RESEARCH PROGRAM ON Livestock

More meat, milk and eggs by and for the poor

Training of women and men smallholder pig keepers on pig artificial insemination in northwest Vietnam

Le Thi Thanh Huyen[1] and Karen Marshall[2]

[1]National Institute of Animal Science, Vietnam
[2]International Livestock Research Institute

The Program thanks all donors and organizations which globally support its work through their contributions to the CGIAR Trust Fund.

Patron: Professor Peter C Doherty AC, FAA, FRS
Animal scientist, Nobel Prize Laureate for Physiology or Medicine–1996

Box 30709, Nairobi 00100 Kenya
Phone +254 20 422 3000
Fax +254 20 422 3001
Email ilri-kenya@cgiar.org

ilri.org
better lives through livestock

ILRI is a CGIAR research centre

Box 5689, Addis Ababa, Ethiopia
Phone +251 11 617 2000
Fax +251 11 667 6923
Email ilri-ethiopia@cgiar.org

ILRI has offices in East Africa • South Asia • Southeast and East Asia • Southern Africa • West Africa

Name of training event	**Training of women and men smallholder pig keepers on pig artificial insemination in northwest Vietnam**
Aim of the course	This course aimed to build the capacity of women and men smallholder pig keepers, including village boar keepers, in pig artificial insemination such that they can competently perform this procedure.
Dates	Two-day course 17–18 November 2020
Venue(s)	Agricultural Service center and smallholder pig farms, Co noi commune, Mai Son district
Instructors and their affiliation	▪ Trinh Hong Son, Pig breeding research center of the National Institute of Animal Science (NIAS), Vietnam ▪ Le Van Hao, Pig breeding research center of NIAS, Vietnam ▪ Le Thi Thanh Huyen, Department of Livestock Systems and Environmental Research, NIAS, Vietnam
Participant information, including number by gender	36 participants smallholder pig keepers and boar keepers (from six villages); of which five (14%) were of H'Mong ethnicity and 31 (86%) of Thai ethnicity; and 19 (53%) were female and 17 (47%) were male.
Linked project or program	This training was offered under the Livestock-led interventions towards equitable livelihoods and improved environment in the Northwest of Vietnam (Li-Chan) project, implemented by partners of the CGIAR Research Program on Livestock. See https://livestock.cgiar.org/news/community-engagement-key-success-livestock-systems-transformation-project-northwest-vietnam for more details.
Funder	Livestock CRP
Course summary or agenda	The training was one of a series around cattle and pig genetics implemented as part of the Li-Chan project. The training series comprised that on: (a) cattle and pigs breeds, breeding and artificial insemination (b) Ban boar semen collection and semen quality evaluation (c) artificial insemination procedure in pigs (this training) (d) artificial insemination procedure in cattle This course aimed to build the capacity of smallholder pig keepers and village boar keepers in pig artificial insemination. Training topics including how to detect pigs in heat; the advantages of artificial insemination over natural mating; theory and practice of performing artificial insemination in pigs; and that on pig breeds/semen types and semen suppliers. The course was implemented over two days comprising both theoretical and practical sessions.

Training agenda:

Time	Content
Day 1	
8.30–9.00	Register and sign the consent
9.00–9.30	Advantages of the method of artificial insemination
9.30–10.30	Group discussion on selection of sows for artificial insemination and detection of sows in heat
10.30–10.45	Tea break, photo
10.45–11.30	Pig selected for artificial insemination
11.30–13.00	Lunch
13.30–14.30	Methods of determining the sows in heat Questions and answers
14.30–15.30	Identification of signs that the sow is ready for artificial insemination
15.30–15.45	Tea break
15.45–16.15	Determining the optimal time to mate the sow
16.15–16.30	Review the training day
Day 2	
8.30–9.45	Storing, transporting and preparing semen before insemination
9.45–10.30	Practices with microscope to evaluate semen quality
10.30–10.45	Tea break
10.45–11.15	Group discussion on the sanitation of tools and female pig for breeding, and the importance of this
11.15–11.30	Sanitation of tools and female pigs for breeding
11.30–13.00	Lunch
13.30–14.30	Theoretical guide to artificial insemination
14.30–14.45	Methods of heat synchronization in pigs
14.45–15.00	Tea break
15.00–15.45	Artificial insemination practice with the dummies
15.45–16.30	Questions and answers

On-farm practices with small groups at the sow farms after the training courses in Oi and Khoa villages (as Mon 1 and Mon 2 had an outbreak of African Swine Fever)

Links to training material, if available	Hard copies of training material in Vietnamese were distributed to all participants
Any other remarks	• Farmers appreciated learning about artificial insemination from experts (rather than just learning from each other), particularly how to improve artificial insemination success rates, the reasons why pig artificial insemination could be unsuccessful, and how to avoid damaging the sows. • Following ethe training, the trainers supported small groups of farmers and veterinarian workers in selecting and performing artificial insemination for 21 Ban

	sows with high quality Duroc semen (10 sows in Chieng Chung and 11 sows in Chieng Luong). • Female farmers were very interested in the practices
Photos	
Contact person(s) for more information	Le Thi Thanh Huyen, National Institute of Animal Science, Vietnam Email: lehuyen1973@yahoo.com Karen Marshall, International Livestock Research Institute Email: kmarshall@cgiar.org