DFID-Funded Collaborative HPAI Research Project for Asia and Africa

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Pro-Poor HPAI Risk Management Project
Stakeholder Workshop, Kenya
Overview

- Background & Motivation
- Project Goal & Objectives
- Research themes
- Principles & Next Steps
Motivation

• Considerable uncertainty about the timing, extent, and severity of a potential animal disease outbreak

• Yet developing countries must make critical decisions about ways to defend against a potential outbreak of diseases, such as HPAI
HPAI Threats

• Poor peoples’ livelihoods
  • From disease itself
  • From control measures

• Poultry industry
  • in affected countries
  • in indirectly affected countries

• Global public health
  • rural populations
  • urban populations
Disease and control measures

- Easy to conceptualize but hard to quantify
  - There are likely to be differential economic impacts on different income groups and sectors of the economy
- The rural poor, whose livelihoods depend in large part from poultry (itself a research question) and who consume their own poultry, may disproportionately feel these costs.
Economic Impact of Selected Diseases

- Avian Flu, EU: $500m
- BSE, UK: $10-13bn
- Lyme disease, US: $2.5bn
- Foot & Mouth Disease, Taiwan: $5-8bn
- BSE, Canada: $1.5bn
- Swine Flu, Netherlands: $2.3bn
- Nipah, Malaysia: $350-400m
- BSE, Japan: $1.5bn
- Avian Flu, EU: $500m
- SARS, China, Hong Kong, Singapore, Canada,…: $50bn+
- Foot & Mouth Disease, UK: $30bn
- BSE, US: $3.5bn
- SARS, China, Hong Kong, Singapore, Canada,…: $50bn+

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

• ‘Stratum-specific’ impacts of disease and disease control
• Cost-effectiveness / cost-benefit of control (acute, endemic)
• Institutional angles of HPAI control
• Externalities / ‘global public goods’ aspects of HPAI control
Project Goal

To help national governments, international organizations and other stakeholders to be prepared to make informed decisions should need arise and to limit the spread of HPAI, while minimizing the impact on different socio-economic groups, particularly the poor.
Regional / Country ‘Responsibility’

Ethiopia, Kenya, Nigeria, Ghana, and Indonesia,

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

• A 6 thematic 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) acute vs endemic situations, and 3) long vs short distance spread

• Self-contained, but interlinked themes
  • Linked by baseline values, assumptions and policy options
Background papers

Aim
• Document ALL the available existing information pertaining to HPAI and poultry sector in the study countries
• Identify knowledge gaps to focus research in study countries

Research project
• Country baseline information, shocks (disease, policy response) and simulation assumptions agreed upon
Disease Risk

- Base line risk maps
- Risk pathways
- Disease probability models (qualitative and quantitative)
  - Likelihood of entry of HPAI virus and exposure of domestic poultry? Or likelihood of spread to different regions
- Spatial spread models
  - Potential pathways of HPAI spread to poultry and the likelihood that this will happen?
Livelihood impacts

• Economic: poultry sector and beyond
  • CGE analysis and multi-market analysis

• Livelihoods impact
  • Household level analysis (quantitative)
  • Nutritional analysis (quantitative)
  • Focus group surveys (qualitative)
Institutional mechanisms

- Assessment of role and effectiveness of various institutions in control efforts
  - Institutions (eg animal health services, MARDs, regional organizations)
  - ‘Top-down’ surveillance vs ‘bottom-up’ disease reporting
  - Public vs private sector engagement
  - Farm- vs value-chain focused approaches for disease control
  - National vs international responsibilities and cost sharing
- Assessment of the costs and risk reduction effects of various policies, reforms and institutional changes on disease risk to date;
- Behavioral experiments to see what works under specific situations
Synthesis Analysis

- Cost/benefit analysis of various prevention/ control risk management options
- Cost/effective analysis of risk management options
- Risk analysis paradigm
- Simulation analyses capturing the effect of various risk management strategies on:
  1. biological efficacy of disease
  2. economic efficiency
  3. social desirability
  4. political feasibility
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 as an interface for stakeholders to use information
  - network maps
National collaborators (so far)

- Kenya
  - Kenya Institute for Public Policy Research and Analysis (KIPPRA)
    - Dr. John Omiti
  - FAO
    - Dr. Samuel Okuthe
Country Champions – linking to policy making

- **Nigeria**
  - Dr Joseph Nyager; HPAI country coordinator

- **Ethiopia**
  - Dr Amsalu Demissie (Deputy Secretary, Animal Health)

- **Indonesia**
  - Dr Elly Sawitri; HPAI country coordinator

- **Ghana**
  - Dr. E B M Koney, CVO

- **Kenya** (Passionate, HPAI experience and keenness to reach out to stakeholders- Amos’ trinity)
Principles

• avoid duplication
• transparent, disclosure of interim findings
• collaborative & trans-disciplinary
• iterative, ongoing adjustments
• constructive peer review
• end-user focused
Steps so far

- **December – January**: ‘recruit’ national partners and agree on ways and areas of collaboration
- **January**: ‘Issues Paper’ on main issues addressed by project
- **January**: Inception workshop in Chiang Mai
- **Spring**: ‘Background Papers’ prepared for each project country (output1)
- **Summer**: Country kick-off meetings to introduce project to stakeholders and agree on major gaps project will address
Next steps (cont.)

• Net mapping exercise
• Agree-upon country baseline information, shocks (disease, policy response) and simulation assumptions agreed upon –
• Define type of research approach and data needs
  • Chose specific methodologies
  • Design survey instruments
  • Link outputs