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Key Findings

- Poultry supply chains support the livelihoods of an extended network of low-income people through production, distribution, processing, and marketing.
- Smallholders specialize in traditional bird varieties, which command higher prices for their taste and are raised by low-input traditional methods.
- Market interactions are universally governed by verbal agreements and informal contracts—smallholders and small enterprise downstream intermediaries are deeply embedded in networks of customary trading and mutual insurance.
- Any attempt to formalize markets without lowering transactions costs will displace low income participants.

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Smallholder Poultry Supply Chains in the Ha Noi Region

J. Ifft, J. Otte, D. Roland-Holst, and D. Zilberman

Poultry supply chains support the livelihoods of not only small producer households, but also other low income households. The results of pilot surveys of poultry market participants (chicken farmers, chick producers, commune traders, wholesalers, slaughterhouses, and retail vendors) in and around Ha Noi reveal a variety of salient characteristics which are relevant to pro-poor livestock policy.

Small enterprises owned by low income households have a significant presence at every stage of poultry production, distribution, processing, and marketing. Thus, farmers are only one category of poor people who obtain income from participation in this supply chain. The surveys indicate that income from poultry is significant for households in each category, reflects long established small enterprise experience, and represents a pervasive linkage between livelihoods of the urban and rural poor.

It is also apparent that smallholder producers specialize in traditional bird varieties, and small enterprise intermediaries in turn handle most of these birds as their main commercial stock. For this reason, policies that affect smallholder poultry producers are likely to have strong collateral effects on other poor households in peri-urban or urban areas. Consequently, poverty alleviation strategies targeted at smallholder poultry producers can have pro-poor multiplier effects. Moreover, the surveys consistently reveal price premia for local varieties at every stage of the supply chain, compounding benefits of small enterprise participation. Symmetrically, however, adverse events for smallholders will multiply negative income effects through the food supply chain.

Market interactions amongst these linked smallholder producers and small enterprises are almost universally governed by informal contracts and verbal agreements.

While this may have benefits of lower transactions costs and flexibility, it has many disadvantages from both private and public policy perspectives. In the private context, lack of enforceable contracts or product certification undermines property rights, contributing to moral hazard and adverse selection. The uncertainty that prevails in traditional markets exerts a burden of risk that lowers average product values, undermining incentives to invest in quality or overcome costly barriers to expanded market access. In the context of animal and public health, these information failures can increase disease risk and compromise biosecurity and food safety.

Poultry Supply Chains and the Poor

Poultry producers: The survey clearly revealed that the poor were involved in most stages of the poultry supply chain. Over 90% of the sample of poultry producers (n=627) was middle aged or older, which is significant for the rural-urban transition. As migration raises average age and dependency levels in the countryside, marketing of traditional agricultural products becomes more important to economic security. A small percentage of farmers also produce chicks for sale, and most smallholders obtain their chicks from neighboring farms, who would also tend to be smallholders.

Traders: Commune traders (n=66) are a leading downstream outlet for smallholder producers. This relationship is symbiotic, as commune traders rely on small producers for the vast majority of their trading stock. These traders also sell nearly all their chickens to final household consumers. For this reason, they provide direct linkage across the 'economy of the poor' carrying products to and from low income households. Unlike farming activities, commune chicken trading is a predominantly female profession, with mature (middle aged) women making up the majority of traders. On average, most commune traders deal in 100-200 chickens per week, indicating that small operators dominate this specialty and reinforcing its importance as a low income enterprise activity.

Figure 1a: Gender of Traders

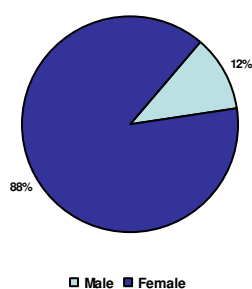
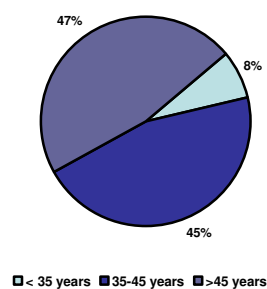


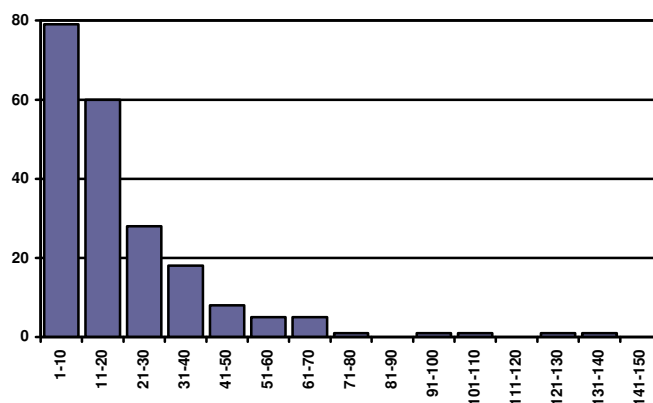
Figure 1b: Age Classes of Traders



Market vendors: Market vendors (n=200) are predominantly small, low-income independent operators who sell less than 50 chickens per day. This is one of the most salient characteristics of the Ha Noi food supply chain, which links small individual agents from the farm gate to the consumer. Larger agro-food intermediaries were largely absent from the market during the survey. While they are beginning to appear in middle and upper income market segments, the current system provides independent livelihoods to a large and diverse population of lower income individuals. Most vendors have significant personal

experience in the markets, with a median value of about a decade. Given the relatively brief period since market reforms began in Viet Nam, this is a well established market profession. Most vendors are middle aged women, and nearly 80% occupy permanent market premises. The dominant position of women indicates that they are providing essential supplemental household income, beyond their child bearing years, and their business probably also contributes to household food security.

Figure 2: Daily Chicken Sales per Vendor



The Role of Traditional Varieties

The surveyed farmers had a clear varietal specialization: smallholders produce mainly local varieties of chicken, which are traditional in Vietnamese diets and well adapted to smallholder husbandry. At the opposite end of the scale spectrum, the largest producers produce non-traditional varieties, crossbred or industrial chickens. Industrial chickens seem to be sold to more distant locations, and are less likely to be sold to local consumers.

Because of their primary reliance on smallholder producers, commune traders tend to specialize in local or traditional chicken breeds. Like smallholder farmers, they are participating in a specialty market with premium price characteristics, and they probably have significant product and market specific expertise related to these more locally adapted product varieties.

Poultry variety is a very important characteristic of the Ha Noi market. In response to demand side forces (a 50% premium for local varieties), vendors devote 59% of their inventory to local birds types, 32% to industrial chicken, and 9% to crossbred birds.

Trading Relationships

Farmer relationships with buyers were usually based on verbal agreement. Near universal informality in smallholder supply chain relationships has both advantages and disadvantages. The latter particularly include the transactions cost and information failure, and should be examined in more detail to identify opportunities for improved efficiency, risk management, and value creation. The combination of informal contracts and selling over long distances increases risk in supply chains. Chick producers generally only sell to traders outside of their own district, with several selling over long distances. This, combined with informal contracts, introduces moral hazard into the supply chain because sellers and buyers

do not necessarily know each other or have a means of communication independently of the trader.

As in other groups, slaughterhouses rely primarily on informal contracts for sourcing animals and delivery to customers. This approach offers flexibility, but makes surveillance and *ex post* analysis more difficult. In some markets no prior agreements regulate market flows. This creates uncertainty and reduces efficiency in the use of processing capacity. Presumably there are advantages to these informal arrangements not obvious to outside observers.

Vendor relations with suppliers are also dominated by informal verbal contracts, with less than 20% of all transactions based on written agreements. This further limits the capacity of health authorities to monitor market resource flows and risk transmission, particularly *ex post*. Informal agreements confer flexibility, lower costs, and other features that appear to make them attractive to market intermediaries. If these features contribute to adverse selection, however, they may prove detrimental to agents at the ends of the supply chain, i.e. farmers and consumers.

Conclusion

One of the most important findings of the surveys has been the size and consistency of the price premium paid for local, traditional, or backyard poultry varieties. The variety grown by the poor in Viet Nam is the most sought after, and also contributes most to poultry market revenue and value added. Noting that these birds may also be produced in more ecologically sustainable and resource efficient ways makes the case for promoting local varieties even stronger.

The nature of norms governing relationships in supply chain must be addressed if supply chains are to be 'upgraded' for improved biosecurity and inclusion of smallholders. Informal contractual systems make behavior very difficult to predict, monitor, or analyze *ex post*. However, simply mandating formal systems, like health certification, is an imperfect solution to these problems, as it may create adverse behavior such as fraud or concealment.

Two major key policy insights can be summarized as follows:

1. Local chicken is a premium consumer good across a wide income spectrum, and thus represents an excellent opportunity for rural participation in urban economic growth.
2. If markets are to be formalized effectively, regulators must find a way to reduce the transactions costs that have led to informal contracting. Otherwise, low income participants will be displaced at every stage of the supply chain.

Generally speaking, these preliminary results reinforce the importance of understanding how markets affect the livelihoods of the poor, and how market institutions can be improved to increase efficiency, quality, and value for all participants, but especially lower income groups for whom market access is the gateway out of long term poverty.

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