



**Terms of Reference For: 3 National Consultant to Supervise the MAR Construction Works (Kagera Shared Aquifer One Consultant for Uganda Site & One Consultant for Rwanda Site)**

**Project Title:** Enhancing conjunctive management of surface and groundwater resources in selected trans-boundary aquifers: case study for selected shared groundwater bodies in the Nile basin.

**Component 3: Targeted Pilot Projects to Explore Conjunctive Use of Surface and Groundwater**

**Consultancy Title:** Supervision for the MAR Construction Works (Kagera shared Aquifer)

- Duration of the Contract: from 1<sup>st</sup> of August 2025 to 30<sup>th</sup> of November 2025 (Part time).
- Level of effort is 30 man working days.
- The consultant may be required to remain on-site or be available on-call as per project needs

**1. Introduction:**

The Nile Basin Initiative is implementing the project titled “Enhancing conjunctive management of surface and groundwater resources in selected transboundary aquifers: Case study for selected shared groundwater bodies in the Nile Basin”. Three pilot projects will be implemented in the three selected aquifer areas (Kagera) to demonstrate novel approaches for sustainable management of groundwater and conjunctive use of groundwater and surface water resources. The pilots were selected to illustrate appropriate innovative techniques for sustainable conjunctive use of groundwater and surface water. Successful pilots from this project will be scaled up through other national and sub-regional initiatives.

NBI intends to employ the services of **Individual National Consultant** to participate in and support the **Supervision for the MAR Construction Works (Kagera shared Aquifer)**- in consultation with the international consultant, and the implementation consultants. The assignment described in these ToRs is funded through NBI member country contributions, and Global Environment Facility through United Nations Development Program. This document

presents the Terms of Reference for the **Supervision for the MAR Construction Works**. The Consultant shall be nominated by the local authorities in consultation with the focal institution.

## **2. Consultancy/Assignment Objectives:**

Three pilot projects will be implemented in selected aquifer areas (Kagera) to demonstrate novel approaches for sustainable management of groundwater and conjunctive use of groundwater and surface water resources. The pilots were selected to illustrate appropriate innovative techniques for sustainable conjunctive use of groundwater and surface water. Successful pilots from this project will be scaled up through other national and sub-regional initiatives.

This document outlines the Terms of Reference (ToR) for the engagement of a qualified national consultant to supervise the construction works associated with the construction of MAR structure including the construction of the main MAR structure, drilling and installation of boreholes, installation of a High-Density Polyethylene (HDPE) water conveyance system and the construction of a community water distribution system including a 40m<sup>3</sup> water tower, a pump house and solar panels to operate the turbine pump. Successful supervision will ensure the project meets quality, safety, and timeline requirements while adhering to the approved design and specifications.

### **The primary objectives of this assignment are:**

1. To ensure that all works are executed in accordance with the approved design, drawings, specifications, and relevant standards.
2. To monitor and manage the quality, safety, and progress of the work.
3. To identify and resolve any technical issues that may arise during the construction process.
4. To document and report on the progress and quality of the work to the project manager.

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## **3. Consultancy/Assignment Scope**

The national resident consultant shall carry out the following tasks:

### **3.1 General Responsibilities:**

- Review the construction plans submitted by the project contractor(s) including workshop drawings, construction plans and work schedules.
- Verify that all construction activities conform to the approved project technical drawings and specifications.
- Verify that all construction activities comply with local regulations, environmental requirements, and health and safety standards.

- Coordinate with contractors, suppliers, and stakeholders to ensure smooth project execution.

### **3.2 Supervision Tasks:**

#### **Site Layout Control:**

- Verify and establish site layout and reference points based on the approved plans.
- Ensure proper alignment and positioning of all structures, utilities, and components.
- Conduct regular checks to maintain accuracy in layout throughout the construction process.

#### **Excavation and Backfilling:**

- Inspect site preparation and excavation works to ensure compliance with specifications.
- Monitor the quality of backfilling material and compaction to achieve required density levels.
- Address any unforeseen subsurface conditions.

#### **HDPE Pipe Installation:**

- Oversee trench preparation, pipe laying, and jointing processes.
- Verify that pipes and fittings meet specified material and quality standards.
- Conduct pressure tests and ensure leak-proof connections.
- Steel Tank Erection:
  - Monitor foundation preparation and alignment of tank components.
  - Supervise tank assembly, welding, and corrosion protection measures.
  - Verify compliance with structural stability and safety standards.

#### **Brick and Concrete Construction:**

- Inspect formwork, reinforcement, and concrete pouring to ensure structural integrity.
- Ensure proper curing and finishing of concrete and brickwork.
- Check alignment, level, and dimensions against the design drawings.

#### **Water Distribution Network:**

- Supervise the construction and installation of the water distribution network as per the design.
- Ensure proper alignment and installation of water pipes, valves, and fittings.
- Monitor pressure tests and flow tests to confirm system performance.
- Coordinate with local stakeholders to ensure minimal disruption to the community.

### 3.3 Documentation and Reporting:

- Maintain daily site logs, including work progress, issues, and resolutions.
- Prepare periodic progress reports and submit them to the project manager.
- Document as-built drawings and compile handover reports.

**Table 1: Deliverables, Time schedule & Payment Schedule**

The National consultant will provide the following deliverables -

| Deliverables                                                                                    | Approx. due date from commencement, in weeks | Payment schedule |
|-------------------------------------------------------------------------------------------------|----------------------------------------------|------------------|
| 1. First Progress Report including Non-conformance reports and recommended corrective actions.  | 10 <sup>th</sup> Sept 2025                   | 20%              |
| 2. Second Progress Report including Non-conformance reports and recommended corrective actions. | 4 <sup>th</sup> Oct 2025                     | 30%              |
| 3. As-built drawings and final project report.                                                  | 14 <sup>th</sup> Oct 2025                    | 50%              |

### Level of effort

The total level of effort for this assignment is expected to be 30 man working days extending from 1st of August 2025 to 30th of November 2025 (Part time)., subject to project progress and completion. The consultant may be required to remain on-site or be available on-call as per project needs.

The Client shall pay the consultant professional fees (*to be determined based on agreed daily professional fee rate*) against deliverables accepted by the client.

The proposed payment schedule is given in Table 2.

**Reporting**

The consultant shall report to the Groundwater Project Manager, the supervising international consultant, and coordinate with contractors, suppliers, and other stakeholders to ensure efficient project execution.

All reports will be addressed to the Senior Water Resources Management Specialist and Head of Basin Wide Program.

**Monitoring & Evaluation:**

For monitoring the progress of the production of the pilot design, the consultant will submit daily/weekly/monthly reports that evaluate the progress of deliverables and the implementation of the different activities of the assignment.

**Minimum qualifications and experience**

The expert should meet the following academic qualifications and experience as a minimum:

- a) A bachelor's degree in civil engineering or a related field.
- b) Minimum of five years of experience in construction supervision, preferably in similar works.
- c) Knowledge of HDPE pipe systems, steel tank construction, and concrete works.
- d) Proficiency in relevant codes, standards, and construction practices.
- e) Strong communication and problem-solving skills.

**Interested applicants should submit the following documents:**

- An updated current CV, contact details of at least three referees and a cover letter setting out how the applicant meets the selection criteria, and a proposed approach and methodology)
- Letter of application confirming availability and Interest in the assignment