

**Ministry of Agriculture and Nature Protection  
of the Republic of Tajikistan  
National Center for Veterinary Diagnostic**

**CONTROL STRATEGY ON AVIAN  
INFLUENZA IN THE REPUBLIC OF  
TAJIKISTAN**

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Due to AI outbreaks in neighboring countries the State Veterinary Inspection Service of Tajikistan has been implementing the “Complex of prophylactic and antiepidemiological measures” since the end of 2005.

# **PROPHYLACTIC AND ANTIEPIZOOTIC MEASURES**

- **Sanitary and quarantine service has been strengthened on all entrances into the territory of Tajikistan;**
- **Importation of poultry production from the countries where AI was registered is banned;**
- **The transportation means entering into the country is treated with disinfectants;**
- **Hunting and selling of wild birds is banned;**
- **Veterinary and public health specialists conduct regular seromonitoring to detect AI cases among migratory birds;**
- **Store of highly efficient disinfection preparation (Virkon C) is established**

# PREPARATION OF SPECIALISTS AND INTERACTION WITH PUBLICITY AND MASS MEDIA

- **Ministry of Agriculture and Nature Protection of Tajikistan jointly with UNICEF and USAID has conducted workshops on control and monitoring of HPAI;**
- **Trainings were conducted for veterinary and public health specialists on prophylaxis and diagnostic of AI;**
- **Leading specialists were sent to various regions of Tajikistan to conduct prophylactic measures against AI;**
- **Press Center for public relation and mass media on AI issues is established under the Ministry of Health;**
- **Scientists and leading specialists regularly make speeches on mass media on issues related to prophylaxis of AI.**

**Taking into consideration the risk of HPAI spread (strain H5N1) into the country territory the Government of Tajikistan has adopted the Decree # 300 «National Plan for Prevention and Combating of Avian Influenza in the Republic of Tajikistan for the years of 2006-2010»»**

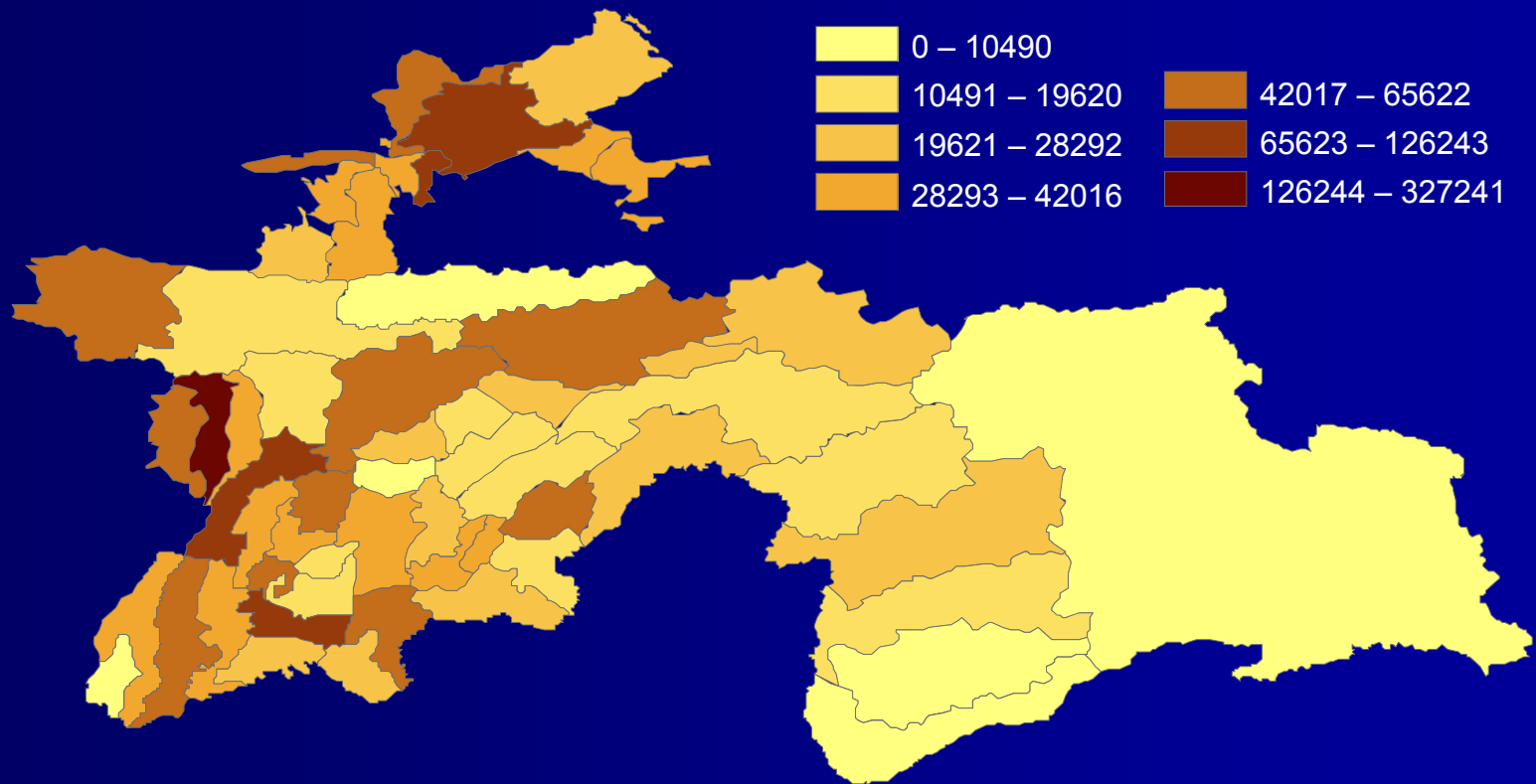
**In the First Meeting of the State Commission «Plan of emergency measures on prophylaxis of AI into territory of the Republic of Tajikistan» Headquarters are established in all cities and districts of the country to combat AI, representatives of all appropriate organs are involved in these headquarters**

# RISK ASSESSMENT

## **ADVATAGES:**

- Relevant far distance from the main routes of wild migratory birds;
- Low density of poultry population on 1 square kilometers;
- Absence of commercial domestic waterfowl breeding industry.

# Density of poultry population on 1 km<sup>2</sup>



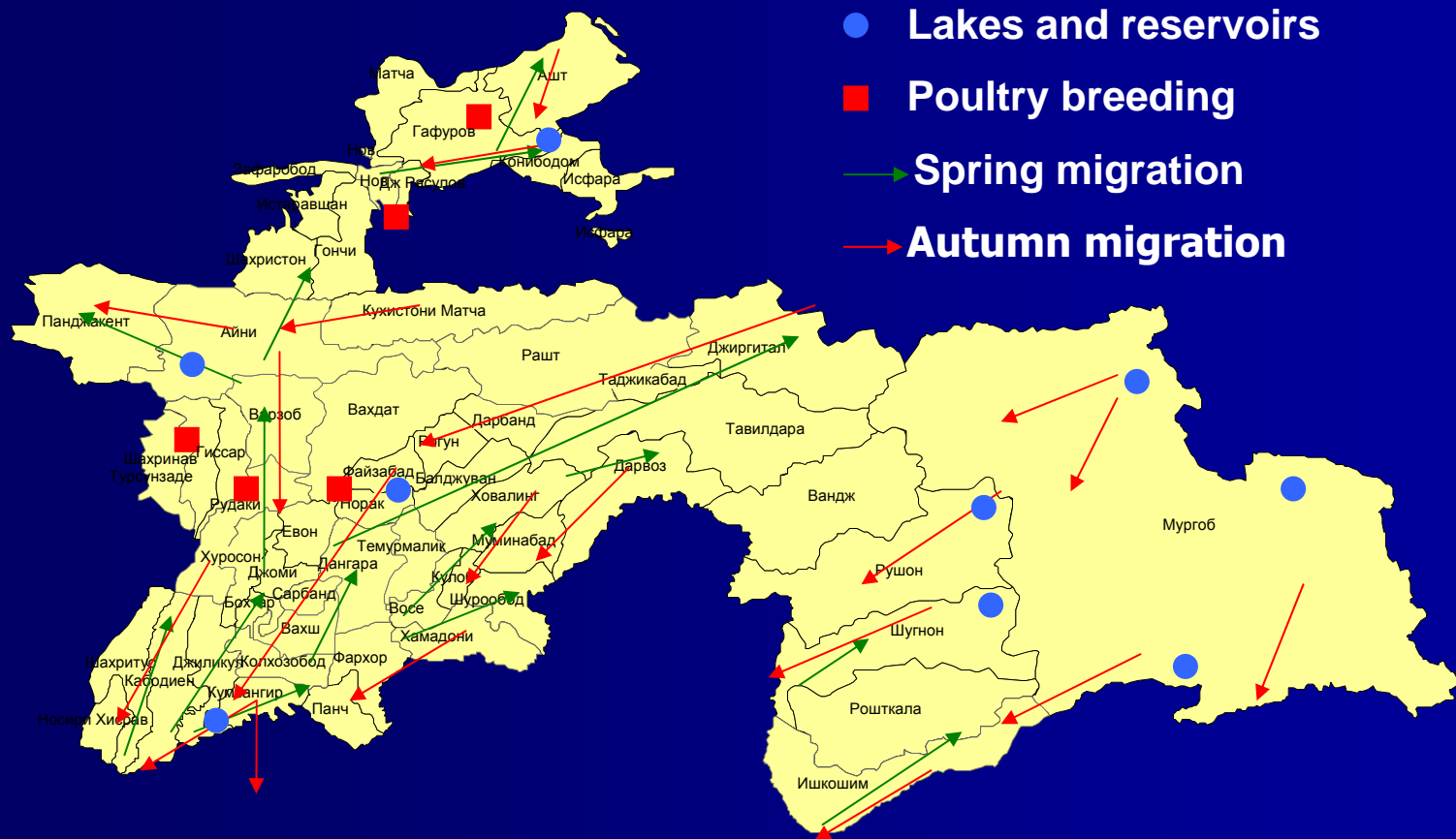


# RISK ASSESSMENT

## **Disadvantages:**

- Borders with infected with AI countries;
- Nesting of more than **40** species of birds ;
- Short stopping of transit – migratory birds ;
- Mainly open keeping of poultry in rural places;
- Annual importation of big quantity of chickens, eggs, poultry meat and feeds.

# Spring and autumn routes of migratory birds over the territory of Tajikistan



1. **Poultry** farms – closed type farms, mainly keep one species of poultry (sometimes quails). Sizes vary from 2 up to 250 thousand. Recorded population – approximately 500 thousand, including turnover - **1,2 million poultry**.
2. **Private farms** (20 – 100 poultry), – as a rule, mixed type, keep mainly hens, turkeys and seldom geese and ducks. These farms are of open type, the poultry kept in these farms may contact with synanthrops and wild birds. In this sector approximately 4 million poultry, including turnover **6 – 7 million poultry**.
3. **Lakes and reservoirs** (2 large and small lakes) **and rivers** (974 rivers) – nesting location of wildfowl of various type and possibility of counteracts between domestic poultry and wild birds

# AI in Tajikistan

- H6 – in 1972.
- H7 – in 1977 – 1978.
- H4 – in 1978 – 1979 and 1983 – 1984.
- 1400 samples tested in 2005 – 2007–  
results were negative

# Potential threat of penetration of AI virus

## Conditionated:

- International trade;
- Increase of quantity and size of farms of open type;
- Migratory birds;

Wild migratory birds are carriers of low virulent strains of AI virus in Tajikistan;

Most probable way of introduction of AI virus:

- Through migratory wild birds from South-East Asia through Pakistan and Afghanistan;
- Through illegal import of poultry and poultry production from other countries.

# Control Strategy

## Objectives

- To prevent occurrence of mutant variant of the virus capable of transmitting from human to human on the territory of Tajikistan
- To minimize probability of occurrence and spread of the disease among poultry and the potential loss
- To ensure security of people involved in liquidation of diseased poultry
- To create means for management of the virus spread in wildlife – conducting monitoring and scientific researches

# Control Strategy

## Tasks

- Restricted contacts between wild; migratory waterfowl and rearing poultry;
- Vaccination of rearing poultry in high risk zones;
- Wide monitoring of virus spread including wild waterfowl;
- Clear and prompt diagnostics of the virus;
- Stamping out in influenza foci.

# FAO ASSISTANCE TO STATE VETERINARY INSPECTION SERVICE

- ELISA equipment procured and established
- Prepared 2 specialists (in Italy and Pakistan) on ELISA and 2 specialists on diagnostic
- Handed over:
  - Diagnostic kits (AI)
  - 8 sets of instruments for sampling, storage and transportation of pathological materials to laboratory
  - Sets of means of individual protection
  - 5 low temperature freezers for storage of samples and generators (distributed to veterinary laboratories);
  - 10 sets of surgery instruments for investigation of corpses
- Disinfectants imported (reserve fund);
- Posters published and distributed on AI 10 thousand pcs



# Problems and needs

- Moral and old age of buildings and equipment of National Center for Veterinary Diagnostic and its structure subunits;
- Absence of modern communication means;
- Needs for training and traineeship of veterinary laboratory personnel;
- Establishing of reserve fund of diagnostic preparations.

**Thank you for attention**