



# Towards better managed markets for healthier poultry trading in Vietnam

Markets provide nutritional, livelihood and cultural benefits to the people of Vietnam. Yet they also bring disease risks. This brief offers ways to minimise the public health risks associated with markets.



Live bird market, Vietnam. Photo: Giel Ton

## Background

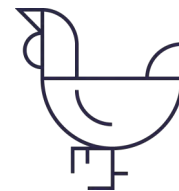
Markets are the main source of diverse fresh food, including poultry, for the people of Vietnam. They are particularly important for those on a low income. The average income in Vietnam is \$4,284<sup>1</sup> a year and markets are a good source of fruit, vegetables, meat and fish at affordable prices. Further, some two million households depend on selling their produce at markets. Although modern, commercial infrastructure such as supermarkets and grocery stores are increasing in number, this is likely to affect urban consumers only. More than two thirds of Vietnam's population live in rural areas. In addition to the convenience and good value that markets represent, Government of Vietnam figures show nearly all Vietnamese consumers (99.5%) consider markets have a special place in the country's culture and traditions.<sup>2</sup> For all these reasons, the development of markets in Vietnam needs to be maintained. Yet, the serious public health risks associated with markets are well evidenced.<sup>3</sup> There is an urgent need to rethink market management and regulation to make markets healthier and safer for all.

## Recommendations

- Institute **systems to identify and manage the movement of poultry** from their farm source, through their transportation and to their arrival at markets. E.g., set up veterinary organisations at commune and district level.
- Local authorities to work together to establish **disease-free breeding zones** in order to supply markets to ease traceability and avoid disease spread from one region to another through transportation.
- Strengthen **quarantine** controls.
- Increase **veterinary management** at markets.
- **Disinfect** markets regularly.
- Replace free slaughter points with **central market slaughter areas** under veterinary control.
- **Separate market areas** selling live poultry from areas selling other foods.



## The link between the poultry trade and disease



The Government of Vietnam has specific regulations for the management of markets to ensure food safety. Market development must follow development plans and markets must be built according to design standards. There are technical regulations relating to space, environment, food hygiene and safety, and traffic safety (see below) . A number of policies encourage investment in markets in rural areas. However, the wholesale and retail sale of live poultry at markets has exposed many risks of disease transmission between birds and between birds and people. Evidence shows that in live poultry markets, interactions between farmers, traders, consumers and others in the supply chain lead to a high risk of pathological residues and the transmission of avian influenza viruses.<sup>4</sup> Whether a live poultry market becomes a reservoir for disease-causing viruses, including of avian influenza viruses, depends largely on market management and traders' compliance with biosecurity regulations. For this reason, live poultry markets are important places for monitoring and management to minimise the spread of disease.

### Some policies related to the investment and management of traditional markets in Vietnam

1. *Decree 02/2003/NĐ-CP và Decree 114/2009/NĐ-CP: Development and management market.* This stipulates planning, development, construction, business, management and investment, and budget support for traditional markets.
2. *Markets - Design Standard: TCVN 9211: 2012.* This is the national design standard for market construction, including for traditional markets.
3. *Food Business Market Standard: TCVN 11856: 2017.* This stipulates the requirements and methods of evaluating food markets.
4. *Decree No. 15/2015/ND - CP dated February 14, 2015 of Government investment in construction and selection of market mining and business units in the form of public-private partnership (PPP).* This stipulates the fields, conditions and procedures for implementing investment projects in the form of PPP, including investment in building markets.
5. *Decree 57/2018 ND - CP of the Prime Minister on mechanisms and policies to encourage businesses to invest in agriculture and rural areas.* This stipulates preferential mechanisms, policies and more for implementing incentives and investment support for businesses investing in agriculture in the countryside.
6. *Decree 31/2021 ND - CP of the Prime Minister on guiding the implementation of the Investment Law.* This guides the enforcement of a number of legal provisions related to investment conditions for state management of investment in Vietnam and overseas investment.

In addition, the breeding, transportation and trading of poultry are specified in the Animal Husbandry Law (2018), the Veterinary Law (2015) and their guiding documents.

## Our research



We researched the characteristics of wholesale and retail live poultry markets, and the relationships within them. Our objective was to identify the important stages related to disease transmission in wholesale and retail markets of live poultry in order to recommend solutions to minimise disease transmission and ensure safer markets for both poultry and people.

We investigated and observed 10 wholesale markets and 17 retail live poultry markets, chosen at random, in four provinces: Hai Duong, Bac Giang, Quang Ninh and Hanoi, and observed and interviewed 27 market managers and 129 sellers.

## Our findings

Our investigations found that most markets sell live poultry, including chicken. The vast majority (93%) sell chickens and ducks, with 70% selling other types of poultry too. Poultry wholesale markets sell from 650 to 105,000 birds (an average of 17,000) a day; small retail markets, average a daily sale of 53 birds a day, and medium-sized markets 115 birds a day.

The vast majority (90%) of chickens traded in markets are coloured chickens, with white and other chickens accounting for only a small proportion of birds. Poultry are sold most days of the week and chickens are imported daily for sale from many different sources: farms account for

most (72%) of chickens, others come from traders in other markets and other suppliers in the same markets. Poultry trading is diverse and complicated, involving many people. For example, some people buy chickens from sellers in the market, some buy from suppliers from other markets and others buy from breeders.

More than a quarter of chickens (26%) for sale in the market remain unsold at the end of the day, and more than half of traders (53%) bring the unsold chickens home to store. The remaining traders keep their unsold chickens at the market and sell them cheaply to slaughterhouses. Nearly half (46%) of traders said that dead chickens are sold cheaply or brought home to eat by households. The remainder are destroyed or used for pet and fish food.

Most (96%) of the markets are cleaned daily,

using tools such as water pumps, brooms and vacuum cleaners. Water and disinfectants are used by most markets (63%). In 85% of the markets, cleaning work was carried out by an environmental company.

Seventy percent of markets have a slaughter area or slaughter point inside the market. Interviews with business owners showed that most slaughterhouses or slaughter points are cleaned daily at the end of the day. However, direct observation showed that the wastewater drainage system in most slaughterhouses is not yet effective.

The cleaning of tools and the slaughter area is not guaranteed. Chickens are kept in cages near the slaughter area so waste is not cleaned regularly, causing smells and residue on the floor.

## Trading poultry: focus on Lien Son market



Lien Son market, in Tan Yen district, Bac Giang province, has about 180 business households trading coloured chickens. Each household sells thousands of birds a day. Chickens are brought here directly by traders from farming households in the Bac Giang and Thai Nguyen areas. The market is open from 6am to 10pm every day, though most big traders from other provinces buy chicken from Lien Son between 7pm and 10pm as the weather then is cooler and so better for transporting the birds. The traders who come to Lien Son to buy chickens supply many provinces throughout the country and chickens are imported and exported continuously. There is rarely a free day for cages to be disinfected, and the potential risk of pathogen presence and transmission is very high.

# Making markets safer



Our research shows that most markets in study sites sell live poultry, including chickens and ducks. These birds pass through many hands before reaching their final destination with a consumer. The complexity of this trade illustrates the major challenge of identifying and managing the sources of poultry in Vietnam's markets, from the breeding facilities through transportation and other stages in the supply chain. Yet this is important, as tracing the origin of birds in such a complex trading system can help to minimise disease transmission, especially in large, wholesale markets.

Our research also shows that while a good degree of cleaning in markets takes place, biosecurity measures, especially cleanliness and hygiene associated with slaughter, is not always as good as it could be for food safety. This is often the result of failures in infrastructure.

Strictly managing veterinary medicine and paying attention to the hygienic management of slaughter points and slaughter areas at live poultry markets are also important to help minimise pathological residue and disease transmission. Regular professional disinfection and cleaning of markets destroys pathogens.

Given the nutritional and livelihoods importance of markets for the Vietnamese people, in particular for rural populations and those on limited incomes, measures should be taken to minimise disease risk and protect public health in markets, whose existence is likely to be important for many years to come.

From our research and observations, we propose three areas for action:

1. **Livestock facilities** Management and policy support should be strengthened for livestock facilities. Breeding areas and areas linked to them should be biosecure to ensure that poultry sold in markets has disease-free origins.
2. **Transportation** Quarantining of birds bound for markets as they are transported through provinces needs to be stricter and better implemented.
3. **Market management** Quarantine management at markets should be strengthened, with regular poultry samples taken and analysed for the presence of pathogens. This can help to control the spread of disease in outbreak situations. There should also be strict management and appropriate mechanisms in place so companies, market management units and poultry traders too are responsible for periodic market cleaning and disinfecting to eliminate pathogens.

Slaughter points in markets should be eliminated. Instead, there should be a policy to support the construction of a separate centralised slaughter area/house (station) in markets to ensure adequate disease hygiene and safety in or near the market itself. All poultry should be slaughtered in such a designated area.

Poultry sales areas in markets should also be regulated. Sales areas should not be mixed with other food and agricultural product areas. There should be separate entrances for cleaning, disinfection and disease management. Farmers should not trade poultry from their place of residence to avoid spreading diseases between poultry and family members.

## Further information

The GCRF One Health Poultry Hub is an impact-driven research and development programme working to help meet Asia's growing demand for chicken meat and eggs while minimising risk to local and global public health.

The research informing this briefing was carried out between 2021 and 2022 in live poultry market in Bac Giang and Ha Noi.

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*Disclaimer: The findings, interpretations and conclusions are those of the authors only.*

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### Footnotes

1. Report of Viet Nam General Statistics Office 2023
2. Do Thanh Hai, 2021
3. Minh Long, 2014; Do Huong, Phan Trang, 2014; Chung et al, 2022.
4. Fiourie et al, 2012., Chung et al 2022.