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# Continuing education in the prevention and control of HPAI: a case study on Indonesia

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**Highly Pathogenic Avian Influenza (HPAI) subtype H5N1 is now endemic in large parts of Indonesia and this situation has revealed, among other constraints, a lack of human resource capacity in many institutions especially in terms of understanding of, and experience in, the control of poultry diseases. Cost-efficient prevention and control of HPAI must be built on a sustainable poultry health programme that incorporates collaborative research and development activities involving the public and private sectors. The programme should provide appropriate education, communication and services to: all poultry producers, workers and traders; community animal health workers; field veterinarians, livestock officers and extension workers; and senior-decision makers at national, provincial and district levels. Lessons learnt in the production of effective education and communication materials that are readily accessible to each target audience are described.**

**Keywords:** HPAI control; HPAI prevention; continuing education; Indonesia

## Introduction

Highly Pathogenic Avian Influenza (HPAI) subtype H5N1 is now endemic in many parts of Indonesia. This situation has revealed, among other constraints, a lack of human resource capacity in many institutions especially in terms of understanding of, and experience in, the control of poultry diseases. An example of this situation is the endemicity of Newcastle disease and Very Virulent Infectious Bursal Disease; outbreaks of these diseases, particularly in smallholder and village flocks, are not

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actively reported or controlled. This paper reviews the key components required for the implementation of a successful HPAI prevention and control programme.

## Prerequisites for effective HPAI prevention and control

The effective control of HPAI requires:

- understanding the behaviour and ecology of influenza viruses, in general, and of its subtype, in particular;
- understanding the perspective and decision-making processes of key stakeholders (e.g. poultry producers from all production systems, workers, traders, disease control officers) with regard to poultry health and disease control;
- understanding the different local poultry production and marketing systems, specifically and within the wider system (for example, within the local farming system for sectors 3 and 4);
- understanding how the characteristics of the local poultry production and marketing systems affect the evolution of HPAI;
- mobilizing all stakeholders to engage in the preparation of HPAI responses and actively practise adequate measures in the three different phases of an HPAI outbreak (prevention, occurrence and post-outbreak; Bagnol, 2007);
- ensuring that donors, national governments, media and civil society collaborate and are involved in the development of the strategy;
- adapting the communication process to the dynamics of outbreaks and the needs of the different stakeholders (Alders and Bagnol, 2007).

## Implementing HPAI prevention and control

Cost-efficient prevention and control of HPAI are built on a sustainable poultry health programme that incorporates collaborative research and development activities involving the public and private sectors. The programme must provide appropriate education, communication and services to: all poultry producers, workers and traders; community animal health workers; field veterinarians including Participatory Disease Surveillance and Response (PDSR) Officers, livestock officers and extension workers; and senior-decision makers at national, provincial and district levels.

## Conclusions

Education and communication materials developed in collaboration with field veterinarians (both public and private) and small-scale and village poultry producers involved in HPAI prevention and control facilitate more effective communication and provide information appropriate to the local context.

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## References

**ALDERS, R.G. and BAGNOL, B.** (2007) Effective communication: the key to efficient HPAI prevention and control. *World's Poultry Science Journal* **63**:139-147.

**BAGNOL, B.** (2007) Communication about Highly Pathogenic Avian Influenza with special emphasis on village poultry farmers. Consultancy report. January 2007. Emergency Centre for Transboundary Animal Diseases (ECTAD). FAO Regional Office for Asia and the Pacific.



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