Food safety challenges in traditional pork value chains and policy engagement in Vietnam and Laos

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ISSUE

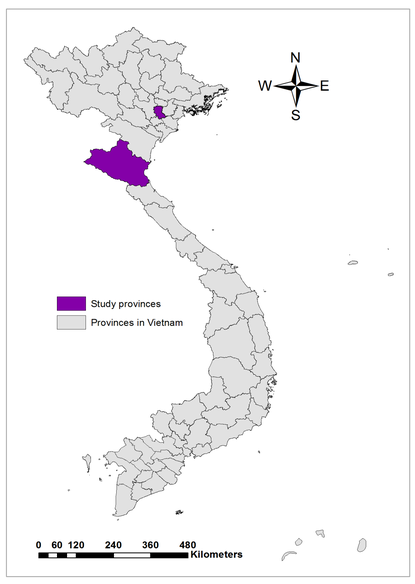
Food-borne disease (FBD) is a major public health issue in low income countries of South East Asia including Vietnam and Laos. The contamination of popular foods can occur along the food value chain. Evidence on the burden of FBD is still limited but the risk is expected to be high due to poor food hygiene practices, missing incentives to change them, risky consumption habits and poor enforcement of existing legislation. We will present two case studies conducted since 2015 for Vietnam and Laos.

VIETNAM: FOOD SAFETY RISK ASSESSMENT (MICROBIOLOGICAL AND CHEMICAL)

Food safety is a key concern of people in Vietnam. Pork, mainly produced by smallholders and sold fresh in traditional (wet) markets, is the most popular meat and essential both for consumer nutrition and farmer livelihoods.

Research questions: What are the risks for eating pork in Vietnam?

Study areas: Hung Yen and Nghe An province



METHODOLOGY

- Interdisciplinary research teams
- Risk assessment for microbiological (Salmonella) and chemical hazards (e.g. antibiotics)
- Cost of illness study
- Farm to fork approach
- Multi-level stakeholder engagement and training

KEY FINDINGS AND ACHIEVEMENTS

- 17% of pork consumers are at risk of Salmonella poisoning annually.
- Prevalence surveys found smallholder pork is as safe as that from the formal sector.
- The annual costs of hospitalization in Vietnam due to FBD diarrhoea amounted to USD2.5–7.6 million annually.
- Risk due to chemical hazards is low (heavy metals, grow promoters and antimicrobial residues)
- Much of the human health risk comes not from eating pork (often well-cooked), but from cross-contamination at kitchen.
- Food safety taskforce established.

POLICY RECOMMENDATIONS

- Biological contamination is the main cause of health risks, while chemical-associated hazards are less important. Enhancing risk communications is critical to improving the ways that related agencies to inform the public of health risks.
- Strengthening hygiene practices along the pig value chain through training and clear guidelines equally important than infrastructure investment. Attention should be given to behavioral change to improve hygienic practices and provision of suitable incentives.
- Interventions also need to target consumers to manage the risk of cross-contamination at household level when handling pork.

LAOS: CASE STUDY ON PARASITIC FOOD-BORNE DISEASES

Cysticercosis (1st) and trichinellosis (7th) are among the 'top ten' food-borne parasites globally and endemic in many parts of Laos. Pork is the most popular meat, mainly produced by small holders and sold in traditional (wet) markets.

Research questions: The distribution of both parasitic zoonoses in southern communities of Laos?

Study areas: Savannakhet and Champasak province

METHODOLOGY

- One Health approach and interdisciplinary research teams;
- Participatory rural appraisal;
- Household surveys with serological sampling in pigs for Trichinella;
- Multi-level stakeholder engagement;

KEY FINDINGS AND ACHIEVEMENTS

- Evidence on risk for Trichinella, 17% positive tested pigs;
- Very limited knowledge and perception on zoonotic FBD;
- Nearly 90% agree that raw dishes (pork/fish) can harm humans – in practice they still like to eat because it is delicious.
- Inter-ministerial platform established – 6 ministries and universities:
  - ✓ Ministry: Health; Agriculture & Forestry; Natural Resources & Environment; Education & Sports; Information; Culture and Tourism; and Defense
  - ✓ Government offices at the provincial level
  - ✓ Faculty of Agriculture, National University of Laos, University of Health Sciences

POLICY RECOMMENDATIONS

- A One Health official committee of Laos should be established to continue promoting an integrated approach and cross-sectoral collaboration using the capital and experience gained from this study. Its governance details should be defined by joint agreement.
- This One Health committee could facilitate and cross link efforts at ministerial and lower administrational levels as well as seed this approach and practice in the academic curriculum to guarantee effective long term One Health management in Laos.

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