

TERMS OF REFERENCE
Preliminary and detailed examination of the building of the Center laboratory of
the State Committee of Food Security.
STRENGTHENING RESILIENCE OF THE AGRICULTURE SECTOR
PROJECT (SRASP)
IDA Grant # №D860-TJ

1. Background

The Strengthening Resilience of the Agriculture Sector Project is an IDA grant in the amount of US\$ 58 million prepared to support Tajikistan for the purpose of foundations for a more resilient agriculture sector refer to the availability of public agricultural services, including improved seeds, seedlings, and planting materials, agri-logistical services, agrometeorological information, soil testing, locust control and crop protection.

The project aims to support the Government of Tajikistan (GoT) in successfully transitioning to a sustainable, more productive, climate resilient, and inclusive model of agricultural sector growth.

The proposed project will help to:

- (i) Increase the availability of improved seeds, seedlings, and planting materials that are climate resilient, affordable, farmer-preferred and well adapted to the different agro-ecological conditions of Tajikistan;
- (ii) Improve the access to improved agri-logistic services for farmers and agri-businesses; and
- (iii) Strengthen the crisis management, i.e. early warning, preparedness and response capacity of selected public institutions.

All activities related to human resource development and capacity building will include topics on understanding climate change better and frameworks, tools, and techniques to facilitate designing and implementing climate adaptation and mitigation approaches. All infrastructure, including buildings, offices, laboratories, and storage facilities, constructed and/or rehabilitated by the project, will be encouraged to utilize energy-efficient and climate-resilient materials and designs. The project aims to thereby strengthen the foundations for more resilient agriculture sector, which will in turn help improve food security and nutrition and accelerate agricultural diversification. It will also contribute to the development of a viable sector of private micro, small and medium enterprises in rural areas and generate employment opportunities for women in regions with few legal alternatives.

2. Objectives of the assignment

The objectives of the assignment are to conduct a preliminary and a detailed examination of the building of Center laboratory of the State Committee of Food Security.

3. Scope of Services and Tasks

3.1. Scope of services

Stage 1 (preliminary or general survey)

1. General inspection of the object.
2. Familiarization with design and assessment of the documentation.

3. Visual inspection of constructions.
4. Instrumental inspection with identification of defects.
5. Performing verification calculations.
6. Tentative assessment of the condition of constructions.

Stage 2 (Detailed Examination)

1. Geological survey
2. Sampling and testing of materials.
3. Testing of inspected constructions by non-destructive methods
4. Processing of results and their evaluation
5. Testing of concrete strength of constructions, permeability of concrete, frost resistance of concrete.
6. Checking the strength of stones and mortar, frost resistance of stones, thickness of masonry joints, void size and moisture content of masonry.
7. To check with the design the number and location of reinforcement, the strength of reinforcement, to analyze that during the installation of reinforcement laying deviations from the project in reinforcement were made.
8. Drawing a conclusion on the results of the detailed inspection

3.2. Tasks

Stage 1.

- a. Detection of visually visible defects and damage to constructions (e.g. due to force, corrosion, temperature or other effects, including uneven foundation subsidence), which may reduce the strength, and deformation characteristics of constructions and worsen the operational condition of the building.
- b. Identification of visually visible deviations from the approved project, including those that received a positive expert opinion (state or non-state), admitted during construction and installation works during the erection of the building.
- c. Verification of availability and compliance of executive documentation and certificates of witnessing of concealed works prepared in accordance with the requirements to the composition and procedure for maintenance of executive documentation during construction, and the requirements for certificates of works, constructions, sections of engineering networks.
- d. Performance of instrumental acceptance control carried out through technical inspection of the building, constructions and premises in order to identify defects and damages of elements, constructions, engineering equipment and systems, as well as deficiencies and deviations from the requirements of the project and regulatory documents. In case of detection of unacceptable conditions of building constructions of the building as a whole, other defects and damages, as well as deviations and parameters that prevent the use of buildings, constructions, a full inspection of these parameters is carried out.
- e. Assessment of the suitability of the building design and current construction to host the central laboratory of the Committee on Food Security: take stock of the various departments to be hosted in the building and evaluate planned laboratory layout against international standards and best practices for laboratory infrastructure design.

Stage 2.

- f. Determination of actual values of reliability, quality, energy efficiency indicators of centralized hot water supply, cold water supply and (or) wastewater disposal facilities, compliance of completed construction and installation works on organization of centralized

- hot water supply, cold water supply and (or) wastewater disposal systems with the approved project (including the design documentation that has undergone expert review)
- g. Preparation of a conclusion in accordance with the requirements of legislation in the field of engineering surveys based on the results of a comprehensive inspection of the technical condition of buildings, constructions, as well as objects of incomplete capital construction for compliance with the requirements of regulations in the field of construction, design documentation for the purpose of further safe exploitation. In case of revealing the lack of necessary documentation or its unreliability, defects and damages of elements, constructions, and engineering equipment and systems, as well as deficiencies and deviations from the requirements of the project and normative documents, the conclusion should include recommendations for eliminating the identified deficiencies.

4. Reporting Requirements

The Consultant shall report to the AED PMU Deputy Director.

All deliverables including the conclusion specified in the Technical Assignment, which should indicate the absence or presence of defects and damages of elements, constructions, and engineering equipment and systems, deficiencies, and deviations from the requirements of the project and regulatory documents shall be provided to the client in electronic format (on CD) upon completion of the consultancy in addition to 2 copies of the hardcopy reports. The conclusion should include recommendations for eliminating the identified deficiencies. The conclusion shall be prepared on paper in the form of stitched and stapled albums in A3 sheet format, which shall be approved by the parties of the Contract in 2 copies, as well as on electronic format in one copy. All design and estimate documentation in source programs (drawings - Autocad, estimate documentation and calculations - Excel) shall be provided to the Client.

The volume of products transferred to the Client: 2 (two) hard copies, 1 (one) soft copy of **Expected deliverables and timing**

The consulting firm must provide the following deliverables under the assignment:

Stage	Name of the Deliverable	Contents of the Deliverable	Time for Submission from contract effectiveness
1	Inception report	The inception report including a quality assurance plan shall be submitted within two weeks of the commencement of the assignment. The report shall outline the Consultant's mobilization, the work plan, strategy, methodology and timetable for the services. The quality assurance plan shall include the following: a. A quality policy statement setting out the objectives of	2 weeks

		<p>the plan;</p> <p>b. The personnel who will implement the plan, their responsibilities and authority;</p> <p>c. The procedures that are to be adopted for the sampling and testing of materials, inspection of the works in progress, the inspection, testing and approval of completed work, and the keeping of records.</p>	
2	Draft report on the implementation of Stage 1	<p>Findings of general inspection of the object.</p> <p>Results of familiarization with design and assessment of the documentation.</p> <p>Draft report on visual inspection of constructions.</p>	4 weeks
3	Final report on the implementation of Stage 1	Findings on the tentative assessment of the condition of constructions.	6 weeks
4	Draft report on the implementation of Stage 2	<p>Preliminary conclusion about the absence or presence of defects and damages of elements, constructions, and engineering equipment and systems, deficiencies, and deviations from the requirements of the project and regulatory documents.</p> <p>Draft recommendations for eliminating the identified deficiencies.</p>	10 weeks
5	Final report on the implementation of Stage 2	Final recommendations for eliminating the identified deficiencies.	14 weeks

The Client will review the deliverables and provide feedback to the Consultant in a maximum of 5 working days. The Consultant will incorporate the comments provided before submitting

the final version of the deliverable which the Client will confirm to be acceptable, or the cycle of comments will continue until an acceptable deliverable is submitted.

5. Team Composition & Qualification Requirements for the Key Experts

The Consultant will be a firm or consortium of firms with proven experience in similar assignments. The Consultant shall have the following qualifications and experience:

- Professional experience of at least 5 years in conducting surveys and assessment of conditions of the construction, detailed design, and cost estimation for construction.
- Proven successful experience in implementing at least 2 similar contracts over the past 5 years;
- Availability of competent personnel with the necessary experience appropriate to the Assignment;

The Consultant will deploy a team of highly skilled and experienced key experts. Key Experts shall score a minimum of 75%. Key Staff with less than 75% scores shall have to be replaced if the Consultant progresses to the negotiations stage.

- ii. The Consultant team shall have the following key staff:
 - a. Team Leader
 - b. Chief Engineer
 - c. Design Engineer
 - d. Architecture
 - e. Surveyor
 - f. Estimator

6. Qualification and experience requirements of Key staff

No.	Key staff	Academic Qualifications and Experience	Duration (person weeks)
1.	Team Leader	Bachelor of Science in Civil engineering with 12 years of work experience in similar assignments	17 weeks
2.	Chief Engineer	Bachelor's Degree in Civil engineering - with 10 years of work experience in similar assignments	17 weeks
3.	Design Engineer	Bachelor's Degree in the field of industrial and civil engineering with experience in the design of administrative buildings and structures - with 10 years of work experience in similar assignments	8 weeks
4.	Architecture	Bachelor's Degree in Architecture and Design - with at least 5 years work experience in similar assignments	8 weeks
5.	Surveyor	Bachelor's Degree in land management and geodesy- with at least 5 years of work experience in similar assignments	4 weeks
6.	Estimator	Bachelor's Degree in civil engineering, economy or related	4 weeks

		fields - with at least 5 years of work experience in similar assignments	
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7. Duration of the assignment.

The duration of the activity is 4 months. Work is expected to start in September 2024.

8. Quality Assurance

The Consultant is responsible for the quality of the conducted investigations and tests, the correctness of the decisions and conclusions for the entire period of the building operation. Conducting instrumental acceptance control does not remove the responsibility from the contractors for the construction and installation works performed, defects eliminated, or detected during the whole warranty period of the facility operation.