of catchment management measures:
 - Mobilise 200 community members and raise their awareness on sustainable management of water resources to control floods (50 members per meeting)
 - Conduct trainings for 150 community members from selected communities to undertake and adopt flood control measures (50 members per training for 2 days)
 - Establish 2km of soil bunds/water diversion channels (0.6m wide x 0.4m deep) upstream of most flood prone spots in each sub-county
 - Establish 2km of assorted tree lines to stabilize the soil bands in each of the hotspot (200 trees in each Km)
 - Establish 20 percolation and infiltration pits of 2.26m diameter x 1m deep or 2m square x 1m deep upstream of most flood prone spots in each sub-county
 - Establish 2km of grass strips to stabilize the soil bunds, that will serve as fodder for animals in each of the sub-counties (1 km is covered with 25,000 grass slips)
 - Establish 01 demonstration site for control of landslides in the most affected sub-counties in Lake Okolitorom sub-catchment (Bumalimba) through use of catchment management measures:
 - Conduct 2 trainings to 100 community members in Vetiver systems application in each sub county as both a sustainability and adoption strategy
 - Provide tools and materials (wheelbarrows, Handles, Spades, Pangas, etc.) to communities to implement vetiver systems for landslide control
 - Provide, plant and manage 10,000 vetiver slips to form grass bunds/strips for slope stabilization, runoff control, soil and water conservation and land rehabilitation
 - Demonstrate Water Source Protection Measures on 20 water sources to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge:
 - Conduct sensitization meetings and establish water user committees for each of the 20 water sources (1 meeting of about 50 members per source)
 - Train 20 water user committees on water point source protection using MWE guidelines (20 members/committee, 1 Training/committee)
 - Provide inputs to communities to implement water source protection measures

- Establish 0.25km of Soil bunds of 0.6m wide x 0.4m deep for soil and water conservation per water point source:
- Stabilise 0.25km of soil bunds with Vetiver grass per water source. Each km of soil bunds is covered by 1250 vetiver grass slips
- Establish a fence (of dimensions 15 x 15m) meters around the water points using procured treated poles, and Chain link 13.5 gauge 1.8x15m

Task 3: Support communities to restore of deforested and degraded communal and individual land through tree growing (afforestation, reforestation and agroforestry)

In Apeduru-Apapai:

Under this task, 800ha of degraded communal and individual land shall be restored through tree growing (afforestation, reforestation and agroforestry). Accordingly, the Service Provider shall;

- Establish 3 tree nurseries in the Apeduru-Apapai sub catchment each with a production capacity of 90,000 seedlings;
 - Conduct trainings for 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)
 - Procure and supply 60kgs of assorted seed to nurseries for raising seedlings
 - Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance
 - Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Mobilise and sensitize 500 households to engage in tree growing initiatives (50 members per meeting)
- Conduct trainings for 500 households in tree growing and forest management for restoration (50 members per training for 2 days)
- Provide tools and materials (wheelbarrow, Handles, Spades, Pangas, etc.) to 500 households for use during tree growing.
- Provide 320,000 tree seedlings of average height of 30cm to communities
- Plant 320,000 tree seedlings to restore 800 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.
- Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Facilitate 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing. During the implementation of the restoration activities, SCMCs and MCMCs will be formed. These will be the people in charge of overseeing the implementation of the activities and will continue following up even beyond the project. However, in order to ensure that the people continue being committed to the agreed actions of restoring, bye laws that don't already exist need to be developed and their enforcement needs to take place.

In Lake Okolitorom:

Under this task, 648ha of degraded communal and individual land shall be restored through tree growing (afforestation, reforestation and agroforestry). Accordingly, the Service Provider shall;

- Establish 3 tree nurseries in the Apeduru-Apapai sub catchment each with a production capacity of 90,000 seedlings;

- Conduct trainings for 150 selected individuals and groups in nursery establishment and management (50 members per training for 2 days)
- Procure and supply 60kgs of assorted seed to nurseries for raising seedlings
- Provide nursery tools and materials for use by individuals and groups in establishing 3 tree nurseries under technical guidance.
- Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth of the seedlings. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Mobilise and sensitize 400 households to engage in tree growing initiatives (50 members per meeting)
- Conduct trainings for 400 households in tree growing and forest management for restoration (50 members per training for 2 days)
- Provide tools and materials (wheelbarrow, Handles, Spades, Pangas, etc.) to 400 households for use during tree growing.
- Provide 259,200 tree seedlings of average height of 30cm to communities
- Plant 259,200 tree seedlings and restore 648 ha of degraded land (at a spacing of 5m x 5m) under technical supervision.
- Carry out quarterly inspections and monitoring to provide extension services during and after establishment to ensure tree survival and growth. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
- Facilitate 150 members of sub-catchment and micro catchment structures to develop and enforce bye-laws to manage the tree growing. During the implementation of the restoration activities, SCMCs and MCMCs will be formed. These will be the people in charge of overseeing the implementation of the activities and will continue following up even beyond the project. However, in order to ensure that the people continue being committed to the agreed actions of restoring, bye laws that don't already exist need to be developed and their enforcement needs to take place.

Task 4: Support communities to establish and promote alternative income generating activities for improved livelihoods.

In Apeduru-Apapai:

Under this task, Bee-keeping, fodder production, energy saving technologies (e.g. improved cookstoves), fish farming as alternative income generating activities including micro irrigation shall be promoted and supported. The beneficiaries of these alternative livelihoods are the land owners along river banks, and other degraded areas to be restored. Each community member or farmer will select the enterprise they are interested in and it is after this that the list of farmers per enterprise will be generated. Success will be measured based on the number of community members or farmers that adopt and use the different alternative income generating activities.

Accordingly, the Service Provider shall;

1. Support Bee-keeping as alternative income generating activity
 - Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment (50 members per meeting)
 - Conduct 2 trainings to 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing including value-addition. (50 members per training for 2 days)
 - Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:

- 25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)
 - 1 Smoker pump (metallic) for 10 groups
 - 02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups
 - 1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups
 - 1 Air tight Bucket (20ltrs for each of 10 groups)
 - 1 Kg of bee wax for each of 10 groups
 - 1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups
 - 1 bee knife and 1 Bee brush for each of 10 groups
 - Provide bee colonies to the selected farmer groups to start beekeeping and establish apiaries each with 25 bee hives. Install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).
 - Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores) and provide them with value-addition facilities such as packaging materials and branding. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project.
2. Support fodder production as alternative income generating activity
- Conduct 2 trainings to 100 selected farmers in fodder growing and management (weeding, manuring, protection, harvesting- Coppicing, Pollarding, and Side pruning). (50 members per training for 2 days)
 - Provide 10 Kgs seed/seedlings of 30cm height to selected farmers for fodder grass growing at 1.5 m spacing along contours
3. Support energy saving technologies (e.g. improved cookstoves) as alternative income generating activity
- Identify, mobilize and sensitise 500 community members on advantages of using improved cook stoves (50 members per meeting)
 - Select and train 3 women groups of 20 members in construction, use, and maintenance, marketing of improved cook stoves (1-day training per group)
 - Provide materials and equipment (wheelbarrow, Handles, Spades, Moulds, Pangas, Strings, etc.) to women groups and to construct 2000 cookstoves for households.
 - Carry out quarterly monitoring visits to the women groups to ensure the production, usage and maintenance of the constructed cook stoves is efficient and effective. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project
4. Promote fish farming as alternative income generating activity
- Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)

- Conduct One training (2-day) for each of the 3 farmer groups of 20-40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).
 - Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) and facilitate them (labour) to construct 3no. (20x15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m²) of the pond base
 - Prepare the 3 ponds to receive fish:
 - fill the pond with water;
 - fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level);
 - if you use compost, add about 10 kg per 100 m²
 - if you use animal manure, add per 100 m² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure
 - if you use plant wastes only, keep the fertilizing crib full
 - pack this material tightly in each crib
 - Stock the 3 ponds with 4500 fish fingerlings: average density of 1 – 5 young tilapia fish (3 – 15 cm long) per square meter of pond area and feed fish once a day with local by-products and wastes
 - Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months.
5. Establish micro irrigation schemes on farmer's land in Apeduru-Apapai
- Mobilise 250 community members, create awareness and engage the selected farmers to form 5 farmer groups of 30 members each. (50 members per meeting)
 - Train the 05 farmer groups in the use and management of the micro irrigation equipment (handling, operation and maintenance, storage and usage) - 1-day training per group of 30 members
 - Procure 05 kits of the Rain-gun sprinkler irrigation system, with galvanized Steel and movable motorised pump suitable for all field crops, fruits and vegetables. Its specifications are:
 - ↪ Inlet size- 1.5 Inches
 - ↪ 7.5 (Horse Pipe) HP Motor pump with only one rain gun
 - ↪ Nozzle size- 12mm
 - ↪ Pressure- 2 to 5kg/cm²
 - ↪ Discharge-240 to 440 litres per minute (LPM) covering an area of 100 feet radius
 - ↪ High density polyethylene (HDPE) Pipe- 63mm of Nominal pressure (PN)16
 - Provide quarterly technical backstopping to the farmers and monitor the effectiveness of the micro irrigation equipment

In Lake Okolitorom:

Under this task, Bee-keeping, fruit growing, and fish farming as alternative income generating activities including micro irrigation and improving coffee value-chain shall be promoted and

supported. The beneficiaries of these alternative livelihoods are the land owners along river banks, and other degraded areas to be restored. Each community member or farmer will select the enterprise they are interested in and it is after this that the list of farmers per enterprise will be generated. Success will be measured based on the number of community members or farmers that adopt and use the different alternative income generating activities. Accordingly, the Service Provider shall;

1. Support Bee-keeping as alternative income generating activity

- Mobilise and engage 100 selected farmers to identify the potential site (0.25ha) for beekeeping/ apiary establishment (50 members per meeting)
- Conduct 2 trainings to 100 selected farmers in bee keeping and siting of apiary; Hives deployment and baiting; Inspection and maintenance of deployed hives; Honey harvesting and handling; and Marketing including value-addition (50 members per training for 2 days)
- Provide key beekeeping equipment to 10 farmer groups each with 25 bee hives as:
 - 25 KTB beehives for each of 10 groups (standard size; lid is 58cm x 97cm, Side 33cm x 88.9cm, Bottom is 22.9cm x 96.5cm)
 - 1 Smoker pump (metallic) for 10 groups
 - 02 (15-20 litre) plastic buckets for (harvesting honey combs) to each of 10 groups
 - 1 Honey metallic aluminium non-corrosive material Settling Tank (25lts) for each of 10 groups
 - 1 Air tight Bucket (20ltrs for each of 10 groups
 - 1 Kg of bee wax for each of 10 groups
 - 1 protective wear (an overall with a hat with a net and gloves all in one-to protect from stings) for each of 10 groups
 - 1 bee knife and 1 Bee brush for each of 10 groups
- Provide bee colonies to the selected farmer groups to start beekeeping and establish apiaries each with 25 bee hives. Install hives at least 1-1.5m above ground and at 5m interval (distance between hives) for easy management of pests. Identify and fence off an area of 0.25 ha per farmer for establishing the apiary, using local live fencing trees of an average height of 1.5-2m high (e.g. Ficus natalensis - mutuba spaced at 3 metres) and three lines of barbed wire all round. Plant suitable fodder trees and shrubs (e.g. Calliandra, Eucalyptus, bottle brush trees, neem tree, etc.).
- Provide technical support to bee-keeping farmers: Carry out quarterly colony inspection and management to monitor status of colony development, disease condition, presence of queen, brood (eggs, larvae and pupae), and amount of food (pollen and nectar stores) and provide them with value-addition facilities such as packaging materials and branding. This shall remain the responsibility of the SCMC, CMC and the KWMZ staff after the project

2. Support 60 farmers in fruit growing as alternative income generating activity

- Identify and mobilise 60 fruit growing farmers, sensitise and engage the farmers to form 2 groups (60 members per meeting)
- Conduct trainings to the farmer groups in eco-agriculture/agronomic practices (including soil and water conservation, pests and diseases control, fruit tree management, organic farming, post-harvest handling). (30 members per group, 1 training per group for 2 days)

- Provide 3000 orange seedlings of average height of 30cm per group and plant and maintain the seedlings (at a spacing of 4m x 4m) under technical supervision.
 - Provide technical support to fruit farmers and conduct on farm monitoring per farmer per month for the first 6 Months.
3. Strengthen the coffee value chain
- Identify and mobilise 3 groups (ave. 30 members per group) of willing coffee growing farmers and raise their awareness of the importance of good coffee growing practices. (1 meeting per group)
 - Conduct trainings to each of the 3 groups to undertake and adopt best coffee growing practices including Organic farming (nature-based management technologies), good agronomic practices including soil and water conservation, organic pest and disease control (1 training per group for 1 day)
 - Provide 13500 arabic coffee seedlings of average height of 30cm per group and facilitate them (labour) to plant and maintain the seedlings (at a spacing of 3m x 3m) under technical supervision.
 - Provide 1 high productivity Manual type Coffee Pulper to each of the groups for wet coffee processing to ensure good quality seed and link farmers to the available markets' entities through bulk marketing (Specs. Production capacity: 200kg/hr, Peeling rate: >99%-99.5%, Body material: Cast Iron/ steel sheet, Dim: 540mm (l) x 310mm (w) x 570mm (h), voltage: by hand.
 - Provide Technical backstopping to the farmers on monthly basis and monitoring to ensure the coffee value chain is enhanced
4. Promote fish farming as alternative income generating activity
- Mobilise 200 community members and create awareness and engage selected farmers to form 3 farmer groups. (50 members per meeting)
 - Conduct One training (2-day) for each of the 3 famer groups of 20-40 members to adopt and practice improved fish farming practices (farm siting, pond construction, pond preparation, fish stocking, fish growing, fish harvesting, pond management).
 - Provide materials and equipment (wheelbarrows, hoes, pangas, spades etc.) and facilitate them (labour) to construct 3no. (20x15m) dug out shallow ponds, with water depth from 30 cm (upper end) to 150 cm (lower end). The banks should be 50 cm higher than the water on top, with a good slope on the sides, built with soil tightly packed and limed where necessary to lower acidity (100 – 200 g/m²) of the pond base
 - Prepare the 3 ponds to receive fish:
 - fill the pond with water;
 - fertilize the water once every two weeks for 6 months to keep it green (build a crib in the shallow end of the pond, fill it with compost, manure or plant wastes, pack it well under water up to the water level);
 - if you use compost, add about 10 kg per 100 m²
 - if you use animal manure, add per 100 m² one of the following: 2-3 kg of chicken droppings, or 8-10 kg of pig manure, or 10-15 kg of cow manure
 - if you use plant wastes only, keep the fertilizing crib full
 - pack this material tightly in each crib

- Stock the 3 ponds with 4500 fish fingerlings: average density of 1 – 5 young tilapia fish (3 – 15 cm long) per square meter of pond area and feed fish once a day with local by-products and wastes
 - Provide technical support to fish farmers and monitor performance (in terms of growth of fish fingerlings, feeding fingerling, operation and maintenance of fish ponds by the farmers) for 10 days per month for 6 Months.
5. Establish micro irrigation schemes on farmer's land in Okolitorom:
- Mobilise 250 community members, create awareness and engage the selected farmers to form 5 farmer groups of 30 members each. (50 members per meeting)
 - Train the 05 farmer groups in the use and management of the micro irrigation equipment (handling, operation and maintenance, storage and usage) - 1-day training per group of 30 members
 - Procure 05 kits of the Rain-gun sprinkler irrigation system, with galvanized Steel and movable motorised pump suitable for all field crops, fruits and vegetables. Its specifications are:
 - Inlet size- 1.5 Inches
 - 7.5 (Horse Pipe) HP Motor pump with only one rain gun
 - Nozzle size- 12mm
 - Pressure- 2 to 5kg/cm²
 - Discharge-240 to 440 litres per minute (LPM) covering an area of 100 feet radius
 - High density polyethylene (HDPE) Pipe- 63mm of Nominal pressure (PN)16
 - Provide quarterly technical backstopping to the farmers and monitor the effectiveness of the micro irrigation equipment.

4 ORGANIZATION OF THE ASSIGNMENT

4.1 LIAISON WITH MWE/DWRM

The assignment will be coordinated by the Component Manager for Component 3 of the IWMDP. However, coordination of day to day implementation of the activities will be done by the Kyoga Water Management Zones (KWMZ) working closely with the Catchment Management Organizations consisting of Stakeholders Forums, Catchment Management Committees, Catchment Technical Committee and Secretariat and backed up by MWE staff at the national level. The WMZs and the Catchment Management Organizations will be strengthened to perform their roles of stakeholder collaboration and coordination, and guidance to the implementation of the priority interventions. This will be done through providing a platform to have regular meetings, trainings and providing them with the necessary equipment to facilitate their coordination role. The respective government agencies at both national and local levels will however take lead in implementation of interventions falling within their mandates.

All the contractual issues related to the assignment will be formally handled by the Component Manager for Component 3 of the IWMDP but will be discussed and resolved where possible at the local level with the relevant technical staff and the WMZ and local governments as appropriate.

The service provider will produce and issue relevant reports to the Client on key deliverables of the assignment in addition to monthly reports. The monthly reports will contain details of the work

done and will also identify actual and anticipated difficulties and delays in the work, the causes, and remedial measures proposed. The firm shall submit 4 hard copies of each progress and technical report to the Client.

4.2 STAFFING/PERSONNEL

Important to note is that the implementation of this assignment shall be community-driven and so the community members on ground are envisaged to execute the activities therein. Therefore, the Service Provider shall employ and pay the community members for the work done as per agreed rates based on government Labour rates and precedence set by other similar projects.

Nevertheless, the Service Provider is required to elaborate in his technical offer on the envisaged logistical set-up and deployment of appropriate expert skills for the execution of the assignment. The Service Provider should carefully review the scope of services and propose a team of well-organized competent staff, adequately equipped with the necessary skills/facilities to guide the communities in execution of the assignment, bearing in mind that a substantial amount of work in this assignment is field based.

The Service Provider will be expected to present his staffing schedule in a manner that makes it clear as to which personnel will be involved in a specific activity. A staff organogram reflecting the envisioned activities should, therefore, be presented.

4.2.1 Staffing Requirements

The Service Provider shall identify and deploy a team necessary to carry out the assignment and should describe clearly the functions of each team member. The Service Provider is however expected to provide a team, composed of the following key staff.

- Water/Environmental Management expert (team leader)
- Forestry/Tree growing Specialist
- Soil and Water Conservation Specialist
- Community Development Specialist

The Service Provider is at liberty to propose additional staff/competencies/short-term specialists as deemed appropriate for the successful execution of the assignment.

4.2.2 Staffing Qualifications

The key personnel shall have minimum academic qualifications and experience as stipulated below:

- 2No. Water/Environmental Management experts: (Team leaders) A master's degree in Water or Environmental Engineering / Management / Science or related field with 8 years of general experience, 5 years of Specific experience in undertaking water related environmental assessments and in environment management planning. Experience in use of Geographical Information System tools will be an advantage.
- 2 No. Forestry/Tree growing Experts: The Forestry/Tree growing Expert should have a Bachelor's degree in Forestry with experience of 10 years in tree growing. A minimum of 3 years' experience in training farmers in tree planting and agroforestry at community level will be needed.
- 2 No. Soil and Water Conservation Experts: The Soil and Water Conservation Expert should have a Bachelor's degree in natural resources/ water resources management, Agriculture, or

related field with experience of not less than 10 years in natural resources/water resources management. 3 years specific experience in construction of soil and water conservation structures, as well as community involvement and training farmers in catchment restoration measures will be needed.

- 2No. Community Development Experts: The Community Development Specialist shall hold at a minimum a bachelor's degree in social sciences, social works & administration, development studies or community psychology. A Master's Degree in those fields will be an added advantage. The proposed expert should have at least 5years of working experience, of which 3 years should have been in natural resources management. The expert should have experience in undertaking impact, social and gender analysis. S/He should be knowledgeable in preparing appropriate awareness programs. The Expert shall be responsible for mobilizing and sensitization of communities during the project implementation process.

The experts are expected to have local experience and knowledge of conditions in the sub catchment. Ability to speak the local language by Community Development Expert will be required. The Service Provider may seek any additional expertise required for the assignment that may not be available among the team members.

4.2.3 Familiarization with the Assignment

To familiarize with the services to be provided under this assignment, the prospective bidder is advised to visit the project areas. However, it should be understood that any cost incurred in this regard shall not be a reimbursable expense to the Service Provider.

The prospective bidder shall review the project documents, including but not limited to the environmental and social briefs prepared for the area, as well as the Environmental and Social Management Framework (ESMF).

5 QUALIFICATION OF THE SERVICE PROVIDER

The service provider should meet the following minimum requirements:

- i. Copies of original documents defining the constitution or legal status including documentary evidence for example articles of association, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- ii. Total monetary value of Services of a minimum average of US\$1,500,000 performed for within the last five years;
- iii. Minimum experience in Services of a similar nature and scope for the last five years, and details of Services under way or contractually committed; and names and address of clients who shall be contacted for further information on those contracts. The required scope shall be a total of at least;
 - a. 10km of riverbanks restored in the last five years,
 - b. 800ha of degraded wetlands restored in the last five years,
 - c. 1000ha of degraded land afforested in the last five years, and
 - d. 200ha of land under soil and water conservation in the last five years.
- iv. Qualifications and experience of the key experts/ personnel as specified in section 4.1 above.

6 REPORTS AND SCHEDULE OF DELIVERIES

The assignment will be undertaken over a maximum period of 24 calendar months. It is envisaged that the work in both Sub-catchments shall be undertaken simultaneously.

It is however, the responsibility of the Service Provider to establish a detailed work program within the above time frame. This should be guided by his professional judgment of the assignment's requirements and knowledge of the local conditions and needs. The detailed schedule for the required reporting is contained in Table 6-1.

Table 6-1: Reporting/ Delivery Schedule

Deliverable No.	Timing after Commencement	Deliverable	No. of Copies of Reports
D.1	Month 2	Inception Report containing the Service Provider's mobilization, updated work plan and schedule for the provision of the services. Should include any major inconsistency in the TOR, and other challenges that have become apparent during this period, methodology and time schedule for the services and the proposed content and structure of the various reports.	4
D.2	Month 5	6 Tree nurseries established each with a production capacity of 90,000 seedlings	4
D.3	Month 7	Water Source Protection on 35 water sources demonstrated to facilitate infiltration, control ground water pollution, reduce siltation and improve discharge.	4
D.4	Month 11	Establishment of soil and water conservation measures on 320 ha of individual farmers/public land to restore degraded hotspots and reduce/control runoff to control soil erosion and siltation promoted and supported	4
D.5	Month 11	1448 ha of degraded communal and individual land restored through tree growing (afforestation, reforestation and agroforestry)	4
D.6	Month 16	13.4 km (6.7 km on each side) of the degraded stretches of the major rivers shall be restored in L. Okolitorom Sub catchment	4
D.7	Month 18	992.5 ha of degraded Wetlands restored to perform their ecological and socio-economic functions in Apeduru Apapai and L. Okolitorom sub-Catchments	4
D.8	Month 24	800 households trained and supported in establishing alternative income generating (livelihood) activities	4
D.9	Monthly	Monthly Reports	4
D.10	Every 4 months	Stakeholder identification, mobilisation, engagement and capacity building Reports	4

The Service Provider is encouraged to assess the appropriateness of the suggested milestones and comment upon realistic expectations, especially with regard to the allocated time frames for the activities, and propose his own assessment and work plan as part of his proposal.

All reports have to be submitted in both soft (*MS Word, PDF*) and hard copy. The hard copies will be prepared in DIN A4 format, except for plans and drawings which should be prepared in DIN A3 format. The reports should be clearly labelled, i.e. title of the study indicated, for easy identification and documentation purposes. All reports shall be prepared in the English language.

The Service Provider shall work closely with the Client with the aim of capacity building and knowledge transfer.

The time provided is only indicative of the expected time used for each item but the order of implementation will be explained by the service provider with justification in the technical proposal.

All reports will be submitted to:

The Director, Directorate of Water Resources Management
P.O. Box 20026, Luzira-Kampala
Tel: 0414 321342

For the attention of: Manager, IWMDP Component 3 (WRM)

A Task Force will be appointed to supervise the implementation of this activity and coordinate the day to day activities.

7 DATA, SERVICES AND FACILITIES TO BE PROVIDED BY THE CLIENT

To the extent possible, the Client will provide free of charge all existing information, data, reports and maps in her custody and will assist the Service Provider in obtaining other relevant information and materials from governmental institutions and state authorities as far as possible. However, it is the duty of the Service Provider to check availability, quality and suitability of this information. The information, data, reports etc. as mentioned above will be available for the Service Provider's unlimited use during execution of the proposed services.