



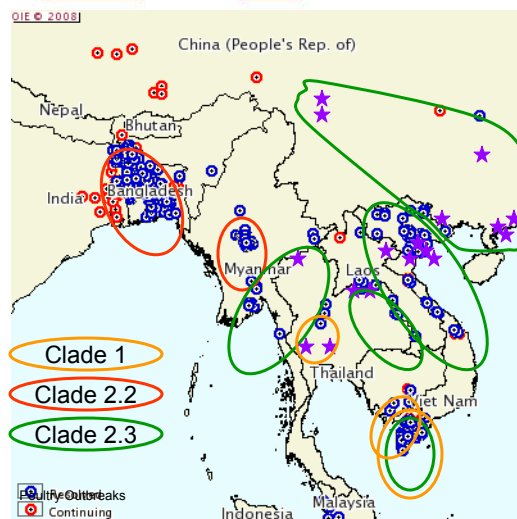
Taking a value chain approach to avian influenza control: *a necessary backdrop to economic analysis*

Nicoline de Haan (FAO, Rome) and
Jonathan Rushton (RVC, London)



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Spatial Distribution of
H5N1 Outbreaks in Mainland
Asia

★ = human cases

Sources: OIE, FAO, WHO, GenBank

Adapted from presentation by USAID in
Regional Strategic Review Meeting

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Introduction

- How do we deal with an animal disease that emerges and reemerges? How do we keep the food supply safe from these diseases?
- Developing an approach to guide *decision making* on effective use of resource within animal health
- Capturing the dynamics and the complexity
- Work in progress



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Background thinking

- Linking with national and international bodies
 - Build on risk analysis methodologies – common scientific approach
- Focus on two concepts
→ Value chains and risk
- from two aspects
 - Animal disease
 - People – livelihoods and consumption



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Disease, people and risk



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Deconstructing disease transmission



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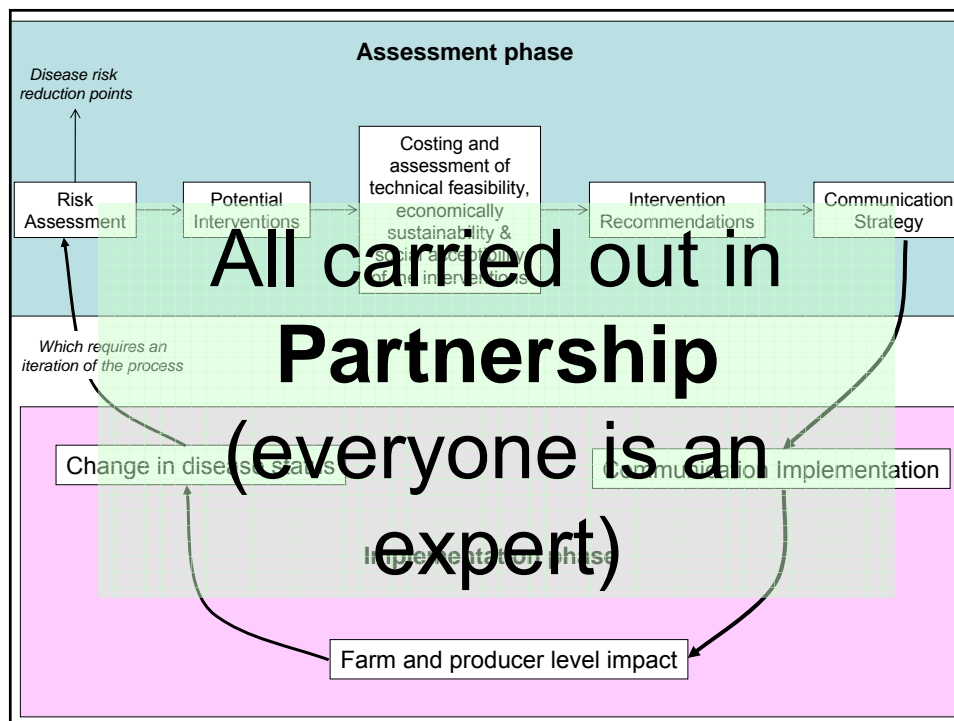
Disease spread and what to do about it!

- Find it fast
 - surveillance
 - risk assessment to target activities and improve sensitivity
 - value chains and product flows
- Rapid and proportionate control measures
- Maintenance of food supplies
 - Limit livelihoods impact
 - Limit problems for consumers



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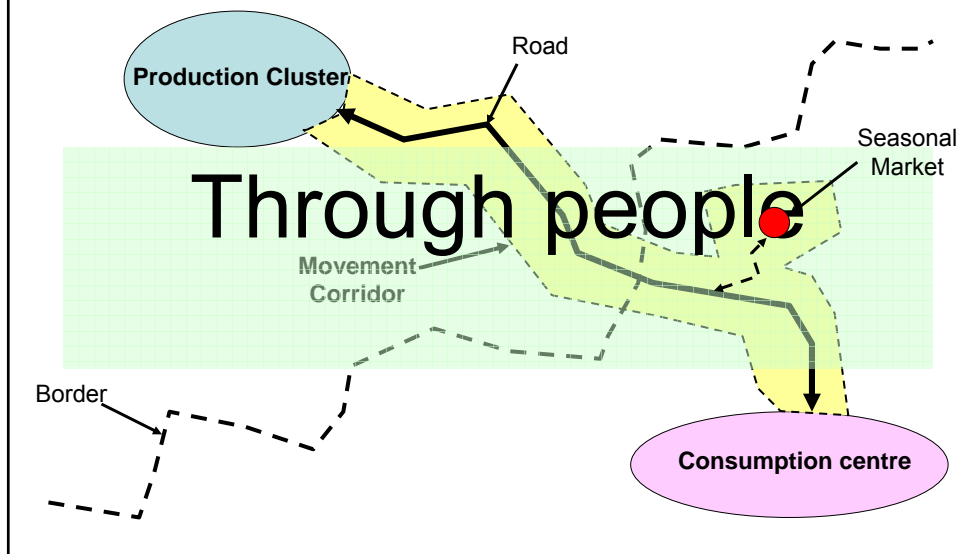


Disease, people, risk and value chains



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How to manage this process





Through people – what does it mean

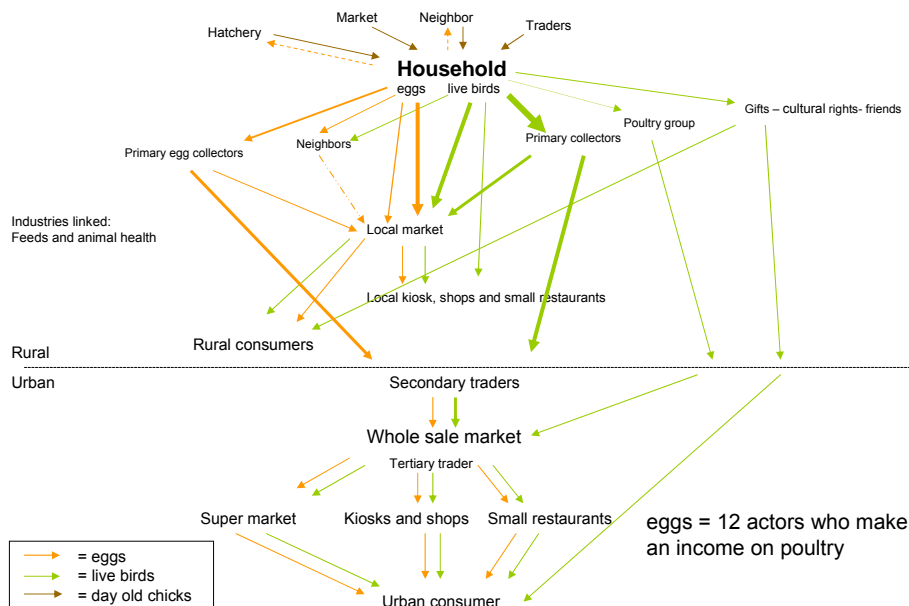
- Social organization for production of food = VALUE CHAINS
- Value chains link people – spatially and socially
- Efficiency, profitability, equity
- Decision making happens along these chains
- Risks of animal disease introduction happens along these chains



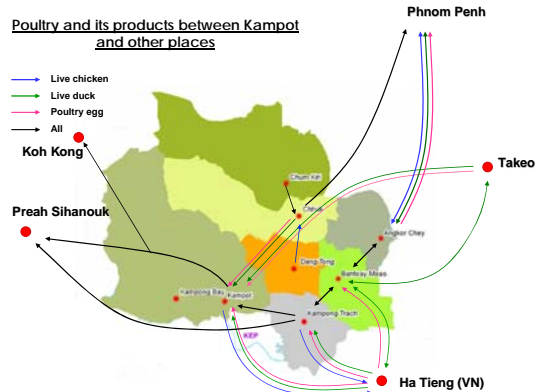
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Value Chain for Local/Indigenous Poultry



- Cambodia



Modify and change through human action as well



RVC
Royal Veterinary College
University of London

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- Understanding how the livestock value chains modify and manage disease allows us to help see how our interventions can help a chain to recover as fast as possible
- **How can we as decision makers make the chains disease free and healthy?**
- The outcome of such an approach **benefits** the **people** who:
 - **work** and generate an **income** in the chains
 - **eat** and **use** the livestock commodities supplied by the chains



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A practical issue: cross borders



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Risk and what to do about it!

- **Risk of a disease agent that is outside the country**
 - Build higher walls
 - Increase vigilance
 - Local cooperation at borders
 - Regional cooperation and compliance – EU, NAFTA, AFTA



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Livestock Information, Sector Analysis and Policy Branch

Depopulation

Are the traditional mechanisms enough?

Disinfection

Close down risky business

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 A collage of four photographs. The top-left photo shows three people in white protective suits and masks handling chickens. The top-right photo shows a person in a white suit standing in a field. The bottom-left photo shows a person in a white suit holding a chicken. The bottom-right photo shows a person in a white suit holding a chicken.



Rethinking how to approach cross border HPAI risk management?



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Risk and the poultry sector – *What to focus on*

- **Poultry commodity chains**
 - By species
 - By product type (meat, eggs)
 - By sub-product type – normally differentiated by breed and sometimes production system
- **Input** supply chains and **by-products**



Manure
Feathers



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Risk and the poultry sector – *What to focus on*

- **People** involved in these chains
 - The ones who set the rules
 - The ones who implement activity
 - The ones that move backwards and forwards along these chains
- **Transport**

Home?



Local?



International?



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Markets





HPAI and risk management in Asia

- The region has **dynamic demand** changes and dynamic **production** and **supply** changes
- This is creating **dynamic risks** and **disease status**
- Involving a dynamic array of **people**
- Therefore any **successful** cross border **risk management** has to be a **dynamic process**



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HPAI and risk management in Asia

- Traditional animal disease control tools need support
- We need to:
 - Be **specific** on what **poultry commodity** cross borders
 - **Prioritise commodities** considered to be **hazards**
 - Have mechanisms where **all trade** is brought into a **legal** and regulated institutional environment
 - Involve **decision makers**
 - Focus on **managing** and **facilitating** the **value chains**



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Conclusions



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Conclusions

- Systems we are dealing with are dynamic and heterogeneous - rapidly changing societies generating bigger demands for livestock products have historically created animal health problems
- We need to identify and work with
 - the key actors in livestock product chains and examine their incentives to participate programmes.
 - the decision makers along the chain
 - the risk points in these chains
- Only through understanding the value chains and the risks can we allocate resources better – do a better analysis - and provide effective and efficient entry points to keep these chains healthy



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THANK YOU

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