

Application of an innovative biosecurity approach in small- and medium-scale pig and poultry production in Viet Nam

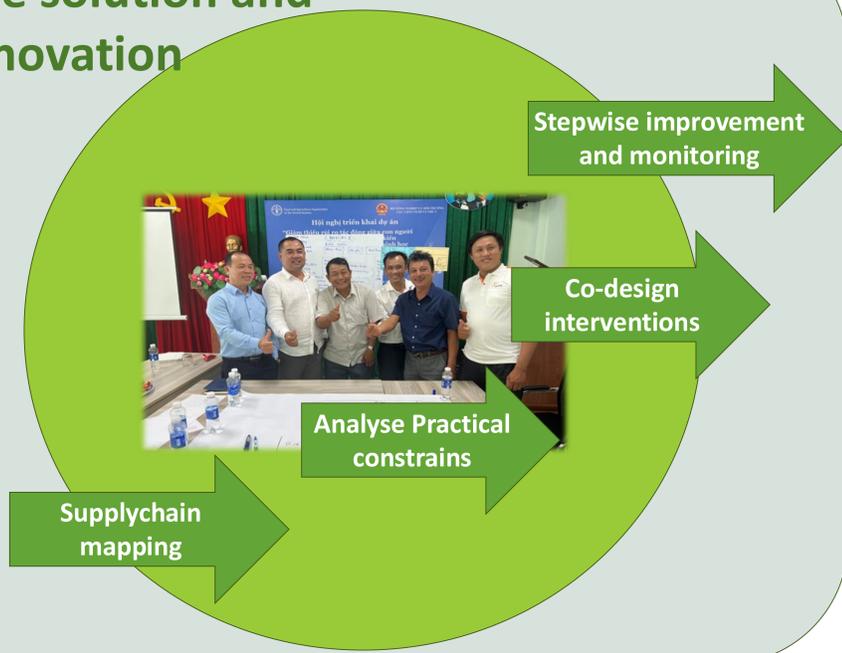
Nhu Van Thu, Pawin Padungtood, Nguyen Hong Minh
FAO Vietnam

Corresponding author: vanthu.nhu@fao.org

Key Challenges in pig and poultry production

- 1. Disease risks in livestock production:** Disease outbreaks remain a major challenge especially within fragmented smallholder production systems.
- 2. Antibiotic misuse and AMR risks:** Inappropriate antibiotic use raises concerns for food safety and antimicrobial resistance (AMR).
- 3. Limited biosecurity adoption:** Biosecurity is essential for disease prevention and sustainable livestock production, adoption remains limited due to technical, structural, and financial constraints among small- and medium-scale farms.
- 4. Difficult implementation of existing guidelines:** Existing biosecurity guidelines are often too general and require high investment, making them difficult for farmers to prioritize and implement.

The solution and Innovation



Codesigning the interventions for pig farms in Ho Chi Minh City
Photo Nhu Van Thu – FAO Vietnam



Farmer self improvement of their farm disinfestation station
Photo Thanh Duc Minh – sDAHP HCM city



A FSC training session on vaccination in Thai Nguyen
Photo Nguyen Hong Minh – FAO Viet Nam



Weekly check-up and visit of FSC farmers
Photo Nguyen Hong Minh – FAO Vietnam

Scalability and regional relevance

- FAO-PMP-TAB can be scaled across regions through its **co-creation approach**, which brings together farmers, scientists, government authorities and private-sector technicians to jointly assess risks and identify practical biosecurity solutions adapted to local conditions.
- By involving farmers directly in **risk assessment and decision-making**, the approach increases their awareness of disease risks and motivates them to adopt appropriate measures, including behavioural changes, improved farm practices and targeted investments. Small- and medium-scale farmers are often willing to adopt new practices when solutions are practical and jointly agreed upon.
- The approach is scalable because it combines **co-creation, flexibility and risk-based prioritization**, allowing farms to implement measures according to their capacities and priorities. Effective disease control is further supported by integrating **biosecurity, vaccination and responsible use of veterinary medicines**, while **FAO Communities of Practice** help share experiences and support adoption in other countries.

Key results and Impact

IMPLEMENTATION	RESULTS	SCALE-UP
8 pilot pig farms piloted in Thai Nguyen and Ha Nam	✓ No ASF/FMD outbreak since 2020	Expanded to 6 additional farms in Ha Tinh and Ho Chi Minh city
3 FSC groups in Thai Nguyen (30 S&M broiler farms)	✓ 99.24% survival rate ✓ -31.86% AMU reduction. ✓ FCR: 2.5	Scaled- up to Bac Ninh and Thai Nguyen with 70 participating farms

