



Update on Activities Related to Highly Pathogenic Avian Influenza

The fourth OIE Regional Meeting on Strengthening Animal Health Information Networking in Asia under the OIE/JTF Project for Strengthening HPAI control in Asia

Chiangmai, Thailand 14 – 16 September 2011

Acknowledgement

- FAO teams at country, regional and HQ levels
- Colleagues from national authorities
- National and international experts



Update on Activities Related to Highly Pathogenic Avian Influenza (HPAI)

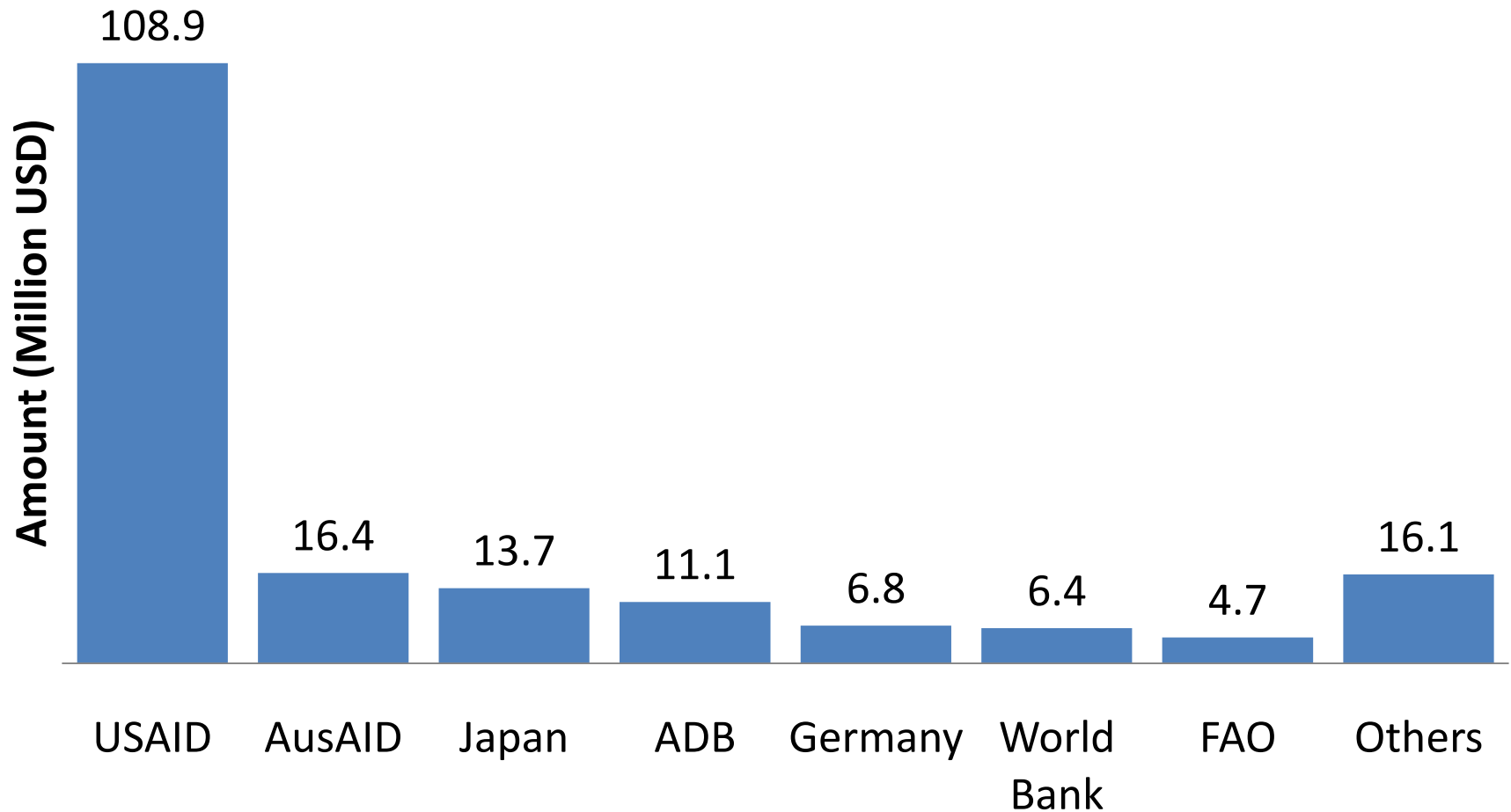
- Background of FAO activities related to HPAI control
- On-Going activities
- Current regional strategies
- Lesson learned from the past
- Current disease situation
- Moving toward One-Health

FAO Activities Related to HPAI Control

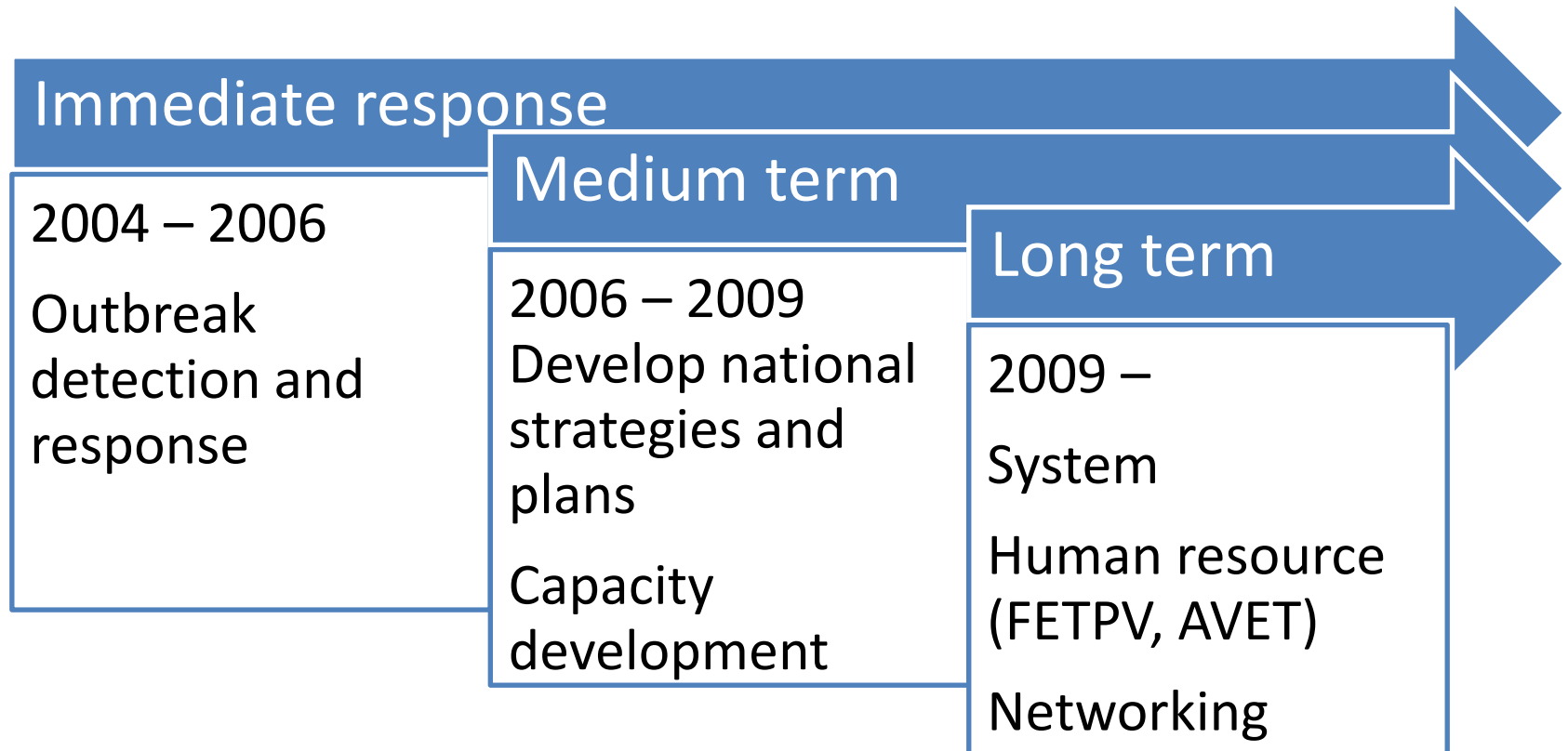
- Since 2004, FAO has implemented its activities related to HPAI control through projects at various levels;

Levels	Number of Projects	Total Budget (Million USD)
Global	13	43
Regional	41	81
Country	109	182
Total	163	306

Funding for Highly Pathogenic Avian Influenza in Asia 2004 - 2011 (Total 184 Million USD)



FAO Activities Related to HPAI Control



FAO Immediate Response to HPAI

- Inform and communication
- Organize technical meeting and expert consultation
- Provide inter-agency coordination and collaboration at national, regional and global level
- Provide technical and operational assistance to improve country capacity
- Specific themes



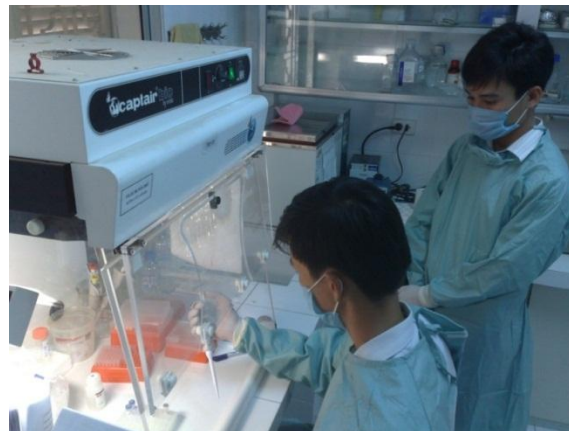
Technical and Operational Assistance

- National level
 - Assess country disease situation
 - Support diagnostic and surveillance
 - Guide and design strategies
 - Contingency planning
 - Provide equipment and laboratory consumables
- Regional level
 - Emergency regional coordination assistance for control of AI in SE Asia
 - Emergency regional support for post AI rehabilitation
 - Strengthening AI control through improved transboundary animal disease information management system in Asia
 - Sub-Regional surveillance and diagnostic laboratory network
- Global level
 - Emergency Center for Transboundary Animal Diseases



FAO Medium Term HPAI Activities

- Develop capacities of countries to;
 - Detect the disease at the field level
 - Perform laboratory confirmation
 - Rapid and effective outbreak containment



FAO Medium Term HPAI Activities

- Assist the country in develop national strategies, action plan and contingency plan with the focus on better coordination mechanisms between animal health and public health sectors

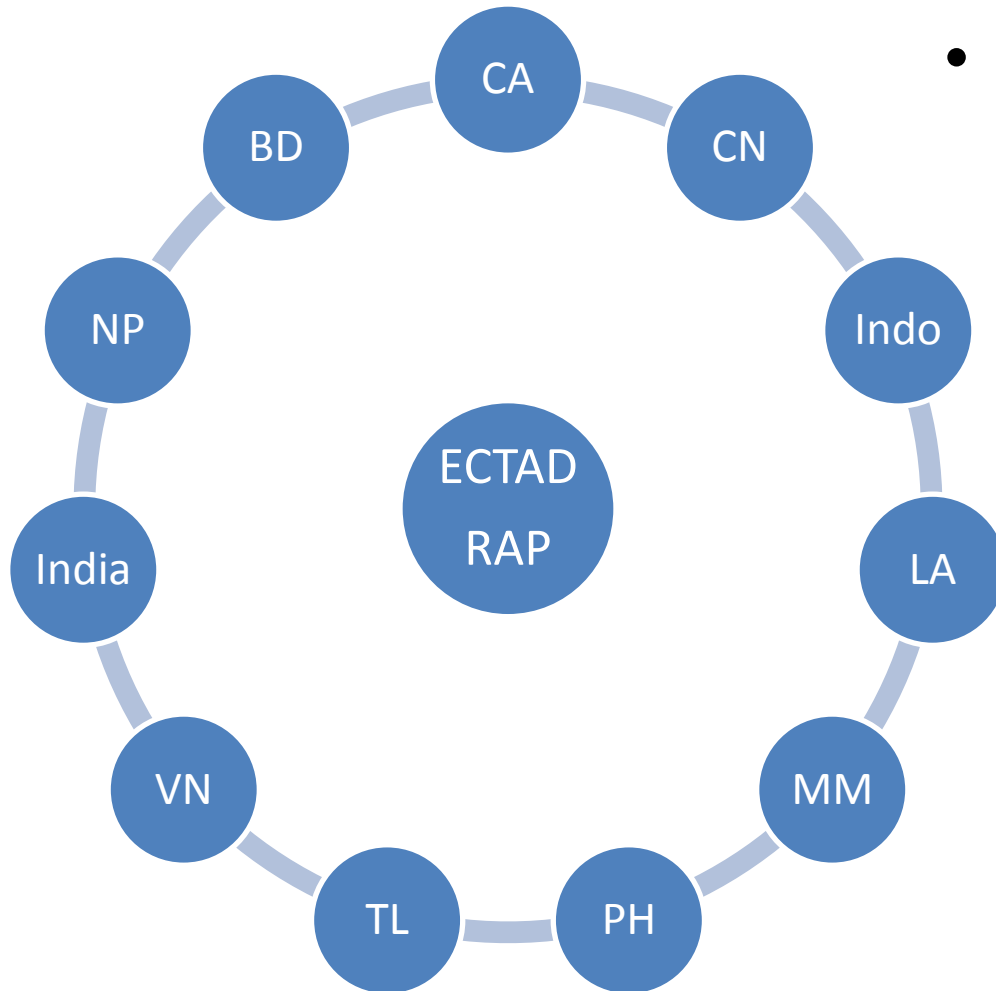
FAO Long Term HPAI Activities

- Strengthen disease control related system of veterinary service from central level to the field
 - Improve/develop legislation
 - Strengthen surveillance
 - Strengthen reporting system and data flow
 - Improve communication
 - Community animal health workers
 - Hotline / SMS

FAO Long Term HPAI Activities

- Improve understanding of disease epidemiology
- Facilitate national and regional surveillance and laboratory networking
- Facilitate sharing of information and biologic materials
- Support design and implementation of compensation

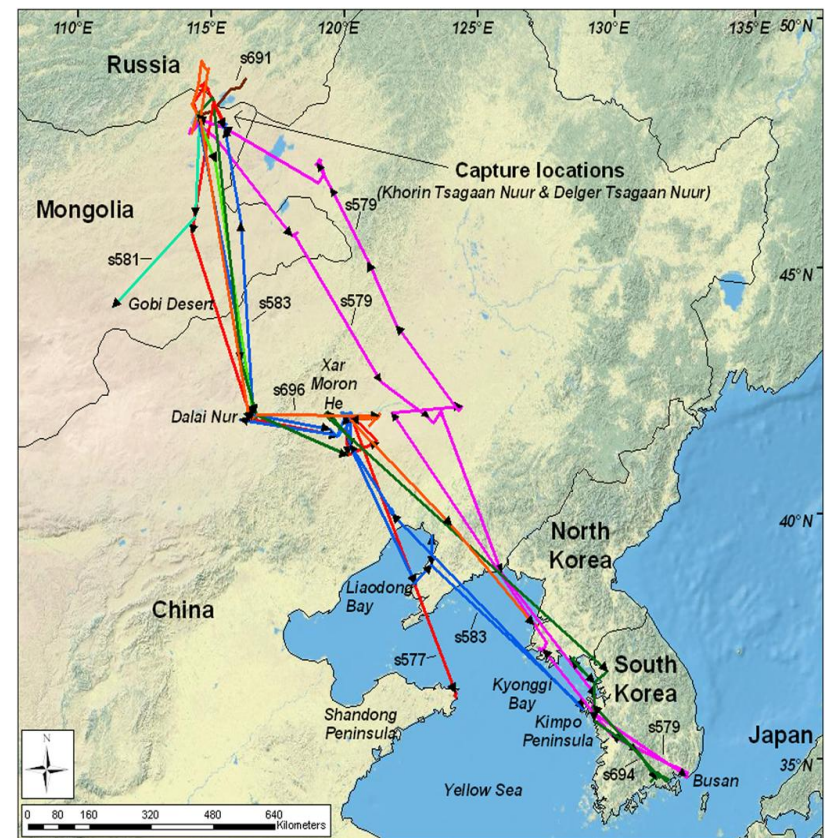
On-Going Activities



- Regional and country programmes
 - Surveillance
 - Risk management at cross-border
 - Develop capacity in field epidemiology
 - Develop capacity in laboratory diagnosis

Risk Based Surveillance

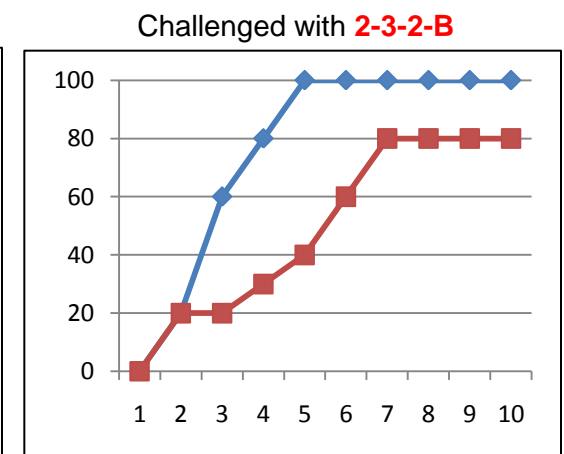
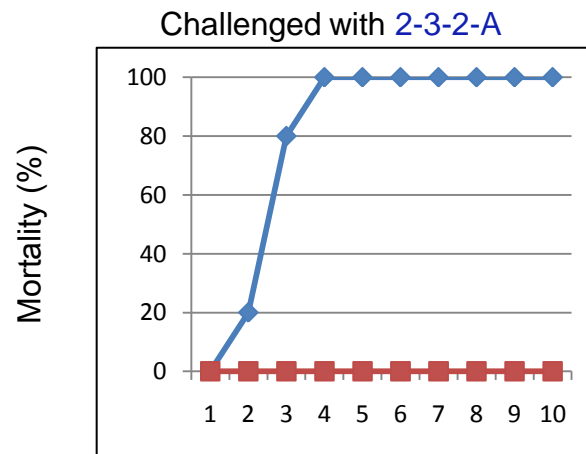
- Live bird markets (LBM)
- Ducks
- Migratory birds



(Scott Newman)

Molecular Surveillance

- Detect outbreaks
- Detect the origin/movement pathways of viruses
- Identify changes in viral antigenicity that will reduce vaccine or diagnostic test efficacy
- Gather samples and data for broader study of influenza virus ecology

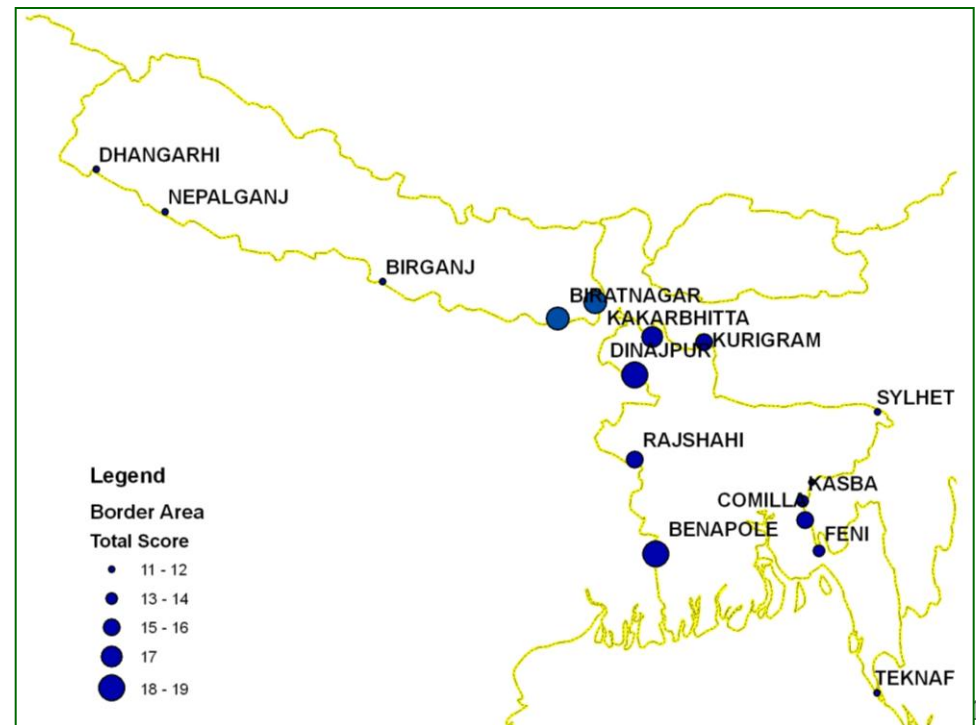


(Simon Reid and Ken Inui)

Cross Borders Livestock Trade Management

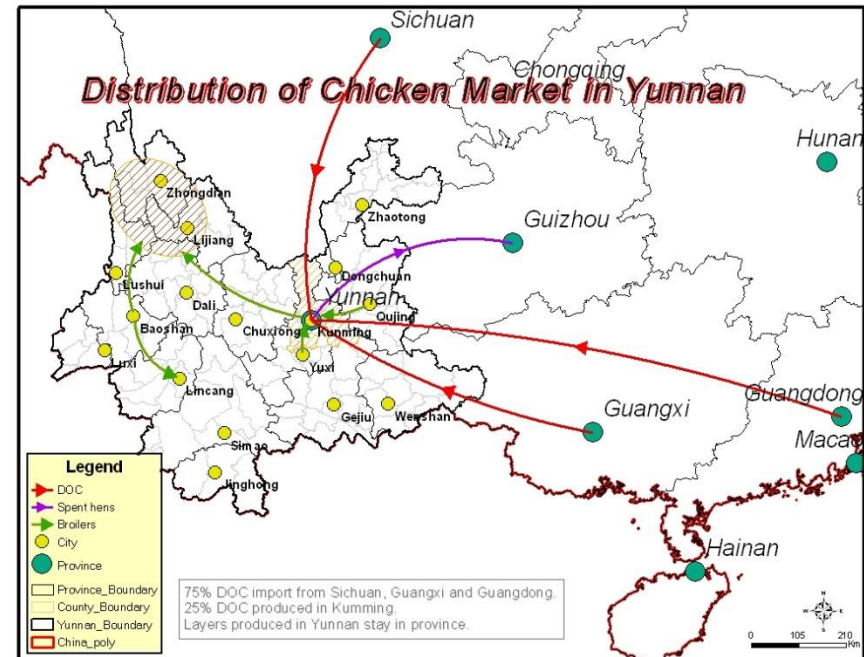
- Risk assessment of HPAI in cross border areas
- Facilitate meeting of national partners
- Harmonizing technical and policy procedures

(Leo Loth and Angel Ortiz-Palaez)



Supply Chain Analysis

- Identify risky areas of the production and marketing systems and propose measures to make them safer
- Achieve a better understanding of the movement of virus through livestock production and marketing systems, so that control measures can be targeted



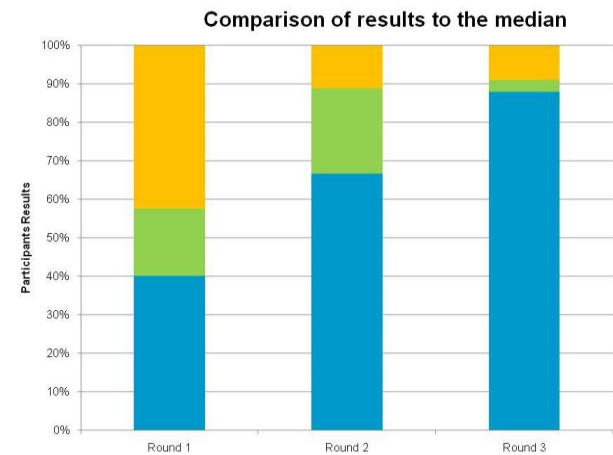
(Jan Hinrich and Vincent Martin)

Capacity Building in Field Epidemiology

- Field Epidemiology Training Programme for Veterinarian (FETPV)
 - Thai Department of Livestock Development host the coordination and training unit
 - Training through services: Lecture 30%, Field service 70%
 - Follow up activities
 - Operational research
 - Minimal interruption of trainees' responsibility
 - Linkage with public health sector
 - Expand from regional programme to country programme i.e. China, India

Capacity Building in Laboratory Diagnosis

- FAO-OIE Regional Framework for Capacity Building for HPAI Diagnosis and Networking
 - Infrastructure
 - Equipment
 - Personnel
 - Protocol (QA)
 - Sharing of Information and Samples
 - Management and Advocacy



FAO-OIE Regional Laboratory Network for Animal Influenza Diagnosis in SE Asia



- Network of institutions, people and experts in the region on a sharing platform
 - Technical assistance
 - Diagnostic service
 - Information
- Regional Guiding Principles for Animal Influenza Surveillance and Diagnosis in SE Asia

Regional Support Unit

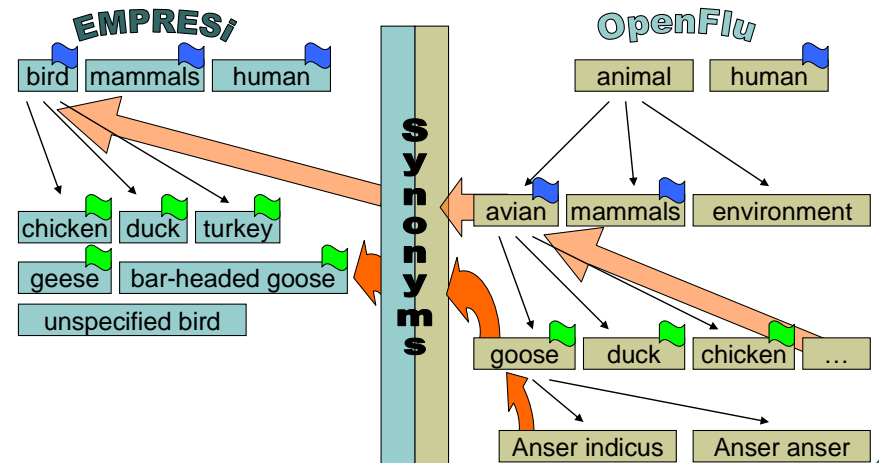
- ASEAN (Bangkok)
 - Regional Support Unit
 - Regional epidemiology network
 - Regional laboratory network
- SAARC (Kathmandu)
 - Regional Support Unit
 - Regional Epidemiological Center



Regional Information Platform

- EMPRESi Asia
 - Disease information
 - Analysis tools
 - Discussion forum
 - Document repository
- Email circulation
 - AI Network Asia

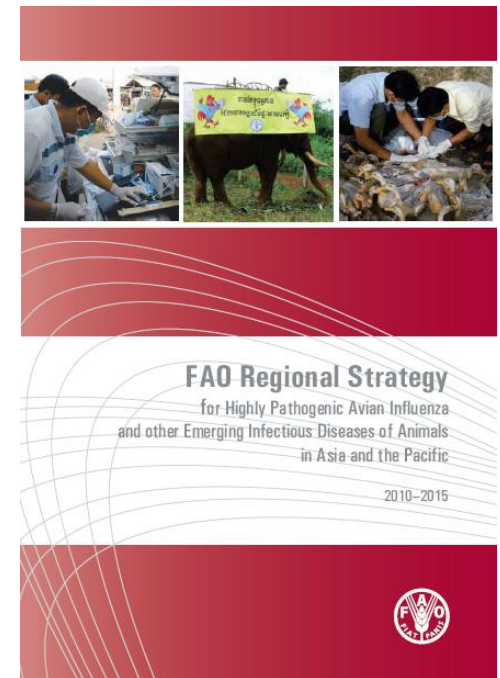
EMPRESi Genetic Module



(Filip Claes)

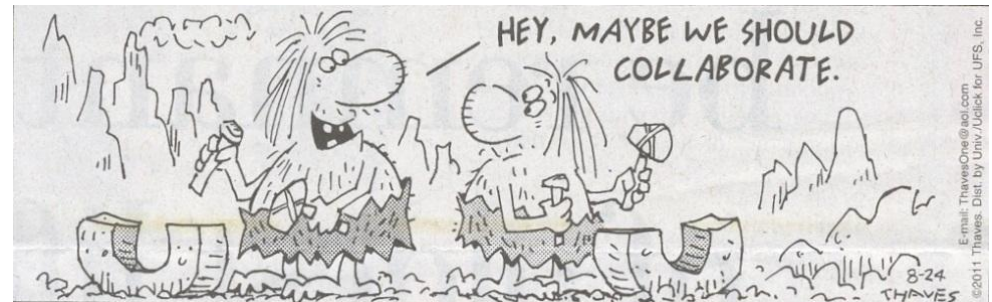
Current Regional Strategies

- Strategic Approach to HPAI Prevention and Control 2010 – 2015
 - Gaining better understanding of risk factors for HPAI transmission and maintenance
 - Improving HPAI outbreak response
 - Reducing HPAI incidence by risk management
 - Collaborative regional activities



Lesson Learned

- Disease is a multi-factorial problem
- Economic development and disease occurrence
- Roles of wild life in disease transmission and being disease reservoirs
- Understanding diseases epidemiology and foresight assists in disease control planning



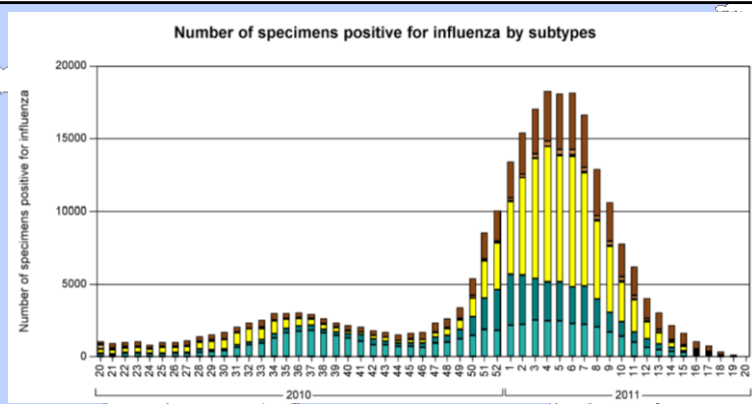
Lessons Learned

- Impact from disease and cost-benefit as well as consequences of disease control
- Multi-sectoral and multi-lateral collaboration
- Political commitment
- Countries' capacity is additional problem to financial aspect
- Risk communication and public awareness

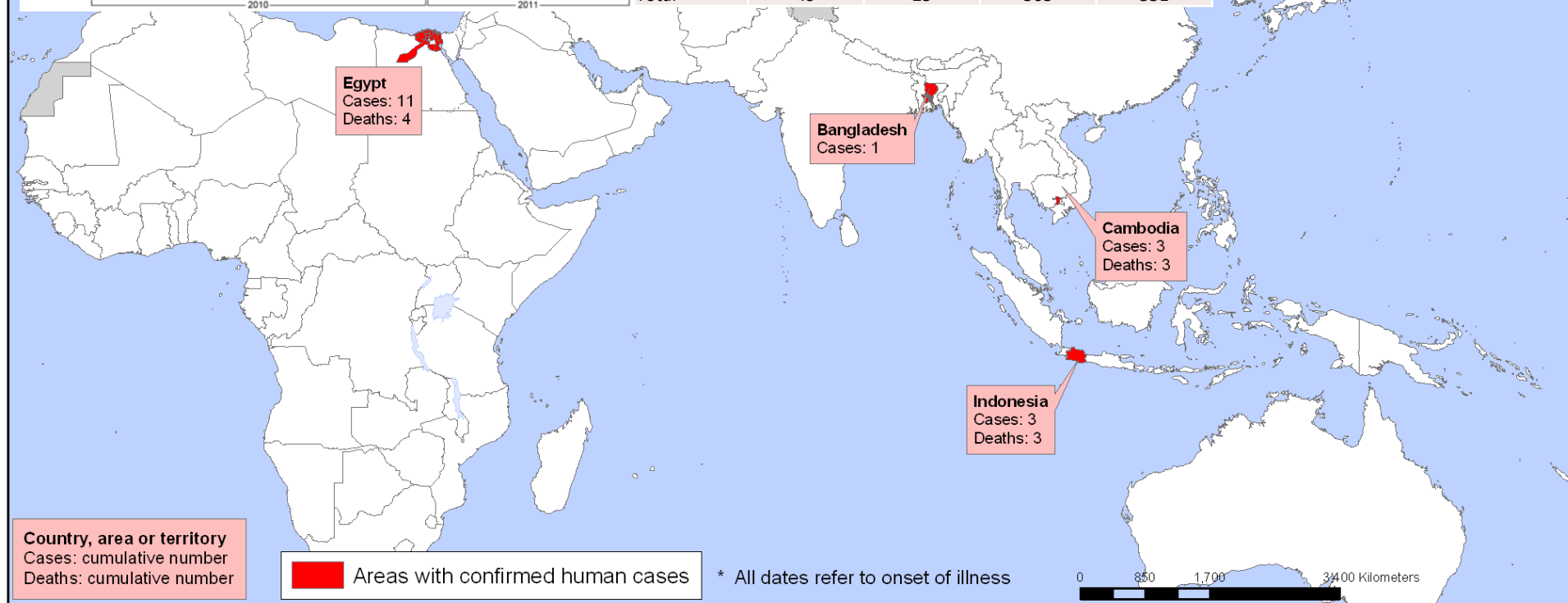


Areas with confirmed human cases of H5N1 avian influenza since 1 January 2011 *

Last update
Map – 16 March 2011
Table – 19 August 2011



Countries	Cases 2011	Deaths 2011	Cases All	Deaths All
Egypt	32	12	151	52
Indonesia	7	5	178	146
Cambodia	8	8	18	16
Bangladesh	2	0	3	0
Viet Nam	0	0	119	59
China	0	0	40	26
Others	0	0	56	32
Total	49	25	565	331



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. © WHO 2011. All rights reserved.

Data Source: WHO
Map Production: Public Health Information and Geographic Information System (GIS)
World Health Organization



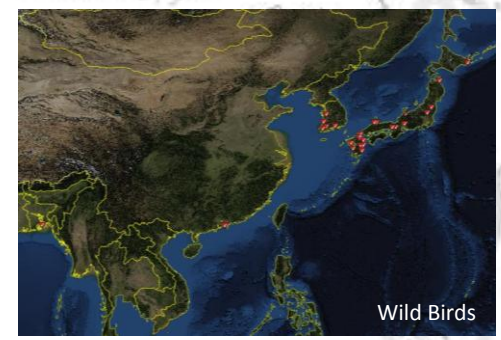
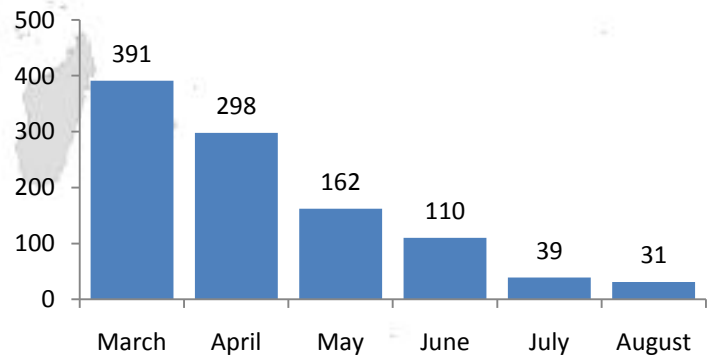
H5N1 in Animals

March – September 2011



Source - EMPRESi

Legend		Countries	Cases
1 month Confirmed (H5N1)	Domestic (Red circle)	Indonesia	573
1 month Confirmed (H5)	Wild (Red inverted triangle)	Bangladesh	123
Past 5 months Confirmed (H5N1)	Domestic (Black circle)	Viet Nam	39
Past 5 months Confirmed (H5)	Wild (Black inverted triangle)	Korea	11
		Others (6)	28
		Total	774



Moving Toward One-Health

Contributing to One World, One Health*

A Strategic Framework for Reducing Risks of
Infectious Diseases at the
Animal–Human–Ecosystems Interface

14 October 2008

Consultation Document

Produced by:



World Health
Organization



UN System
Influenza Coordination



THE WORLD BANK

- Diminish and minimize global impact of epidemics and pandemics due to emerging infectious diseases of humans and animals
- Address health risks at the animal-human-ecosystems interfaces

FAO Role in One Health

- FAO seeks to operationalise thinking that disease emergence needs to be addressed together with
 - Poverty
 - Natural resource management
 - Sustainable agriculture and farming system
 - Rural development
 - Building generic One Health capacity
 - Blending insights gained from epidemiology, agro-ecology, socio-economics and communication

Regional Cooperative Programme on Highly Pathogenic Emerging Diseases (HPED)

- Establish a Regional Support Unit (RSU)
 - Strengthen regional cooperation, disease response capacity and policy development
- Establish a Regional Epidemiology Network
 - Understand the epidemiology of HPAI and other HPEDs in order to design appropriate control measures
- Establish a Regional Laboratory Network
 - Share training, expertise, reagents, facilities and information



Emerging Pandemic Threat Program (EPT)

Early identification of and response to dangerous pathogens in animals before they can become significant threats to human health

PREDICT

To implement an early warning system that addresses the role of wildlife in facilitating the emergence and spread of new diseases

RESPOND

To strengthen countries' capacity to identify and respond to new disease outbreaks in a quick and sustainable manner

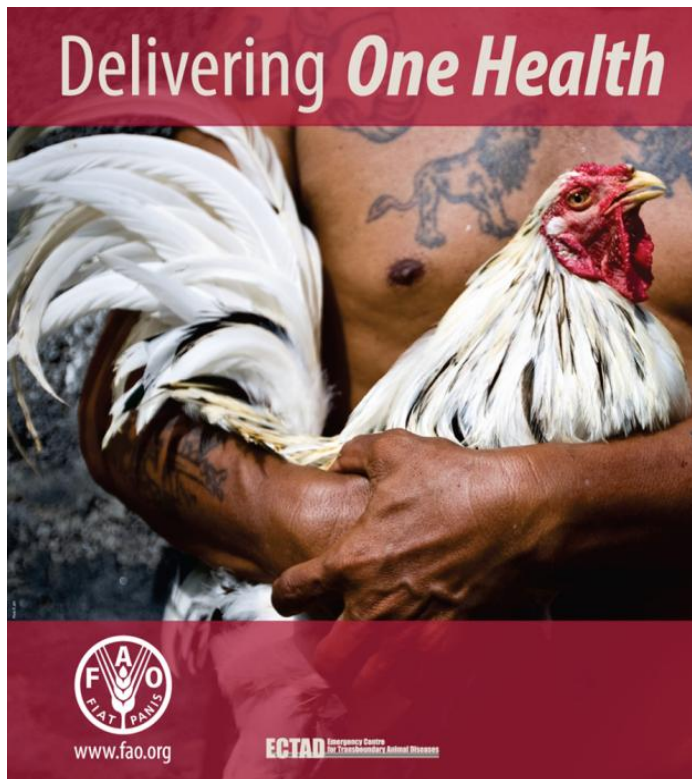
IDENTIFY

To support the development of laboratory networks and strengthen diagnostic capacities in those areas thought most likely to be the source of emerging diseases

PREVENT

To build a behavior-change response to infectious diseases and support efforts to characterize high-risk practices that increase the potential for spreading such diseases

Delivering One Health



- Advocacy
- Strengthen coordination and collaboration across sectors and disciplines
- Capacity building
 - Long term approach
 - Immediate to produce scientific evidence for prevention purpose