

Reducing confinement

what are benefits of moving to group housing for sows?

(WOAH Chapter 7.13)

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Regional Animal Welfare Training Conference
25 - 26 February 2026 Vang Vieng, Lao PDR



Topic: Reducing Confinement: Benefits of Group Housing for Sows

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Place: Vang Vieng, Lao PDR

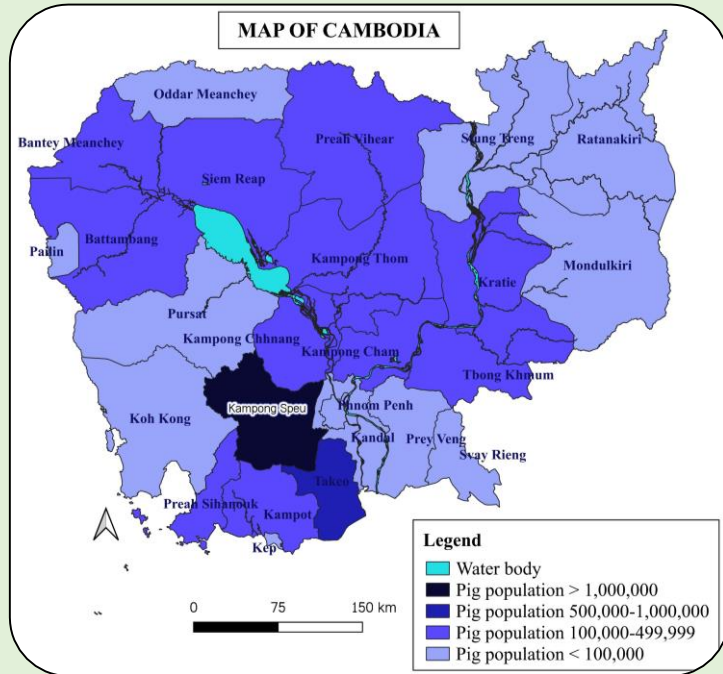
Date: 25 February 2026





Introduction

- More than one-fourth (28.45%) of the pig population are backyard system.
- Total sows 228, 766 sows, 44.33% are backyard.
- Traditionally in pig production, pregnant sows are kept in individual gestation crates for most of their pregnancy.
- Most of crates are narrow metal enclosures that severely restrict movement.
- Need to rethink and reduce prolonged confinement of sows toward group housing systems.





Benefits of moving to group housing for sows

-Good animal welfare (Positive in five domains)

1. Nutrition: Improve nutritional welfare when feeding is managed properly that is essential to prevent competition.

Benefits:

- Less chronic stress from confinement result for better feed utilization
- Opportunity to use advanced feeding systems (e.g., Electronic Sow Feeding)
- More natural feeding posture compared to crates
- Reduced frustration linked to restricted movement during feeding





Benefits of moving to group housing for sows

2. Physical environment: one of the largest welfare gains of group housing that makes the sows experience greater physical comfort and mobility.

Benefits:

- Freedom to walk, turn, and lie comfortably
- Improved resting comfort and posture changes
- Reduced physical restriction and pressure injuries
- Better thermal regulation due to movement ability





Benefits of moving to group housing for sows

3. Health: Improved movement and reduced chronic stress produce health advantages, such as, minimize lameness and injuries.

Benefits:

- Better muscle tone and bone strength
- Lower risk of pressure sores from prolonged restraint
- Improved cardiovascular function
- Potential reduction in stress-related disorders
- Making birth easier for sows





Benefits of moving to group housing for sows

4. Behavioral interactions: provides major behavioral benefits that prevents frustration and abnormal behaviors.

Benefits:

- Expression of natural social behaviors
- Ability to explore, root, and interact with the environment
- Reduced stereotypic behaviors (bar biting, sham chewing)
- Greater behavioral diversity





Benefits of moving to group housing for sows

5. Mental state (Affective experience): positive changes in 4 Domains improve the sow's emotional experience.

Benefits:

- Reduced frustration from movement restriction
- Lower chronic stress and boredom
- Increased opportunities for positive experiences
- Improved overall welfare state





Benefits of moving to group housing for sows

6. Productivity and reproductive performance

- Comparable farrowing rates and litter sizes
- Improved body condition from greater movement
- Reduced stress-related reproductive suppression
- Better longevity of breeding sows



7. Public perception and market access

- Improved societal acceptance of pig production
- Alignment with international welfare standards
- Better positioning for premium or export markets
- Reduced reputational risk

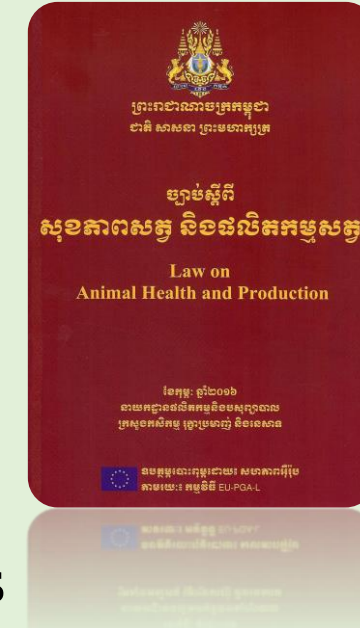




Benefits of moving to group housing for sows

8. Compliance with regulations

- Law
- Sub-degree
- Proclamation



9. Management and observation benefits

- Easier detection of normal vs abnormal behavior
- Better assessment of locomotion and social interactions
- Earlier recognition of illness or injury
- More dynamic herd management





Benefits of moving to group housing for sows

10. Ethical and professional credibility

- Demonstrates commitment to responsible production
- Supports modern welfare science principles
- Enhances professional reputation

11. Long term sustainability

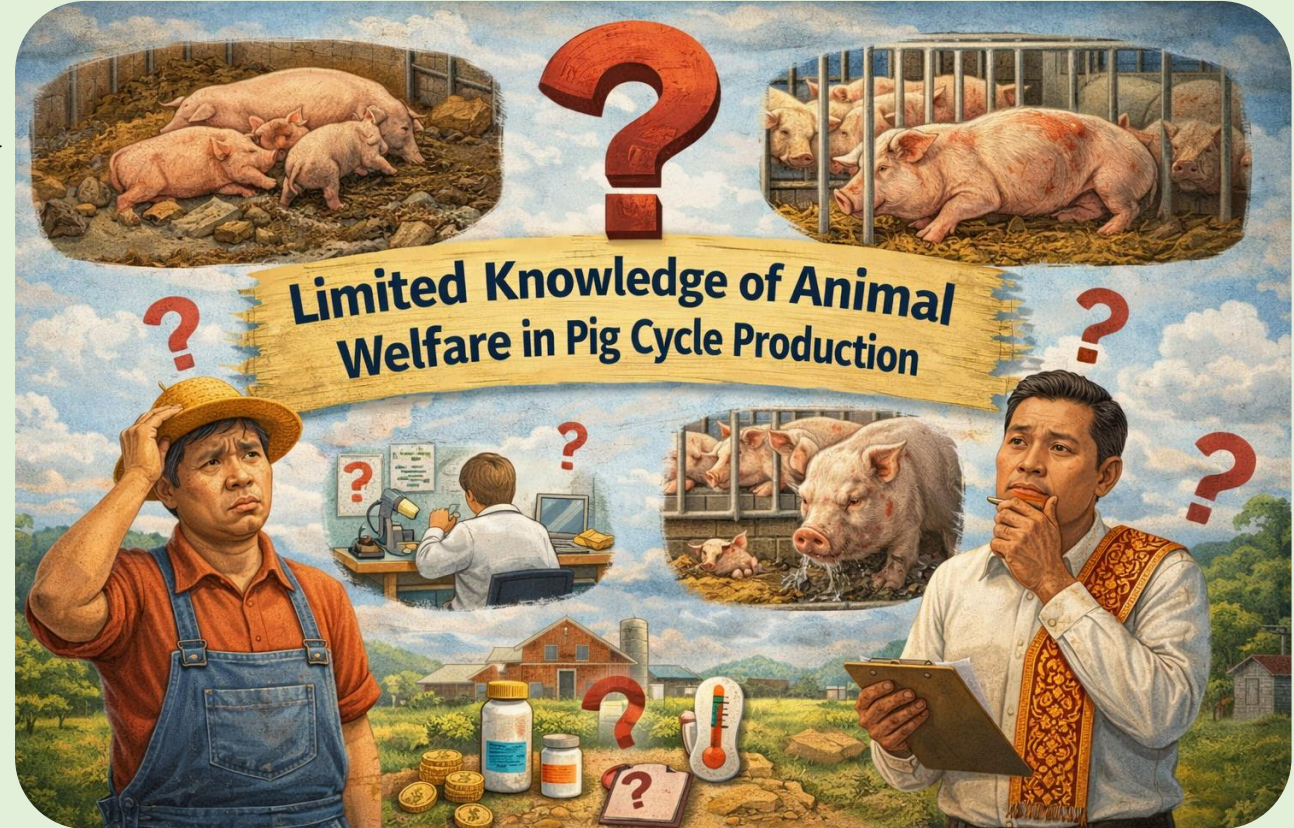
- Social sustainability (consumer acceptance)
- Ethical sustainability (reduced confinement concerns)
- Potential improvements in animal robustness





Importance of the issue to the welfare of pigs

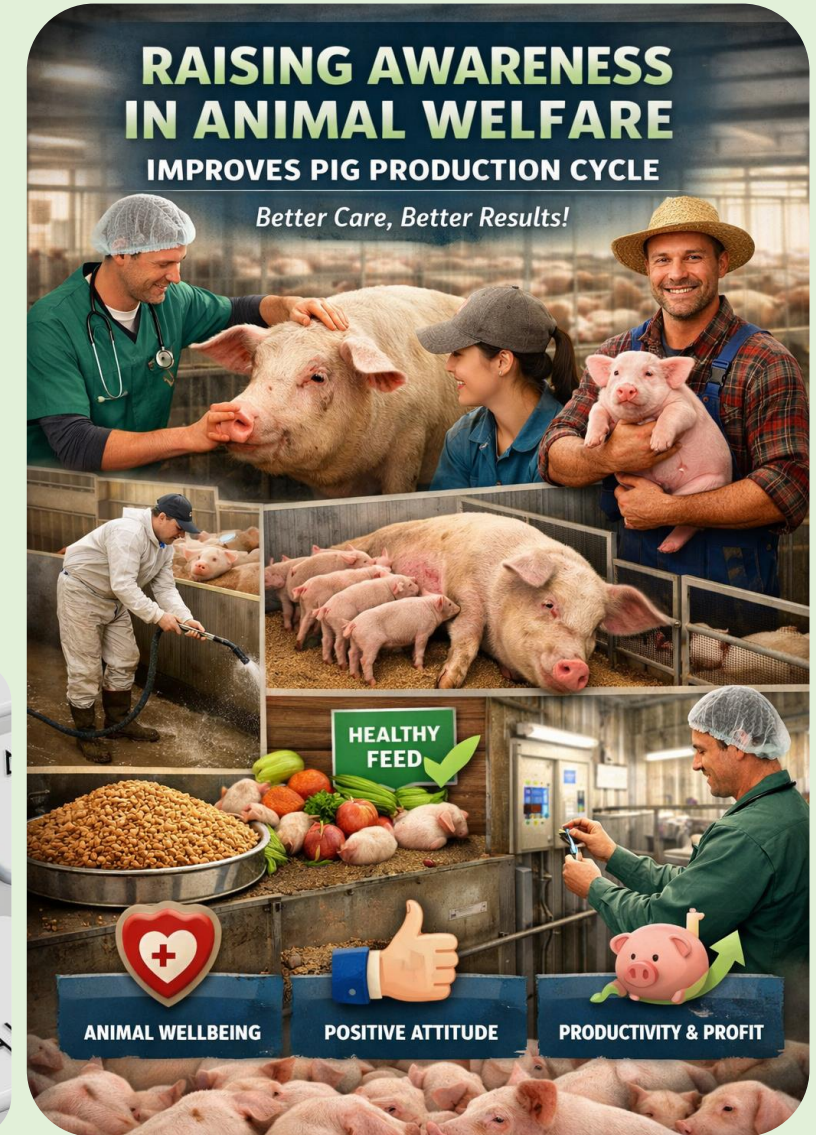
- Limited knowledge of animal welfare in pigs cycle production
- Around 45% of the total country wide pig are backyards.





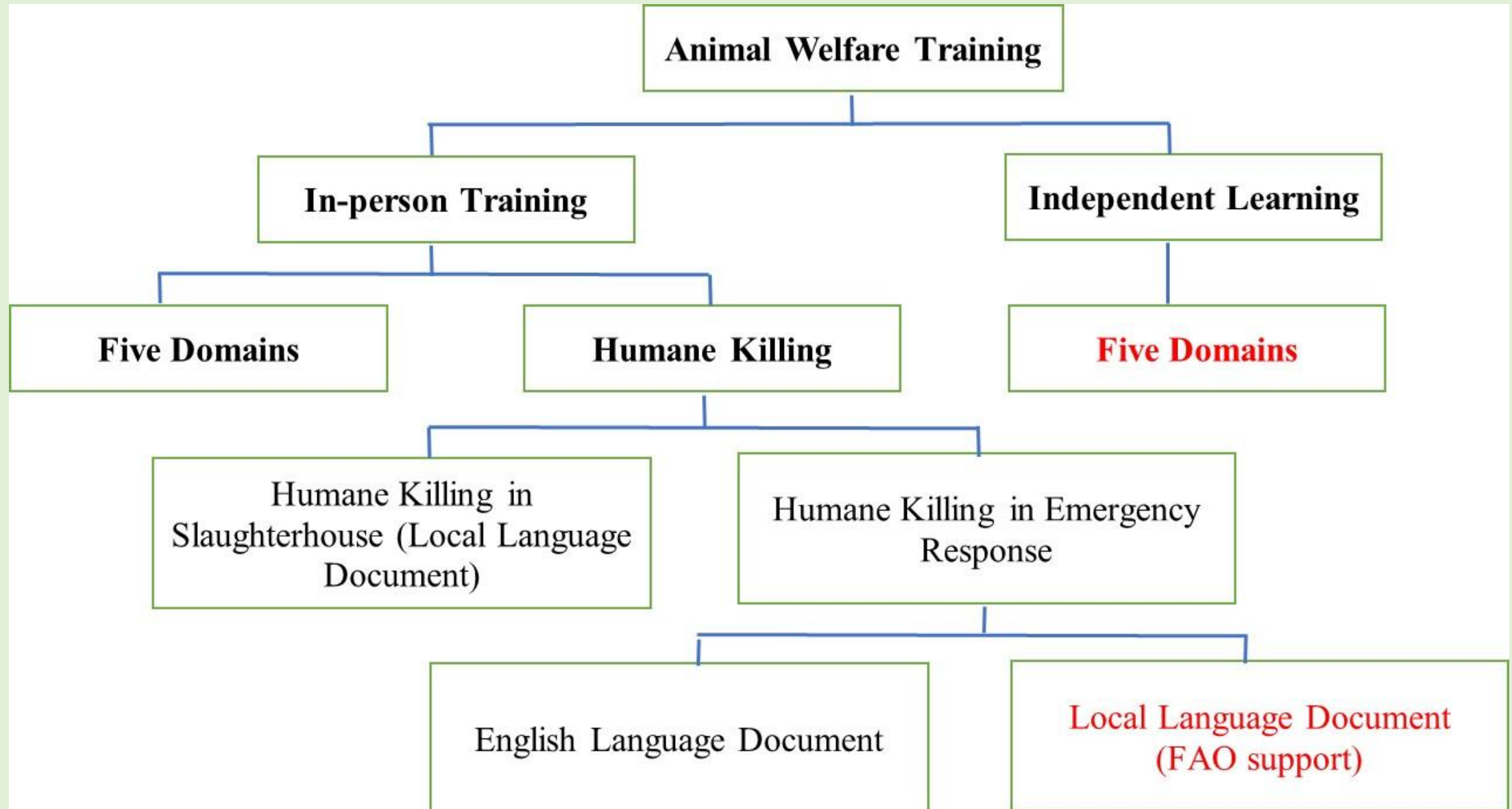
Evidence-based recommendations

- Increased awareness raising/training on animal welfare in pig production cycle among stakeholders
- Strengthen regulations on law, sub-degree and proclamation in pig production cycle.
- Translate the documents of animal welfare in pig production cycle in local language.





Overview of the completed trainings





Reflection on the trainings

In-person training (Humane Killing)

1. Local language document

Stakeholder

- Veterinary in Office of Animal Health and Production (Province Level)
- Officers in Office of Agriculture Natural Resource and Environment (District level)

Good Training Practices Applied

- Structured, competency-based curriculum aligned with ASF control guidelines
- Hands-on simulation of reporting and outbreak investigation
- Biosecurity drills (disinfectant preparation, zoning)
- SOP distribution
- Pre- and post-training assessments



Agenda of African Swine Fever from 09-10 October 2025

Time	Activities	Responsibility
09 October 2025		
8:00-8:30	Registration	Organizer
8:30-9:00	Opening Ceremony	-Welcome speech by OAHP, Kampongthom Province - Opening remarks by Mr. NOU Yuteka Deputy Director General of GDAH
9:00-9:15	Group photo and Coffee break	Organizer
9:15-9:45	Pre-test	Organizer
9:45-11:00	ASF Situation in Cambodia	Mr. CHHIM Vutha
11:00-12:00	Recognition of ASF clinical signs	Mr. UNG Bunsong
12:00-13:30	Lunch	Organizer
13:30-14:40	Laboratory diagnostics	Mrs. SENG Bunnary
14:40-15:50	Identifying risk pathways and populations at risk	Mr. UNG Bunsong
15:50-16:05	Coffee break	Organizer
16:05-17:00	How to implement proper animal movement restriction and containment measures	Mrs. KUY Khechsim
10 October 2025		
8:30-9:50	How to implement 3D (depopulation, disposal, decontamination) activities	Mr. UNG Bunsong
9:50-10:10	Coffee break	Organizer
10:10-11:15	Ensuring best practices in wild boar risk management for ASF detection and control measures	Mr. UNG Bunsong



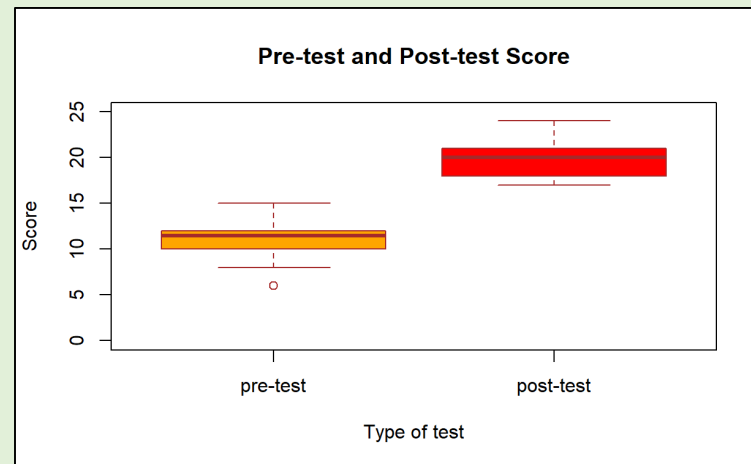
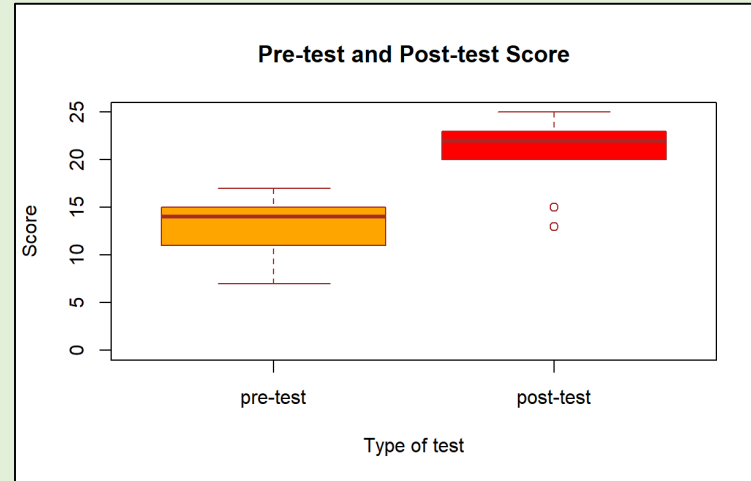
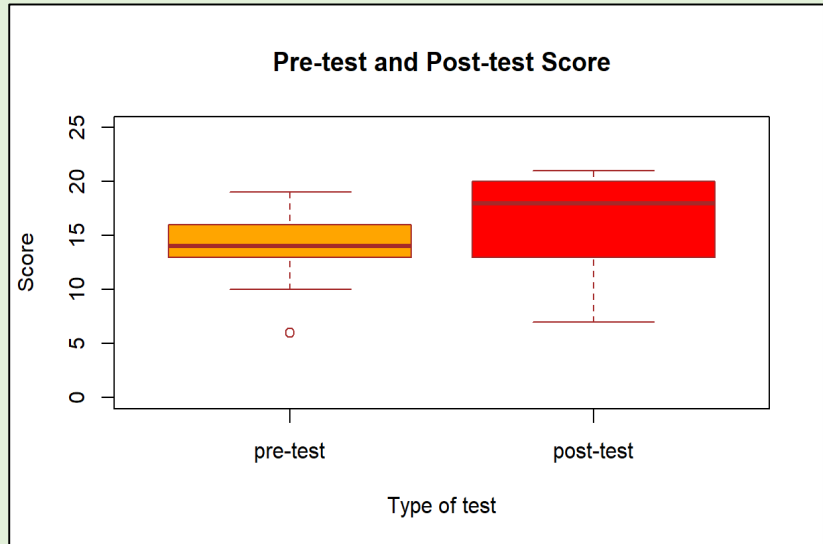
Reflection on the trainings

In-person training (Humane Killing)

1. Local language document

Quantifiable Outcomes

-Knowledge scores increased





Reflection on the trainings

In-person training (Humane Killing)

1. Local language document

Strengths

Better Understanding

- Trainers can explain difficult concepts clearly
- Participants can ask questions immediately
- Reduces misunderstanding about humane procedures.

Improved Animal Welfare

- Ensures correct technique is applied
- Reduces animal suffering
- Promotes compliance with welfare standards





Reflection on the trainings

In-person training (Humane Killing)

1. Local language document

Strengths

Stronger Engagement

- Interactive discussion
- Group learning builds confidence
- Encourages sharing of local experiences

Easy to Understand

- Written in local language (e.g., Khmer)
- Reduces language barriers





Reflection on the trainings

In-person training (Humane Killing)

1. Local language document

Strengths

Flexible Learning

- Useful as ongoing reference guide
- Participants can read anytime

Wide Distribution

- Can reach remote communities.

Measurable

- Can measure the performance of the participants





Reflection on the trainings

In-person training (Humane Killing)

1. Local language document

Weakness

Higher Cost

- Travel expenses
- Venue and materials
- Trainer fees

No Practical Demonstration in Humane Killing

- No skill practice in humane killing
- Lower skill retention
- Limited behavior change
- Harder to assess competency





Reflection on the trainings

Independent learning (5 domains)

1. English language document

Stakeholder

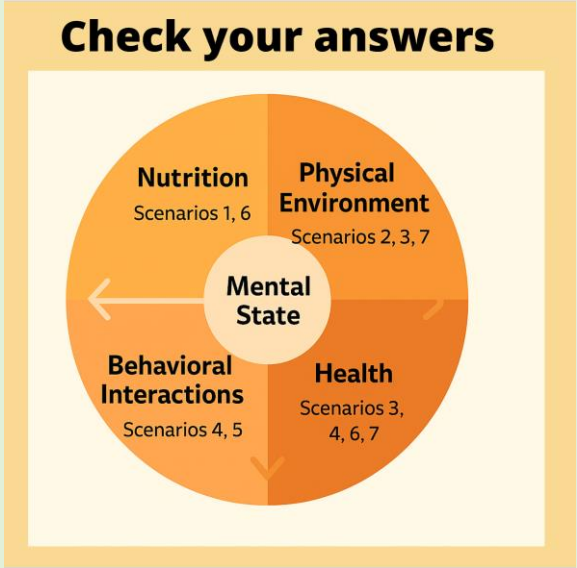
- Cambodian Applied Veterinary Epidemiology trainees (CAVETiers)

Good Training Practices Applied

- Structured and logical content flow
- Use of realistic welfare scenarios
- Participant engagement
- Focus on practical relevance
- Self assessment quizzes on the five domains

What type of domain that spot the pig welfare problem.

Scenario 1: Feeders are blocked and several pigs look thinner than the rest.





Reflection on the trainings

Independent learning (5 domains)

1. English language document

Quantifiable Outcomes

- Improved understanding of Five Domains
- Accurate identification of welfare issues in exercises
- Increased participant confidence

Strengths

- Low cost
- Flexible learning schedule
- Encourages self-discipline and responsibility
- Allows personalized learning strategies
- Promotes deeper understanding through self-study
- Supports lifelong learning skills





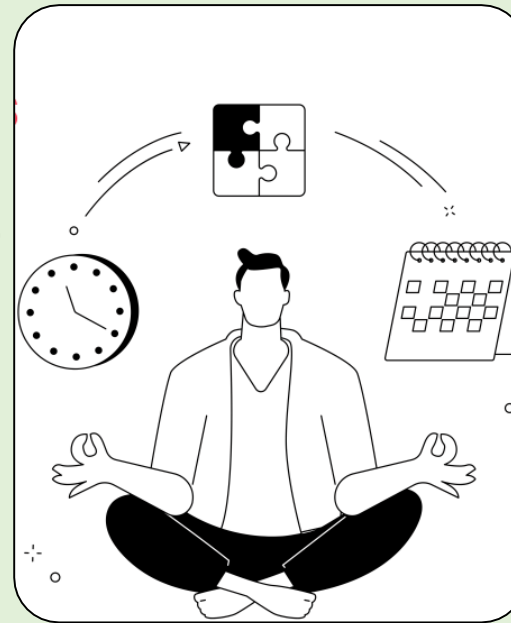
Reflection on the trainings

Independent learning (5 domains)

1. English language document

Weakness

- Requires strong self-discipline and motivation
- Risk of procrastination or inconsistent progress
- Limited immediate feedback or guidance
- Misinterpretation of complex concepts possible
- Can feel isolating without peer interaction
- Language barrier





Plans on future trainings

-If the budget is available, in-person training on animal welfare will be conducted as a standalone activity rather than under the umbrella of another training.





Summary

- Group housing offers significant welfare benefits across the Five Domains
- Reduced confinement improves sow comfort, health, behavior, and mental state
- Productivity can be maintained while enhancing animal welfare
- Welfare-friendly systems support public perception and market opportunities
- Capacity building and stakeholder awareness remain critical challenges
- Independent learning is valuable but has limitations (feedback & language)
- Dedicated in-person animal welfare training is recommended when budget allows
- Strengthening regulations and local language resources is essential.



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