REPUBLIC OF ZAMBIA
MINISTRY OF AGRICULTURE
PROJECT MANAGEMENT AND MONITORING DEPARTMENT

Irrigated and Sustainable Agriculture for Transformation Project - ISAT

Terms of Reference

Position; Irrigation Engineer

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1. Background

The Government of the Republic of Zambia, through the Ministry of Agriculture (MoA), is implementing the Irrigated and Sustainable Agriculture for Transformation (ISAT) Project funded by the World Bank. The Project Objective is to increase access to irrigation, enhance integration into agriculture value chains and climate resilience in Zambia. ISAT comprises the following components: Irrigation Development and Scale-up; Knowledge Generation and Digital Dissemination; Market Access and Value Chain Development; and Project Management, Monitoring and Evaluation. The Irrigation Engineer will support scheme development and upgrading, farmer-led irrigation development and relevant irrigation research infrastructure, coordinating with responsible MoA structures and other PIU specialists.

2. Objectives of the Assignment

Under the supervision of the National Project Coordinator, the Irrigation Engineer will lead the PIU's technical coordination and quality assurance for Irrigation Development and Scale-up activities under Component 1 and relevant irrigation infrastructure under Component 2.1. The Engineer will coordinate with the Department of Irrigation and Mechanization, ZARI and other PIU specialists on feasibility and design review, technical procurement inputs, works supervision, commissioning, sustainable operation and maintenance, and technical evidence for monitoring and verification, within the approved project scope and delegated authority.

3. Scope of Work

The Irrigation Engineer's tasks will include but not be limited to:

The Engineer shall maintain site-specific design-review and supervision records covering water availability, climate resilience, energy options, engineering quantities, quality tests, progress measurements, defects and corrective actions. In coordination with the environmental and social specialists, the Engineer shall document the required technical clearances and permits before recommending commencement of works. For FLID, the Engineer shall support equipment suitability checks and GPS-referenced installation evidence under the approved RBF Manual, without substituting for any required independent verification or authorizing grant payment. Commissioning and handover packages shall include as-built records, asset inventories, operating and maintenance arrangements, user training and outstanding-defect tracking. Technical certification, payment authorization and contract variation approvals shall remain with the officers designated in the contract and MoA–NAO arrangements.

i. Day to day technical inputs into project planning and implementation processes.
ii. Coordinate site-level implementation information with the responsible MoA district and field structures, scheme operators, Water User Groups and contracted service providers, as applicable under the approved implementation arrangements; document progress, constraints and corrective actions for PIU review.

iii. Supporting the Project Coordinator in the supervision and coordination of the consulting teams that will be hired under the project on the various aspects of the ISAT, including the feasibility consultants.
iv. Critically analyzing/reviewing, on behalf of the Project Coordinator, the various reports prepared by the consultants hired under the project and advising accordingly, paying particular attention to the proposed management aspects, project water requirements and supply, capital costs and operation and maintenance costs.
v. In conjunction with other project coordination staff, organizing workshops and meetings as required to review project consultants' technical proposals.
vi. Advising the Project Coordinator on the adjudication of consultants' proposals and contractors' tenders.
vii. Preparing training manuals on technical matters.
viii. Contributing to the design of the monitoring and evaluation arrangements.
ix. Preparing a technical contribution to the Project Coordinator's regular management reports.
x. Generally providing technical support to the Project Coordinator's project management function during the implementation of subprojects.

4. Qualifications and Experience

4.1. Academic Qualifications

i. Bachelor's Degree in Irrigation Engineering, Agricultural Engineering, Civil Engineering, Water Resources Engineering, or a related field.
ii. A Master's Degree in Irrigation Engineering, Water Resources Management, Agricultural Engineering, or related discipline will be an added advantage.
iii. Registration with the Engineering Institution of Zambia (EIZ) and the Engineers Registration Board (ERB) is required.

4.2. Professional Experience

i. Minimum of ten (10) years of progressively responsible professional experience in irrigation engineering and water resources development.
ii. Demonstrated experience in design, construction supervision, rehabilitation, and management of irrigation infrastructure.
iii. Experience working on donor-funded agricultural, irrigation, water resources, or rural development projects.
iv. Proven experience in contract management and supervision of contractors and consultants.
v. Experience in irrigation feasibility studies, engineering design review, and quality assurance.
vi. Familiarity with environmental and social safeguards requirements related to infrastructure development.
vii. Experience working with government institutions and stakeholder coordination processes.

5. Duration and location

i. The assignment shall be on a full-time basis, based in Lusaka, Zambia, with regular travel across the Country. The contract will be for an initial three (3) years renewable for an additional two (2) years based on satisfactory performance and availability of funds.
ii. Please note that the stated five-year term is a proposed assignment period, not confirmation of an approved contract or financing eligibility. Before contracting, MoA and NAO shall reconcile the term and renewal provisions with the approved procurement plan and contract form and identify the funding source, eligible expenditure category and applicable closing date. No commitment or extension shall rely on an assumed common closing date for IDA and FS2030 financing.

iii. The Irrigation Engineer shall be based at the Project Implementation Unit (PIU) within the Ministry of Agriculture in Lusaka. The position will require frequent travel to irrigation sites and project implementation areas throughout Zambia.

6. Institutional Arrangements

i. The Irrigation Engineer shall be part of the Project Implementation Unit (PIU) of the ISAT Project.
ii. The Irrigation Engineer will work closely with relevant departments within the Ministry of Agriculture, particularly the Department of Irrigation and Mechanization and other technical units involved in project implementation.
iii. The Irrigation Engineer shall collaborate with consultants, contractors, Water User Groups, local authorities, and other project partners.
iv. The Irrigation Engineer shall support technical missions, inspections, supervision activities, and project reviews conducted by Government and development partners.

7. Reporting Obligations

The Irrigation Engineer shall prepare and submit the following:

i. Monthly technical implementation progress reports.
ii. Site inspection and supervision reports.
iii. Construction quality assurance and quality control reports.
iv. Technical assessments and feasibility review reports.
v. Contractor performance evaluation reports.
vi. Environmental and safety compliance reports related to irrigation infrastructure activities.
vii. Inputs into quarterly, semi-annual, and annual project progress reports.
viii. Technical briefs and presentations for management, project committees, and development partners.
ix. Completion reports for irrigation infrastructure works and related assignments.

The Irrigation Engineer shall maintain comprehensive technical records and ensure timely submission of reports and documentation required by the Project Coordinator, Ministry of Agriculture, and financing partner.