**FAO-led training strengthens laboratory capacity for early detection of avian influenza in Tajikistan**

***15 May 2025, Dushanbe*** – The Food and Agriculture Organization of the United Nations (FAO), in close collaboration with the Committee for Food Security under the Government of the Republic of Tajikistan, successfully concluded a three-day training workshop entitled “Avian Influenza Virus Detection by Molecular Method”, held from 13 to 15 May in Dushanbe.

The training was conducted under the regional initiative “Pandemic Preparedness and Response through a One Health Approach in Central Asia,” funded by the Pandemic Fund and implemented within the framework of the component “Laboratory Capacity Building for PPPR”. Hosted at the National Center of Diagnostics of the Committee for Food Security (NCDFS), the workshop convened laboratory professionals from the National Veterinary Laboratory and regional laboratories in Sughd and Khatlon provinces.

Blending theoretical knowledge with practical, hands-on sessions, the workshop aimed to enhance diagnostic capacity and biosafety practices in Tajikistan’s veterinary laboratories, particularly for the detection of Avian Influenza (AI). Participants were trained in accordance with the World Organization for Animal Health (WOAH) protocols, focusing on the molecular detection of Avian Influenza virus type A, including subtyping for the H5, H7, and H9 serotypes.

The comprehensive curriculum covered a wide range of topics, including the classification and nomenclature of Avian Influenza viruses, RNA structure, sample preparation and RNA extraction, PCR components, and the advantages of RT-PCR in AI detection. Participants engaged in applied sessions on RNA extraction, sample handling, real-time RT-PCR testing, troubleshooting, and results interpretation.

“This kind of training is essential for us. It strengthens the skills of our veterinarians and laboratory professionals in proper sample collection, handling, and reporting – key steps in improving our response to animal diseases and safeguarding both communities and food systems,” said Mustafo Muminzoda, Deputy Chair of the Committee for Food Security under the Government of the Republic of Tajikistan.

“This workshop is an important contribution to Tajikistan’s efforts to build a resilient health system. By strengthening diagnostic capacities for transboundary animal diseases such as avian influenza, we help protect both animal and human health,” noted Aghasi Harutyunyan, FAO Representative a.i. in Tajikistan, emphasizing the relevance of the training in advancing the One Health approach.

Avian Influenza (AI), commonly known as bird flu, is a highly contagious viral disease affecting both domestic and wild bird populations. Certain strains – particularly H5, H7, and H9 – pose serious threats to animal health and have zoonotic potential, with the capacity to cause severe illness in humans. Timely detection and containment are critical to preventing wider outbreaks and ensuring food security and public health.

This capacity-building initiative marks a key step toward the standardization of laboratory methods, enhanced biosafety measures, and improved outbreak preparedness and response in Tajikistan and across the broader Central Asia region.