Lessons from bird flu

Negative repercussions

- Collapse of the poultry sector in affected countries.
- Anticipated consumer recoil in retail markets.
- Loss of revenues for small poultry farmers without insurance.
- Large poultry farmers turning to insurance brokers or to the State.
- Diversion of compensation allocated to stricken poultry farmers.
- Reduction in the commercial trade of living material.
- Irrational and pointless destruction of wild birds (nests of swallows, swans...), abandonment of domestic animals (birds, cats).
- Mobilization of funds to the detriment of other subjects receiving less media attention.
- Decrease in tourism.

Positive repercussions

- Evidence of the necessity of training veterinarians in all of the affected countries.
- Growing awareness of the risks linked to emerging diseases.
- Revival of other meat production sectors.
- Capitalizing on previously scattered knowledge.
- Public consciousness raising on current events.
- Revival of veterinary and medical research.

Blood sample drawn from the wing vein of a hen in Cambodia, 2002 - Vincent Porphyre, © Cirad

What has been understood

- It is difficult to draw together the financial, material, and human resources needed to stop the expansion of a panzootic even if the country of origin and the concrete sanitary control measures to be taken are known.
- The media plays an important role in decision making, particularly in democratic countries.
- It is easy to lose sight of the fact that bird flu is principally an animal health problem before being, and this is still very hypothetical, a problem of human public health.

What remains to be studied

Numerous questions still remain concerning the epidemiology of the H5N1 virus (and of other avian influenza viruses), in addition to the potential to improve control measures. The following list is only indicative and not exhaustive:

- The conditions in which the ordinarily mildly virulent H5N1 virus becomes very aggressive.
- The role of wild birds in the transport of the virus over long distances.
- The survival of the virus in tropical and temperate environments when it is protected from direct sunlight, high temperatures, desiccation, and the aggression of diverse chemical agents.
- The possible transformation of the virus genome within the bodies of domestic pigs.
- The impact of avian flu on small farms in Africa.
- The transmission of the virus between domestic and wild birds.
- The risks linked to commercial trade.
- The modification of the spread of the virus at different scales (local, national, international).
- Genetic and immunogenetic resistance.
- The interaction between the virus and host cells.
- The search for new vaccines to better protect domestic and even wild animals.