**Key Findings**

- Conventional HPAI control strategies pose incentive problems and significant long term fiscal obligations.
- Initial results from Hanoi consumer surveys reveal significant concern about food safety and a price premium that could finance HPAI risk reduction and higher producer incomes.
- As a form of product quality, HPAI safety can be promoted from the demand side, enlisting private agency to improve biosafety and increase value to both consumers and producers.

**Because** HPAI represents a critical public health concern, outbreaks have generally been controlled through swift and determined government interventions. Moreover, most intervention and control strategies have targeted the supply side of poultry markets, that is, through culling, banning live bird sales and even meat sales, and mandating changes in husbandry practices. These measures have had varying success, in part because of uneven application, and also because such command and control approaches do not take full account of the roles of incentives and private agencies involved in food supply. Furthermore, such approaches rely on public resources and institutional capacity, and thus may be difficult to sustain for extended periods.

Considering the above, it is reasonable to examine what kind of market-oriented approaches to HPAI risk management could be developed. This study examines how the demand side of poultry markets can play a constructive role in reducing risk. To the extent that consumers care about and are willing to pay for HPAI-free poultry, there may be options for private finance of safe poultry supply chains. Early evidence from Hanoi indicates that demand side approaches to reducing disease risk should be more actively investigated.

**Hanoi Consumer Survey**

Prices reflect information about scarcity, quality, and bargaining power, which are essential considerations for actual and potential market participants. Likewise, a better understanding of the structure and dynamics of market
prices can be used to improve their economic effectiveness. To better understand poultry value chain dynamics, consumer preferences, product quality, and price uncertainty, a poultry market consumer survey was conducted in Hanoi, Viet Nam.

The survey had two main objectives: The first was to identify current shopping habits and preferences of Hanoi residents related to household food consumption generally, and chicken and other livestock products in particular. The second objective was to gauge consumer interest in health-certified chicken, and measured willingness to pay for different types of chicken.

**Buying Patterns**

Survey respondents are very experienced consumers: 96% of households report shopping at least once per day and 80% of them shop in wet markets. Over 30% of households purchase live chickens, which are a luxury good accounting for about 14% of total food expenditure. There are three basic varieties of chicken available: local varieties, ‘industrial’ chicken, and crossbreds. Most households (66%) report buying all three varieties, but 87% buy local varieties. The main reason for this preference seems to be quality because consumers pay a substantial premium for local birds.

![Figure 1: Average prices by chicken type (Viet Nam Dong)](image)

As Figure 1 shows, local bird varieties command nearly double the price of industrially produced birds, meaning that the dominantly demanded product in this relatively low income country is the most expensive one. This is particularly significant because smallholders are the main producers of these native varieties.

**Consumer Preferences**

To better understand the reasons for these buying and price patterns, consumers were asked about their preferences with respect to chicken. Figure 2 shows average scorings of four product characteristics on a scale of 1 to 5. As the previous results imply, price is not a high priority. On the contrary, quality characteristics such as taste, safety, and regularity of
availability, were paramount. Scores for taste and safety were more than double the expressed importance of price. Evidently, Hanoi buyers value local chicken because of their superior taste, and are willing to pay nearly double the price for them.

Figure 2: Concern for different attributes of chicken meat (average ranking)

On the subject of safety, the survey yielded interesting and suggestive results. Marketplace conditions were quite a low consumer safety priority. This is significant because market renovation is a standard and investment-intensive government approach to food safety problems, a public goods intervention that apparently has little credibility in the eyes of local buyers. Of much greater significance were characteristics that can be targeted by product certification programs. Food origin is uncertain in the markets studied, with birds passing between several intermediaries who blend and transport stocks. These intermediaries provide valuable distribution services, but they also introduce informational, incentive, and health risks that lead to significant moral hazard and adverse product selection. Despite the complex nature of these interactions consumers appear to be acutely aware of this, and a credible product traceability scheme would be needed to improve this situation.

### Willingness to Pay

Given expressed concerns of Hanoi consumers about food safety, assessing their willingness to pay for safety improvements of chickens is essential to determining the capacity of the poultry market to support demand-oriented risk reduction measures. To ascertain willingness to pay, households were asked whether they would pay 5 000, 7 500, 10 000, or 12 500 extra for safety-certified chicken of each variety.

<table>
<thead>
<tr>
<th>Hypothetical Safety Premium (VN Dong)</th>
<th>5,000</th>
<th>5,700</th>
<th>10,000</th>
<th>12,500</th>
<th>Ave Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>99%</td>
<td>91%</td>
<td>89%</td>
<td>74%</td>
<td>62,000</td>
</tr>
<tr>
<td>Crossbred</td>
<td>92%</td>
<td>87%</td>
<td>70%</td>
<td>66%</td>
<td>42,000</td>
</tr>
<tr>
<td>Industrial</td>
<td>93%</td>
<td>74%</td>
<td>69%</td>
<td>52%</td>
<td>32,000</td>
</tr>
</tbody>
</table>
The results above clearly show a reservoir of private purchasing power that can finance improved poultry safety measures. For the most expensive variety, that is, local birds, nearly 100% of respondents said they would voluntarily pay about 8% more for a certified bird, while over three-quarters said they would pay a 20% safety premium (Table 1). As could be expected, price tolerance was lower for less desired varieties. Still, a majority (52%) of interviewees were willing to pay a safety premium equal to more than 30% of the base price.

It is important to note that precedence exists for this approach in Viet Nam in the form of an industrial brand of ‘safe chicken’. Experience with this product has been limited, but consumer reaction to it is revealing. Households were asked if they had tried this product, and for those who had, about their experience. Nearly all households (94%) reported having heard of ‘safe chicken’. Of the households that had heard of it, 37% had tried this product and reported paying an average premium of 8,400 Dong. Of the households having tried ‘safe chicken’, half of them only tried it once or twice, indicating that product retention was limited, the main reason being dissatisfaction with other product quality characteristics. Evidently, the existing ‘safe chicken’ programme has limited acceptance because it trades off one important product quality characteristic, safety, against another essential one, taste.

Conclusions

The Hanoi poultry market surveys strongly supports the idea that demand-side, market-oriented approaches can contribute significantly to sustained management of HPAI (and other diseases) risks. In the urban market studied, consumers shop daily in wet markets and exhibit strong preference for local varieties that are most likely to be produced by smallholder producers. They also indicate that food safety is a major concern of theirs, but express scepticism about public sector approaches to food safety, whether these are targeted at the food marketplace generally or at the poultry supply chain in particular.

Most importantly, a significant majority of consumers expressed a willingness to pay a substantial premium for credible health/safety certification and for local chicken varieties. The preference for local chicken varieties is very important for poverty reduction initiatives, since smallholders are the primary source of these birds. Indeed, it is reassuring to see that consumers’ established tastes for these bird varieties has not been undermined by the advent of HPAI, and that appropriate policies may sustain this supply chain and even improve returns to the original producer groups, mainly poorer rural and peri-urban households.

Our findings indicate that urban Vietnamese markets have the potential to support demand-oriented disease risk reduction measures. If consumers are willing to pay a ‘safety premium’ large enough to finance a certification scheme, this could spare significant public resources. A self-financing, market-based scheme could foster a virtuous quality cycle among producers, encouraging them to make other quality improvements to raise revenue. Ultimately, a demand-oriented approach can be more efficacious, as well as more sustainable, than onerous direct government intervention.

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