REPUBLIC OF ZAMBIA
MINISTRY OF AGRICULTURE
PROJECT MANAGEMENT AND MONITORING DEPARTMENT

Irrigated and Sustainable Agriculture for Transformation Project - ISAT

Terms of Reference

Position; Information and Communications Technology Specialist

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. The project supports irrigation development, knowledge generation and digital dissemination, market access and value chain development, and project management, monitoring and evaluation. Implementation draws on experience from the Irrigation Development and Support Project, the Zambia Growth Opportunities Program for Results, the Zambia Agri-business and Trade Project and other relevant initiatives.

The Ministry requires an Information Technology Specialist to support the PIU in all project envisaged activities related to information systems, digital tools and technology services. The Specialist will also help ensure that the project has secure, reliable and fit-for-purpose systems for communication, records, data management and reporting, and will provide technical advice on digital solutions that support project implementation.

2. Objective of the Assignment

Under the Project Coordinator, the Specialist shall perform the Digital/ICT function, support all the digital/ICT activities envisaged under the project in all their phases including design, implementation and supervision, leading digital implementation requirements and technical coordination as well as PIU IT support. Responsibilities cover approved e-extension, farmer-registry, soil-information and FLID systems; interoperability; vendor technical deliverables; user acceptance; adoption monitoring; and sustainable handover. MoA ICT and Smart Zambia shall coordinate institutional architecture and technical standards; Technical departments shall own approved technical content; M&E shall own indicator definitions and results validation; and NAO shall retain assigned fiduciary controls. No parallel platform or additional support post is authorized by this ToR.

3. Scope of Work

In coordination with MoA ICT, Smart Zambia, ZARI and the relevant component leads, the Specialist shall translate the approved e-extension, farmer-registry, soil-information and FLID, and any other Digital/ICT related project supported activities digital requirements into a costed implementation roadmap, system specifications, interoperability arrangements and user-acceptance criteria. The Specialist shall coordinate vendor technical deliverables, access controls, testing, training, service continuity and documented handover to the responsible government institution. M&E shall retain responsibility for indicator definitions and data validation; technical departments shall approve advisory content; and NAO shall retain assigned procurement and financial controls. New systems and AI-enabled functions shall be implemented only within the approved project design and applicable project requirements.

The Specialist will work closely with the PIU, relevant MoA Information Communication Technology Department, project consultants and other technical staff. Responsibilities will include, but will not be limited to:

1. Coordinate the technical assessment of existing MoA agricultural systems, digital tools, infrastructure, connectivity and user capacity, and prepare a costed roadmap for the government-owned, integrated national e-agriculture platform under Sub-component 2.2. Coordinate the platform architecture assessment within the first six months of implementation to identify integration pathways with ZIAMIS and other MoA systems and avoid parallel data infrastructure.
2. Coordinate configuration, integration, testing and phased deployment of approved e-agriculture services, together with the computers, connectivity, communications and collaboration tools needed for PIU and field operations. Consolidate and strengthen existing digital tools wherever feasible rather than establish stand-alone systems.
3. Provide user support and troubleshoot approved hardware, software and platform services for PIU staff and participating field users; document requests, resolutions and recurring constraints, and maintain inventories of equipment, licenses, warranties and assigned assets.
4. Coordinate technical implementation with MoA ICT, Smart Zambia, responsible MoA departments and authorized providers, including complementary digital-extension activities supported through SIFAZ and other cooperating partners. Maintain agreed system interfaces and responsibilities, resolve technical dependencies and avoid duplication; coordinate procurement inputs with NAO without assuming fiduciary approval powers.
5. Translate extension-service requirements into platform specifications and workflows for performance-based monitoring of approximately 2,600 extension officers and a dashboard recording staff and farmer training, farmer field schools, field days and agricultural shows, integrated with ZIAMIS. Support project document management, field data collection and reporting without replacing technical departments' service-management responsibilities or M&E ownership of results definitions.
6. Support secure electronic records and data-exchange arrangements across approved systems, including controlled access, consistent identifiers and formats, version control, retention, archiving and audit trails. Document interfaces and data responsibilities with MoA system owners, maintaining government ownership and avoiding duplicate beneficiary and service records.
7. Apply appropriate cybersecurity controls to PIU services and project-supported platforms, including role-based access, secure configuration, updates, endpoint protection, monitoring and incident escalation, in coordination with MoA ICT and authorized providers. Protect the integrity and availability of farmer, extension and verification records.
8. Prepare and maintain operational procedures for platform administration, account and access management, data exchange, acceptable use, equipment management, backup and incident handling, consistent with Government requirements. Specify technical publication workflows while retaining responsible departments' authority to validate and approve agricultural advisory content.
9. Coordinate routine backups and restoration tests for critical PIU records and project-supported platform data; maintain recovery records, address identified weaknesses and document continuity arrangements with the responsible MoA system owners and service providers.
10. With the Geospatial/M&E Specialist and responsible departments, provide secure storage, exchange and evidence-linked extracts for project results, platform engagement, extension delivery and soil-health information services. Support the improved farmer registry and soil information system under approved FS2030 activities, enabling site-specific recommendations and authorized FISP monitoring and evaluation. M&E shall retain results validation and indicator ownership; technical and policy leads shall

retain content, targeting and graduation decisions. Enable authorized exchange of approved project data with Africa RISE regional reporting systems.

11. Coordinate technical solutions for SMS, USSD, radio-linked delivery and simple visual materials, including content in the seven local languages specified in the PAD, to reach farmers with limited connectivity or digital literacy. With extension and research leads, support dissemination of approved weather, pest and disease early warnings, climate-smart irrigation advice, soil-health information and input-efficiency recommendations. For FLID, support approved digital workflows and GPS-enabled installation evidence, preserving independent verification before payment and the separation of verification, approval and fiduciary functions; support field-testing of verification protocols before scale-up.
12. Prepare technical requirements, cost estimates, procurement inputs, evaluation criteria and user-acceptance tests for approved digital services, integration, equipment and connectivity. Review vendor technical deliverables, document tests and defects, and recommend acceptance through the authorized process, coordinating with NAO while retaining the established separation of procurement, contract approval and payment responsibilities.
13. Monitor platform availability, service quality, user uptake and implementation bottlenecks, and track corrective actions with MoA and providers. Prepare costed operations, maintenance and handover plan identifying institutional owners and technical capacity needs; prioritize MoA recurrent-budget provision for core public advisory, weather and market-information functions in line with the PAD's sustainability approach, without assuming that future allocations are already committed.
14. With the Extension Specialist, and MoA ICT, assess digital skills and train PIU staff, extension officers and other approved users in platform use, digital advisory delivery, secure data handling and troubleshooting. Support agro-dealer advisory capacity where included in approved activities; pair digital tools with field-based extension and practical user support, and document training, use and feedback for continuous improvement.
15. Protect personal, confidential and sensitive information through authorized collection and use, controlled access and secure sharing; document data-management responsibilities across integrated systems and promptly escalate suspected breaches through applicable Government and project procedures. Share only authorized datasets and appropriately protected reporting extracts.
16. Submit technical inputs to project work plans, budgets and progress reports covering architecture and integration milestones, digital-service delivery and uptake, vendor outputs, training, risks, corrective actions and sustainability readiness. Provide supporting system records to technical leads and M&E for agreed results reporting, and support project reviews and missions without treating platform activity alone as verified achievement of project outcomes.

4. Qualifications and Experience

4.1 Academic Qualifications

- Bachelor's degree in Information Technology, Computer Science, Information Systems, Computer Engineering or a related discipline.
- A relevant postgraduate qualification or professional certification in IT service management, networking, cybersecurity, systems administration or project management is an advantage.
- Relevant vendor-neutral or industry certifications in networking, systems administration, cloud services, cybersecurity or IT service management are an advantage.

4.2 Professional Experience

1. At least ten (10) years of progressively responsible experience in information technology support, systems administration, infrastructure management or a related field.

2. Demonstrated experience supporting office IT environments, user accounts, endpoints, networks, productivity and collaboration tools, and business applications.
3. Experience with cybersecurity practices, access management, backups, incident response, continuity planning and secure information handling.
4. Experience preparing technical specifications, cost estimates and procurement documentation for IT equipment and services, and coordinating vendors or service providers.
5. Experience supporting data management, digital data collection, document management or reporting systems is an advantage.
6. Experience working with government institutions or development partner funded projects is an advantage.
7. Knowledge of applicable Government information security, records management and data protection requirements, or ability to learn and apply them effectively.
8. Strong problem-solving, customer service, communication, documentation and training skills; ability to explain technical matters in clear language.
9. Fluency in written and spoken English.

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 Expert will be based at the ISAT Project Implementation Unit within the Ministry of Agriculture in Lusaka and will travel frequently to project sites and other locations in Zambia as required.

6. Institutional Arrangements

1. The Specialist will be part of the ISAT Project Implementation Unit and will report to the Project Coordinator.
2. The Specialist will work closely with the Ministry's designated information technology and information management personnel and coordinate with PIU technical specialists and administrative staff.
3. The Specialist will liaise with authorized technology suppliers, consultants and service providers on technical support, system implementation and maintenance.
4. The Specialist will support technical missions, system reviews, user training and meetings with Government and development partners.

7. Reporting Obligations and Deliverables

1. The Specialist will submit timely, practical and decision-oriented outputs in accordance with the PIU work plan and deadlines agreed with the Project Coordinator. Expected outputs include:
2. An IT asset and software inventory, with documented assignment, warranty, license and maintenance information as relevant.
3. Recommendations and specifications for required IT infrastructure, software, connectivity and support services, with indicative costs and procurement priorities.
4. IT policies, standard operating procedures or user guidance for access, cybersecurity, data handling, backups, records management and incident reporting, as agreed with the PIU and Ministry.
5. Periodic records of support requests, system availability, maintenance activities, backup status, security incidents and corrective actions, with sensitive details appropriately protected.
6. User orientation and training materials, with records of training delivered to PIU staff and other agreed users.

7. Monthly progress updates and periodic technical inputs to quarterly, semi-annual and annual project progress reports.
8. The Specialist will maintain accurate and secure records of IT assets, configurations, licenses, service requests, maintenance and incidents, and provide them to the PIU in accessible formats. Deliverable schedules and acceptance arrangements will be agreed with the Project Coordinator at inception.