

# Producing safer chicken: accounting for land use, livelihoods and local taste

Despite a decade of action, most animal slaughter in Vietnam remains high-risk for disease transmission. This brief analyses why and offers routes to safer slaughter.



Slaughtering chickens in a live bird market. Photo. NIVR.

## Background

There is growing understanding of the disease threats to animals and people presented by wet markets – traditional markets where fresh foods, including meat and fish, are sold. The virus causing the COVID-19 pandemic is likely to have emerged in a wet market.

In Vietnam, wet markets are popular. However evidence shows they are hotspots for disease emergence and spread, including of diseases that spread from animals to people (zoonoses), such as avian influenza<sup>1</sup>. The common practice of slaughtering animals in wet markets is particularly risky.

Policymakers in Vietnam have long recognised the public health threat from wet markets and sought to control trading and sales practices to lower disease risks. Efforts over the past 10 years have included closing small-scale slaughterers and introducing regulations encouraging investment in industrial premises, with the provision of support to them. However, latest data (2023) show that fewer than 1% of slaughtered birds (mostly chickens) come from large-scale slaughterhouses. Further, wet markets continue to be important in providing healthy and nutritious food to many.

#### Recommendations

AT PROVINCE/CITY LEVEL

- Allocate funds to improve safety at small-scale slaughterhouses and slaughter points at markets.
- Encourage animal traders to use slaughter centres.
- Support capacity-building for small-scale slaughterers to improve hygiene and safety.
- Develop long-term land-use plans for markets, slaughter centres and slaughterhouses.

#### AT MINISTRY LEVEL

- Draft regulations for small-scale slaughterers, focusing on providing the human resources to improve small-scale slaughter.
- Design communication strategies to improve small-scale slaughterers' understanding of food hygiene and safety.
- Dedicate human and financial resources to build a network of laboratories for biosurveillance.





# Current policy in Vietnam

We analysed all policies since 2001 which aim to improve animal slaughter at national level in Vietnam. As national-

level policies are translated to provincial or city level policies in Vietnam, and it is here that the tools for policy implementation are designed, we also analysed policies relating to the improvement of animal slaughter in three provinces, namely Hanoi, Hai Duong and Bac Ninh. In addition, we interviewed 107 key stakeholders, including slaughterers, policymakers, retailers and food-outlet managers.

#### **National level**

At national level, Vietnam's Livestock Development Strategy, published in 2020 and setting the vision for 2021-2030, supports industrialising and modernising livestock production, processing and retail. The vision is that 50% of poultry will be slaughtered in large-scale slaughterhouses by 2030 and 'most poultry' slaughtered in such premises by 2045. Various policies support the provision of monitoring, capacity building and inspection services to industrial slaughterhouses. The Government of Vietnam provides tax reduction and loans to investors building such premises.

#### **Provincial/city level**

In **Hanoi** province, we found seven relevant policies. The vision they embrace is to have cut the number of small slaughterhouses by half between 2018 and 2020, taking a gradual approach to transitioning from smallscale to large-scale slaughterhouses. The policies promote consolidation of animal production, slaughter and retail by expanding supermarkets and convenience stores (where people buy chilled and frozen meat). They encourage private investors to build large-scale slaughterhouses by providing funds, reducing land tax and offering subsidies. The policies also support waste treatment and infrastructure development, e.g., of roads and drainage systems.

In **Hai Duong** province the vision is to eradicate smallscale slaughterers quickly. We found four policies, which all aim to completely replace small slaughterhouses with industrial slaughterhouses. They plan to support the building of four industrial slaughterhouses, 35 semiindustrial slaughterhouses and 102 manual slaughtering centres before 2030. Hai Duong also envisions exporting animal products, which require stricter product standards than the domestic market.

In **Bac Ninh** province, we identified two relevant policies. Similar to Hanoi and Hai Duong, Bac Ninh aims to supply 100% of poultry and pig meat from large-scale slaughterhouses by 2045. The province also promotes consolidation of animal production, slaughter and retail. Like Hai Duong, Bac Ninh recognises the export potential of chicken products. This is especially relevant because Bac Ninh already has a large industrial zone with many foreign companies operating in the province. However, unlike Hanoi and Hai Duong, policy in Bac Ninh emphasises the importance of livelihoods and rural development for the livestock sector. It also recognises the benefits of local chicken breeds suitable to the Vietnamese environment.

# National policies: visions, objectives and proposed actions

OBJECTIVES	RELEVANT PASSAGES	
FOOD SAFETY	Examining slaughtering premises before and after slaughtering and animal sampling.	
	Ban on the trade and slaughter of sick/dead animals; ban on disposing of dead animals in the environment; control of animal movements, slaughtering and inspection/monitoring.	
Slaughter Hygiene	Slaughterhouse disinfection and provision of appropriate tools under the guidance of the veterinary authority.	
	Capacity building of slaughterhouse supervisors and veterinarians in charge of slaughter- house management.	
ENVIRONMENTAL SANITATION	Hygiene requirements of concentrated slaughterhouses, slaughtering personnel, equip- ment and animal examination.	
	Financial support for industrial slaughtering premises, and land-use priorities to industrial farms and slaughterhouses.	
	Proactive and irregular inspection of slaughterhouses.	

Examples of policy measures at national level. Each policy document has certain objectives it is trying to achieve, which is to improve: food safety, slaughter hygiene and environmental sanitation. Note that some passages in the policy documents may be relevant to more than one objective.



# Challenges to closing down small-scale slaughterers

Analysis shows that polices at national and provincial levels, taken as a whole, have been designed to encourage investors to build large-scale slaughterhouses with the aim of improving food safety, slaughter hygiene and environmental sanitation. However, the policies have had limited impact.

#### **Competing priorities**

Tensions and competing interests between different government entities, such as ministries and departments within ministries, make it difficult to realise the vision of replacing small-scale slaughterers. In Hanoi, for example, while the agriculture ministry supports livestock-based livelihoods, concerns about environmental pollution from animals and a desire to attract more investment for infrastructure (e.g. hospitals, schools) mean other ministries want to prohibit all animal-based livelihoods. Competing priorities between government departments and ministries create tensions.

#### Land usage rights

Competing priorities also lead to uncertain land usage rights for potential owners of, and investors in, slaughterhouses. In Vietnam, land is not purchased but land usage rights are extended with leasing agreements. The government can cease land usage rights if or when it decides that certain livelihood activities are inappropriate for a given area. This leads to uncertainty for businesses and individuals willing to invest in slaughterhouse development, who have concerns that they may suddenly be forced to move out of an area. The result is potential investors are discouraged from investing in physical infrastructure.

#### **Consumer preferences**

Industrial slaughterhouses are more common along white chicken (industrial broiler) supply chains. White chicken is popular for supply to school and industrialzone canteens, and is often sold in supermarkets. At these outlets, people are less interested in specific flavours, textures and cooking methods or dishes. They just need a large quantity of homogeneous chicken products and the supply needs to be consistent in terms of quantity, delivery time and food safety. In addition, white chicken is much cheaper than coloured birds.

Chicken from coloured and specialty birds (e.g., spent hens) are preferred by individual families and speciality chicken restaurants, who seek out chicken from specific coloured birds. These birds are almost always supplied from small-scale slaughterers. They are raised in smallscale farms and sold in wet markets, where people are able to select the bird they want (e.g., breed, sex, size, shape, etc.) for a specific purpose.



We invested a huge amount for this slaughterhouse five years ago, but we have to move somewhere in 2030 because of Hanoi's

new urbanisation programme. It's giving us a lot of difficulties.

- Slaughter point owner

#### The myth of price

We found that price is not the main deciding factor when consumers choose chicken in Vietnam. Coloured chicken is about 160% more expensive than white chicken at wet markets (see table below), and white chicken at supermarkets is more expensive than the same at wet markets. The evidence shows that people choose to buy coloured chickens not because they are cheaper than white chickens, but because of other considerations, such as culinary and cultural preference for certain kinds of chicken for specific dishes, a perceived sense of better food safety and the impression that they can ensure the health of chickens they consume when they first see the bird alive in the market.

PRICE (VND/KG)	WET MARKET	SUPERMARKETS
COLOURED CHICKEN	115,000	Not applicable
WHITE CHICKEN	70,000	80,000 - 85,000

Prices of coloured and white chicken by retail location. Source: Vu Dinh Ton

#### Livelihood concerns

Small-scale slaughtering is an important livelihood option for marginalised people. We found that women and people who used to or are earning income from small-scale livestock or agricultural farming move into small-scale slaughtering as it is easy to operate and comes with limited costs (if operating informally, i.e. without licence). For them, coloured chicken slaughter is more profitable because of the birds' higher retail price and hence there are higher profit margins compared with white chicken. However, for many this work is seen as a transient livelihood because of its long, hard hours and conditions. The transient nature of it limits incentives for long-term investment.

# A future for small-scale slaughtering?

The Government of Vietnam has enacted policies to modernise and industrialise animal slaughtering in response to public health concerns. However, efforts to replace small-scale slaughterers with large-scale, industrial slaughterhouses have met with social, cultural, economic and political challenges. The tensions between different government entities result in ambiguous and unpredictable land usage rights, which discourages owners and investors of large-scale slaughterhouses to invest in physical infrastructure. These tensions will not be resolved easily as different government entities have different-often competing-priorities and objectives. The result is that the government cannot offer owners and investors of large-scale slaughterhouses a guarantee that they can continue to develop slaughterhouses on current land areas.

Meantime, Vietnamese people's culinary preferences and perceptions of food safety suggest that chicken from coloured birds will remain an important source of poultry consumption in Vietnam. Consequently, smallscale slaughterers will continue to play an important role in supplying coloured chickens.

Small-scale slaughtering also provides an important livelihood option for marginalised people, which is critical for poverty reduction and equity.

# Policy implications

Experience to date shows it is unrealistic to aim to replace small-scale slaughterers with large-scale slaughterhouses. The Vietnamese people's culinary and food safety preferences and perceptions will likely not change in the near future. A better strategy for Vietnam might be to modify the western model of industrialised animal supply chains (involving large-scale farms, slaughterhouses and retailers such as supermarkets) to one adapted to its own specific social, cultural and economic context. This means finding ways to improve the hygiene, biosecurity and food safety of small-scale slaughterers, rather than investing in developing large-scale slaughterhouses.

Vietnam could focus on improving wet market hygiene, and monitor and supervise animal slaughtering practices in markets. Effective control of public health risk is possible at wet markets when combined with thorough preventive (e.g., regular vaccination, hygiene control at markets), surveillance (e.g., regular sample collection along supply chains) and responsive (e.g., a rapid containment of infectious diseases) strategies. Such an approach was employed in Hong Kong<sup>1</sup>, where the public health risk of the live poultry trade was effectively reduced.

The use of slaughter centres could also be expanded, instead of investing in large-scale slaughterhouses. Unlike industrial slaughterhouses, slaughter centres provide a physical location where individual traders come to slaughter purchased chickens. As these traders mostly slaughter coloured chickens, this will help improve slaughtering practices for coloured chicken supply chains. The government can focus on monitoring the hygiene and food safety-related practices at slaughter centres and encourage the use of slaughter centres among small- and medium-scale poultry and other animal traders.

### 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.

This research was carried out in northern provinces of Vietnam. specifically Hanoi, Hai Duong and Bac Ninh, between 2021 and 2023. This works builds on a collaboration between the Vietnam National University of Agriculture (VNUA), Hanoi, and the Institute of Development Studies (IDS), UK.

This briefing was authored by Professor Vu Dinh Ton, Dr Ayako Ebata and Dr Hoa Pham.

See also the GCRF One Health briefing 'Strengthening One Health can keep diseases from poultry in check'.

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#### Footnotes



<sup>1.</sup> Live and Wet Markets: Food Access versus the Risk of Disease Emergence: Trends in Microbiology https://doi.org/10.1016/j.tim.2021.02.007 2. Study on the Way Forward of Live Poultry Trade in Hong Kong : BMT Asia Pacific