REPUBLIC OF TAJIKISTAN

STRENGTHENING RESILIENCE OF THE AGRICULTURE SECTOR PROJECT
REPUBLIC OF TAJIKISTAN

Terms of Reference and Scope of Work for the Information Systems and Automation Expert to support the SUE "Center for Digitalization and Advanced Training of Agricultural Workers" under the Ministry of Agriculture (MoA) of the Republic of Tajikistan.

1. **Background**

The "Strengthening Resilience of the Agriculture Sector" Project (SRASP) in Tajikistan aims to enhance climate resilience and promote sustainable agricultural development by enhancing the capacity of the Ministry of Agriculture to collect, analyze and monitor real-time data through the development of the Agriculture Management Information System (AMIS). Under subcomponent 3.1 of the project, it is planned to establish the AGRIDATA Stack system as part of AMIS, combining data on land use, crop conditions, and climate impacts through digital tools such as dashboards and remote sensing technologies. This system is to be managed by the AGRIDATA Technology Group (ATT) and the Advisory Body (AAB), which will oversee the management and harmonization of data. Agrometeorological information services will be expanded with new weather stations, ICT infrastructure and a digital farmer alert system, including weather, crop and pest messages available via SMS or mobile apps. To ensure the effective use of this system, the project places special emphasis to digital literacy and targeted training for MoA employees, local agencies and dehkan farms. Key risks such as stakeholder coordination, data sharing, technical challenges, and digital literacy deficiencies are addressed through strategies such as information programs, secure data transfer protocols, and enhanced community engagement. This comprehensive system supports data-driven decision-making to improve agricultural resilience and respond to crises across Tajikistan. The main customer of AMIS is the Ministry of Agriculture represented by the SUE "Center for Digitalization and Advanced Training of Agricultural Workers" and the State Institute "Agriculture Entrepreneurship Development" Project Management Unit (AED PMU).

2. **Objective of the assignment.**

The Information Systems and Digitalization Expert, hereinafter called "the Expert" plays a key role in developing the Information System for the agricultural sector, ensuring that the system meets the requirements of the customer, stakeholders, and end users. The main tasks of the Expert include the formation and management of the product vision, the creation, and prioritization of tasks, working with stakeholders and stakeholder performers, determining acceptance criteria, collecting and analyzing feedback, as well as monitoring the progress of development. Together with the Customer, the Expert determines the goals of the system, and manages the list of requirements, organizing it by priority depending on its importance and value for the Customer. He interacts with key stakeholders, involved consulting and technical implementers, and end users to agree on changes and clarify requirements, constantly checking whether the information system being developed meets their expectations and goals. The Expert also sets quality and acceptance criteria to ensure that tasks are completed at the proper level, analyzes feedback to make improvements, and participates in regular meetings with the team, monitoring the progress of development and

adjusting the course if necessary. He /She will be primarily responsible for supporting the Customer in planning and implementing activities related to the implementation of subcomponent 3.1., particularly the implementation of the AMIS Information System. Digital technologies will be implemented in accordance with the project Guidelines of the State Institution "AED" PMU, the Charter of the SI "AED" PMU, the current legislation of the Republic of Tajikistan, and the orders of the Director of the SI "AED" PMU.

3. **Scope of services for the Expert**

   Under the direction of the SRASP Project Coordinator of the SRASP, and the Component 3 Coordinator the Expert will implement the following tasks:

   3.1. **Develop and manage the concept note for the AMIS**
   Based on existing materials, including the documents prepared by the FAO consultant, the Expert must categorize the strategic objectives of the Client and key stakeholders, define the needs of the end users and develop a strategic concept document for the AMIS. The Expert is responsible for conveying this document to the development team, including consulting and technical staff, clarifying what is to be achieved by the system. This includes defining the objectives, user values and long-term prospects of the system.

   3.2. **Creating and prioritizing a list of key tasks and requirements**
   The Expert must develop a list of key tasks and requirements for the AMIS. This list includes key tasks, requirements, and functional elements that are critical to achieving the AMIS strategic objectives. The expert should prioritize the items based on their importance, cost, and expected benefit to the Customer.

   3.3. **Stakeholder   Engagement**
   The Expert is tasked with actively engaging stakeholders to gather their requirements, expectations, and feedback. This involves participating in regular meetings and presentations to discuss the goals and plans for improving the information system. The Expert must ensure that all proposed changes are coordinated with stakeholders and their opinions are considered, all while maintaining alignment with the core vision and objectives of the project.

   3.4. **Definition of acceptance and quality criteria**
   The Expert is tasked with defining clear, measurable acceptance criteria for the tasks and functions of the AMIS, ensuring they align with organizational requirements and standards. This involves analyzing system requirements, collaborating with stakeholders to confirm priorities, drafting criteria using the SMART framework, and validating them through stakeholder review. The Expert must document the finalized criteria, ensuring they are clear and actionable, and provide guidance to development and testing teams for effective implementation. The completed criteria must be approved by stakeholders and ready for integration within the project timeline.

3.5. Feedback and Iterative Improvement

The Expert must constantly analyze feedback from users, stakeholders and the team in order to improve the software product. Based on this information, he can change priorities in the task list, clarify requirements or add new features, which allows the product to be more adapted to changing conditions and needs.

3.6. Monitoring progress and coordination

The Expert is responsible for monitoring the progress of development and making timely adjustments as needed. They must manage the scheduling of meetings with stakeholders and performers to stay informed about current tasks and adjust the project's course if necessary.

3.7. Trainings and training materials coordination

The Expert is required to work closely with the development team to prepare training materials for the staff of the Digitalization Center at the Ministry of Agriculture and other relevant partners and stakeholders. The Expert will supervise and accompany the delivery of training sessions, ensuring they are conducted in accordance with the project's design, strategy, and goals. Additionally, the Expert will monitor the training plans to ensure that the outcomes align with the agreed-upon objectives and contribute to the overall success of the project.

4. Reporting Requirements:

The Expert will report directly to and work under the supervision of the Deputy Director/Project Coordinator of the SRASP, the Director of the SI "AED" PMU and the Component 3 Coordinator.

5. Deliverables

Deliverable	Content	Estimatedtime of submission after contract signing
Strategic concept note for the AMIS	Concept note for the Agriculture Management Information System (AMIS) describing categorized objectives of the Client and key stakeholders, define the needs of the end users and overall strategic objectives of the AMIS	2 weeks
List of key tasks and requirements	This list includes ranked by importance key tasks, requirements, and functional elements that are critical to achieving the AMIS strategic objectives.	4 weeks
Monthly report	The monthly report covers key activities, achievements, challenges faced and recommendations for overcoming them. Highlights completed tasks, successful outcomes, and outlining next steps for the upcoming month.	Monthly

6. **Qualification criteria for the Expert**

   a. **Education:** The Expert should have a university degree in computer science, mathematics, or a related field. A diploma or certificate in digitalization or agricultural management is an advantage.
   b. **Work experience:** He/She should have at least 3 years of proven experience in the field of Information Technology implementation and automation of business processes, and software development. Experience in IT project management and additional experience in agricultural projects is an advantage.
   c. **Required skills:**
      i. **Communication**: An Information Systems and Automation Expert needs to communicate effectively with the team, key stakeholders, consulting and technical performers in order to communicate the requirements, expectations and vision of the AMIS software product.
      ii. **Analytical Thinking**: An Information Systems and Automation Expert must be able to analyze data, draw informed conclusions, and make decisions that lead to the successful achievement of product goals.

      iii. **Flexibility**: An Information Systems and Automation Expert must be able to respond quickly to changes and adapt to new conditions to ensure that the project to remain relevant and useful.

      iv. **Understanding of Technical Aspects**: An Information Systems and Automation Expert should be an expert in the development phases of Information Systems and possess a basic knowledge of programming and technical processes and constraints to better understand the capabilities of the technical team.

      v. **Knowledge of languages:** A digital expert must be fluent in Tajik, Russian and English. Documents should be prepared in English and Tajik (and, if necessary, in Russian).

7. **Duration of the Assignment**

   The assignment will begin in May 2025 and will initially last until December 31, 2025, including a 3-month probationary period. The decision to extend the contract will be made by the SI "AED" PMU based on business need.