**Term of Reference**

**Functional Title: Irrigation Engineers**

**Qualifications and experience**: Bachelor’s Degree in civil engineering with 5 years' experience in planning, design and implementation of small irrigation system or community infrastructures. Should be familiar with the use of GPS survey methodologies, be proficient in use of GIS and AutoCAD software. A good understanding of functioning of three sphere of governments in a federal system. Familiar with Local Government Operations Act, 2074 and other relevant acts/guidelines like Public Procurement, implementation of projects through Users Committees, Public Auditing and so on being applied by the Local Governments.

**Responsibilities:**

1. Accountable for overall management of the project in working Palikas.
2. Ensure Palikas select small irrigation schemes giving priority to disadvantaged groups with a linkage with agriculture services and inputs.
3. Ensure quality of the social mobilization process and participatory approach for project verification, design and implementation by mandatorily visiting schemes during the critical milestones/stages of the project.
4. Manage and supervise the Technical Officers in project selection, verification, design, construction and post construction support.
5. Participate in public meetings at Palika, information dissemination and discussion with ward members to enable them to come forward with request for construction or rehabilitation of small irrigation schemes.
6. Guide the Technical Officers for collecting all relevant data at selected sites for scheme verification, including measurements of irrigation sources, location and type of the proposed infrastructure; and entering these data in the automated on-line scheme verification system. During data collection, it should be ensured that all relevant existing infrastructure and proposed command areas are identified, geo-referenced/tagged and that the condition of the existing infrastructure is properly recorded.
7. Based on the scheme verification data, assist in the preparation of a list of schemes that can be taken up for scheme preparation.
8. Be accountable in assuring quality of survey, design including BoQ, cost estimate and the bills of individual schemes. Guide the Technical Officers in preparation of the detailed design for construction and/or rehabilitation of the selected irrigation schemes including the BOQs and cost estimates, based on a set of typical designs and using the automated on-line project preparation system. If required, make necessary changes in the type design and include in the system or add specific designs.
9. Guide the Technical Officers in preparation of GIS mapping of construction or rehabilitation of irrigation infrastructure, giving due attention to the location of structures, command areas of proposed irrigation schemes, cross drainage and slope stability.
10. Be accountable in timely supervision and operation & maintenance related activities performed in each schemes. Ensure the Technical Officers perform construction supervision, quality control and post construction support to the WUA, including the formation of and training to WUAs and transformation of WUA to an O&M committee after the conclusion of the schemes. Similarly, ensure commissioning and testing of the completed works, preparation of an operation and maintenance plan for the created infrastructure, and periodically supervise the implementation of these plans.
11. Ensure WUAs are provided adequate support during construction activities.
12. Coordinate with Palika and relevant agencies for the delivery of agriculture support including capacity building and support to WUAs. Communicate with Palikas in relevant matters.
13. Establish and strengthen linkages with related organizations at Palika level.
14. Plan and conduct crop cut surveys, short-term monitoring and good practices/case studies. Ensure timely collection of data and entry into the MIS and coordinate field visits by the central-level specialists.
15. Other tasks as directed by the Team Leader.