

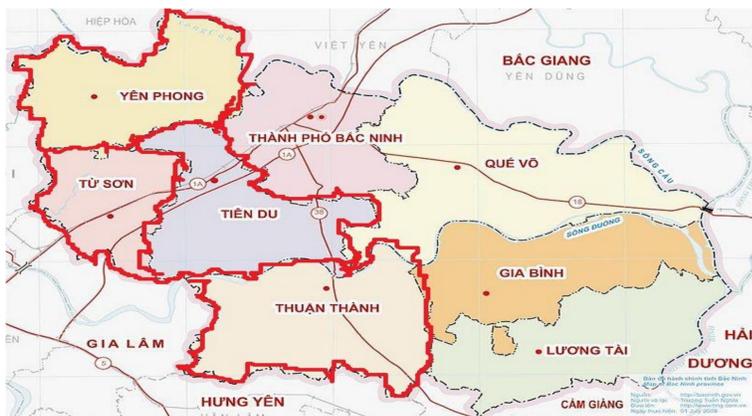
Factors influencing antimicrobial use in pig production

An anthropological research in Bac Ninh province, Viet Nam

Presenters: Tran Minh Hang¹, Mac Cong Ly³, Britt Tersbø², Anders Dalsgaard², Nguyen Viet Hung³

Introduction

In Vietnam, the use of antimicrobials in livestock in general and in pig production in particular has been perceived as not well regulated and practiced. This leads to the over-use of antibiotics and would contribute to the antimicrobial resistance (AMR) in animals, human and the environment. While many studies have focused on quantification of antimicrobial use (AMU) and AMR profiles resistance in livestock production, much less has been known on how farmers and other actors on the social aspect of the AMU, meaning the drivers and decision leading to the AMU.



Picture 1: Research field sites: Yen Phong, Thuan Thanh, Tien Du and Tu Son districts

Objectives

Our study aims to understand how and why antimicrobials are used in pig production and identify factors that influence the AMU in raising pigs in Vietnam. This study is part of the “Health and Antibiotics in Vietnamese Pig Production” (VIDA-PIG Project), funded by the Danish International Development Agency (DANIDA that addresses the major health issues affecting Vietnamese pig farms.

Methods

The research was conducted in Bac Ninh province in the Red River Delta of Vietnam, about 30 kilometers from Ha Noi during 2018-2019. The research team conducted 74 in-depth interviews with pig producers, local veterinarians, local authorities, leaders of department of health, veterinarian drug shops, feed shops, veterinarian drug companies, feed companies, organic food stores; 9 focus group discussions with farmers in different farm scale sizes namely small (<20 pigs), medium (<200 pigs), and large farm sizes (>200 pigs). Researchers also had 7 farm stay observations where they stayed 5-7 days in each farm to observe daily pig production activities and pig disease treatments.

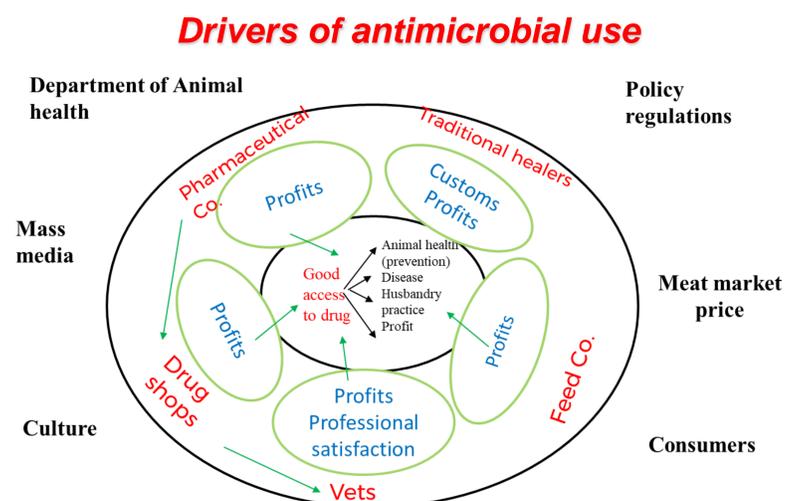


Picture 2: Focus group discussion with pig farm owners in Tu Son district

Results

	Small	Medium	Large
Types of food	Mixed (salvaged feed from restaurants, food processes, etc.	Industrial bran	Industrial bran
Hygiene conditions	Low	Medium	High
Relation with local vets	Self-injection for pigs + Call local vets when pigs has serious illness	Self-injection for pigs	- Rented vets treat for pigs
Quantities of antibiotics for pig disease treatments	Use antibiotics following drug sellers' advices	Use antibiotics by their own experiences	- Often follow the rented vets' instruction
AMU for prevention	Sometimes	More common	Sometimes

Table 1: Relationship between farm scales and antimicrobial use in different conditions



Conclusions

AMU in pig production was driven by multiple and complex factors such as profits of farmers, profits of veterinary drug shops and companies, market price of pork, mass media and policy regulations. Veterinarian plays important roles in AMU. The decision on whether or not to prescribe an antimicrobial was influenced by numerous factors relating to the veterinarians' experience, the clinical situation presented, and the profit they may earn from selling veterinary drugs. This study described the practices of feeding and pig health management in different size farms and examined the factors that influenced the AMU practices and decision of AMU of multiple actors in pig production. The profits of different actors along the value chain is key to AMU.

Partners



Institutions and Contact

Notes:

- Institute of Anthropology, Vietnam Academy of Social Sciences (VASS)
- University of Copenhagen
- International Livestock Research Institute (ILRI)

Contact:

International Livestock Research Institute (ILRI)
Address: Room 301-302, B1 Building, 298 Kim Ma Street, Van Phuc Diplomatic Compound, Ba Dinh District, Hanoi, Vietnam
Tel: (+84) 24 3237 3995 - Fax: (+84) 24 3237 3996
Email: ILRI-Vietnam@cgiar.org
Website: <https://www.ilri.org/>