



FAOAIDEnews

Animal Influenza Disease Emergency

The Central Asia Regional Network for the Prevention and Control of Avian Influenza

After H5N1 HPAI virus was reported in poultry in South East Asia in early 2004, it was only a matter of time before incursions were reported in Europe and countries of the Central Asia Region. It is widely believed that the virus was mainly spread through migration of wild birds, as well as cross-border trade. Whichever the explanation might be, it was quite evident that by mid 2005 this region was experiencing a major avian influenza H5N1 epidemic. Outbreaks were reported in the Russian Federation and Kazakhstan in July 2005, followed by Mongolia in August, Turkey in October, and Ukraine in November of that same year. The first outbreaks occurred in wild birds, followed by rapid spread to domestic poultry: both, backyard and commercial flocks. In January 2006, Turkey reported its first confirmed human case of avian influenza A (H5N1) infection and death, followed shortly thereafter by Azerbaijan in February. From 2006 to 2008, H5N1 HPAI has been repeatedly reported in Pakistan, Iran, Afghanistan and Turkey, which suggests that there are continuous reintroductions from an outside source.

For the purposes of geographical definition, the Central Asia Region for FAO/ECTAD extends from the Caucasus to bordering areas of China and India. Specifically, the region comprises nine countries: Afghanistan, Azerbaijan, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan, Uzbekistan, and three country/territories with observer status: Mongolia, Turkey, and Xingjiang Uygl Autonomous Region of China. Inclusion of these countries and territories into a common oversight scope arises from similarities in socio-cultural, economic, structural, geopolitical, environmental, and epidemiological factors.

The diverse agro-ecological systems in the Central Asia Region facilitate many wild and domestic bird interactions to take place. In general, five major and interrelated ecosystems can be identified in Central Asia as wintering and breeding grounds for wildlife, especially for migratory wild birds. The five ecosystems include the Korgaldzhino Depression in Kazakhstan, the Gyzyll-Agach Reserve (Caspian Sea Area) in South Azerbaijan, the Gasan-Kuli Bay in

Turkmenistan, the Aras River and reservoir, and the Syr-Darya and Amudarya rivers crossing through Kazakhstan, Uzbekistan and Turkmenistan. All these ecosystems form very important migration corridors and wintering ground for many avian species.

Following independence from the former Soviet Union in the nineties, many of the Central Asian countries had to restructure their national veterinary systems while at the same time seek alignment with international standards, processes, and obligations. When asked what the most challenging task was over the last four years of work in Central Asia, Dr. Gholam Kiani, ECTAD regional manager for the Central Asia Region, said that building trust with the country teams and establishing effective two-way communication with government officials was initially quite difficult. Dr Kiani credits the recent successes to FAO's ability to deliver exactly what was agreed with the countries in a timely manner, coupled with utmost transparency from the very outset. This, he claims, built trust and allowed national counterparts to regard FAO as a reliable partner in the fight against highly pathogenic avian influenza and other transboundary animal diseases.

There are a number of other challenges as well. Currently, there is no equivalent of regional economic bodies (like the South Asian Association for Regional Cooperation - SAARC or the Association of Southeast Asian Nations - ASEAN in South and South East Asia) who are engaged in animal health issues in the Central Asia Region. The security situation in some parts of Afghanistan and Pakistan, where a very high proportion of the population are dependent on backyard poultry for food and livelihoods, remains sensitive; but despite these challenges there has been steady progress due to the strong commitment of national counterparts, donors, and the FAO team.

At the same time, there is a lot to learn from various countries of the region. Iran, for example, has a unique insurance system for poultry producers, implemented by the producers themselves, to compensate against losses due to disease outbreaks or culling. Iran also has invested in geo-referencing all poultry farms, and all commercial poultry transport vehicles are also registered. This allows for strong prevention and control measures to be deployed rapidly and consistently. FAO was one of the first international technical agencies to offer and effectively provide comprehensive support to the region in a manner conducive towards rapid mitigation of disease impacts, while at the same time strengthening veterinary and animal health services.

Along with FAO/ECTAD's well-recognised technical expertise and reliability, the Animal Production and Health Division brought additional topic-specific expertise such as livestock policy, socio-economics, livelihoods, agricultural markets, livestock trade, wildlife, and risk communication to provide unique multi-disciplinary perspectives and approaches in the prevention, detection and control of H5N1 HPAI and other transboundary diseases.

The FAO/ECTAD technical assistance to countries of the region was developed in 2006 under the rubric of FAO's Global Programme for the Prevention and Control

of Highly Pathogenic Avian Influenza. Direct beneficiaries of the technical assistance programmes are Afghanistan, Azerbaijan, Tajikistan, Kyrgyzstan, Turkmenistan, Pakistan, Islamic Republic of Iran, Uzbekistan and Kazakhstan, along with Turkey, Mongolia and the Xingjiang Uygl Autonomous Region of China who are also considered as part of the regional network.

Support for programmes is through financial contributions from the World Bank, the Italian Government, the Asian Development Bank (ADB), and funds allocated under the FAO framework of the Special Fund for Emergency and Rehabilitation Activities (SFERA) - a multi-donor fund with contributions from various sources including Canada, France, Jordan, Norway, Saudi Arabia, Sweden, Switzerland, and the United Kingdom, among others. In some countries, FAO has been identified as a technical and implementing agency for the animal health components of World Bank investments on prevention and control of highly pathogenic avian influenza.

The core strategy for the Central Asia regional network and programme of work is to strengthen capacities for H5N1 HPAI disease management. The network and programmes aim to build common and shared approaches to deal with H5N1 virus incursions both in the domestic and wildlife sectors. The specific objectives for the Central Asia Region have been identified as:

1. Strengthening diagnostic capacities at field and laboratory level;
2. Developing appropriate response and contingency plans;
3. Raising public awareness of the potential disease risks and threats to animals and humans;
4. Establishing an information and technology network specifically for AI surveillance that is linked with other regions and feeds into the global early warning and response system for transboundary animal diseases and zoonoses (the GLEWS* platform of FAO/OIE/WHO).

The planned activities under the programme include: capacity building at regional level; regional coordination and communication; building capacity for immediate and effective response to HPAI outbreaks; and strategic project management. A series of sub-activities were initiated and consisted of rehabilitating and strengthening the capacities of in-country veterinary services on poultry disease diagnostics (not limited only to AI), demonstrating and building active and passive disease surveillance systems, providing basic veterinary epidemiology training, building rapid response mechanisms, delivering technical advice and operational backstopping, facilitating technical support services and streamlining chains of command.

Senior in-country veterinarians were recruited as national consultants and focal points to build close technical linkages between the state veterinary services and FAO/ECTAD. Rapid outbreak response teams in a number of countries have been equipped with vehicles, communication tools, and sampling equipment for outbreak investigation. A series of training-of-trainers and national-level training on epidemiology, disease investigation procedures, surveillance, and disease diagnosis (field and laboratory) have been implemented. A number of laboratory

experts have been trained at OIE/FAO reference laboratories in serology and molecular methods for poultry disease diagnosis. Regional level training has been conducted in risk/outbreak analysis and improved husbandry communication, as well as the socio-economic aspects of disease control and surveillance.

The avian influenza regional network for Central Asian continues to act as a dynamic platform for beneficiary countries to openly and transparently discuss issues and experiences in tackling transboundary animal diseases. Collaboration has increased tremendously and countries are now sharing H5N1 HPAI surveillance data and critical information during meetings to attain regional goals. A number of new initiatives are underway such as regional and national wildlife surveillance capacity building missions, as well as a comprehensive assessment of national veterinary laboratories to designate a regional centre of excellence in avian influenza research.

With the successful completion of the first phase of activities in December 2008, the next and second phase will address specific gaps detected and specific demands of participating countries through tailored solutions and a more comprehensive portfolio of activities. This will build on the achievements of the first phase and new priorities identified by countries of the region.

* Global Early Warning and Response System for Major Animal Diseases, including Zoonoses <http://www.glews.net/>

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