

State Institute “Agriculture Entrepreneurship Development” Project Management Unit

One Health for Pandemic Prevention Food Systems Resilience and Ecosystem Health in Central Asia Project (OHP)

Consulting services for the assessment of veterinary laboratories under the Ministry of Agriculture of Tajikistan

I. BACKGROUND

The One Health approach is an integrated and unifying framework that aims to achieve optimal health for people, animals, and ecosystems. It recognizes the interdependence between human, animal, plant, and environmental health, and it mobilizes various sectors and communities to address global challenges, such as pandemic prevention, antimicrobial resistance (AMR), food safety, and environmental sustainability. This approach is essential for fostering well-being and tackling complex health issues in interconnected systems.

The One Health for Pandemic Prevention Food Systems Resilience and Ecosystem Health in Central Asia Program for Tajikistan is a US\$31.79 million grant, with US\$30 million sourced from the International Development Association (IDA) and an additional US\$1.79 million from the Pandemic Fund. This initiative, part of the World Bank's Multiphase Programmatic Approach (MPA), aims to support the five Central Asian countries (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan) in addressing prevalent challenges related to zoonotic diseases, AMR, and food safety.

The One Health Program in Tajikistan, implemented as part of Phase 1 under the World Bank's Multiphase Programmatic Approach (MPA), is designed to strengthen the country's capacities for preventing, detecting, and responding to zoonotic diseases, AMR, and food safety risks. It supports investments across national and regional One Health coordination, communication, information sharing, regulatory frameworks, knowledge development, workforce capacity, risk-based surveillance, prevention and response systems, laboratory capacity, and data systems.

The project includes four key components:

1. **Strengthening One Health Governance** – Establishing a cross-sectoral governance structure to enhance coordination and policy alignment.
2. **Enhancing One Health Knowledge and Workforce Capacity** – Developing and implementing workforce training programs and research initiatives.
3. **Improving One Health Prevention, Detection, and Response Systems** – Strengthening national and regional laboratory networks, enhancing risk-based surveillance, and supporting digital information systems.
4. **Project Management, Monitoring & Evaluation, and Learning** – Establishing systems to manage and track project progress, ensure compliance, and facilitate knowledge dissemination.

The One Health Program in Tajikistan is implemented by the State Institute “Agriculture Entrepreneurship Development” Project Management Unit (SI AED PMU). The implementing agency works closely with national and regional stakeholders to ensure effective and sustainable implementation of the One Health approach.

The Project primarily focuses on technical assistance, capacity building, procurement of laboratory equipment, construction of research centers and laboratories, and One Health risks related to the laboratory civil works.

II. PROJECT OBJECTIVE DEVELOPMENT

To strengthen the capacity to prevent, detect, and respond to priority zoonotic diseases, antimicrobial resistance, and food safety issues in Asia Tajikistan through a regional One Health approach.

III. OBJECTIVE OF THE ASSIGNMENT

The objective of this assignment is to engage a consulting firm to conduct a comprehensive technical, infrastructural, and operational assessment of selected veterinary laboratories and develop a prioritized investment and upgrading plan.

The firm shall work in close partnership with:

- Local laboratory experts
- Local engineering/construction experts

to ensure that recommendations are technically sound, locally applicable, and implementable.

The objective of this assignment is to conduct a comprehensive assessment of **five veterinary laboratories** to provide evidence-based recommendations for strengthening their infrastructure, biosafety level, diagnostic capacity, and laboratory quality management systems.

The results of the assessment will support decision-making regarding prioritization of investments, taking into account available project resources.

IV. SCOPE OF WORK

The consulting firm is to conduct a comprehensive assessment of **five veterinary laboratories** and to provide evidence-based recommendations for strengthening their infrastructure, biosafety level, diagnostic capacity, and laboratory quality management systems.

The assessment will include:

- Evaluation of each laboratory's mandate and functional role within the national system;
- Determination of the appropriate biosafety level (BSL) required;
- Identification of equipment needs;
- Identification of civil works required to ensure proper installation and compliance with biosafety standards;
- Preparation of cost estimates for both equipment and required works.

The consulting firm will assess the following five laboratories:

1. Laboratory of the Department of Zooengineering, Tajik Agrarian University (TAU)
2. Laboratory of the Department of Microbiology, Veterinary Faculty, TAU
3. Republican Laboratory of Immunogenetic Control, Ministry of Agriculture (MoA)
4. Laboratory of the Institute of Veterinary Medicine of the Academy of Agricultural Sciences of the Tajikistan (AAST)
5. Poultry Disease Laboratory of the State Unitary Enterprise "Poultry Industry of Tajikistan", MoA

STEP 1: Baseline Assessment

The Consultant will carry out a comprehensive assessment of each laboratory, including:

- Existing infrastructure (building condition, utilities, workflow layout, compliance with biosafety requirements)
- Assessment of laboratory mandate and current functions
- Determination of required biosafety level (BSL)
- Existing equipment and technology
- Human resources and capacity
- Laboratory processes and diagnostic activities
- Biosafety and biosecurity systems
- Information systems and data management

STEP 2: Needs Assessment

Based on the findings, the Consultant will:

- Assess the alignment of each laboratory with national animal health priorities;
- Evaluate current and future activity levels and sustainability;
- Identify detailed needs in terms of:
 - Equipment
 - Civil works (renovation, upgrading, installation requirements)
 - Human resources and training
 - Systems and operational improvements

STEP 3: Results

The consulting firm will:

- Prepare the list of equipment and cost estimates for each laboratory;
- Prepare a list of construction works and cost estimate for each laboratory.

V. METHODOLOGY

- Desk review of existing documentation
- Site visits to selected laboratories
- Interviews with laboratory management and specialists
- Prioritization of investment needs

VI. REPORTING REQUIREMENTS AND DELIVERABLES

The Consulting company will work under the overall supervision of SI AED PMU and Animal Health Coordinator and will maintain close coordination with the MoA, AAST and TAU. All deliverables and reports shall be submitted in both Tajik and Russian languages, accompanied by executive summaries in English.

5.1 Draft Assessment Report (per laboratory) will include:

- Assessment of mandate and required biosafety level
- Infrastructure and equipment gap analysis
- Civil works requirements
- Cost estimates of equipment, works and human capacity development
- Recommendations

5.2 Final Consolidated Report will include:

- Consolidated list of required laboratory equipment and related cost estimate (by lab and total)
- Consolidated human capacity development requirements and related cost estimate (by lab and total)
- Consolidated list of required civil works (rehabilitation, construction, installation) and related cost estimate (by lab and total)

VII. QUALIFICATION REQUIREMENTS

- The firm shall be legally registered and authorized to provide consulting services in the Republic of Tajikistan;
- The firm shall have at least five (5) years professional experience in veterinary laboratory systems, animal health system, agriculture or related fields;

- The firm shall demonstrate successful completion of at least two (2) similar assignments in laboratory assessments, laboratory infrastructure design, or preparation of laboratory equipment specifications or related fields;
- Familiarity with ISO 17025 laboratory requirements and national construction standards and regulations (SNiP, GOST, and other applicable standards);
- Demonstrated experience working in the Republic of Tajikistan on similar assignments and experience with projects financed by international development partners, including the World Bank, ADB, FAO, WHO and UN agencies, will be considered an advantage.

Required Key Experts

The Consulting Firm shall provide a multidisciplinary team including, at minimum, the following key experts:

a) International Veterinary Laboratory Expert

- University degree in Veterinary Medicine, Microbiology, Laboratory Sciences, Epidemiology, or related fields;
- Minimum 10 years of relevant professional experience;
- Demonstrated experience in veterinary laboratory assessment and laboratory systems strengthening;
- Experience working with government institutions and donor-funded projects will be considered an advantage;
- Fluency in English is required; knowledge of Tajik or Russian is highly desirable.

b) Biosafety and Biosecurity Specialist

- University degree in biosafety, zoo-engineering, microbiology, laboratory sciences, public health, veterinary medicine, or related fields;
- Minimum 5 years of professional experience in laboratory biosafety and biosecurity systems;
- Experience with international biosafety standards and laboratory risk assessment methodologies, as well as familiarity with laboratory accreditation processes and quality management systems will be considered an advantage;
- Fluency in Tajik or Russian is required; knowledge of English is highly desirable.

c) Engineering Specialist

- University degree in civil engineering, laboratory engineering, architecture, or related fields;
- Minimum of five (5) years of experience in infrastructure assessment is required. Experience in the medical or veterinary sectors will be considered an advantage;
- Experience preparing technical specifications and cost estimates for civil works;
- Fluency in Tajik or Russian is required; knowledge of English is highly desirable.

d) Laboratory Specialist

- University degree in Veterinary Medicine, Biology, Epidemiology and Epizootiology, or related fields;
- Minimum 5 years of experience in laboratory equipment planning and diagnostics systems;
- Proven experience preparing equipment lists and technical specifications for veterinary or public health laboratories;
- Familiarity with laboratory workflow optimization and equipment installation requirements;
- Fluency in Tajik or Russian is required; knowledge of English is highly desirable.

VIII. DURATION

The period of service provision is two **(2) months** from the moment of signing the contract.