

Food safety risk communication: A One Health approach to improve knowledge and practices along pork value chains in Vietnam

Sinh Dang-Xuan¹, Trang Le-Thi-Huyen¹, Hai Ngo-Hoang-Tuan^{1,2}, Hung Nguyen-Viet¹, Nga Nguyen-Thi-Duong³, Hung Pham-Van³, Huyen Le-Thi-Thanh⁴, Phuc Pham-Duc², Phi Nguyen-Hong², Fred Unger¹

¹International Livestock Research Institute; ²Hanoi University of Public Health, Vietnam; ³Vietnam National University of Agriculture, Vietnam; ⁴National Institute of Animal Sciences, Vietnam

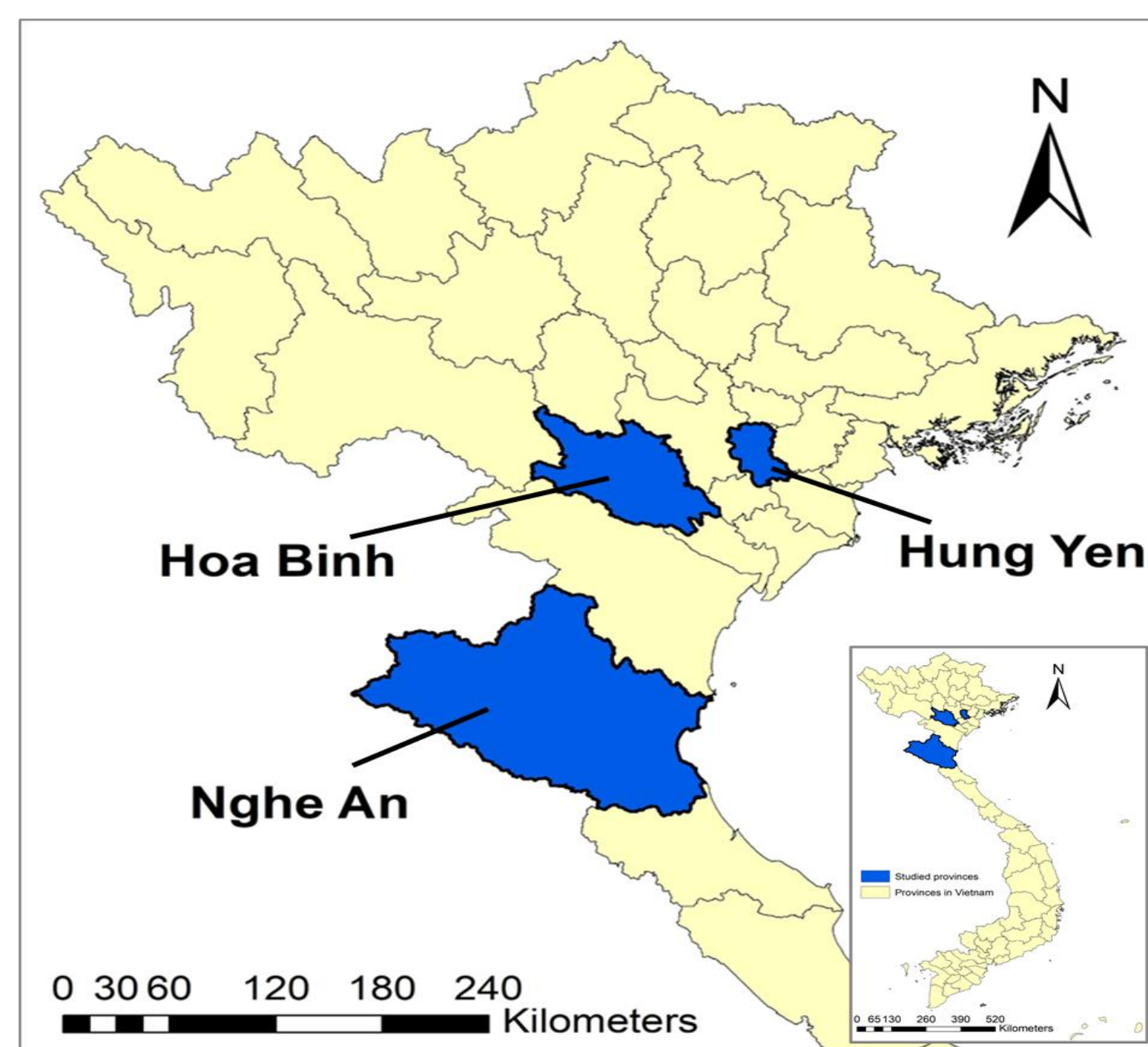
1. INTRODUCTION

Food safety is attracted a great concern of public worldwide and required a multi-sectoral collaboration to manage potential risk of food borne illnesses. One health approach can be applied to food safety, where food safety risk communication (RC), apart from risk assessment and risk management (CODEX), plays a crucial role to disseminate the information and knowledge on risks amongst scientist, managers or policy makers and community. This study aimed to improve their knowledge and practices on food safety for pork value chain actors, relevant stakeholders, and consumers to prevent foodborne illness using risk communication.

2. METHODOLOGY

2.1. Study sites

Fig 1. Map of study sites in Vietnam (right below) and three studied provinces.

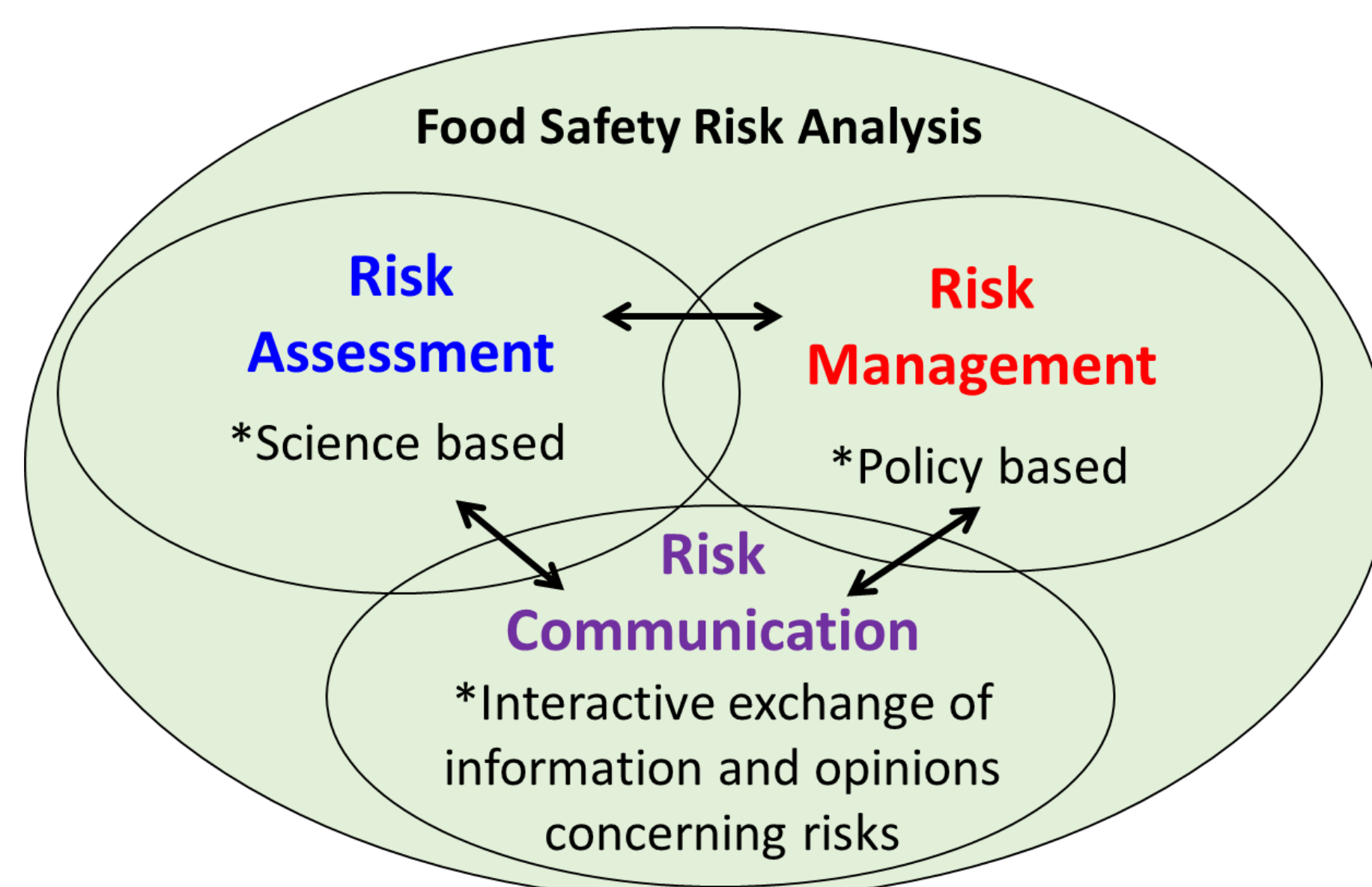


2.2. Targeted groups

- Pork value chain actors (*pig producers, slaughterhouse workers, retailers and consumers*)
- Local veterinary and health workers, local authorities' staff
- Canteens staff, consumers in studied districts/provinces.

2.3. Study approach

Fig 2. Food safety analysis framework, and FS risk communication component of the study from November 2019 to June 2022



Participatory trainings, group discussions, meetings, loudspeaker campaigns



Handbooks, posters and leaflet on food safety practices and food borne illness prevention

3. RESULTS

Knowledge and practices scores of pig value chains actors (slaughterhouse workers and retailers) on food safety were improved. Local veterinary and health workers, local authorities' staff trained were better in managing and disseminating food safety information and training in their works.

Targeted groups	N#. participants (N#. females)	Topics in risk communication messages to improve
Pig producers	119 (94)	FS knowledge and hygiene practices related to their daily work such as a pig producers, slaughterhouse workers, consumers, canteen staff
Slaughterhouse workers	43 (11)	
Pork retailers	30 (21)	
Consumers	191 (175)	
Canteen staff	142 (129)	
Local authorities (TOT)	175 (88)	FS knowledge, risks & conduct RC
Total	700 (518 females, 74%)	
Loud speaker	Reach ~45% district population (120,000 community members, include 70,000 females): received information about FS knowledge, hygiene practices 64 times)	

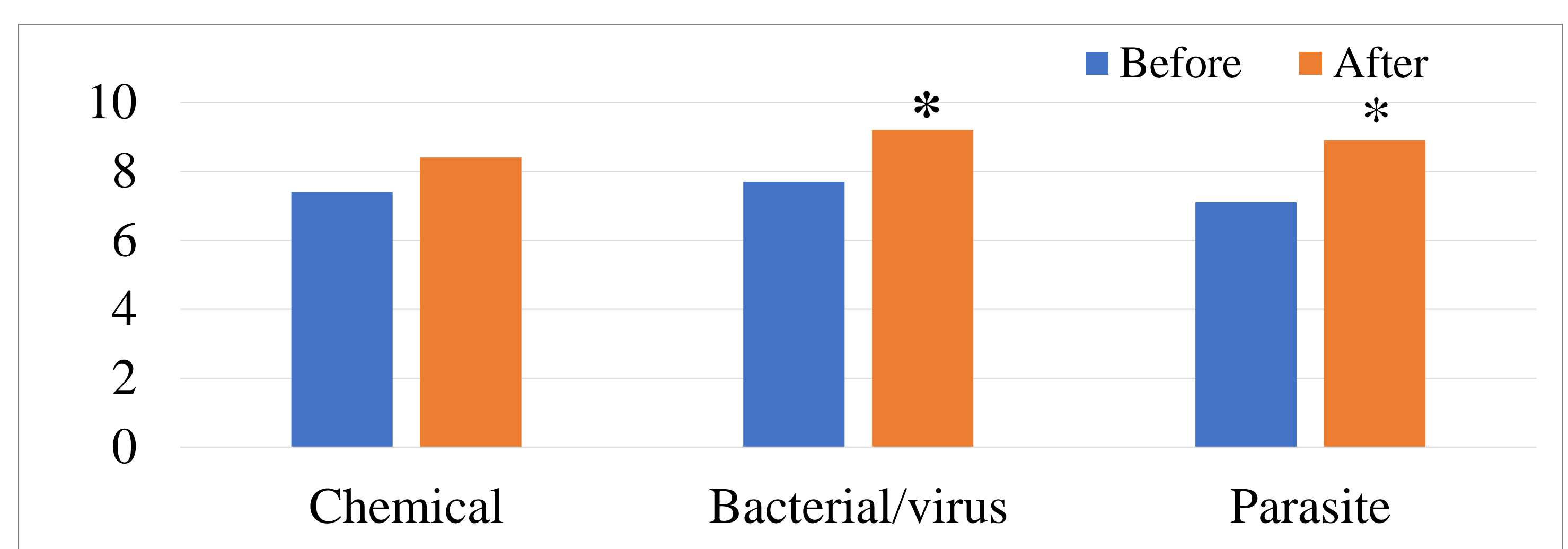


Fig 3. Perceive risk of food borne hazards of participant before and after training (ranks from 1-least to 10-most important, * $p < 0.1$)

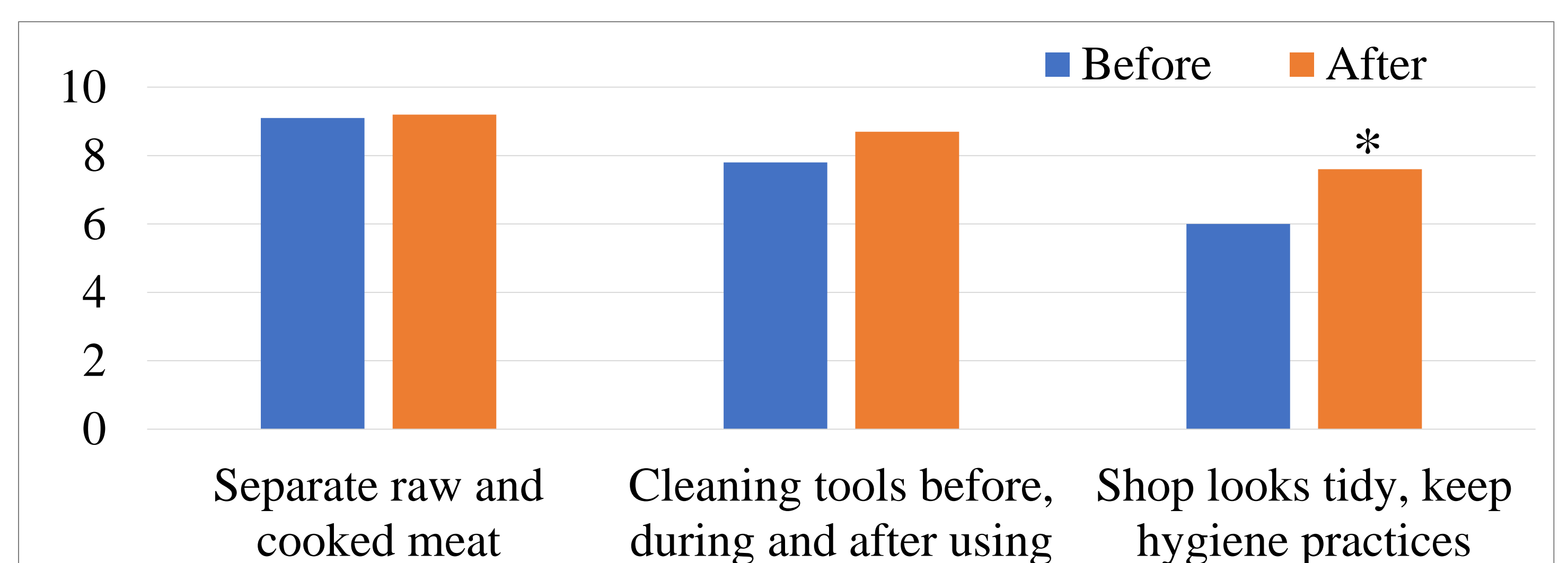


Fig 4. Changes in knowledge and practices to improve food safety of value chain actors before and after training (ranks from 1-least to 10-most important, * $p < 0.1$)

4. CONCLUSIONS

Participatory and interdisciplinary approaches which engage different disciplines (veterinary, public health, and local authority) would create an effective channel to convey food safety knowledge and practices to targeted value chain actors and communities to reduce risk foodborne illnesses for consumers.

Contact: Sinh Dang-Xuan (S.Dang@cgiar.org)

This publication is copyrighted by the International Livestock Research Institute (ILRI). It is licensed for use under the Creative Commons Attribution 4.0 International License. November 2022