

Avian influenza: global situation

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The avian influenza crisis due to highly pathogenic H5N1 virus (HPN5N1) started in Asia at the end of 2003 and it took a regional dimension at the beginning of 2004 with 10 countries being successively infected within a few months. The consequences were disastrous on the poultry sector with very severe socioeconomic impacts on domestic, regional and international trade, on rural economies, on the livelihoods of small poor farmers and on poultry biodiversity. On top of that there were very worrying fears that the virus could mutate or reassort its genes and become the source of a human pandemic.

Up to now the virus has shown to be rather stable and the contamination of humans as well as other animal species than birds remains exceptional. Therefore, the most efficient prevention of a human pandemic is still based on the control of the disease at source in domestic birds.

Most commonly transmission is via direct contact between birds and through contact with the virus on fomites. The geographical spread is due to the movements of animals or contaminated products, cages and other equipment and people wearing contaminated clothes and wild birds. Live markets have proven to be sites for multiplication of the virus and ducks raised in open free ranging farming systems are one of the most important reservoirs of AI virus. But part of a rather complex epidemiology remain today unknown.

With regard to wild birds their role in maintaining low pathogenic avian influenza virus is well known and once introduced in domestic poultry it can result, in some circumstances, in the emergence of HPAI viruses. The question today is to know what exact role they can play as reservoirs and carriers of HPAI virus. The recent spread of the disease in Europe has shown that long distance transport of HPAI virus is a reality but many epidemiological and virological facts remain to be better scientifically documented. This is why this FAO/OIE International Conference on the role of wild birds was necessary and why more investigations will have to be carried out.

In September 2005, after analysing the evolution of the epidemiological situation in Northern China, Mongolia and Siberia regions, FAO sent a worldwide alarm message predicting that the disease would spread out of Asia shortly and this is what happened in October 2005 when Middle East and Eastern and Western Europe became infected making HPAI a real international crisis. By the beginning of 2006, HPAI had spread into Africa where eight countries are now, at the end of May, contaminated.

Since 2004 the situation has improved in most of Asia where strong political commitment, appropriate methods and tools (including veterinary vaccines) to be used for efficient strategies and more investment to come allow to be more optimistic than before. On the other hand, the majority of European and Middle East countries can probably control the disease but the situation in Africa is particularly worrying since most of the counties do not have adequate capacity to eradicate the disease which could therefore become endemic in many regions of this continent.

Consequently more investment to combat avian influenza around the world remains indispensable as well as investigation and research on issues such as epidemiology, veterinary vaccines, poultry biodiversity issues, socioeconomic impacts of the disease and of control programmes, compensation schemes, restocking and restructuring options.

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