Terms of Reference (ToR) Consultancy Service for Irrigation Project

1. Background

With the funding from KOICA and technical support of Good Neighbors International (GNI) Nepal, SAHAMATI is implementing Inclusive Rural Development Project (IRDN) in East and West Nawalparasi district. Started since July 2019, the two-year long IRDN project aims to implement 26 Locally Initiated Projects (LIPs) under four themes; Commercial Agriculture Production, Commercial Livestock Production, Economic Infrastructure at Community Level and Youth and Women Skill Development.

2. Background of the Assessment

One of the specific objectives of IRDN/LIP is to uplift the economic status and employment opportunities in targeted area through increasing the access of irrigation to community. Economic infrastructure is one of the components of LIPs that aims to supply irrigation water to increase cropping area, crop intensity and productivity which improve farmer's livelihood.

IRDN project has received more than 42 project proposals from the communities. Following rigorous selection process, 26 project proposals have been selected for the implementation. Out of 26 projects, 6 irrigation projects have been selected for implementation at community. Therefore, SAHAMATI intended to invite Expression of Interest (EOI) from potential individual/firms/company for preparation of Detail Implementation Plan (DIP) for irrigation project in IRDN working area.

3. Objectives of the Work

- To confirm actual area to be irrigated by ground water scheme.
- To provide the standard design, estimation and specification of tube well and water distribution system required for the irrigated area.
- To prepare a detailed implementation plan for the irrigation project including socio-economic aspects

4. Scope of the Work

The design should be based on primary data principally. However, secondary data may be used wherever needed.

5. Activities

For preparing the designs and estimates of the tube well, the consultant/firm is expected to use standard methods and technique that ensure quality outputs. The consultant/firm shall:

- To determine the number and type of tube wells satisfying required discharge of the area of the land to be irrigated.
- To design a type of tube well for maximum yield.
- Develop the appropriate typical working drawings in consultation with organizational technical team and related government bodies.
- Submit the final working drawings to the organization after getting final approval from concerned government authorities.
- Conduct meetings with GNI and SAHAMATI and other relevant stakeholders.

6. Expected Deliverables

Expected results of the survey are as follows:

- 1. Detailed design of different types of tube well confirming boring length and type of tube well for maximum yield.
- 2. Main pipe and branch pipes.
- Design solution optimization; Production of detailed technical and working drawings using computer aided design
 - a) Engineering Specification
 - b) Work plan, bill of quantities
- 4. To finalise the Detailed Implementation plan for an irrigation project of the area for the type of designed tube well

The report shall be submitted in English Language in the form of:

• Two hard copies and an electronic copy (PDF and DWG format) of the designs and report.

7. Duration

Tasks	Time Allocation
Document review of IRDN project and develop methodology and tools in consultant with IRDN team.	2 days
Meeting with IRDN team and agree on survey plan and tools.	1 Days
Field work in Nawalparasi districts (Field visit in project Municipality/Rural municipality), meeting with stakeholders, interaction with beneficiaries).	2 days

Design/Estimate	5 days
Preparation of draft Report.	2 days
Preliminary presentation with IRDN and collect feedback.	1 day
Finalization and Submission of Report	2 days
Total	15 days

8. Budget

The consulting team/consultant can propose a competitive cost package which must reflects perday remuneration of expert/s, travel and other related expenses including taxes at time of proposal submission. The budget should cover the consultancy fee, geological survey (bore depth identification), travel, food and accommodation of consultants and others expenses as justifiable. SAHAMATI could not bear any additional and unforeseen budget against agreement between both parties.

9. Acceptance of Proposal

All rights to accept/reject proposal, without giving any reason, shall be reserved with IRDN project, Nepal. If deemed necessary, the firm/consultant shall be asked for modifications and presentations of the proposal before approval.

10. Management of the Work

The selected firm/consultant shall manage the assessment and be accountable for the timely delivery of the expected quality products.

11. General Qualification of the Firm/Consultant

Public, private, and non-governmental organizations/ individuals registered with an authorized agency of the Government of Nepal and having proven experience in the field of Ground Water Irrigation work, 'Designing and Analysis' are eligible to apply.

12. Composition of the Designing Team

Chief Irrigation Engineer/ Team leader(one):

- Chief Irrigation Engineer shall have at least a Master Degree Irrigation and possess strong
 working knowledge of design, estimation, structural analysis and preparation of specification
 of materials and work methodology.
- The incumbent shall be responsible for ensuring that the designs are correctly prepared and reported.
- S/he shall have an extensive knowledge in irrigation project and analysis work for rural area.

- Be responsible for coordinating all the activities mentioned in this ToR.
- Possess very good interpersonal, technical and communication skills.
- Have proficiency in written and spoken English and Nepali language.

Structural Engineer (one):

• The Structural Engineer shall have a Master Degree in Structural Engineering and with at least three years of experience in structural analysis.

Agriculture Expert (one):

 The Agriculture Export have a Master degree in Agriculture and with at least 6 years of experience.

Civil Engineer (one):

• The Civil Engineer shall have a Bachelor Degree in Civil Engineering and with at least three years of work experience in irrigation/water supply field.

Sub Engineer (one):

• The Sub Engineer shall have a Diploma in Civil Engineering or Architecture and with at least 3 years of work experience in construction field.

13. Termination of the Contract

SAHAMATI may terminate the agreement, if the consultant/firm commits a breach in the performance or observance of any of its obligations under this ToR. The consultant/firm shall be notified in writing seven days prior to the termination of the agreement.

14. Information Documentation and Copyright

The firm/consultant shall collect and document required information during the entire course of the survey and include information/data that are not included in the report under annexes.

15. Documents to be submitted by the Firm/Consultant

The consultants should submit below documents to verify required expertise for the assignment:

- Curriculum vitae of consultants highlighting relevant qualifications, work experience and knowledge of working in similar field.
- II. Financial proposal indicating expert fee, travel and other logistic cost
- III. Letter of Interest (LoI) briefly mentioning the study methodology.

In case, consulting company is applying for this assignment below documents should be submitted:

- I. Copy of company/organisation registration
- II. Organisation profile

III. Relevant Experience in tube well design

IV. A copy of Tax clearance certificate

V. VAT/ PAN registration

VI. Audit report

VII. Any other relevant documents

16. Documents to be submitted by the Firm/Consultant

IRDN technical support team at GNI Nepal provides assistance and advice to the consultant with all necessary background materials concerning the project and the project site, including the project plan and baseline data and information. SAHAMATI is responsible for decision making concerning all practical issues of the assignment during field study.

Annex 1

Name of irrigation project working area

S.N	Municipality/Rural Municipality	Ward No.
1	Sunwal Municipality	7

Letter of Interest, Technical and financial proposal and CV/s of experts should reach the address given below via email by 15 December 2019, 17:00 hours (Local Time). Please enclose the application and proposals in an envelope and mark it "EOI for Detail Implementation Plan Preparation of Irrigation Project" and submit it at the address given below:

SAHAMATI

Gaidakot Municipality – 5 Nawalparasi, Nepal

Email: sahamatijobs@gmail.com or eoi@gninepal.org