



Better lives through livestock

Traditional food chains – gains, threats, and ways to de-risk them

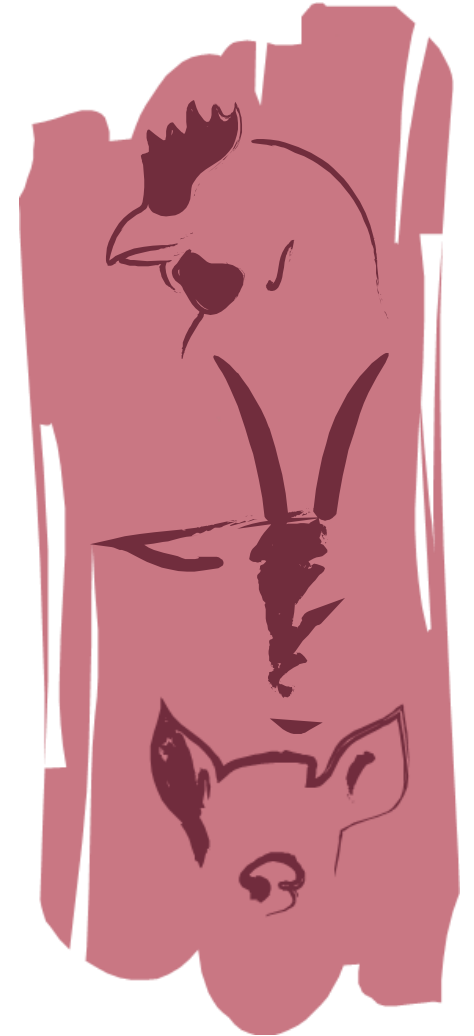
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- Food safety assessment and interventions in selected pork value chains
 - ✓ Assessment & Interventions
- A4NH update (global context & Vietnam)
- 3S Food Safety Performance Tool 10min
 - ✓ Context & key results
 - ✓ Discussions around scalability



Menti-Question



HEALTH

Go to **menti.com**, and enter code 9299700

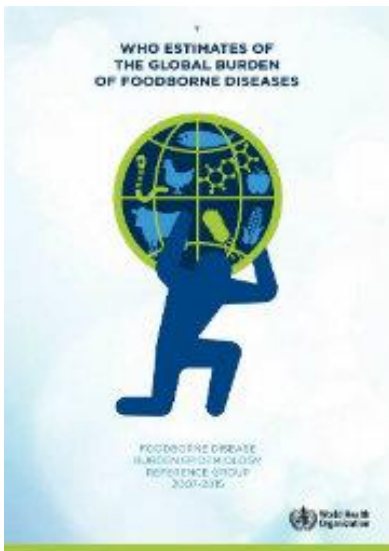
How much do you trust the following supplier in providing safe pork ?
(use a scale from 1-5 with one lowest and 5 highest)

- Traditional retail
- Supermarket or convenient stores
- Organic/healthy food stores (Bac Tom, Soi Bien)
- Directly at producer (e.g., when buying indigenous pigs)

Food safety is an **emerging** public health problem worldwide but also in Vietnam

Traditional, wet or 'informal' markets supply >80% of the food consumed in **sub-Saharan Africa**

Better lives through livestock



Estimated global burden of FBD (31 hazards) **was 33 million DALYs**

- Comparable with burden from Malaria, HIV and TB

Traditional, wet or 'informal' markets often blamed for unsafe food

- Research has shown that this retail type can be as safe as modern retail

75% of total livestock derived food in Asia is produced by **small farms** (large proportion supplying traditional retail)

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Limited evidence on actual FS risks in traditional retail

Traditional food chains – traditional/wet markets

Terminology

- It refers to **traditional markets** which sell mainly fresh foods such as meat, some seafood, fruits and vegetables.
- Usually less regulated
- Consist of different stalls with independent owners
- **Frequent use ice** to keep food fresh and **often wash products** to keep them clean and fresh.

“wet market”



Photo credit: Chi /ILRI 2020

Why customers prefer traditional/wet markets

- **Accessibility**, numerous in urban areas but often the only source in rural areas
- **Cheaper** than formal/modern retail (opposite to developing countries – “organic” markets – pricy)
- **Addressing specific consumer demands**
 - ✓ Sell of traditional foods (including wildlife)
- **Livelihood** contribution
 - ✓ Income for retailers (many are women) & smallholder
- **Consumers associate** wet markets **with fresh, local, “healthy by nature foods”**
- Tourist attractions



Photo credit: Unger, Chi Nguyen /ILRI

Traditional/wet markets are not the same

- Many markets **sell fresh meat** (often from animals killed that morning)
- **Live birds and live aquatic food**, often **killed on spot** or taken home alive
- **Only a minority** of markets **sell wildlife**: may be alive or freshly killed
- Markets **vary from permanent** to simple structures or even, **to food sold on the ground**
- **Operation time** varies: **daily, some days week or less**



Photo credit: Chea Rortana, Chi Nguyen /ILRI

Risk at traditional/wet markets

The **risk to human health is little understood** and variable.

There are both **risk amplifying and mitigating practices** and characteristics in wet markets. Some of these are shown below:

Risk mitigating and risk amplifying characteristics of wet market

Risk mitigating	Risk amplifying
Separation between types of fresh food (fresh/cooked or intestines and meat)	Direct or indirect contact with body fluids or between intestines and meat
Basic infrastructure: water, electricity, easy to clean surface	Keeping and slaughter live animals
Rapid turnover, selling in small amount	Selling on the ground/floor
Trust in vendor	Lack of effective, risk based inspection
Short value chain	Poor infrastructure: lack of water and electricity

Will modern retail replace traditional/wet markets?

Modern retail:

Based on experiences on rapid growth of modern retail from other parts of the world (America, Europe, Australia, South America) the same was assumed for Africa and Asia.

But there are crucial differences.

- **Modern retail in Asia and Africa does not offer fresh food at lower cost** than traditional retail
- There is also a strong **preference for “warm fresh meat”** = not chilled or frozen food in Africa and Asia.
- Perception that **modern retail uses more “chemicals”** e.g. grow promoters & consequently different perceived meat taste and quality

“premium shops”

Shops specialising in selling “health” fresh food at a premium (rather small outlets)

Co-existence of traditional and modern retail

For richer customers, wet markets and modern retail **may be complementary** rather than competitive

- people buying packaged food in supermarkets and fresh food in wet markets

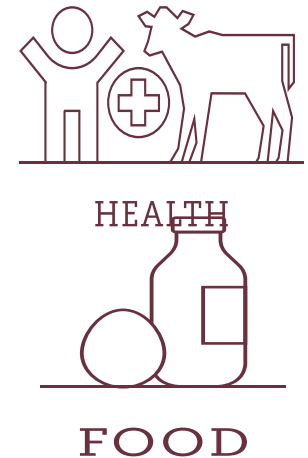


Shall we worry about wet markets?

Food safety

Wet markets often lack adequate food safety measures, but:

- **Hazards can be high, but risks can be low** if post processing involves a reliable control step
- **The informal sector is not always dangerous and the formal sector is not always safe**



Transmission of emerging diseases

- **H5N1 pandemic** - many **efforts to regulate or stop e.g. sale of live birds** but not very effective
- **Coronavirus** emergence has also been **associated with sale of wild animals in wet markets**
- Role of wet markets in the recent pandemic not fully understood



Formal versus informal retail

- **Formal** retail: supermarkets, convenient stores, “healthy” food shops
- **Informal** retails include:
 - ✓ traditional markets and or ‘wet markets’
 - ✓ Street and /or street food vendors
- **Traditional, wet or ‘informal’** markets **supply >80%** of the food consumed in **sub-Saharan Africa***, but also the region e.g. Vietnam and Cambodia
- Informal retail often **escape** structured sanitary **inspection** and lack modern infrastructure and modern management
- **Formal sector is more vulnerable** to system failures
 - E.g. failure in cool chain

*Predicted to still meet 50 to 70 % of consumer demand for food by 2040



Photo credit: ILRI/ Chea Rortana, Chi Nguyen.

How to reduce risk from wet markets

Attempt and challenges:

- **Improve infrastructure**
 - ✓ But without changing retailers behaviour and practice tends to be unsustainable
- **Training** retailers helps to improve food safety
 - ✓ **But without incentives**, improvements are **not sustained**
- **Ban wet markets** have **usually failed** and often had serious un-intended consequences.
- **Enforcing high standards** such as modern retail **often failed**
- So far there was **limited investment and research** into informal markets
- **VietGAHP** or **certification**, so far limited reach

What can be done differently?

Participatory, risk-based, demand-led approaches seem most promising
(not-top down or purely regulatory)

Understanding health risk from informal markets (as opposed to presence of hazards)

Tackling most risky features first

Implementing and **evaluating potentially scalable** and sustainable interventions



Risk assessments + scale + scalability potential + societal aspects

Food Safety Performance Tool



What can be done differently?

Existing regulations sometimes inappropriate or not exist e.g. for small-scale slaughter or informal retail setups

Rather gradual upgrading of existing structure than infrastructure change

- Provide simple technologies to make food safe (e.g. easy to clean surfaces)



Participatory developed & simple / low costs interventions


Safe Pork & Safer Ban Pork





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