



Agriculture Department
Animal Production and Health Division
**AVIAN
INFLUENZA**

UNDERSTANDING AVIAN INFLUENZA

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A major new and wide-ranging overview from FAO

The experience acquired with H5N1 HPAI in recent years by scientists and animal health and other experts in their efforts to combat avian influenza has produced a wealth of knowledge that is helping reshape many long-held views about the disease and offering new insights into how it spreads and how it can best be controlled, if not eliminated.

A major new and wide-ranging overview of avian influenza has just been released by FAO in an attempt to throw much-needed light on the disease and the viruses that cause it, explain what is known and what is still not known about it, and take a critical look at some of the major issues involved, including the pros and cons of different approaches to disease control.

The work – *Understanding avian influenza – a review of the emergence, spread, control, prevention and effects of Asian-lineage H5N1 highly pathogenic viruses* – is an FAO initiative and was produced by Les Sims, a veterinary consultant who has been developing control and preventive programmes for this disease since it first emerged in Hong Kong SAR in 1997, and Clare Narrod of the International Food Policy Research Institute (IFPRI) who has been actively involved in understanding the economic and livelihood impact of avian influenza and control measures.

FAO will release the work in three instalments, starting with the first three chapters. The second instalment will contain Chapters 4 and 5, and the third and final instalment Chapters 6-9.

Understanding avian influenza explores the various mechanisms of persistence and spread of H5N1 HPAI viruses – both confirmed and possible – in order to understand better the sources of virus and the modes of transmission. It does this in an effort to separate science from perception, and to highlight areas where uncertainty remains.

The authors have based their analysis on past experience with other outbreaks and the events that have occurred since 1996 when H5N1 HPAI viruses first emerged, and examine some of the speculation related to the disease.

Key areas discussed include ***the role played by domestic ducks in the development of the current epizootic, issues related to whether the disease emerged from intensively-reared poultry, and the relative role of wild birds and trade in poultry in disease spread.***

The document summarizes many of the factors that have or are believed to have led to the emergence and spread of avian influenza, and offers an extensive bibliography of important reference works for anyone wishing to learn more.

ABOUT THE AUTHORS

Les Sims

Asia Pacific Veterinary Information Services, Australia

Les Sims is a veterinary consultant with over 30 years of experience, focusing primarily on farm animal disease management. He has a special interest and association with avian influenza, having been involved with outbreaks of highly pathogenic avian influenza since 1985 (two outbreaks in Australia in 1985 and 1992). He was in charge of operations and played a major role in avian influenza control and prevention in Hong Kong from 1997 to 2002, while working for the Hong Kong government as an Assistant Director of the Department of Agriculture, Fisheries and Conservation.

Since 2004, he has worked as a consultant, mainly through FAO and the World Bank, advising veterinary authorities on avian influenza in China, Thailand, Cambodia, North Korea, Mongolia, Indonesia and, especially, Viet Nam. He has provided technical support for HQ staff at the Food and Agriculture Organization of the United Nations (FAO), written numerous papers on issues related to avian influenza control and prevention for FAO and others, and guided development of technical components for World Bank projects on avian influenza in Cambodia and Viet Nam.

Les believes firmly in the need for practical approaches to disease control so that programmes match available resources/infrastructures, the local disease situation and the nature of the local industry.

Clare Narrod

International Food Policy Research Institute (IFPRI)

Clare Narrod, a senior research fellow in the Markets Trade and Institutions Division of the International Food Policy Research Institute (IFPRI), joined the institute in August 2005 to lead a programme in Food and Water Safety. She is also the Deputy Director of the ILRI/IFPRI Programme on Livestock Markets and a member of the Livestock Programme Group that steers the CGIAR system-wide livestock programme.

Before joining IFPRI, Clare worked at the United States Department of Agriculture (USDA) Office of Risk Assessment and Cost-Benefit Analysis as a Risk Assessor and Regulatory Economist where she reviewed food safety and animal and plant health rules for USDA clearance. She has also worked at FAO, where she led a number of livestock projects that focused on understanding the policy, technology and environmental determinants and implications of scaling up livestock production. In the past she has held consultant positions at the World Bank and at the Inter-American Institute for Cooperation in Agriculture.

Currently she leads a multi-country research project focusing on Pro-Poor HPAI Risk Reduction strategies in Africa and Indonesia, which is closely linked to a sister project led by FAO that focuses on in the Mekong Delta. She was member of a World Bank/FAO/ILRI task force that reviewed compensation issues related to avian influenza. Clare believes firmly that science-based decision-making, which takes into factor the cost-effectiveness of risk reduction strategies and the ability of different size producers to adopt such measures, should guide country specific HPAI control programmes.

(Source: http://www.fao.org/avianflu/documents/key_ai/key_book_preface.htm)