

A farmer-friendly approach to preventing avian flu in Viet Nam

Key fact:

A pilot quality assurance scheme for poultry products in Viet Nam has successfully demonstrated how hygiene in poultry production can be improved, reducing the spread of avian flu and providing better markets for smallholder farmers.

Summary:

A DFID-funded partnership has pioneered an innovative approach to prevent the resurgence of Highly Pathogenic Avian Influenza (HPAI) in Viet Nam. As part of its worldwide Pro-Poor HPAI Risk Reduction project, which explores alternative approaches to reducing HPAI and its impact on smallholder farmers, a successful pilot programme has taken a demand-driven approach, introducing a traceable labelling scheme that links safe on-farm practices to consumer demand for guaranteed disease-free meat.



A vendor sells certified chickens in a Vietnamese market (Jenny Ifft)

Using a certification scheme, the pilot programme provided farmers with sufficient incentive to meet health standards in raising their poultry. As customers, concerned about quality and health, willingly paid a price premium of US\$0.63 for certified chickens, participating farmers were able to access higher value markets. Chicken bearing the programme logo and guarantee of safety was sold in four markets outside Ha Noi. As a result of this success, wider donor interest has been generated and the pilot programme is being scaled up to national level with support from USAID and a private Vietnamese company.

Facts & figures¹

- ❖ To date, 262 humans have died from the H5N1 virus but several hundreds of millions of birds have been wiped out by avian flu and the culls undertaken to prevent it.
- ❖ Despite concerted global effort to curb the spread of avian flu, the H5N1 virus remains entrenched in several areas, and countries continue to report outbreaks.
- ❖ In 2009, the United Nations estimated that avian flu had caused worldwide bird losses valued at over US\$20 billion. In Viet Nam alone, 17% of the total poultry population was culled in 2003, costing the industry US\$120 million.
- ❖ Poultry farms are the most likely sites for the virus to be transmitted from birds to humans, due to their close proximity.
- ❖ The 35 farmers who participated in the pilot programme raised an average of only 100 birds each on their farms, which is very typical of the smallholders who make up much of Viet Nam's poultry industry.
- ❖ Locally raised chickens are sold at markets in Viet Nam for 50 to 100% more than industrially raised chickens at supermarkets, reflecting a strong consumer preference.
- ❖ The average premium of 10,000 VND (US\$0.63) paid by shoppers for certified chickens, produced under the pilot programme is equivalent to an extra 15% over the price of non-certified local chicken.
- ❖ The project partners are investigating tailored credit for producers and marketers wanting to meet the upfront investment costs of establishing safe on-farm practices, certification and advertising that will eventually cost little to maintain.

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Highly pathogenic avian influenza (HPAI), associated with the H5N1 virus and more commonly known as avian flu, first broke out in the poultry farms of Viet Nam in 2003. The disease rapidly spread through flocks causing high mortality, and raised fears around the world of a human-avian flu pandemic.

Governments responded to the risk by destroying several hundreds of millions of birds. This approach has so far protected the population at large, but at a heavy cost to countless small-scale farmers who raise the majority of poultry in countries such as Viet Nam. Many such farmers lost entire flocks to emergency culls.



Special yellow bands make each chicken traceable from the farm to the market (Jenny Ifft)

Despite a concerted global effort to curb the spread of avian flu, the H5N1 virus remains endemic in several areas of South-East Asia, and elsewhere in the world. Whilst H5N1 is no longer headline news, authorities and research programmes have continued to work on methods for prevention and control. To explore approaches that will help rather than negatively affect smallholders, a DFID-funded collaborative project has

been implemented by FAO, the Royal Veterinary College, and the University of California at Berkeley in the Mekong countries of Viet Nam, Cambodia, and Thailand. Strategies are also being assessed in four African countries and Indonesia by International Food Policy Research Institute (IFPRI) and International Livestock Research Institute (ILRI).

In Viet Nam, the Pro-Poor HPAI Risk Reduction project has successfully tested one innovative demand-driven approach, which has now generated wider donor interest and is being scaled up to national level with support from USAID and a private Vietnamese company. Inspired by quality assurance and marketing strategies such as the 'organic' and 'fair trade' labels seen in many supermarkets, the research team investigated the potential for a certification system to assure customers that poultry products have been raised under hygienic conditions for minimising disease risks. The aim was to encourage better on-farm practices hindering the spread of avian flu and other diseases, while also creating a new premium market with higher income potential for farmers.

The certification initiative was launched after an in-depth survey of markets and households in an agricultural district outside Ha Noi, the capital of Viet Nam. Eighty per cent of chicken purchases were found to be at traditional 'wet markets' - open complexes where live and fresh local poultry are sold - and shoppers considered these local birds to be both safer and tastier than the industrially produced chicken offered by supermarkets. Noting the significant demand for safe local chickens, a pilot certification programme was established, offering selected farmers the chance to market their birds with an assurance of quality, reduced disease risk and improved hygiene.

Hygiene standards at the 35 participating farms were monitored weekly by veterinary officials. The requirements included vaccinations for chickens, a key weapon against the spread of H5N1. In recognition of upholding the required standards, chickens were tagged on the feet or



A second pilot is now operating for duck farmers around Ho Chi Minh city (Jenny Ifft)

wings. Local slaughterhouses, selected by the pilot programme, processed the birds under further veterinary monitoring, to be sold in packages bearing the project logo. Ultimately the chickens were sold by eight vendors at four different markets, furnished with posters, leaflets, and aprons to promote the certification.

While promoting the advantages of safety-guaranteed chicken, the participating vendors also kept records of sales and prices over time. These, combined with 800 household surveys on chicken buying choices, provided the data for a revealing economic experiment. Shoppers at the wet markets were willing to pay more for the guarantee of safety: an average premium of 10,000 VND (US\$0.63) over regular chickens. These extra earnings were enough to cover the cost of farming to higher hygienic standards and earn a profit for farmers.

The researchers have since launched a second pilot programme for free-range duck farms in the Mekong delta and, on the strengths of these successes, promoted the approach for scaling up. Along with Hapro, a private Vietnamese company, USAID is now in the process of organising a national certification poultry programme as part of the STOP AI initiative. By demonstrating how simple tools - tags, logos, aprons - can establish a traceable relationship between farmers and consumers and create incentives for farmers to follow best practices, the pilot programme has introduced a strategy that will keep both people and livelihoods healthy.

Additional case study information

Costs and benefits:²

- The pilot programme cost a total of US\$45,000 to implement, the most significant expenditures being for bird tags and advertising.
- In a future certified supply chain, the price premium of US\$0.63 per chicken recorded in the pilot would be sufficient to cover extra costs and turn extra profits for certified farmers. Producers will face an initial cost of compliance, depending on how many safe practices they already follow, along with the ongoing costs of audits, veterinary services and certification.
- Vaccinations against H5N1 and other damaging poultry diseases are calculated into the cost of compliance as an ongoing expense, but these will themselves bring immediate benefits to productivity. At the moment, poultry vaccination is rare in the country and mortality rates are an economic drain on farmers.
- Safe local chicken is far from a niche market in urban Viet Nam. Even when flu concerns are low, the price of local chicken is up to double that of industrial chicken, and it makes up 75 per cent of at-home consumption in Ha Noi - a preference based on a desire for safety and quality.
- Along with DFID's other pro-poor HPAI activities, the pilot has drawn the attention of national governments and the international animal health community to the fact that avian flu cannot be eradicated without making smallholder poultry farmers part of the solution. In Viet Nam, culling strategies have been adjusted, wet markets have reopened, and compensation for farmers has increased.

DFID contribution to research:

As the organising donor, DFID provided about £4 million in funding to the Pro-Poor HPAI Risk Reduction project between 2007 and 2010. The pilot certification programme was one of the many initiatives considered under this project. Other activities under the project have included spatial modelling of disease spread, assessments of the relative cost-effectiveness and impacts of control strategies, and proactive policy guidance in South-East Asia and Africa.

Research milestones:

- 2003-2004 A major HPAI outbreak originating in Viet Nam prompts worldwide control efforts and culls of millions of birds - 45 million in Viet Nam alone.
- 2005 Two further outbreaks at the start and end of the year, causing 21 human deaths in Viet Nam, indicate that the virus has become an endemic problem.
- 2007 A First Steering Committee in London and Inception Workshop in Chaing Mai, Thailand launch the Pro-Poor HPAI Risk Reduction project.
- 2008-2009 The Mekong team runs the pilot chicken certification scheme outside of Ha Noi.
- 2009 On the success of the pilot, USAID begins the process of upscaling the strategy with national partners.
- 2009-2010 A second pilot is implemented for free-range ducks near Ho Chi Minh City.

Photo credits:

Jenny Ifft: For high res images contact Jenny Ifft (jiff@are.berkeley.edu)

Links:

Highly Pathogenic Avian Influenza: www.hpai-research.net

Main reference:

Ifft, J., J. Otte, D. Roland-Holst, and D. Zilberman, (2009) *Poultry Certification for Pro-Poor HPAI Risk Reduction*. HPAI Mekong Team Working Paper No. 6.

Other key references:

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<http://un-influenza.org/node/2341>

Contact for further information:

Joachim Otte

Programme Coordinator
Pro-Poor Livestock Policy Facility
FAO Animal Production and Health Division
Viale delle Terme di Caracalla
00100 Rome
Italy
Tel: +39 06 57053634
Fax: +39 06 57055749
Email: Joachim.Otte@fao.org

¹ Facts and figures sourced from: Ifft, J., J. Otte, D. Roland-Holst, and D. Zilberman, (2009) *Poultry Certification for Pro-Poor HPAI Risk Reduction*. HPAI Mekong Team Working Paper No. 6

² Ifft, J., J. Otte, D. Roland-Holst, and D. Zilberman, (2009) *Poultry Certification for Pro-Poor HPAI Risk Reduction*. HPAI Mekong Team Working Paper No. 6



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