

# Enhancing Control of Highly Pathogenic Avian Influenza in Developing Countries through Compensation: *Issues and Good Practice*

E X E C U T I V E S U M M A R Y





# Enhancing Control of Highly Pathogenic Avian Influenza in Developing Countries through Compensation

**Issues and Good Practice**

*Executive Summary*



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This is the executive summary of a report drafted by an interdisciplinary and interagency task team led by Christopher Delgado of the Agriculture and Rural Development Department of the World Bank, involving staff and consultants from the World Bank, the Food and Agriculture Organization (FAO), and the International Food Policy Research Institute (IFPRI). The core drafting team, which accepts responsibility for the views expressed in the report, consisted of Christopher Delgado, Patricia McKenzie, and Cornelis de Haan (World Bank); Anni McLeod and Ana Riviere-Cinamond (FAO); and Clare Narrod (IFPRI).

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Cover Artwork: Detail from a painting by Gerardo Bravo Garcia Avian Flu Series, 2006. Oil & Gold Leaf on Canvas. Courtesy of the World Bank Art Program. Cover Design: Bill Praguski, Critical Stages.

# Executive Summary

Highly pathogenic avian influenza (HPAI) under current conditions poses a major risk to human and animal health. Efforts to contain the disease are therefore in national and global interest. As the most widely practiced control methods for poultry involve culling birds that are infected or in regions immediately around infected animals, the most common practice to ensure the cooperation of owners of birds is to compensate them for the culling of their animals to achieve this public goal. Early identification of HPAI and the immediate culling of diseased or suspected animals are critical elements of reducing the risk of the disease spreading. The international community and national governments have responded to this challenge by establishing funding mechanisms to enable compensation to assist in this strategy.

Payment of compensation to farmers whose animals are being culled enhances producer cooperation through better motivation to comply with the disease reporting and culling requirements of disease control packages. It reduces the time lag between an outbreak and containment actions, and hence diminishes the overall cost of control. To the extent that it reduces the virus load, it also reduces the risk of the virus mutating to becoming transmissible from human to human. Enhancing early reporting and complete culling of diseased or suspected birds is thus the first objective of compensation schemes. A second objective can be to reimburse losses of private citizens who have complied with a disease control process for the public good. This is compatible with the first objective.

While the imperative of disease containment drives compensation schemes, the reality of the severe impact of culling on very poor people cannot be ignored. However, a compensation scheme cannot cover all livelihoods losses caused by livestock disease control and it cannot replace social safety nets. This requires other measures, outside the scope of this paper.

The report seeks to provide guidelines on good practice for payment of compensation as part of HPAI stamping-out strategies. It is meant for national and international managers and project staff involved in containing HPAI. It responds to a request of the Senior Officials Meeting on Avian and Human Influenza held in Vienna, June 6–7, 2006, and the result of the work of a multidisciplinary team from the World Bank, FAO, and IFPRI. The report is based on review of the well-established literature of compensation practices in the developed world, staff interviews, experience, and newly emerging gray literature (project documents, mis-

sion reports, and so forth) on compensation in the developing world, and specific field visits to Egypt, Indonesia, and Vietnam.

## Preparedness Is Key

An effective and efficient compensation scheme will compensate the appropriate beneficiaries for the appropriate losses and at an appropriate level, with only a short interval between culling and payment of the compensation. This will only be possible if a number of elements are already in place before an outbreak. There needs to be appropriate legislation for the control of animal disease in force that spells out clearly the rights and responsibilities of government, livestock sector and marketing personnel, and farmers in animal disease control. There needs to be widespread awareness of the dangers of the disease and how to mitigate them. Funds have to be readily available and the procedures and sequencing of actions to be followed for compensation need to be agreed in advance. Preparations for the implementation of expedient and transparent payment schemes need to be in place.

Procedures and sequencing of compensation require knowing who to compensate, when, how much, and how, and all the stakeholders have to be aware of and have faith in the system. Widespread knowledge in advance of what the stakes are (including poultry holdings) and identification of the stakeholders are key elements in improving the governance of the use of compensation resources, which is especially difficult in emergency situations.

Because preparedness is essential to using culling and compensation effectively and efficiently for disease control, countries need to make a host of arrangements without necessarily having national precedents to guide the way. The present document tries to illustrate key lessons from countries such as Thailand and Vietnam (and others) that have learned by doing and incorporated many of the lessons in revised strategies. Even with guidelines from elsewhere, national avian influenza committees will still need to negotiate specific arrangements with national stakeholders in a way that fits local conditions, and this takes time and effort.

Countries faced with outbreaks before they have their contingency plans in place will need to adopt the most basic measures. Even so, the same issues of who to compensate, when, for what, how, and how much still apply. However, the need to move quickly for disease control will force many of the normal oversight tasks to a later date and is likely to make governance issues even more difficult.

Finally, it will be difficult to delink compensation practices from both changing needs for effective disease control and the issue of equitable production systems change as the disease becomes endemic. This aspect is also introduced briefly in the concluding chapter.

## Identification of Beneficiaries

As a general rule, the beneficiaries of compensation are the owners of the animals. Other supply chain participants, such as feed suppliers and market operators, may also incur losses when livestock production and sales are disrupted by disease, but they have not normally benefited from compensation schemes. The type of production system significantly shapes feasible identification procedures. Large, highly biosecure poultry farms (the so-called sector 1 and 2 under FAO/OIE nomenclature) have generally good inventory records and culling is well controlled. Farmer documents are then a basis for compensation.

Under conditions of contract farming in these systems, ownership of the birds decides the beneficiary. If the contractor is the owner, he/she would be compensated, and takes the responsibility for reimbursing the integrator. If the integrator owns the bird, he/she will receive the compensation. In a few cases, arrangements have been made to pay the contractor for lost income on a wage per day basis, with funds subtracted from the integrator share before payment. The issue of how to incorporate contract growers into compensation process remains a problem that many countries are only now beginning to look into. More attention needs to be addressed to this issue lest it becomes a loophole limiting effective control of the disease.

Identification of the beneficiaries for small enterprises and back yard systems (the FAO/OIE denominated sectors 3 and 4) is more complex, as records are normally not available, and factors such as differential ownership by gender come into play. Surveys as part of the preparedness planning (not after the disease emerges), including the identification of ownership patterns, broad awareness of the existence of compensation and payment as an integral part of the stamping-out process, are then key factors to ensure a broad participation of the sectors 3 and 4.

## Type of Losses to Be Compensated

Normally, compensation covers only the so-called direct losses, which include the value of the animals,

and sometimes also (in richer countries) the costs related to the disposal of dead animals and cleaning and disinfection. So-called farm-level consequential losses, due to business interruption, movement control, and price effects are not compensated, although in many developed countries private insurance schemes exist for such losses. Dead animals before culling are often not compensated, however there may be a rationale to do so at least partially where either dead animals have market value (and thus there is the danger they will be sold) or disease control teams cannot respond within 72 hours of disease reporting by the farm in question. In all cases the accurate computation of losses is greatly aided by having adequate farm-level records of poultry holdings, and it will be important to promote such a database prior to disease outbreak. Finally, the lion's share of actual economic losses to the countries in question may be indirect: lost feed sales, diminished tourism, absenteeism at work, and so forth. These losses are never covered by public compensation schemes. In principle, they could be insurable under private sector contracts outside the livestock sector if risks are well known, but they rarely are.

## Setting Compensation Rates

Compensation rates are variously set on the basis of (a) market value; (b) budget availability; and (c) production costs. Setting the cost on the basis of market value, wherever possible, is the preferred policy, as basing the cost on budget availability often leads to underpayment, and hence poor compliance with the culling operation, and production cost would favor inefficiencies, and is more complex to establish. Experience that emerges from the review in establishing compensation rates based on market values shows:

- Compensation rates as a percentage of a reference market price should be set before the disease emerges, as part of an overall preparedness plan, using average preoutbreak market prices at the farm gate, computed with due regard for seasonality and the transport costs from the local community relative to the reference market. For special category birds (rare breeds, indigenous poultry, fighting cocks, grandparent stock, other bird types), where market prices are not readily available, consultation with the stakeholders is required to set realistic levels.
- Uniformity of rates across the country and for different classes of birds improves the implementation efficiency of the program, and should be pursued in situations with good control. However, in situations of poor movement control,

differentiation by type of bird (layer, broiler) and age/weight of the group might be needed to fit compensation as close as possible with prevailing market prices. An interesting intermediate solution might be to pay not on the basis of numbers but on the basis of the total weight of the flock.

- Compensation rates should be no less than 50 percent of the reference market value of suspected birds at the farm gate, and no more than 100 percent. The rationale for the preferred range of 75–90 percent of the reference price and multiple considerations for being closer to one or the other limit are discussed in the report. Rates should be considerably lower for diseased birds and even less, but positive, for dead birds, to provide positive incentives for early and complete reporting. Careful attention needs to be paid to bird movements during compensation to ensure that an incentive is not being created for the influx of healthy birds to disease zones or diseased birds to disease-free zones.
- In dealing with small farmers in developing countries, compensation should be paid within 24 hours of culling by cash (or possibly voucher where handling cash presents a security threat and credible local formal financial institutions such as rural post offices are available); any delay is likely to have a significant effect on reporting.

## Establishing Awareness

Experience from on-going campaigns highlights the absolute necessity of communication on disease control and compensation, which when done properly may run from 10 percent to 20 percent of the total package cost. The package should contain components of consultation with the beneficiaries, advocacy, and information, using multiple media and channels. The specific messages on compensation should explain to affected farmers the need for mandatory culling in cases of suspicion of avian influenza as a necessary measure to protect the health of the entire human population. They should contain the principles, procedures and grid of compensation levels, precise information on the exact amounts, and payment procedures. Messages and media should be prepared ahead of time with inputs from both technicians and communication specialists. They should also be consistent over time, since frequent policy and message changes undermine the credibility of the campaign. Private sector operators, such as para-veterinarians, can play a critical role in awareness raising and overall support to the campaign, and their input on retainer fees should be more encouraged than is currently the case.

## Payment Systems

To promote early notification of suspected outbreaks, compensation for culled birds must be paid promptly following the birds' destruction. Critical elements from an appropriate payment system follow.

- Rapid access to adequate funding for immediate deployment as needs arise is essential. Sources typically are government's own funds from the National Treasury, farmer's contributions, and those of donor partners. National budgets need contingency funds of at least 3–5 percent of total budget to facilitate a rapid central contribution in the event of an outbreak; alternative contingency planning will be necessary where this is not available.
- The share of compensation payments in total animal disease control expenditures under outbreaks ranged from 0–45 percent in the cases studied, with a central tendency of about 35 percent. Holding large sums as contingency reserves to allow a rapid response engenders a considerable cost. For compensation planning purposes, the upper range of foreseen culling during a severe outbreak should be capped at 10 percent of the national flock. Many outbreaks are controlled with culling of less than 1 percent of the national flock. Once the share of infected and closely associated birds exceeds 5 percent of the total national flock, vaccination typically starts substituting for culling and compensation. These percentages, multiplied by the size of the national flock and again by 75 percent of the average farm-gate poultry price, provides a rough estimate of the range of funds that need to be accessible for compensation payments per se on short notice. Countries that are important poultry exporters and wish to avoid vaccination (such as Thailand under its 2004 outbreak) should plan at the 10 percent (high) limit, countries with little in the way of poultry exports and a large percentage of smallholder poultry producers at 5 percent, and countries with little trade concern, a high degree of biosecurity, and a creditworthy public finance system at 1 percent.
- The system should be simple enough to be used in difficult field situations and should make use of existing institutions (for example, line ministries, veterinary services, financial institutions). It is important to clarify responsibilities in advance, make provincial cross-agency coordination arrangements, and establish local contingency funding. If no system is in place when the disease emerges, the focus will need to shift to a greater reliance on ex post independent scrutiny to avoid inordinate delays in paying compensation.
- Eligibility databases and emergency payment (see above) procedures should be prepared as

part of the emergency part preparedness plans; where lacking, they will both need to be set up when the disease emerges, posing considerable difficulties.

- The veterinary services (assessing the need and reliability of the culling), the Ministry of Finance (payment), civil authorities (security), and community leadership (transparency) should all be directly involved in the payment process.
- For sectors 1 and 2, bank transfers are the most adequate instrument; cash payments are the preferred method for those farms of sectors 3 and 4 without banking access. Vouchers are often less credible for immediate motivation of rural households, but may work where they can be integrated with a dense local network of trusted financial institutions, such as rural post offices.
- To the extent possible, maximum use should be made of local banking entities, producer's organizations, veterinary services, and nongovernmental organizations (NGOs). Their fiduciary assessment should be part of the preparedness planning.

## The Way Forward

While over time the international public good argument regarding the risk of human-to-human transmission of HPAI might diminish, transmission between animal populations of different countries will continue to be a main reason for international funding of disease control in developing countries. Moreover, in the likely event of the disease becoming endemic within certain countries, this will have major effect on the poor, and interventions under those conditions therefore deserve international support from an equity perspective. Stricter disease control requirements will have a major effect on the structure of the industry, with implications still to be clearly identified for the future viability of the sectors 3 and 4. Nonetheless, compensation is likely to remain necessary for many years to come to promote the early eradication of outbreaks and to avoid the spread of transmissible animal diseases.

Under such conditions, compensation will:

- Become part of modified stamping-out strategies, with probably a lower priority to culling. Clear principles of how stamping-out strategies should evolve, and how compensation fits into such evolving strategies are needed.
- Have to become more dependent on the countries proven political will to improve the key institutions for animal health, in particular for early alerts and independent disease reporting. The OIE tool for Performance, Vision and Strat-

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- egy (PVS) is a useful instrument to assess government capabilities.
- Be restricted to sectors 3 and 4, and be funded from a mixture of national and international public funds, the latter in particular for the poorer countries.
  - Be funded for the large commercial sectors through private initiatives, probably as a mix between mandatory levies and voluntary insurance; in many cases the public sector needs to work with the private sector to find equitable ways to develop these systems.





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