

Regional symposium on research into smallholder pig health, production and pork safety

27–29 March 2019

Hanoi, Vietnam

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Abbreviations and acronyms

ACIAR	Australian Centre for International Agricultural Research
A4NH	CGIAR Research Program on Agriculture for Nutrition and Health
GREASE	Research Activities for a better Management of Emerging Epidemic Risks in Southeast Asia
ILRI	International Livestock Research Institute
PACCOM	People's Aid Coordinating Committee, Vietnam
VNUA	Vietnam National University of Agriculture

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Thanks are also extended to Chi Nguyen, Hanh Le and Thu Dang, ILRI support staff who provided assistance in the workshop preparation, communications, travel and logistical arrangements.

Introduction

The smallholder pig industry plays an important role in many countries in Asia and the Pacific. But the sector faces different challenges in different countries. In Timor-Leste, for example, the key research need is to develop practical husbandry practices to improve pig nutrition, whereas in Vietnam solutions are needed to produce safer pork for the market.

To address the issue, the International Livestock Research Institute (ILRI) and the University of Queensland, Australia supported by the Australian Centre for International Agricultural Research (ACIAR) and the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH) are organizing a regional symposium on research into smallholder pig production, health, and pork safety. The symposium is being held in Vietnam from 27–29 March 2019.

The overall aim of the symposium is to present and discuss research on improving the smallholder pig sector through proven concepts that are sustainable and use holistic approaches.

The symposium aims to:

- Share experiences and challenges in research on smallholder pig health, production and pork safety;
- Discuss and explore gender aspects in pig and pork production;
- Facilitate inter-country and intra-country networks on pig research including the South-South exchange;

Date and location:

- Location: Pullman Hanoi Hotel, 40 Cat Linh Street, Hanoi (27–28 March), and campus of Vietnam National University of Agriculture (29 March)
- Date: 27–29 March 2019
- Co-organized by: ILRI and University of Queensland
- Funded by: ACIAR and A4NH

Workshop summary

The symposium was held in Hanoi, Vietnam from 27–29 March 2019. It was attended by 97 participants (46 females and 43 males) from 18 countries coming from academia/universities (48), international agencies including embassies (33), state agencies (14), and private sector (2). The program for the first two days focused on six themes and comprised three keynote presentations, 29 short oral presentations, 22 poster presentations, group reflection sessions after each theme, a group discussion on incorporating gender into research (led by a group of gender experts) and a panel discussion. The field day, originally planned for the third day, was cancelled due to outbreaks of African swine fever in Vietnam. This was replaced by a visit to traditional markets, followed by an information session on the pig sector in Vietnam and an interactive session covering topics such as possible future research topics and/or collaborations and ideas for translation of research into practice and policy organised at Vietnam National University of Agriculture (VNUA). As gender was a key focus of the symposium we included a pre-symposium questionnaire on the topic. In addition, an online post-symposium evaluation was conducted. Reflections and highlights of the symposium were captured in a 4-minute video available at <https://youtu.be/mT-zEwQEFV0>.

Relevance of the event to participants' work and development outcomes

Most of respondents to the evaluation (90%) indicated that the symposium was relevant/highly relevant to their work or study with 87% reporting the personal/professional development outcome(s) gained from the symposium as very good or excellent. Examples of development outcomes reported by participants included increased knowledge of various aspects of the research in the pig sector, ideas for potential collaborations and future research, opportunities to present research to an international audience and networking opportunities.

Key insights from the gender session included a shared understanding of the importance to include gender at the design stage of livestock research projects, that women have a critical role in livestock value chains, and gender differences in access to resources and decision-making power.

Networks for future collaboration

The symposium provided a network opportunity for participants to connect from different countries and backgrounds and further enhanced their understandings and learnings of an improved small holder pig value chains.

Participants expressed their strong interest in attending a similar symposium in the future, particularly to improve their understanding of gender, interventions and multi-sectoral collaborations. The high level of interest in the symposium could be further enhanced with more time for each session.

Further workshop output

A note 'Exploring gender within the smallholder pork value chain in Southeast Asia through a symposium' was developed focusing on the workshop discussions on gender aspects.

Link to the note [here](#).

Annex I: Participants and program

Below one can find the list of participants, with their respective organizations.

No.	Country	Organization	Full name	Position/title	Email
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1.	Bhutan	National Centre for Animal Health	Vijay Raika Monger	Animal health specialist	reekraika@yahoo.com
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Day I (27 March 2019, Pullman Hotel)		
Time	Activity	Person in charge
8:30	Registration	ILRI
Opening session		
9:00–9:30	Opening Group photo	<ul style="list-style-type: none"> • MARD representatives • Anna Okello, ACIAR RPM • Dieter Schillinger ILRI DDG • Tamsin Barnes, UQ Facilitator: Hung Nguyen
Session 1 – Pig nutrition and husbandry Chair: Auriol Purdie		
9:30–10:00	Keynote: Impact of environment on pig production and health	<ul style="list-style-type: none"> • Colin Cargill, Australia
10:00–10:30	Coffee break	
10:30–12:00	Short presentations <ul style="list-style-type: none"> • Determination of apparent and standardized total tract digestibility of phosphorus and calcium in coconut co-products fed to growing pigs • Effect of dietary supplement, base mix, and/or soybean meal on growing pig performance • Effect of level of rice husk biochar on growth performance and nutrient digestibility of crossbred pigs fed incorporate ensiled banana pseudo stem and water spinach • Identifying husbandry options for smallholder pig farmers in Timor-Leste • Identifying constraints to smallholder pig raising in San Simon, Pampanga, Philippines through semi-structured interviews and farm visits • Reflection on session (10–15min)	<ul style="list-style-type: none"> • Ronilo de Castro, Philippines • • • Samorn Sreng, Cambodia • • Chhay Ty, Cambodia • • • • Olavio Morais, Timor-Leste • • Paul John Alvaran, Philippines • • • • • All participants
12:00–13:30	Lunch and time slot for poster presentations (Posters under Session 1, 2 & 3)	
Session 2 – Pig health and diagnostics Chair: Jenny-Ann Toribio		
13:30–15:30	Short presentations: <ul style="list-style-type: none"> • Pig production and diseases in Bhutan 	<ul style="list-style-type: none"> • Vijay Raika, Bhutan • Ardiana Rachim, Indonesia

	<ul style="list-style-type: none"> • Current situation of classical swine fever in East Nusa Tenggara Province, Indonesia • Plain sliced bread as the base for lyophilized CSF oral vaccine • Point-of-care tests for pig disease diagnosis • A simplified approach for bacterial respiratory pathogen identification for front-line veterinary diagnostic laboratories serving smallholder pig producers • ASF prevention and control through application of biosecurity in smallholder pig farms, Uganda: progress and challenges • Emergence of African Swine Fever in Vietnam, 2019 • <p>Reflection on session (10–15min)</p>	<ul style="list-style-type: none"> • • Sarthorn Porntrakulpipat, Thailand • Agnes R. Dela Cruz, Philippines • Milagros R. Mananggit, Philippines • • Peter Oba, Uganda • • • Le Van Phan, Vietnam • • All participants
15:30–16:00	Coffee break	
Session 3 – Social science, gender and equity in the pig value chain Chair: Tamsin Barnes		
16:00–17:00	<p>Short presentations:</p> <ul style="list-style-type: none"> • The influence of nipple drinker system on smallholder pig raisers in the municipality of San Simon, Pampanga, Philippines • Small scale pig farming in empowering tribal women: A field level study from Madhupur forest areas of Bangladesh • How gender matters in antimicrobial resistance • Understanding the gender roles in smallholder pig farming in San Simon, Pampanga, Philippines 	<ul style="list-style-type: none"> • Alvin G Allam, Philippines • • • Homayra Siddika, Bangladesh • • • Nguyen Thi Thinh, Vietnam • Tessa Lyrene DC. Lantican, Philippines
17:00–17:45	<p>Individual and group discussions</p> <ul style="list-style-type: none"> • Questions around gender/equity meaning, gaps, experiences • Feedback on pre-symposium questionnaire 	<ul style="list-style-type: none"> • Facilitator: Gomathy Palaniappan, Vanya Slavchevska, Negin Khaleghi, Marisa Mitchell
Day 2 (28 March 2019, Pullman Hotel)		
Session 4 – Zoonoses and food safety including antimicrobial resistance (AMR) Chair: Pham Duc Phuc		
8:30–9:00	Keynote: ILRI research on foodborne diseases associated with pigs	<ul style="list-style-type: none"> • Hung Nguyen, Vietnam
9:00–10:30	Short presentations:	<ul style="list-style-type: none"> • Lian Thomas, Kenya

	<ul style="list-style-type: none"> • Safe pork in Kenya; exploring risks and the regulatory environment of the pork value chain • SaferPORK – from assessment to interventions targeting rural and urban pork supply chains in Northern Vietnam • Seroprevalence of Trichinella & Cysticercosis spp. Infections of Pigs Correlated to Human Health in Southern Laos PDR • Occurrence of cysticercosis in slaughtered pigs from two slaughterhouses in Myanmar • Antimicrobial use and resistance among small-scale peri-urban pig farms in Cambodia • <p>Reflection on session (10–15min)</p>	<ul style="list-style-type: none"> • • Fred Unger, Vietnam • • • Vannaphone Putthana, Laos • • • Saw Bawm, Myanmar • • Gunilla Ström Hallenberg, Sweden • • All participants
10:30–11:00	Coffee break	
Session 5 – Interventions		
Chair: Fred Unger		
11:00–12:30	<p>Short presentations:</p> <ul style="list-style-type: none"> • Traceability in Kenya`s rural smallholder pig systems, can it work? • Taenia solium control – is it achievable? Results of a pilot study in northern Lao PDR • Assessing the societal economic benefits of a joint human-porcine intervention package for control of Taenia solium, soil transmitted helminths and improved pig health • Using an Ecohealth Approach to improve the Competitiveness and Productivity of the Smallholder Pig System in San Simon, Pampanga, Philippines • Exploring Behavioural Economics: Using ‘Nudge Theory’ to improve the effectiveness of SaferPORK interventions in Vietnam • <p>Reflection on session (10-15min)</p>	<ul style="list-style-type: none"> • Florence Mutua, Kenya • • Amanda Ash, Australia • • Amanda Ash, Australia • • • Eduardo Lapuz, Philippines • • • Mathew Hennessey, UK • • • All participants
12:30–14:00	Lunch and time slot for poster presentations (Posters under Session 4, 5 & 6)	
Session 6 – Developing a sustainable, affordable, welfare-friendly and safe smallholder pig value chain		

Chair: Gomathy Palaniappan		
14:00–14:30	Welfare in the value chain: practical strategies and benefits of improved pig welfare	Rebecca Doyle, Australia
14:30–15:30	<ul style="list-style-type: none"> • Upgrading in smallholder pig value chain in Vietnam • • Awareness of food safety along Ban pork value chain in Hoa Binh, a northern mountainous province of Vietnam - opportunities for ethnic community in safe-pork supply • Understanding the economics of smallholder pig raising in San Simon, Pampanga, Philippines • <p>Reflection on session (10–15 min)</p>	<ul style="list-style-type: none"> • Nguyen Thi Duong Nga, Vietnam • Le Thi Thanh Huyen, Vietnam • • • • Tessa Lyrene DC. Lantican, Philippines • • All participants
15:30–16:00	Coffee break	
Reflection and wrap-up session, group work or panel		
Facilitator: Hung Nguyen		
16:00–16:10	Overall reflection	<ul style="list-style-type: none"> • Hung Nguyen, Vietnam
16:10–17:20	<p>Panel discussion: How to achieve sustainable, affordable, welfare-friendly and safe smallholder pig value chain</p> <p>Tentative panelists:</p> <ul style="list-style-type: none"> • Eduardo Lapuz, Assistant Regional Director, Department of Agriculture for Region 3, DOA, Philippines • Vannaphone Putthana, Lecturer, National University of Laos, Laos • Jenny-Ann Toribio, Associate Professor, University of Sydney, Australia • Tran Manh Chien, Founder, Bac Tom, Vietnam • Tong Xuan Chinh, DDG Department of Livestock Production, Vietnam • Dieter Schillinger, DDG, ILRI, Kenya 	
17:20–17:40	Closing and certificate distribution	Tamsin Barnes & Fred Unger
Day 3 (29 March 2019, VNUA* campus)		
Informative session on pig sector in Vietnam, cross-country collaboration and visit of traditional market		
7:00	Departure from Golden Rice Hotel	
7:30–9:00	Visit of traditional market (4 groups)	VNUA and ILRI
9:15–10:30	<p>Welcome remarks</p> <p>Remarks from the symposium organizers</p> <p>Pig sector informative session:</p> <ul style="list-style-type: none"> • Pig value chain in Vietnam by VNUA 	<p>Board of Directors, VNUA</p> <p>Tamsin Barnes & Fred Unger</p> <p>VNUA, HUPH**, NIAS***, ILRI</p>

	<ul style="list-style-type: none"> • Indigenous pig systems in Vietnam by NIAS • Pork safety and farm to fork by HUPH 	
10:30–11:00	Coffee break	
11:00–12:30	<p>Cross-country session on joint future research areas or incorporation of gender into research</p> <p>Group session format</p>	Gomathy Palaniappan, Tamsin Barnes, Fred Unger
12:30–14:00	Lunch	
14:00	Departure for Hanoi center	

Annex 2: Links to presentations and photos

Presentations and photos of the symposium are available here:

https://www.dropbox.com/sh/vzmqcng276dw5u2/AAAd_3nsB-0why_YGDAJOLifa?dl=0

Annex 3: Media clippings

Media clippings on the symposium are available here: <https://www.ilri.org/news/press-clippings-regional-symposium-research-smallholder-pig-production-health-and-pork-safety>