

Controlling Avian Flu and Protecting People's
Livelihoods in the Mekong Region

Livelihoods Findings for the Greater Mekong Sub-Region

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FAO - APHCA - DFID

International meeting on Pro-Poor HPAI Risk Reduction:
Lessons from Southeast Asia and Africa
Phuket , Thailand – 25-27 October 2010

A Collaborative Research
Project Funded by:



Implemented by:



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4.1 General observations about livestock disease control in the
GMS

Top Findings

NB: Outline numbers refer to the supporting project document.

Overarching Issues

Institutional Objectives

- **Control of HPAI**
- **Efficient use of scarce public resources**
- **Sustaining/improving livelihoods of the poor**
- **Improved economic well being of the economies involved**
- **Improved public knowledge and health**

Policy Challenges for Institutions Seeking to Control HPAI

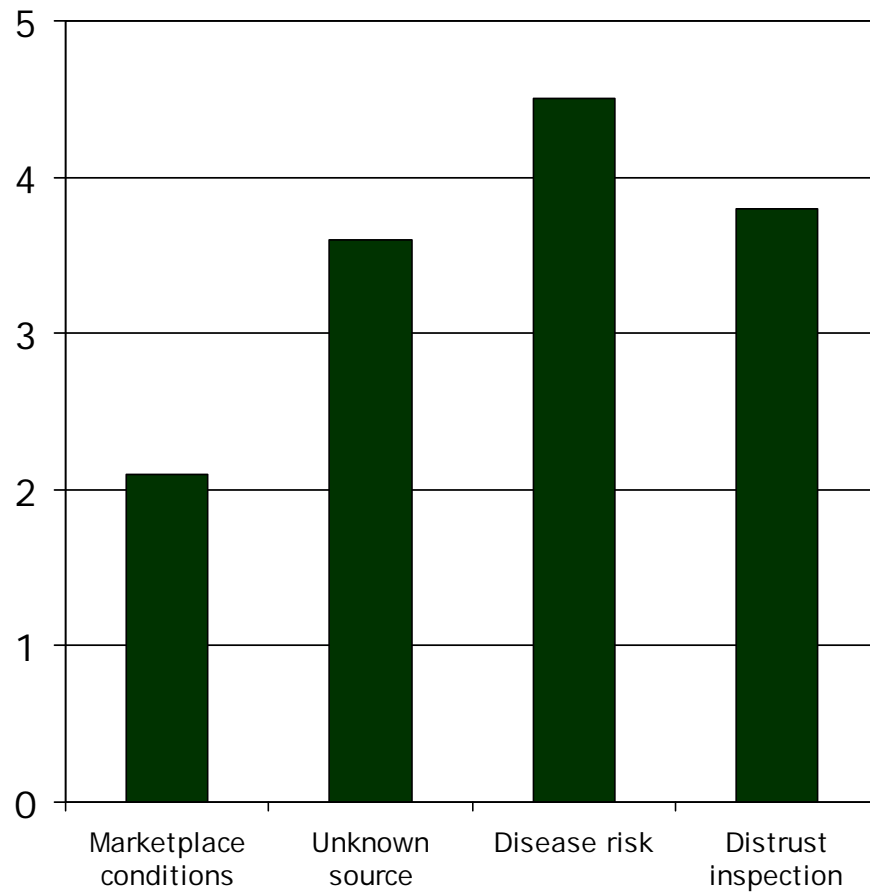
- **Risk perception – farmers may not internalize social costs**
- **Imperfect information and market “failures”**
 - **Adverse selection: bad birds drive out the good**
 - **Moral hazard: incentives to misrepresents animal health**
- **Costly technologies to monitor disease and maintain control capacity**
 - **Among flocks**
 - **Over space and time**

1.2 Poultry sector dynamics and consumer preferences

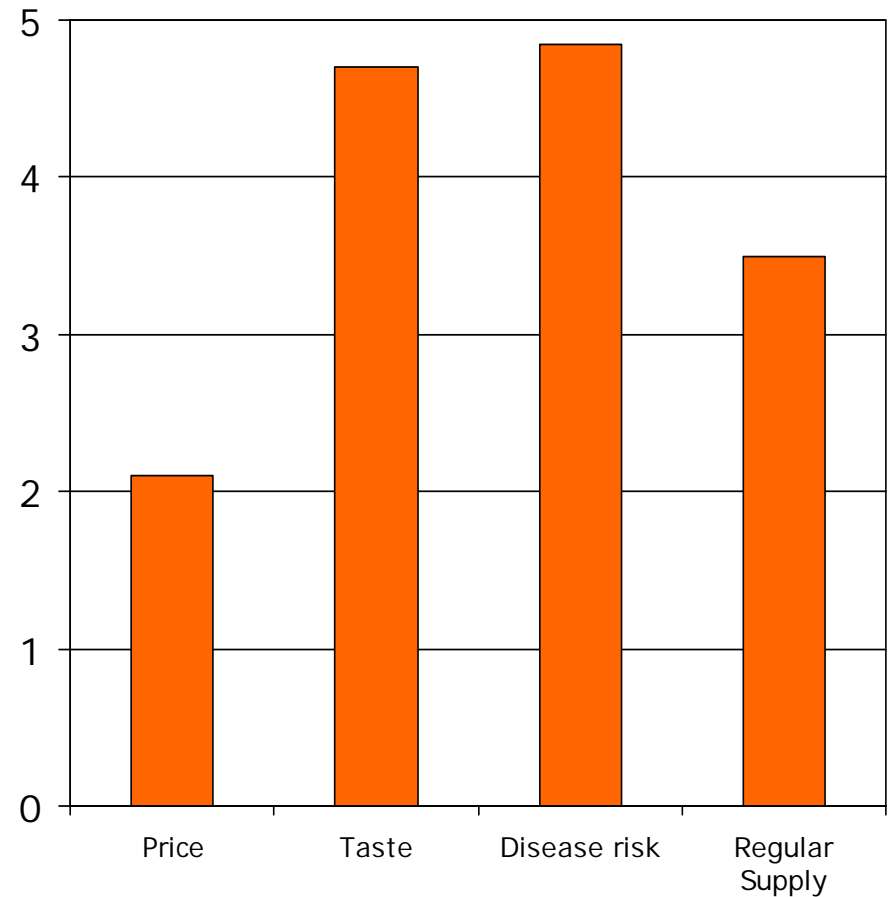
1. Most urban consumers remain regular patrons of wet markets, and are very discerning consumers of fresh poultry products, preferring 'traditional' to 'industrial' chicken.
2. Consumer surveys consistently value food safety ahead of other food product characteristics, with taste a close second.
3. Demand for local varieties of poultry often exceeds supply in local markets .

Consumer Concerns & Preferences

Ranking of Safety Concerns

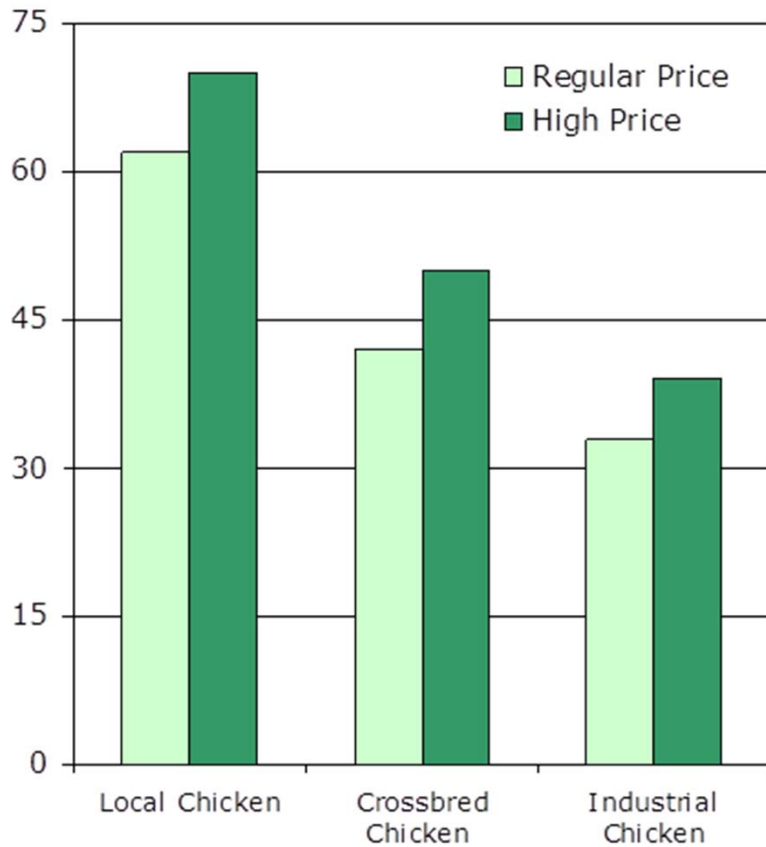


Ranking of Chicken Attributes



Price Profile of Chickens

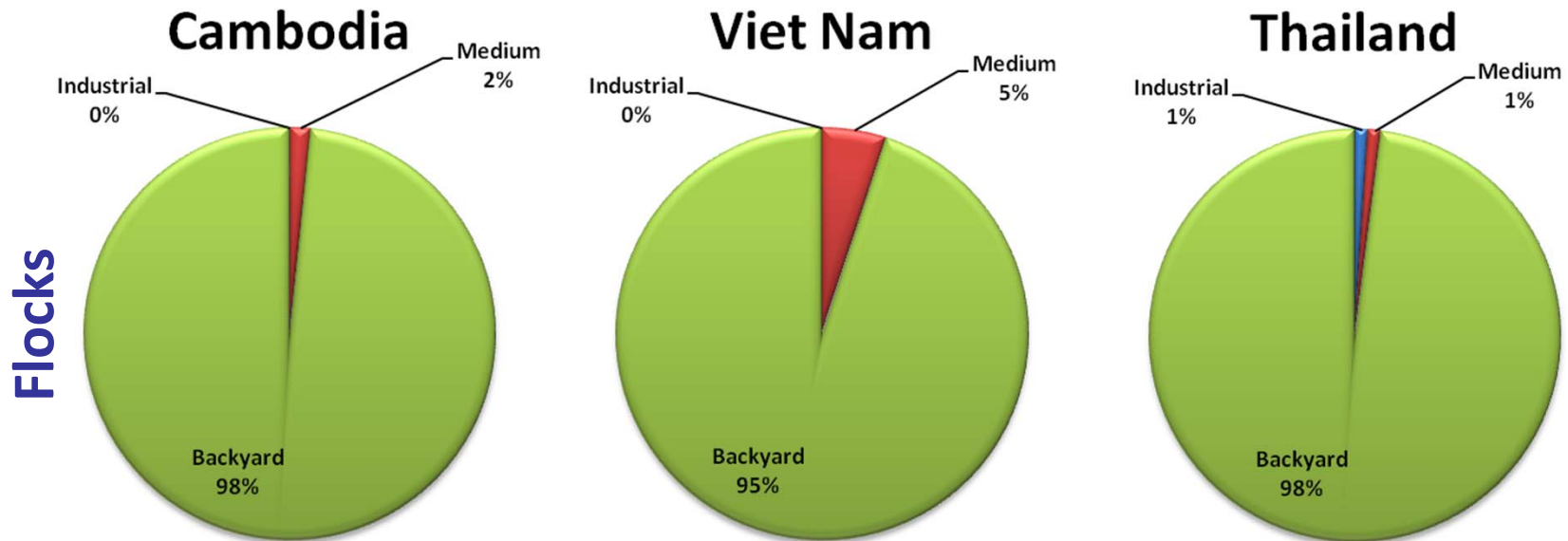
Price by Chicken Type (VND in '000)



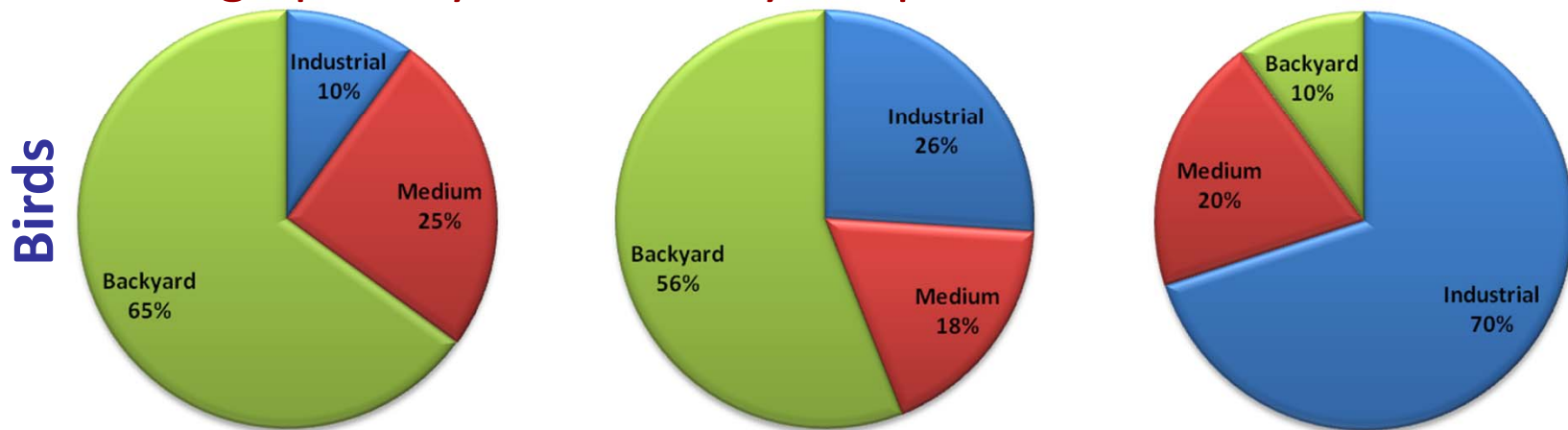
1.3 Household poultry keeping and marketing

1. Nearly all rural households in the GMS keep poultry for both sustenance and income, specializing in traditional bird varieties raised in low-input systems.
2. Though small in absolute terms, the relative returns to selling poultry products are very high.
3. In addition to nutrition and income, poultry offer rural households a complex array of services, including pest control, fertilization, security, and entertainment, and birds and bird products serve a variety of cultural functions.
4. The majority of small scale producers face credit constraints.

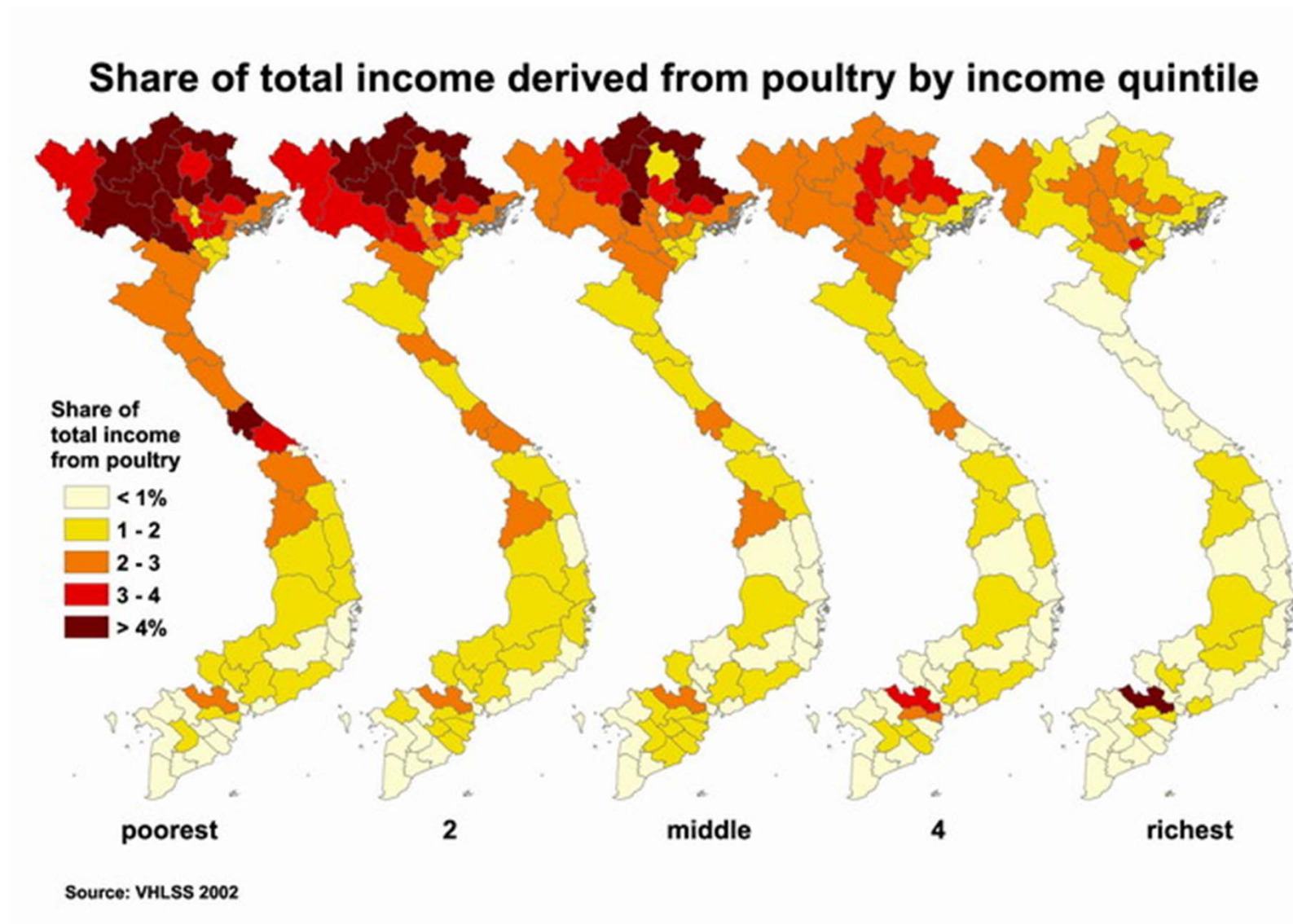
Backyard Chickens are Ubiquitous



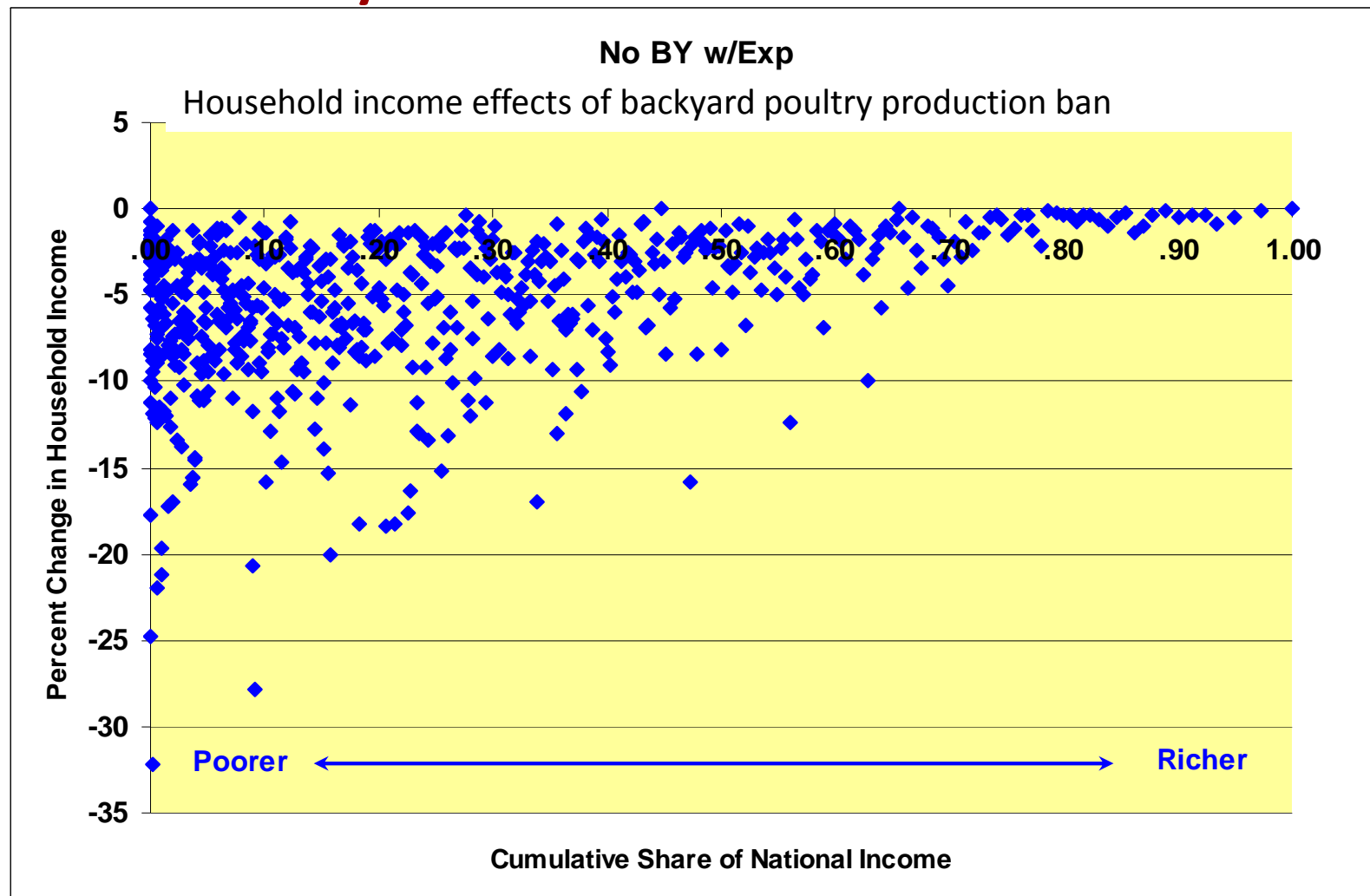
although poultry sectors may be quite diverse...



Poultry Income by Poverty Status – Viet Nam



Impact at Micro-Level: Viet Nam, Income only



Backyard Chickens are Very Profitable

(Viet Nam evidence)



Average Return per Hen and Year
(Monetary Values in 1,000 VND)

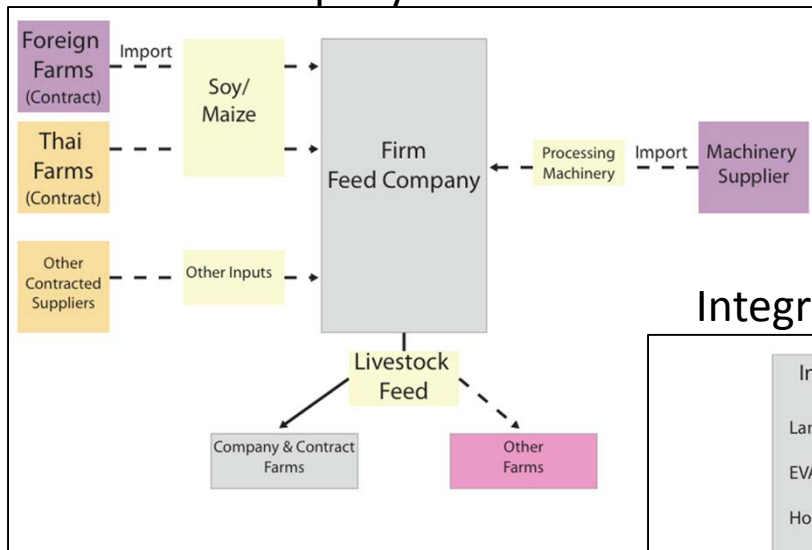
| Item | |
|---------------------------------|--------------|
| Eggs consumed/sold (nr) | 35.0 |
| Birds consumed/sold (nr) | 6.7 |
| Value of eggs consumed/sold | 49.0 |
| Value of birds consumed/sold | 244.7 |
| Depreciation of hen | 6.3 |
| Gross revenue/hen | 287.4 |
| Investment/hen | 50.0 |
| Return on investment (%) | 575.0 |

3.3 Livelihoods and economic impacts of HPAI & HPAI control

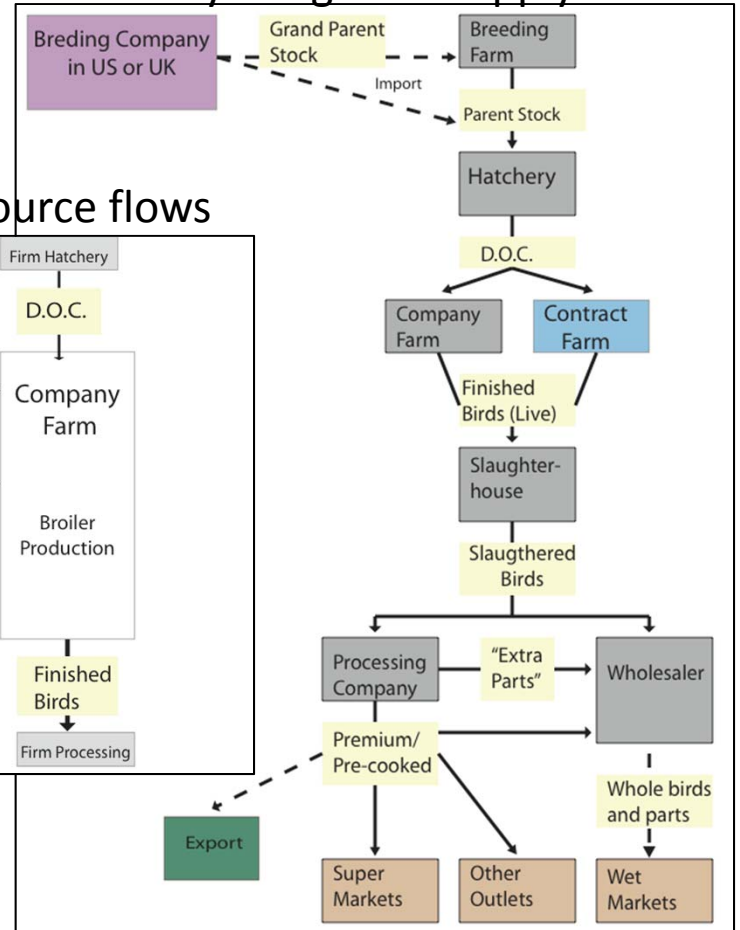
- 1. HPAI causes economic losses through a complex mixture of impacts acting across direct and indirect pathways.**
- 2. Drastic disease control measures and consumer reactions to HPAI have severe impacts on all actors in poultry supply chains, irrespective of the specific infection status of their flocks.**
- 3. Smallholder poultry producing households have well-developed strategies to cope with one-time losses of their poultry.**
- 4. Poultry production and processing standards promoted by the industrial / corporate sector are reducing the prospects for smallholder poultry development.**
- 5. Changing market environments in response to HPAI pose more serious threats to smallholder poultry producer livelihoods than HPAI itself.**
- 6. Low-income urban consumers are neglected stakeholders in HPAI control.**
- 7. Poultry producers who bore the largest cumulative economic burden of HPAI differ from those whose livelihoods are most severely affected by the disease.**

Supply Chain Audits

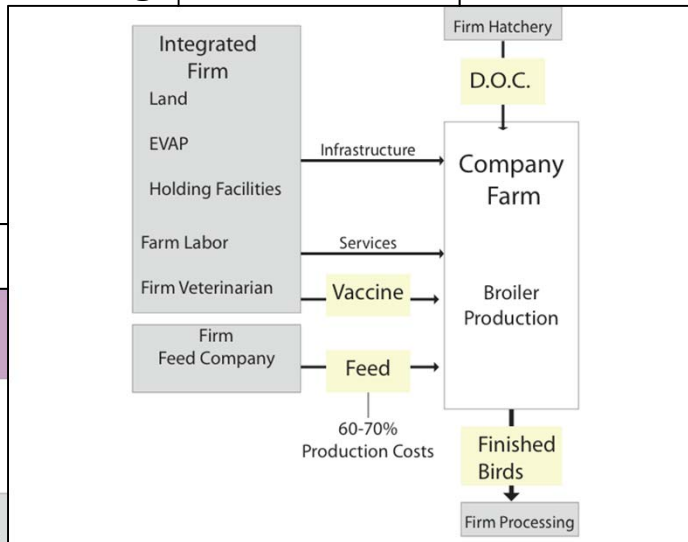
Feed company resource flows



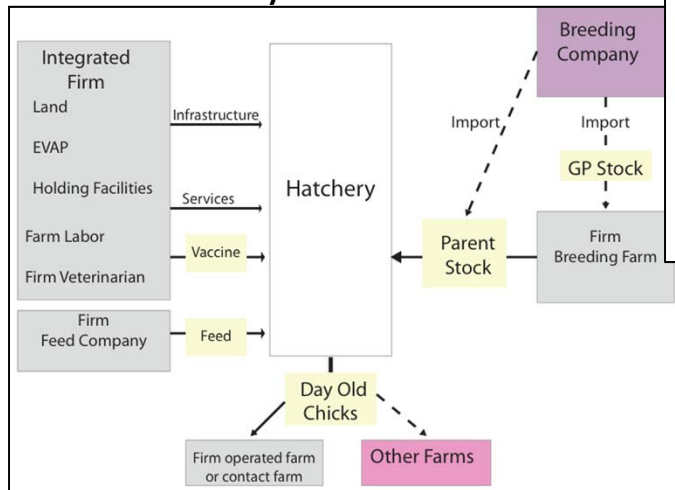
Vertically integrated supply chain



Integrated farm resource flows



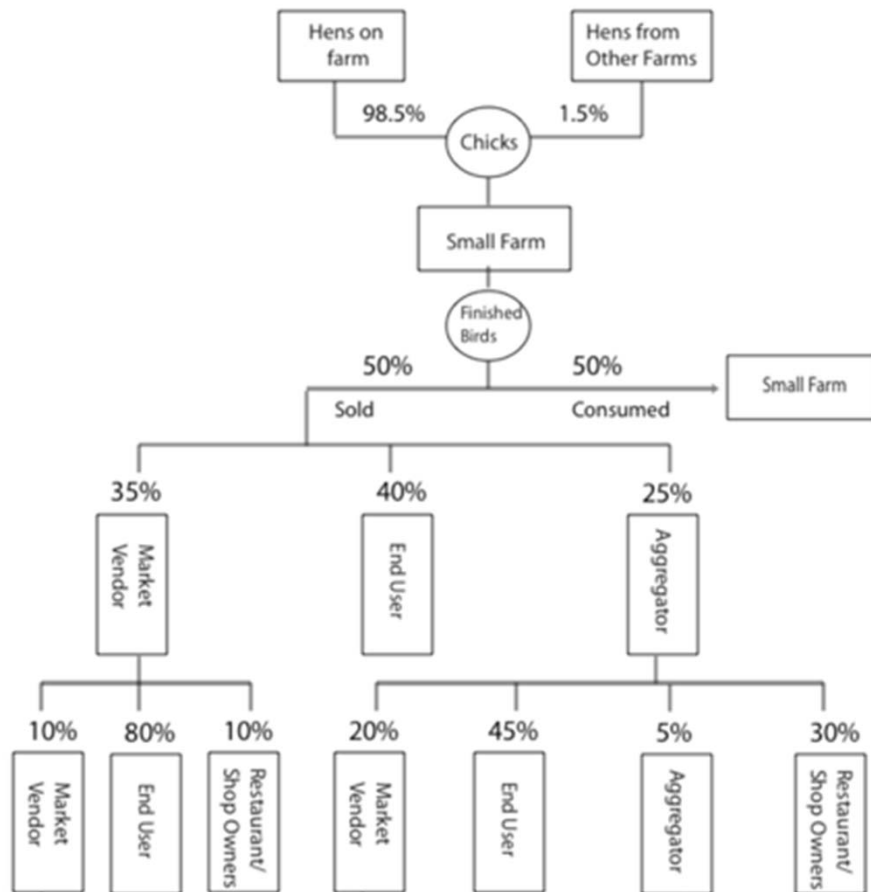
Hatchery resource flows



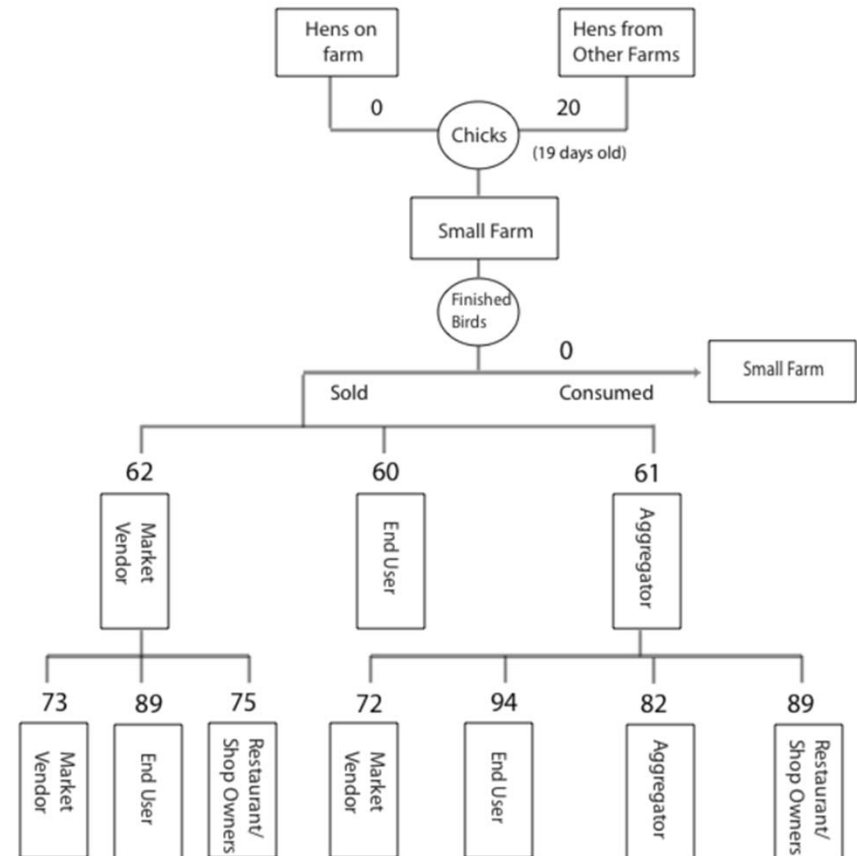
Supply Chain Audits

Calibrated to detailed enterprise surveys

Percentage of Market Chain Transactions



Price of Market Chain Transactions (Baht/kg)



4.1 Alternative approaches to HPAI control

- 1. Any attempt to formalize markets without maintaining low transactions costs will displace low income participants.**
- 2. Diffusion of coping mechanisms along food supply chains, supported by incentive-compatible policies, can enhance social effectiveness of public and private HPAI risk management programmes.**
- 3. Consumers continue to exhibit a preference for local poultry breeds and willingness to pay significant premia for this preference, which can be used to finance private, self-sustaining, and credible supply chains for healthier, higher quality poultry.**
- 4. The need for improved disease surveillance is global; willingness to pay at each location may be small, but gains may be substantial.**

Improving Farm Balance Sheets

Three ways:

1. Increase output – traditional (Green Revolution) productivity policy, extension services, etc.
2. Reduce costs – local varieties are already low cost
3. Increase prices – quality improvement

Market Access - a Basic Policy Challenge: How to Help the Poor?

- Market access is the gateway out of long term poverty for most of the world's poor.
- The poultry-dependent are more likely to be poor, and poultry income thus offers a strong catalyst for poverty reduction.
- How then can we best facilitate improvements in this source of income?

Answer: Promote self-directed poverty alleviation though improved market access.

Supply Chain Interventions

- Certification
- Contracting
- Cooperatives
- eTrading



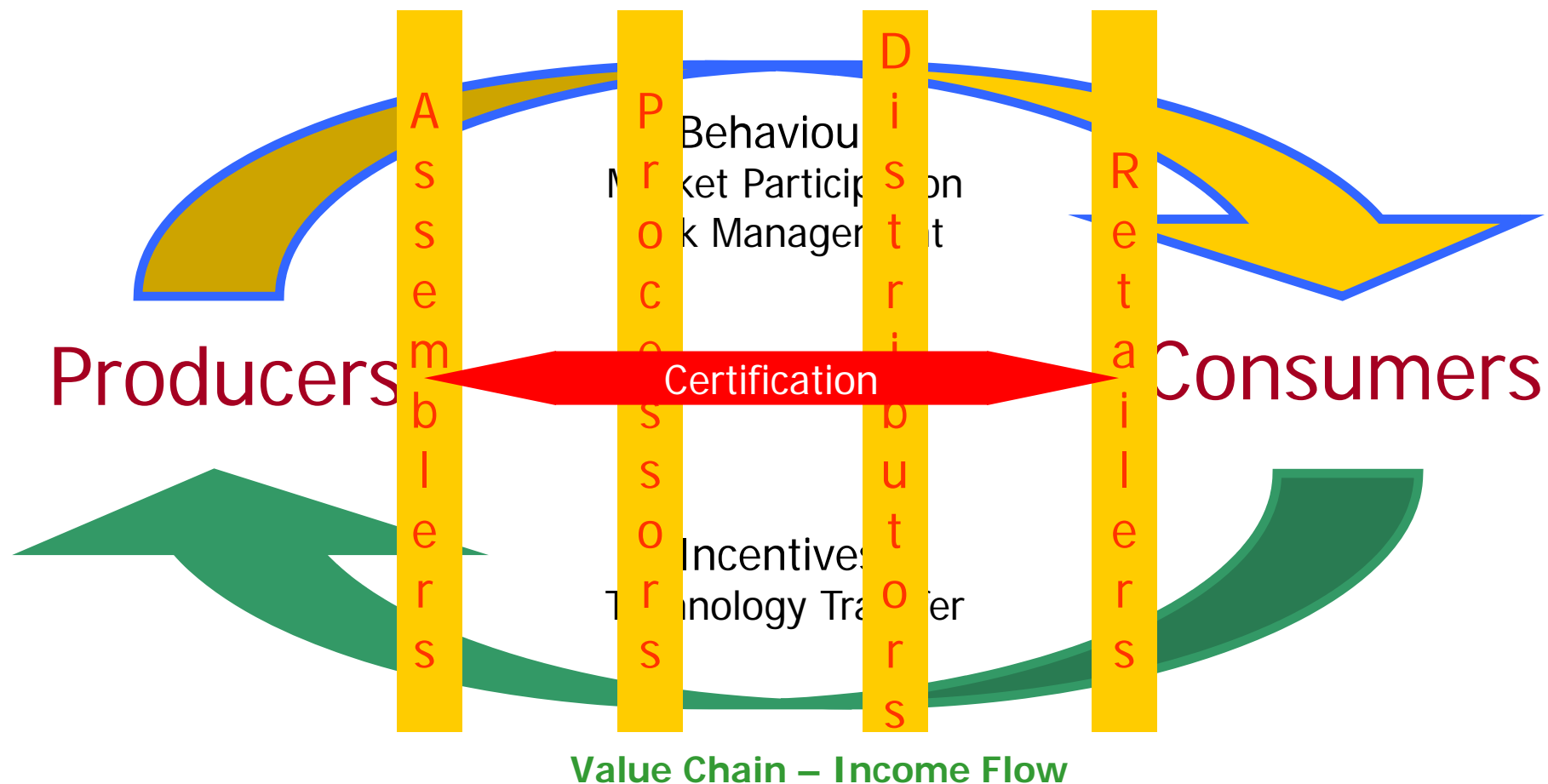
Certification: Branding Safe Local Chicken

Consumers in the GMS have demonstrable preferences and WTP for local chicken varieties, but may be worried about health risk and concerned about the social image of “traditional” food products. Certification and branding schemes can:

- Establish credible product quality status
- Promote traditional varieties with identity preservation
- Facilitate promotion and marketing
- Provide an upstream channel for extension services and management practices that will reduce risk

Certification to Reduce Market Uncertainty

Supply Chain – Resource Flow



See HPAI Research Brief No. 4

Contracting: Integrated supply chains for healthy chicken

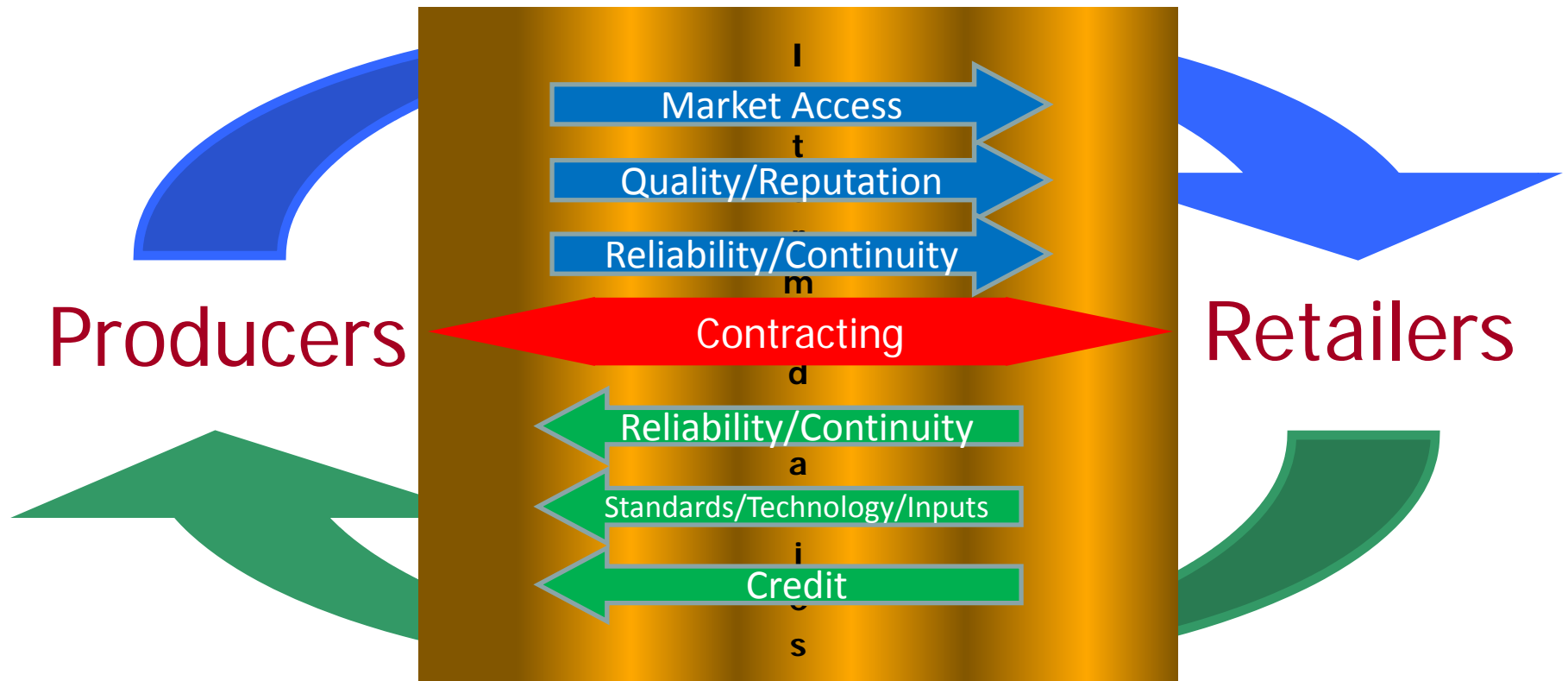
One mechanism to increase the market of local chicken and their safety is to develop contract arrangements. Including:

- Integrators who buy and market chicken from small holders
- Smallholder farmers' who will follow product specification in return for more secure access to market
- Such arrangements can also facilitate credit/investment and access to technology, income smoothing, higher quality inputs, etc.

These type of arrangements may exclude some small operators that are not interested in large commitment to poultry, but will result in a more sustainable industry.

Contracting to Facilitate Value Creation

Supply Chain – Resource Flow



Value Chain – Income Flow

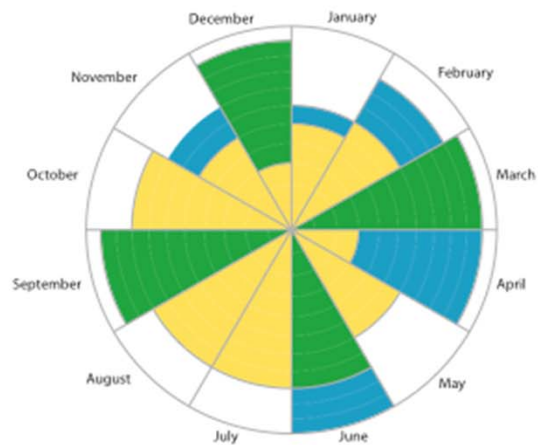
eBird – An SMS based poultry trading system

- Objective: Create a clearinghouse for poultry transactions based on Short Message Service (SMS) text messaging to connect individual buyers and sellers across low income agrofood supply networks.
- The purpose of the system is to facilitate producer-consumer information exchange and improve producer incentives to invest in quality improvements by providing the opportunity to build reputation.
- Such improvements, including nutritional values and animal health status, will increase value added and improve livelihoods across low income supply chains extending from smallholder farmers to independent urban food vendors.

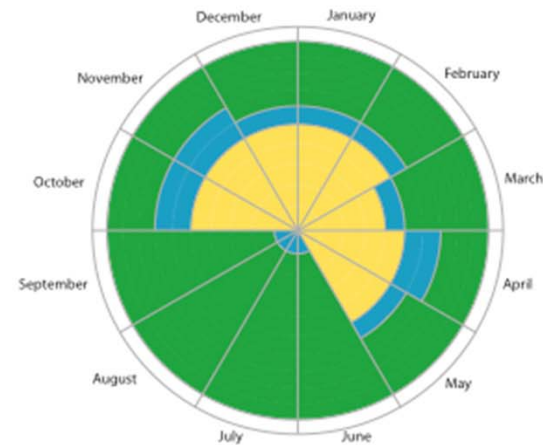


Smoothing - Seasonality in Smallholder Income

1. Income by Source



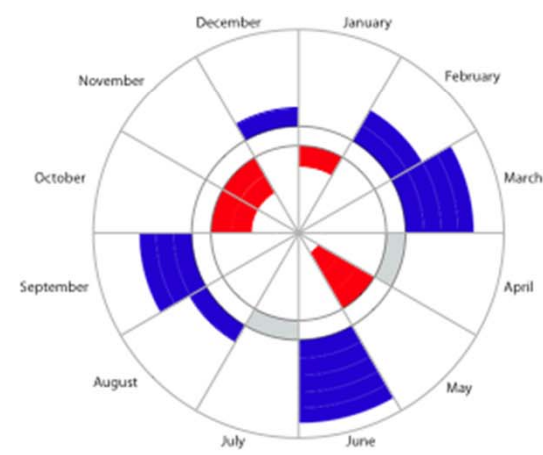
2. Labor Allocation



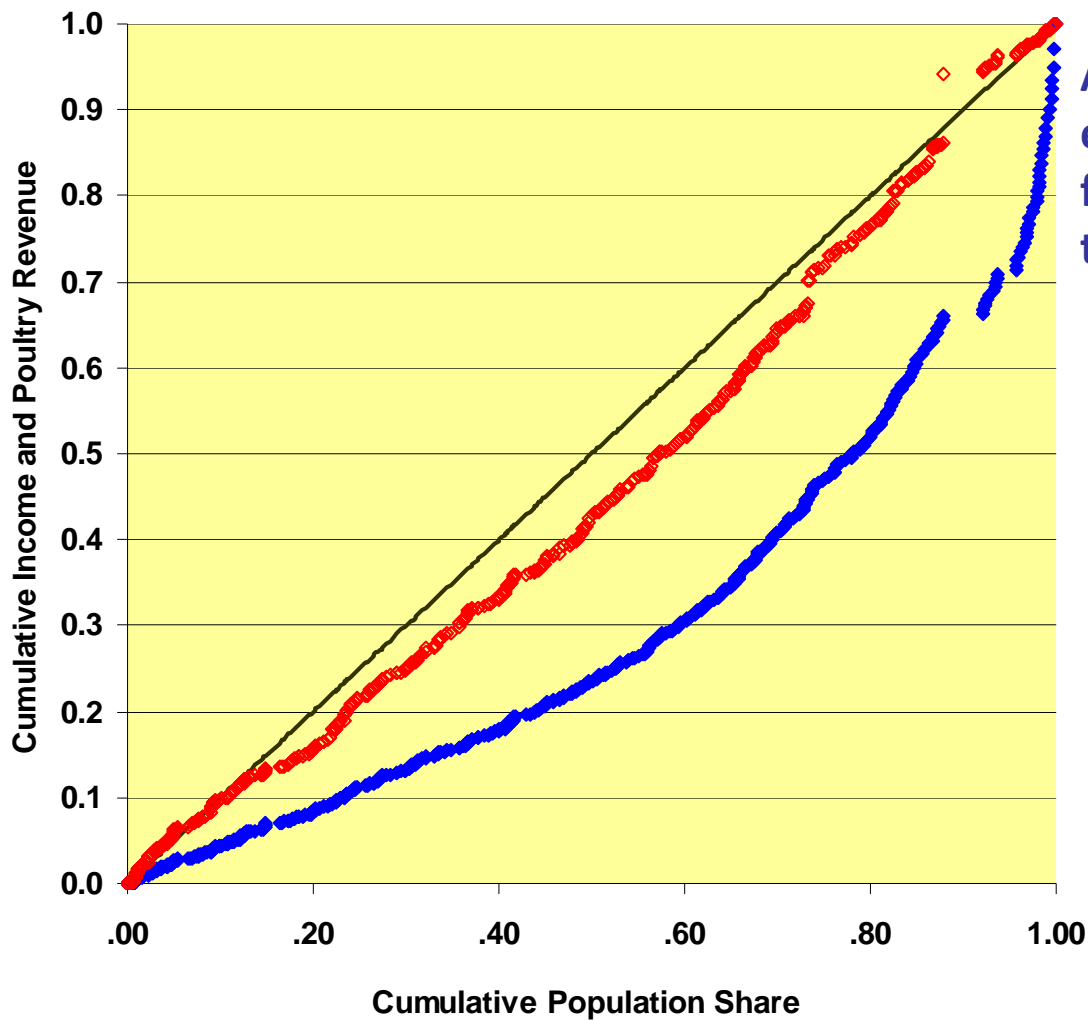
3. Consumption



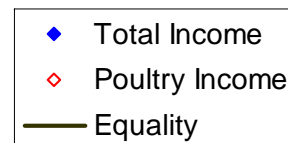
4. Net Cash Assets



Poultry Income is Pro-poor: Viet Nam



Across the Viet Nam national economy, poultry income is far more equitably distributed than total income !



Top Livelihoods Findings

- Publicly funded blanket vaccination campaigns are costly and appear to be ineffective against HPAI in areas with a high prevalence of small-scale poultry keepers raising birds in 'traditional' ways mainly for home consumption. Targeted vaccination of specific high-risk groups can achieve comparable risk reduction at a fraction of the cost.
- Radial approaches to culling birds and destruction of smallholder poultry infrastructure, which are very costly to communities, appear to contribute little to risk reduction and deter broad-based cooperation in HPAI control programmes. Culling should be limited to infected flocks and high risk contacts. Infrastructure can be disinfected, but should not be destroyed.
- Although they comprise the vast majority of poultry keepers in the GMS, smallholders do not presently have a voice in the design of short- and long-term HPAI policies. Omitting this stakeholder group is a mistake that compromises policy effectiveness and legitimacy.
- It is essential to recognize the smallholder poultry producers as part of a solution (effective disease defense) rather than a problem (infection risk), enlisting them with socially effective policies that recognize and reward their contribution to the national and global commons of disease resistance.
- Market-oriented policies offer vital opportunities for private cost sharing and self-directed poverty reduction (e.g. certification, contracting, cooperatives).

Thank you