Terms of Reference
(ToR)
Procurement of Consultancy Service for Assessment of Ground Water for irrigation in selected sites and selection of ground water monitoring tools

BID NUMBER (069/26/SNV)

1. Background

With 60 years of experience and a team of approximately 1,600 people, we support our partners in more than 20 countries in Africa and Asia, tailoring our approaches to different contexts to achieve large-scale impact and create more equitable lives for all.
Our core values of people-centeredness and respect, equity and equality, and diversity and inclusion are fundamental to who we are and what we do. This is reflected in our vision, mission, and strategy, which set out our aspirations and commitments as our compass towards 2030.
For more information on SNV, please refer to our website: www.snv.org.

As part of SNV global program, Power for Food Partnership (P4FP) Ethiopia is one of the Partnership intervention implemented by SNV and partners that promotes Regenerative Agriculture - Productive Use of Renewable Energy (RA - PURE) nexus across agricultural value chains. The programme aims to improve food security, increase farmers' incomes, reduce post-harvest losses, and strengthen climate resilience through the deployment of PURE solutions such as solar water pumping, solar cooling, solar drying, and other productive-use energy technologies.

In relation to solar powered water pumping, the groundwater extraction for irrigation is steadily increasing in Ethiopia, particularly in the Rift Valley, Central Ethiopia, and major horticulture-producing areas. This trend is largely driven by growing demand for irrigated agriculture and the expansion of irrigation technologies, including solar water pumps (SWPs).

While these developments present significant opportunities for improved agricultural productivity, income generation, and climate resilience, they also introduce risks related to groundwater depletion, resource competition, and environmental sustainability.

The rapid adoption of SWP-based irrigation, combined with limited regulatory frameworks, weak monitoring systems, and insufficient hydrogeological data, heightens the risk of unsustainable groundwater abstraction. Additionally, there is limited evidence and guidance on aligning groundwater governance, financing mechanisms, and productive use of renewable energy to enable sustainable and economically viable irrigation models.

In this context, there is a need to develop a structured concept that assesses groundwater dynamics, identifies risks and opportunities, and proposes integrated, system-level interventions to support sustainable groundwater use for irrigation.

2. Purpose of the Assignment

The purpose of this assignment is to guide the assessment, supply, installation and conceptual development of continuous groundwater extraction for irrigation monitoring mechanism on the selected irrigation-based ground water. The assignment aims to generate evidence and actionable recommendations to inform program design, policy engagement, and investment decisions.

3. Objectives of the Assignment

The specific objective of the assignment is to assess current groundwater extraction and utilization practices in selected high-pressure irrigation areas (e.g., Central Ethiopia, Sidama, Rift Valley, and horticulture clusters) identify the required technology, prepare detail document (technical specification, installation guideline, monitoring system and continuous data acquisition system).

The assignment will employ a combination of approaches, including:

- Desk review of relevant literature and existing data;
- Field/site assessments of selected irrigation locations;
- Possibility of installing the groundwater monitoring systems on selected sites;
- Establishment of remote monitoring and data management systems including availability of the required mobile network;
- Define methodology on periodic maintenance services and capacity-building/training to users and relevant stakeholders.

4. Scope of Work

The assignment will include, but not be limited to, the following components:

4.1 Context and System Analysis

- Review short-listed irrigation sites and assess their suitability for piloting groundwater monitoring systems, considering factors such as accessibility, site conditions, and network availability;
- Analyze farming systems, including crop types, irrigation practices, and farm sizes, to support selection of representative boreholes for monitoring.

4.2 Risk Assessment

- Identify and assess environmental and social risks associated with groundwater monitoring systems and their operation.

4.3 Concept Development

- Develop detailed intervention approaches, including system installation, configuration of remote monitoring interfaces, and operational service models;
- Propose practical implementation modalities and identify additional services required to ensure effective system operation;

5. Expected Deliverables and Timeline

A. Deliverables

The assignment is expected to deliver the following outputs:

- Assessment report and site recommendation for the installation of the monitoring system
- List of the technology and detail specification of suitable groundwater monitoring technologies and required quantities;
- A detailed Terms of Reference for the supply, installation and service provision, clearly outlining roles and responsibilities of stakeholders involved in installation, operation, and maintenance.

B. Timeline of Assignment

The assignment is expected to be completed within 1–2 months from the contract start date.

6. Consultant Qualifications and Experience

The consultant (individual consultant or consulting firm) should possess the following qualifications:

Educational Background:

At least a bachelor's degree in one of the following fields:

- Hydraulic engineering
- Agricultural engineering
- Instrumentation
- Related disciplines

Professional Experience

Must demonstrate:

- Minimum of 5 years of relevant professional experience.
- Proven experience in ground water resource assessment, monitoring technology and procurement support.
- Experience working with development organizations, farmer groups, government institutions, and private sector actors.
- Strong report-writing skills.

7. Reporting and Coordination

The consultant will work under the supervision of SNV's Power for Food Partnership team and will coordinate closely with relevant government offices, project partners, and local stakeholders.

8. Application Requirements

Interested consultants are invited to submit:

A. Technical Proposal

The technical proposal shall include:

- Understanding of the assignment.
- Detailed methodology and delivery approach.
- Proposed work plan and timeline.
- Training design and facilitation methodology.
- Approach for conducting practical field demonstrations.
- Quality assurance measures.
- Curriculum vitae (CV) of the consultant(s).
- Evidence of similar assignments successfully completed.

B. Financial Proposal

The financial proposal shall be submitted in a separate sealed envelope and include:

- Professional fees.

- Transportation and field travel costs.
- Accommodation and per diem (if applicable).
- Other relevant costs.
- Detailed cost breakdown.

9. Evaluation Criteria

Proposals will be evaluated using a two-stage selection process based on a total weighting of 100% (70% Technical and 30% Financial). Only consultants securing the minimum technical score of 50/70 or above will be eligible for financial evaluation,

Evaluation Criteria	Weight (%)
Understanding of the Assignment and Methodology	20
Relevant Experience in Similar Assignments	20
Qualifications of Consultant(s)	15
Quality of Proposed Approach and Work Plan	15

10. Submission of Proposals

Submission is acceptable in both hard copies or email /soft copies/.

1. **For email /soft copies/ applicants:** Both the Technical and Financial proposals should be sent separately, only through ettenders@snv.org

   Therefore, SNV will expect **two submission** emails that are for the technical and financial offers.

   Both email subjects must contain the name of the assignment and proposal type. If the consultants miss the submission procedure, they will be automatically **rejected.**

   Title of the specific assignment: "Assessment of Ground Water for irrigation in selected sites and selection of ground water monitoring tools."

2. **For hard copy applicants:** Technical and financial proposals must be submitted with separate sealed envelopes to the SNV office address below.

For any clarifications or questions, please use the following email: azeleke@snv.org

Proposals must be received by SNV no later than **December 14, 2026, 17:00 PM**, close of business.

Address: SNV – Ethiopia Country Office, Procurement Department; on the way from AU to Mexico Square; P. O. Box: 40675, Tel: + 251 (0) 11 616 6232, Ext 238; Fax number: +251-116166252; Addis Ababa, Ethiopia

SNV-Ethiopia reserves the right to cancel the bid partially or fully.