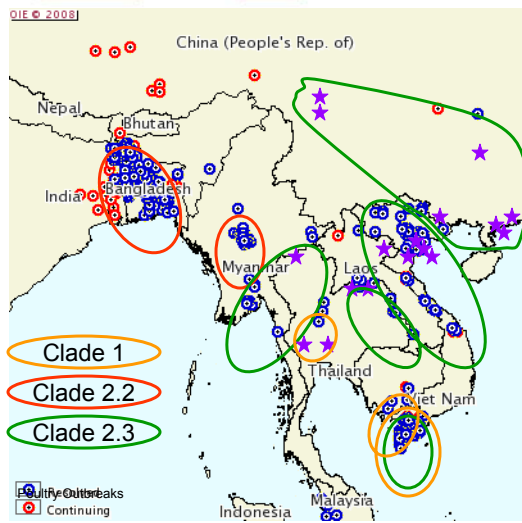




# Taking a value chain approach to avian influenza control: *a necessary backdrop to economic analysis*

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



Spatial Distribution of H5N1 Outbreaks in Mainland Asia

Sources: OIE, FAO, WHO, GenBank

Adapted from presentation by USAID in Regional Strategic Review Meeting





## 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



## 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





# Disease, people and risk



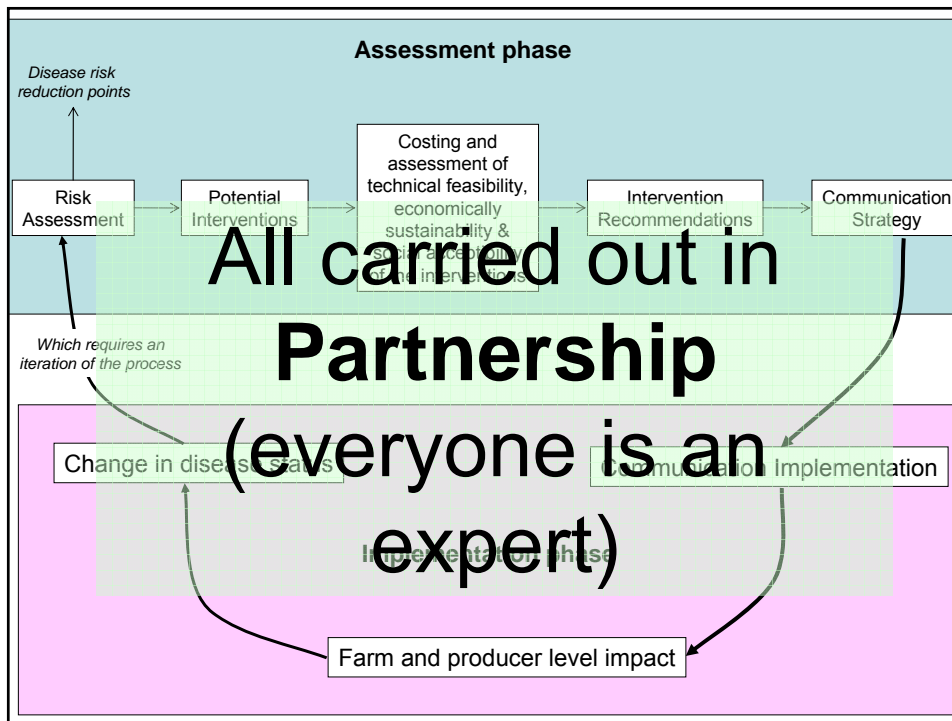
# Deconstructing disease transmission





## 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

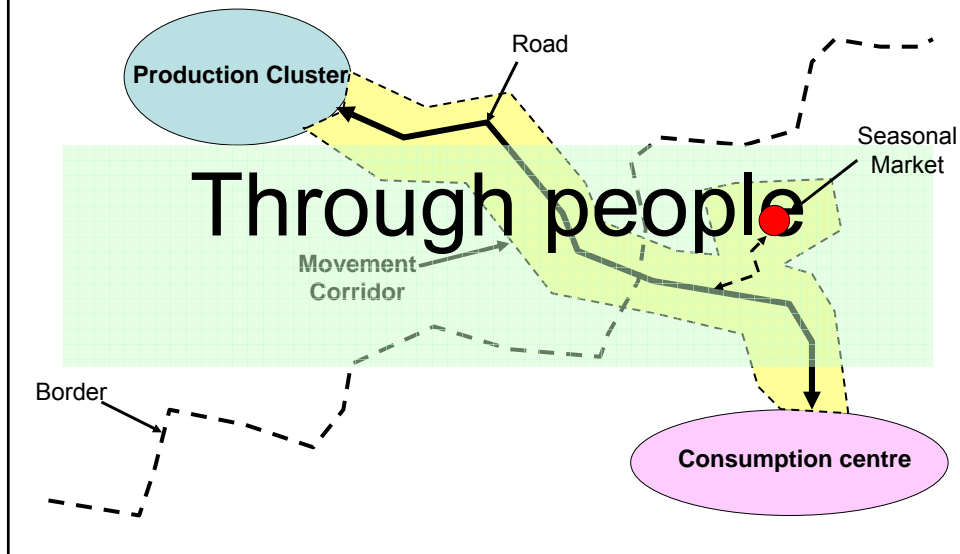




# Disease, people, risk and value chains



## How to manage this process





## Through people – what does it mean

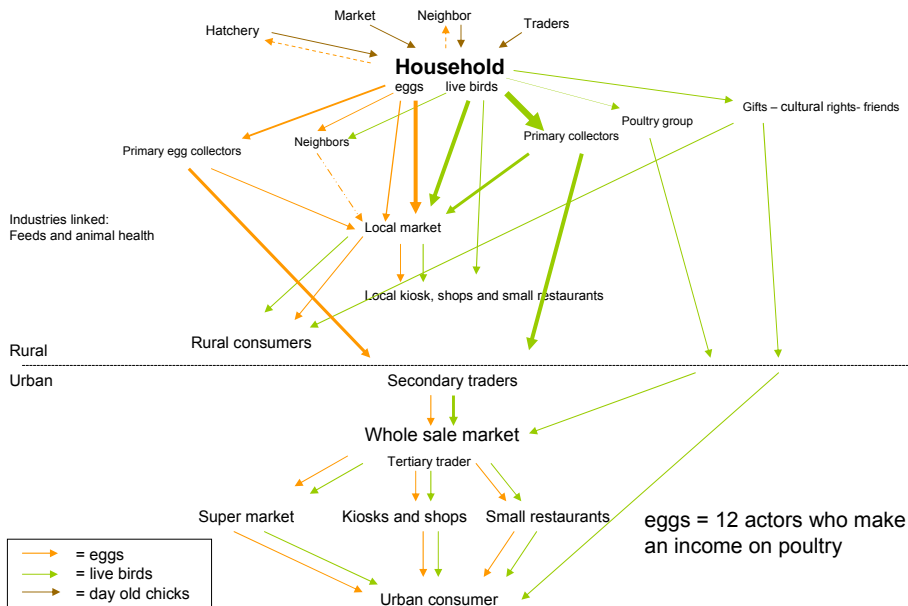
- Social organization for production of food = VALUE CHAINS
- Value chains link people – spatially and socially
- Efficiency, profitability, equity
- Decision making happens along these chains
- Risks of animal disease introduction happens along these chains



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### Value Chain for Local/Indigenous Poultry







## A practical issue: cross borders



## 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





Livestock Information, Sector Analysis and Policy Branch

**Depopulation**

**Disinfection**

**Close down risky business**

Are the traditional mechanisms enough?

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



## Rethinking how to approach cross border HPAI risk management?



## 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





## 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**



## 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**





## Conclusions



## 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





# THANK YOU

## Acknowledgements

- Wantanee Kalpravidh, David Castellan - FAO Bangkok
- Nick Taylor - University of Reading
- Katharina Stärk, Dirk Pfeiffer - RVC

