



DFID-Funded Collaborative HPAI Research Project for Asia and Africa

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On behalf of the IFPRI/ILRI FAO/RVC/Berkeley team

Pro-Poor HPAI Risk Management Project
Inception Workshop, Chiang Mai, 12 December 2007

Pro-Poor HPAI Risk Management Research Project

Overview



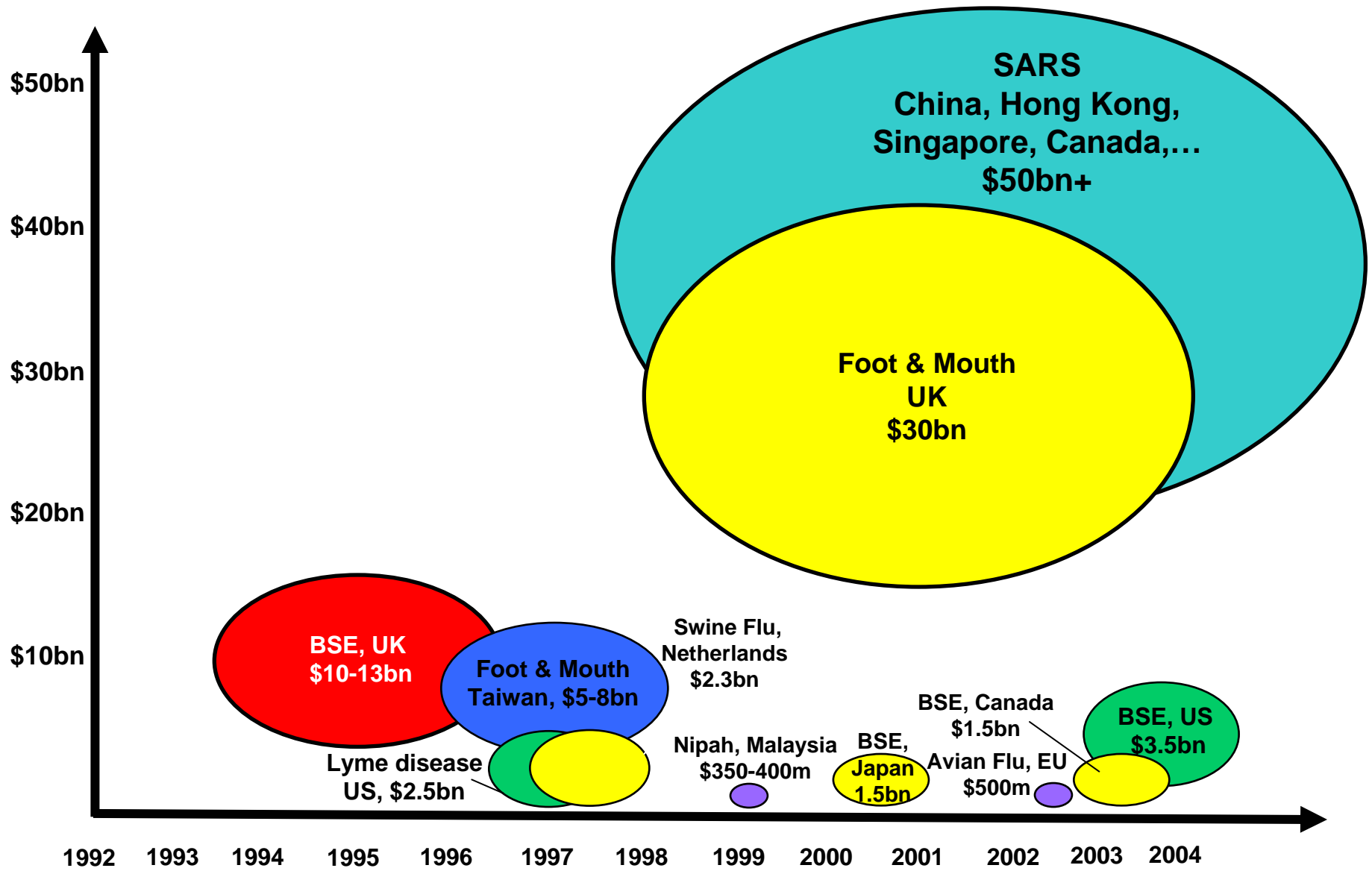
- Background & Motivation
- Project Goal & Objectives
- Research Modules
- Oversight & Management
- Principles & Next Steps

HPAI Threats

- Poor peoples' livelihoods
 - disease itself
 - control measures
- Poultry industry
 - in affected countries
 - in non-affected countries
- Global public health
 - rural populations
 - urban populations



Economic Impact of Selected Diseases



Adapted from: *Bio-Era*. Courtesy of Dr. Will Hueston, Center for Animal Health and Food Safety, UM

Research & Research Gaps

Research

- Viral genomics – virus evolution
- Pathogenesis – in humans and poultry
- Immunology – vaccine development
- Disease ecology – wild bird & domestic reservoirs
- Disease epidemiology – e.g. spread mechanisms

Research Gaps

- ‘Stratum-specific’ impacts of disease and disease control
- Cost-effectiveness / cost-benefit of control (short & long term)
- Institutional angles of HPAI control
- Externalities / ‘global public goods’ aspects of HPAI control

The International Partners



International Food Policy Research Institute
Clare Narrod, Devesh Roy



International Livestock Research Institute
Jeff Mariner, Karl Rich



Royal Veterinary College, University of London
Dirk Pfeiffer



RDRC, Berkeley University, California
David Roland-Holst, David Zilberman



Food & Agriculture Organisation, Rome
Joachim Otte, Anni McLeod

Pro-Poor HPAI Risk Management Research Project

Project Goal

Safe smallholder poultry enterprises and poultry markets in regions affected or at risk of HPAI while also minimizing the potential spread of HPAI to humans

Project Objectives

1. Provide scientific basis for
 - cost-effective, and
 - 'equitable'HPAI control strategies,
2. 'Inject' insights into
 - national,
 - regional and globalpolicy processes, **and**
3. Build capacity for evidence-based formulation of disease control policy



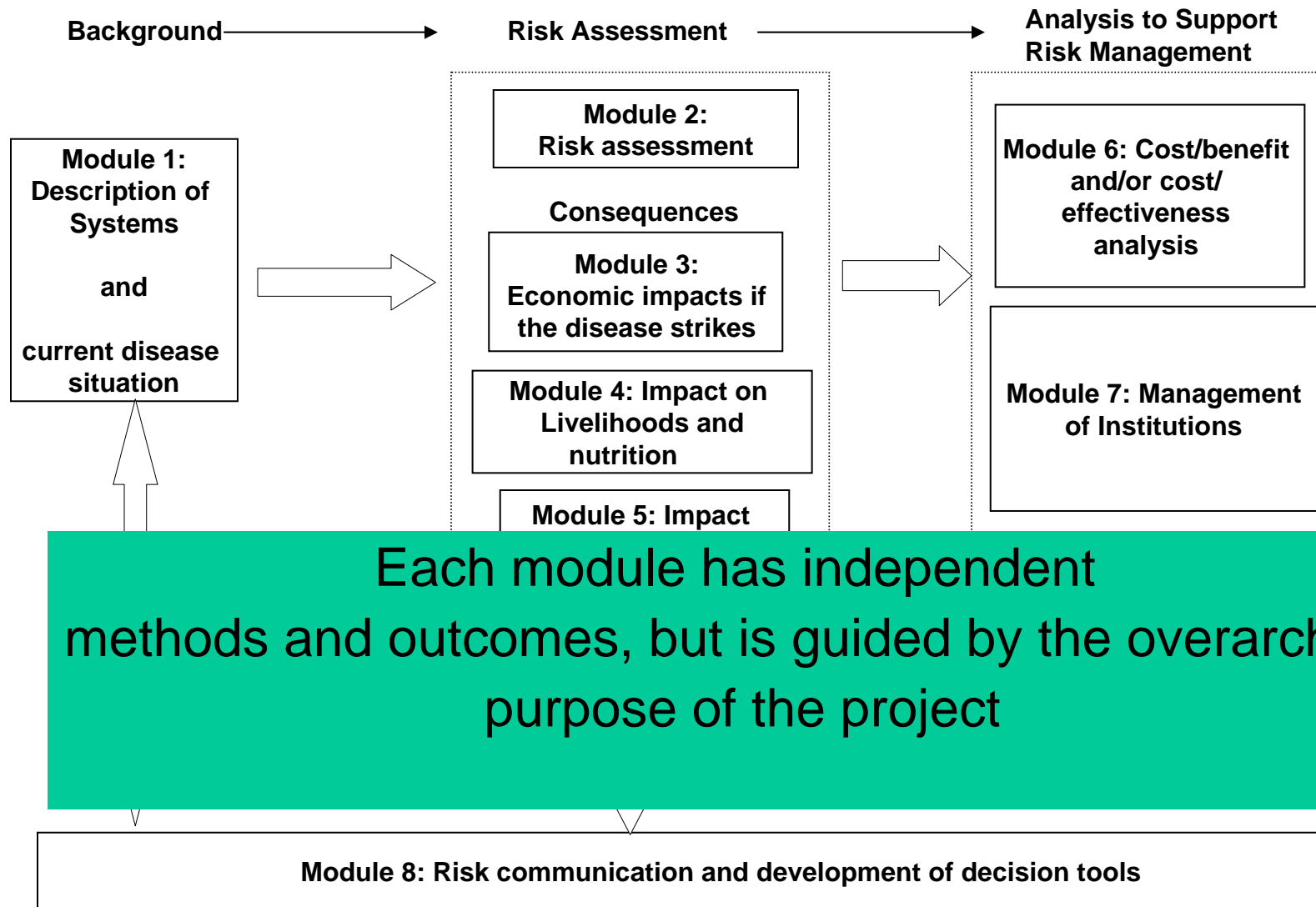
Scope of Research

- Select group of countries in Africa and Asia who are either infected or at risk of becoming infected will be the focus of the study, however...
- Methods developed by the proposed research will be general, and applicable to other potential disease threats and regions

Our Strategy

- A 9 part modular approach will be used to capture the complex interactions of the spread of AI and its impact on the economy as a whole
 - Attention paid to: 1) smallholders and the poor, 2) to acute vs endemic situations, and 3) long vs short distance spread
- Self-contained, but interlinked modules
 - Linked by baseline values, assumptions and policy options

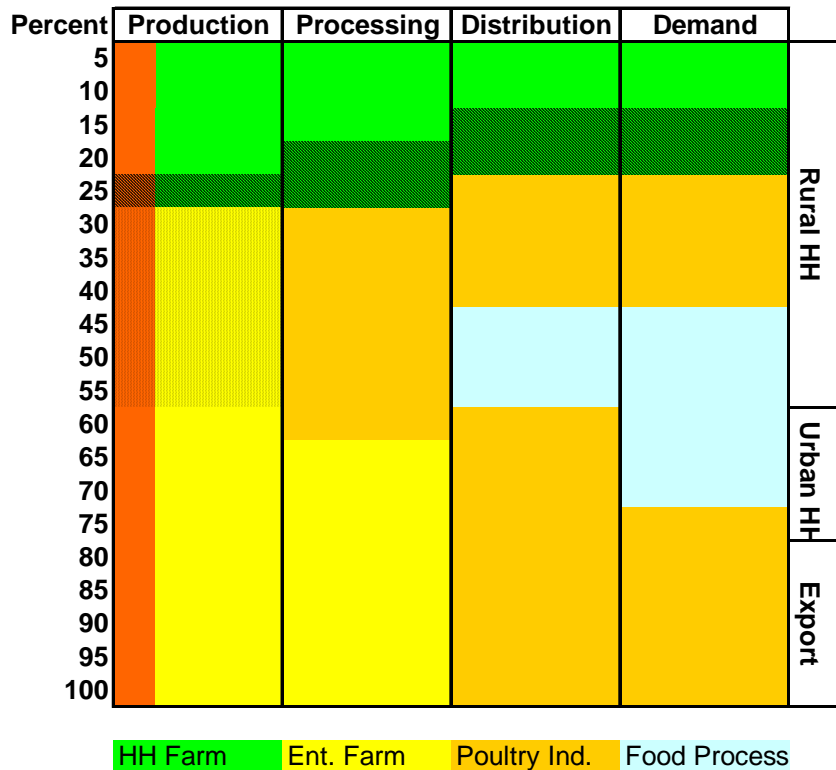
Research Modules & Linkages



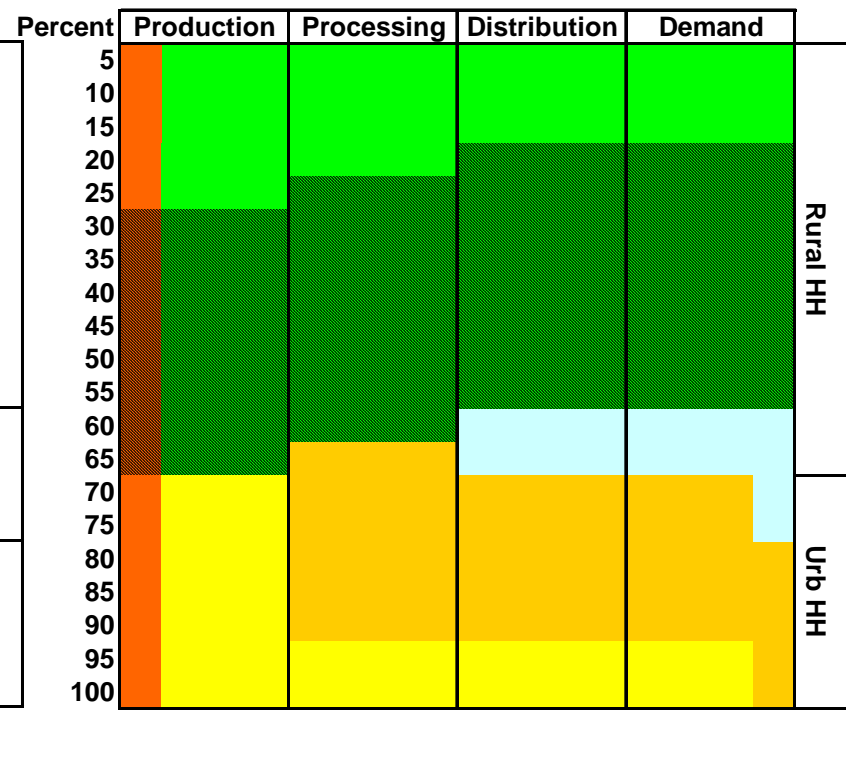
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Module 1: Poultry Systems & HPAI

Thailand

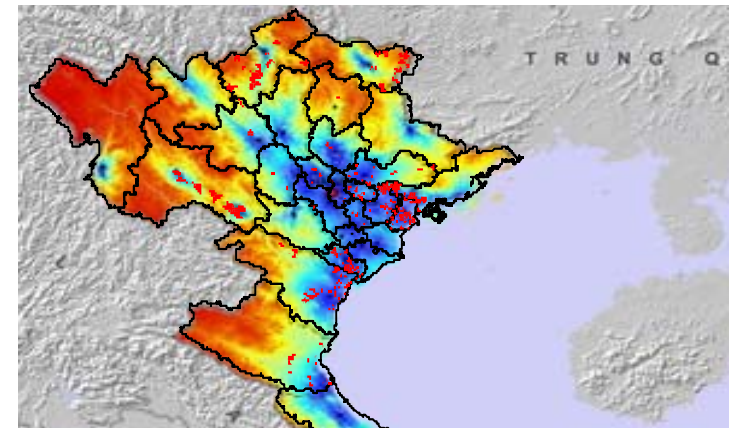
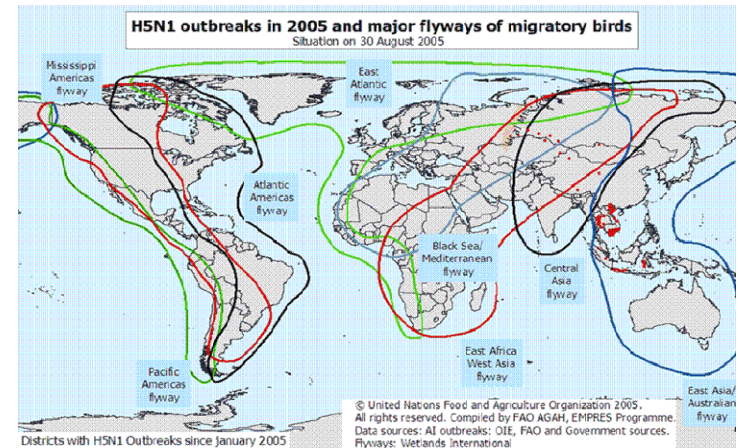


Viet Nam



Module 2: Risk Assessment

- Qualitative & quantitative
 - Likelihood of entry of HPAI virus and exposure of domestic poultry?
 - Potential pathways of HPAI spread to poultry and the likelihood that this will happen?
 - Likelihood of HPAI becoming endemic and how would the risks / control strategy change?



Modules 3, 4 & 5: Disease Impacts

- Economic: poultry sector and beyond
- Livelihoods and nutrition
- Institutions (eg animal health services, MARDs, regional organizations)



Module 6: Effectiveness of Control



- Control options in relation to structure of the poultry industry and animal health system capacity
- Differential social and economic impact of chosen control strategies
- Incentives for compliance / non-compliance across actors

Module 7: Institutional Responses

- 'Top-down' surveillance vs 'bottom-up' disease reporting
- Public vs private sector engagement
- Compensation vs adjustment support
- Farm- vs value-chain focused approaches for disease control
- National vs international responsibilities and cost sharing
- Experiments (epidemiology and economics) to see what works under specific situations
- etc.....

Module 8: Risk Communication

- Assessment of information needs / gaps of different stakeholders
- Identification of appropriate communication channels for different target audiences (e.g. women & children)
- Development of simple decision support tools for policymakers



Project Oversight / Management

External: Steering Committee

- Experts in different research domains, individuals tasked with disease control in affected countries and representatives of international organisations
- Charged with providing guidance to the project to ensure that the research conducted:
 - addresses issues relevant to decision-makers;
 - is scientifically sound,
 - is practical and transparent, and
 - expediently finds its way into national, regional and global decision making processes.

Project Oversight / Management (cont.)

Internal: Thematic responsibilities

- Technical areas
 - Risk assessment: Dirk Pfeiffer (RVC)
 - Consequence analysis: Clare Narrod (IFPRI)
 - Risk management: Jeff Mariner (ILRI)
- Translation of research into policy action: Anni McLeod (FAO)
- Capacity building with regional and national collaborators: Joachim Otte (FAO)

Regional / Country 'Responsibility'



Indonesia, Ethiopia, Kenya,
Nigeria & Ghana / Burkina F.

The Mekong Region: Thailand,
Cambodia, Vietnam (Lao PDR)

Principles

- open for others to join, avoid duplication
- transparent, disclosure of interim findings
- collaborative & trans-disciplinary
- iterative, ongoing adjustments
- constructive peer review
- end-user focused



Next Steps



- **December – January:** ‘recruit’ national partners and agree on ways and areas of collaboration
- **January:** HPAI + research meeting for East Asia (jointly with RESTAD project)
- **January:** ‘Issues Paper’ on main issues addressed by project
- **Spring:** ‘Background Papers’ prepared for each project country (module1)



<http://www.hpai-research.net>

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