TERMS OF REFERENCE
(TOR)

REPUBLIC OF AZERBAIJAN

"CONSTRUCTION OF THE MAIN IRRIGATION CANAL FROM THE MAIDEN TOWER RESERVOIR PROJECT"

Loan No: AZE 1024

Capacity building program
for

INSTITUTIONAL CAPACITY AND LIVELIHOOD DEVELOPMENT UNDER "CONSTRUCTION OF THE MAIN IRRIGATION CANAL FROM THE MAIDEN TOWER RESERVOIR PROJECT"

DATE: June 2026

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Terms of Reference

1. BACKGROUND

Azerbaijan has received financing from the Islamic Development Bank (IsDB) to support "Construction of The Main Irrigation Canal from The Maiden Tower Reservoir Project". The proposed Program aims to improve construction of an irrigation canal from the Maiden Tower water reservoir in Azerbaijan. Executing Agency (EA) is Azerbaijan State Water Resources Agency (ASWRA). The project includes the following components.

Component 1: Climate Resilient and Smart Water Management Infrastructure Development and Agricultural Productivity Enhancement: This will develop a climate-resilient and smart water resource management system through the construction of a main canal with a length of 52 km and a sub-discharge capacity of 50 cubic meters per second from the Maiden Tower reservoir area on the Araz River and 252 km irrigation pipeline network on the liberated lands in Jabrail and Fuzuli regions located along the Araz River and providing reliable irrigation services in the Mil-Mugan zone. This component aims to develop climate-resilient and smart water management systems, improve efficiencies, and provide canal infrastructure protection measures and advanced irrigation techniques (such as Pivot Sprinklers, drip irrigation systems, etc.) to support sustainable agricultural growth of the project area. It will also support the development of smart monitoring and control systems, including SCADA, to provide real-time data management and maintenance for effective resilience against climate variability. The component also enables private sector investment opportunities, aligning with global sustainability trends and promising substantial returns through value addition and sustainable and efficient agricultural practices while establishing upstream facilities and enabling mid and downstream for Agro-Parks.

Component 2—Project Engineering Review and Construction Supervision Consultant Services: This component will provide support for reviewing the project's detailed design, preparing the bidding documents for selecting the contractors, assisting the Executing Agency (EA) in the selection process, and supervising the project implementation.

Component 3 – Support to the Project Management Unit: This component will provide support for the Project Management (PMU) in terms of: (i) recruitment of additional technical staff (Procurement, Environmental Safeguard, Project Financial Management, and M&E Specialists) and payment of monthly allowances with related running costs.

Component 4 – Capacity Building: This component will consist of the institutional and livelihood capacity development.

Component 5—Project's Audit: This component will support the annual audit of the project's Special Account.

Component 6 – Contingency Emergency Response Component: This standalone zero-value component is embedded in the Project to allow for the use of the present Project resources to cover emergency response activities in case of highly unpredictable events such as disasters, pandemics, etc., as a support to the Government's rapid emergency response efforts in the future. This can be done by reallocating Project funds, subject to a prior consultation with the IsDB.

This consultancy service related to Institutional Capacity and Livelihood Development is relevant to project component 4 as described below:

Component 4 – Capacity Building consists of institutional capacity and livelihood development. Institutional capacity of the EA staff and relevant partners (Amelioration, Hydrometeorology Agencies, and Ministry of Agriculture) related to the improved and efficient water management system (hydrometeorology, early warning system capability enhancement, operation and maintenance, etc.). ASWRA, Amelioration, Hydrometeorology Agencies, and Ministry of Agriculture should benefit from the improved capacity and service delivery in irrigation water delivery, crop selection and production, weather and water measurement. It will consist of enhancing the technical and operational capacities of the Amelioration and Hydrometeorology agencies and integrating their activities with the Ministry of Agriculture. The initiative aims to establish a real-time Digital Platform between agencies to improve water resource management practices by Agro-parks and communities and enhance agricultural productivity, value addition, and climate resilience in the liberated areas of the Jabrayil and Fuzuli regions. The platform will be established using the Earth Observation (EO) technologies and data from the project area, and extension services for the end beneficiaries will be created with nominal payment to sustain the platform and scale up to other areas, and

The livelihood capacity development of the project's beneficiaries in the liberated area consisted of enhancing the livelihoods of communities in the liberated areas by empowering communities and local farmers with the necessary skills, resources, and support to engage in sustainable agricultural practices and alternative income-generating activities for youth and women. A comprehensive capacity development plan with targeted training programs and support for the development of long-term business plans will be provided to local communities regarding non-agricultural livelihood activities and farmers regarding modern agricultural techniques, value addition to products, efficient irrigation practices, and sustainable farming methods.

2. PROJECT OBJECTIVES AND SCOPE

A. Objective

The main objective of the project is to improve the water supply of agricultural areas located in the territories of Jabrayil and Fuzuli regions. Within the framework of the "Construction of The Main Irrigation Canal from The Maiden Tower Reservoir Project", it is planned to carry out activities in conjunction with the Ministry of Agriculture under the "Capacity Building" Component 4. The organization of joint activities in the proposed areas within the Project will serve to increase the knowledge and skills of local communities and farmers, as well as to strengthen the development potential of the region from a technical, institutional and socio-economic perspective and ensure the sustainability of the Project. The project will be implemented in Azerbaijan as a pilot initiative, specifically in the Jabrayil and Fuzuli regions. Additionally, small training should be organized for training of women related to WUAs' governance structure and entrepreneurship in agribusinesses in Karabakh Irrigation Canal area (Mingachevir city, Yevlakh, Goranboy, Barda, Aghjabadi, Aghdam, Tartar, Beylagan, and Imishli).

B. Scope

The Consultant services will be required for a period of two months for mobilization and selection of beneficiaries and 10 months for organizing local and international trainings, cross-check and practical application of knowledge and skills taught during training and preparation of reports. In total, Consultant services will be for a 12-month period.

The Consultant shall ensure the development and practical implementation of solutions for the sections envisaged within the component. Key aspects of the Consultant's work will include (but not limited to) assisting the Client (EA) in the following:

- Capacity building of agricultural producers:
    - modern irrigation technologies;
    - water-saving crop types and agro-technical methods;
    - modern agriculture, irrigation, fertilization, efficient use of pesticides;
    - methods of preserving soil fertility and adapting to climate;
    - teaching field experiments in the agricultural sector, as well as practical training on preventing soil salinity and erosion;
    - awareness and training programs targeting women about governance structure of water user associations, irrigation management and entrepreneurship.

- Increasing scientific research and innovation potential, providing scientific and practical support to agricultural activities:
    - Capacity Building and increasing the level of knowledge of the local communities and farmers in the agricultural sector from a scientific-practical, institutional and socio-economic perspective;
    - strengthening the material and technical base of agricultural research institutes;
    - application of digital agricultural technologies (drones, soil analysis systems, GIS)

- Institutional and management capacity building:
    - implementation of the Water Users Association (WUA) model, which includes measures to optimize farmers' agricultural activities in addition to water resources management as a pilot project;
    - water management and technical capacity building of local communities in order to increase the management capacity of the newly created water infrastructure (for government agencies, WUAs and farmers) to ensure the long-term effectiveness and sustainability of the project;
    - training and technical support for agricultural services (e.g. veterinary, agro-services, seed production), as well as providing scientific and practical support to agricultural activities;
    - demonstration of water efficiency and productivity examples by establishing pilot farms, and teaching field practices by conducting practical training and seminars for farmers.

- Strengthening the governance and management capacity of institutions responsible for water resources and agricultural management, including the Azerbaijan State Water Resources Agency (ASWRA), the Amelioration, Hydrometeorology Agencies, the Ministry of Agriculture, Water User Associations (WUAs), and local irrigation operators. Activities will focus on improving coordination, operational planning, financial and administrative management, operation and maintenance of irrigation systems, and participatory water management approaches.
- Checking the existing systems and recommend an integrated Digital Water Management Platform that enables real-time data collection, analysis, and sharing among relevant institutions. The platform will integrate hydrometeorological data, remote sensing information, GIS tools, and field-level operational data to support informed decision-making, early warning systems, and risk-informed irrigation management. Service-extension and cost-recovery mechanisms will be developed to ensure financial sustainability and scalability of the digital systems beyond the project period.

- Training program planned within the framework of the Karabakh Irrigation Canal irrigation area:

  - Developing and delivering training modules for women on Water User Associations (WUAs) governance structures;
  - Providing mentorship and training on entrepreneurship in agribusinesses tailored for female participants in the region.

3. ASSIGNMENT TASKS

The Consultant will deliver:

- Training programs on:
  - Modern irrigation technologies (pressurized systems, efficient surface irrigation practices)
  - Water-saving crop varieties and cropping patterns
  - Efficient use of fertilizers and pesticides
  - Soil fertility management and conservation agriculture
  - Climate change adaptation techniques in irrigated agriculture
  - Governance structure of water user associations, irrigation management and entrepreneurship targeting women.
- Practical field-based training on:
  - Prevention and mitigation of soil salinity
  - Soil erosion control

  - Efficient on-farm water management
- Establishment of demonstration plots to showcase best practices in water productivity and crop yields
- Strengthening agricultural research institutions through:
  - Technical training
  - Investigation and recommendation about improvement of equipment and analytical capacity
- Introduction and application of digital agriculture tools, including:
  - Drone-based crop monitoring
  - Soil analysis and mapping systems
  - GIS-based agricultural decision-support tools
- Enhancing linkages between research institutions, extension services, and farmers

- Development and piloting of Water User Association (WUA) models (if not exists) that integrate:
  - Water allocation and management
  - Optimization of agricultural practices at farm level
- Capacity building for:
  - Azerbaijan State Water Resources Agency (ASWRA)
  - Amelioration, Hydrometeorology Agencies
  - Ministry of Agriculture
  - WUAs and local irrigation operators
- Training on:
  - Operation and maintenance (O&M) of irrigation infrastructure
  - Financial and administrative management
  - Participatory water management approaches
  - Entrepreneurship
- Support to local communities to enhance their role in irrigation system management
- Investigation and Recommendations about design and establishment of a real-time Digital Water Management Platform integrating:
  - AWSRA
  - Ministry of Agriculture
- Use of:
  - Remote sensing technologies
  - Geospatial (GIS) tools
  - Field-level data from the project area
- Investigation and Recommendations about development of service-extension models (with nominal user fees where applicable) to ensure:
  - Financial sustainability
  - Scalability to other regions
- Data collection, Beneficiaries (hydrometeorology, ecology, agricultural, farmers,
- Organizing local and international trainings,

- Cross check and practical application of knowledge (final report)
- The consultant shall design and conduct baseline and endline survey to assess the intermediate outcomes of the capacity building and livelihood development activities. This will include:
    - Collecting and analysing data from beneficiaries and institutions to establish baseline conditions
    - Conducting endline surveys to measure changes in knowledge, practice, and institutional capacity
    - Comparing baseline and endline findings to assess progress and effectiveness of interventions.
    - Prepare a concise analysis summarizing the outcomes, lessons learned, and recommendations for future similar interventions.

4. REPORTING REQUIREMENTS AND TIME SCHEDULE FOR DELIVERABLES

4.1 List of reports and documents that need to be prepared by the Consultant and submitted in hard and digital format to the Client (EA) and IsDB:

Duration of the Assignment
The total duration of the consultancy services under **Component 4 – Capacity Building** shall be **twelve (12) months**.

4.1.1 Phase I – Preparation and Inception (Month 1)

During the first month, the Consultant shall undertake preparatory activities and submit the following deliverables:

a. Inception Report

- Confirmation of understanding of Component 4, its objectives and scope
- Detailed implementation methodology
- Institutional coordination and stakeholder engagement framework
- Risk identification and mitigation measures
- Detailed activity schedule and implementation plan for the 12-month period

b. Detailed Work Plan

- Breakdown of activities
- Training approach, modalities, and sequencing
- Roles and responsibilities of national institutions, beneficiaries, and partners

4.1.2 Phase II – Beneficiary Identification and Needs Assessment (Month 2)

The Consultant shall prepare and submit:

c. Beneficiary Identification and Profiling Report

- Identification of primary and secondary beneficiaries (farmers, WUAs, institutions, extension services, etc.)
- Gender- and youth-disaggregated beneficiary analysis
- Geographic coverage and prioritization within the project area

d. Capacity Needs Assessment Report

- Assessment of existing institutional, technical, and operational capacities
- Identification of capacity gaps and priority training areas
- Alignment of identified needs with project objectives and IsDB development priorities

4.1.3 Phase III – Capacity Building, Training, and Knowledge Exchange (Months 3–11)
Throughout the implementation period, the Consultant shall prepare and submit the following outputs:

e. Training and Education Materials

- Training manuals, technical guidelines, presentations, and field training documentation
- Materials covering irrigation management, agriculture, institutional strengthening, and digital tools

f. International Knowledge Exchange and Reverse Linkage Reports

- Documentation of expert missions, study visits, and joint training programs
- Summary of transferred knowledge and adaptation to local context
- Lessons learned and best practices

g. Periodic Progress Reports

- Quarterly (or as agreed) implementation progress reports
- Summary of activities conducted and outputs delivered
- Participation statistics and beneficiary feedback
- Issues encountered and corrective actions

h. Monitoring and Evaluation (M&E) Notes

- Tracking of outputs and intermediate outcomes
- Assessment of effectiveness of training and institutional strengthening activities

- Performance indicators aligned with IsDB results framework

4.1.4 Phase IV – Final Reporting and Closure (Month 12)

At the completion of the assignment, the Consultant shall submit:

i. Draft Final Report

- Consolidated summary of all Component 4 activities
- Assessment of achievements against objectives
- Evaluation of institutional, technical, and social impacts
- Sustainability and scalability assessment

J. Final Capacity Building Completion Report

- Finalized report incorporating comments from the Client and IsDB
- Lessons learned and recommendations for replication
- Annexes including training materials, attendance lists, and technical documentation

4.1.5 Review and Approval

All reports shall be submitted in draft and final versions. The Consultant shall address comments provided by the Client and the Islamic Development Bank prior to final approval. All deliverables shall be submitted in formats acceptable to IsDB and suitable for inclusion in project monitoring and evaluation documentation.

Note: All reports / outputs must be provided in English and Azerbaijan Languages.

5. DURATION OF ASSIGNMENT

The total contract period will be 12 months.