

Regional and global challenges of the Avian Influenza outbreaks in Asia and FAO's prospective

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Highly Pathogenic Avian Influenza (HPAI) has been recognised as a fatal disease of poultry since its first description in Italy in 1901. The in-depth study of viral genetics and strategies of replication led to the understanding of genetic reassortment of orthomyxoviral genes and mutations leading to HPAI viruses that have origins in non-virulent and low pathogenic strains of viruses. The predictability of highly virulent manifestations of avian influenza infections is uncertain although there is wide acceptance that specific viruses expressing certain haemagglutinin genes tend to lead to HPAI infections. In December 2003, rumours were retrieved by FAO and other international organisations originating from Vietnam of a virulent disease with high mortality rates in poultry. In the following weeks, uncovering additional information from the region through disease intelligence systems determined that the problem of the condition, HPAI, to be widespread. In fact, never had such an outbreak of HPAI affected such a vast land mass. Of paramount concern were the reports that once again, the avian virus had caused illness and death in humans. The potential risk for a widespread pandemic was recognised quickly by FAO, the World Health Organisation (WHO), and the Office International des Epizooties (OIE), and by early February 2004, a tripartite meeting was held in Rome to develop plans for concerted action, strategies for the control of avian influenza, including the use vaccination as an option and procedures to protect the human population from infection by decreasing or eliminating risks of transmission. During this time, FAO offered news bulletins which provided updates, georeferenced maps overlaid with poultry production systems and demographics, infection dynamics, information on consultant activities and their findings in the region, as well as recommendations made at international and regional gatherings. By late February, FAO and the OIE – with the collaboration of WHO – held a regional meeting in Bangkok, attended by 26 countries, numerous representatives of the donor community, research institutes -including experts from the FAO/OIE reference centres to assess the crisis with the additional purpose of a call for funds from the international community to assist affected villages and the severely damaged poultry production system in the region. During the intervening period, FAO established template technical cooperation projects (TCPs) for any country of the region affected by the avian influenza emergency for the control of the disease, improve diagnostic laboratory capabilities, increase surveillance and understanding of disease dynamics, as well as for the provision of supplies and equipment to protect the workers in the country side, markets, and commercial operations involved in the disease control

Developments in family poultry production and health

campaign. To date, FAO has established six national TCPs (~400,000 USD each) for Cambodia, China, Indonesia, Laos, Pakistan, and Vietnam and four regional TCPs for East, South East and Southern Asia, including one specifically focussed on rehabilitation and restocking (overall a total of 5.5 million USD has been earmarked for HPAI; with USD 4.3 million committed and USD 2.7 million disbursed in the six national and one regional TCP, and 1.6 million in regional projects under the current approval process).

After the culling of over 100 million poultry in Asia and over 20 human deaths, one of the great concerns of FAO and other international partners is the premature restocking of affected areas before proper rehabilitation has taken place, including the institution of adequate preventive measures in marketing and veterinary infrastructures to ensure that reoccurrence of avian influenza does not occur. Undoubtedly, had national and regional early warning and early detection capacities been present throughout in the region, the widespread occurrence of HPAI could have been avoided. Weaknesses in the systems of reporting, investigation, sample collection and dispatch, authoritative differential diagnosis and the transparent sharing of information from provincial, national, and international levels was apparent. FAO urges countries throughout the world to evaluate, re-evaluate, and practice their emergency and contingency plans for the unpredictable occurrence or presence of a transboundary animal disease. FAO and the OIE have embarked on a joint initiative entitled "Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs)" whose purpose is to foment sound epidemiological strategies for disease containment and control through the establishment of support units around the world within existing regional organisations dedicated to improving animal production and health. In addition, the GF-TADs initiative will promote country and regional networks in epidemiology and diagnostic laboratories, create a Global Early Warning System for animal and zoonotic diseases, and provide regional advocacy for projects, research, and programmes aimed at averting such disasters as HPAI in Asia or elsewhere.