



ENHANCING CAPACITY FOR CATTLE FARMERS & TECHNICAL STAFFS IN REDUCING GREENHOUSE GAS EMISSIONS IN VIETNAM LIVESTOCK'S PRODUCTION

Nguyen Thi Lien Huong, PhD

National Agricultural Extension Center (NAEC)
Ministry of Agriculture and Rural Development (MARD)

CONTENTS

- ❖ Introduction of the cattle production in Viet Nam
- ❖ The Enhancing Capacity for Cattle farmers and technical staffs in Reducing GHS emission
- ❖ Conclusions and Suggestions

INTRODUCING THE CATTLE PRODUCTION IN VIET NAM

Number of cattle: 6,325,627

Number of Dairy cattle: 331,368

Smallholder dairy farms: 41,09%.

(General Statistics Office, January 2021)

&

ROLE OF ENHANCING CAPACITY FOR CATTLE FARMERS AND TECHNICAL STAFFS IN REDUCING GHG EMISSION

In Vietnam, cattle raising is a big cause of greenhouse gas emissions.

Knowledge about reducing GHG emissions in livestock and its technique are still limited.

→ It is important to raise their awareness through the following activities:

- Training (Training from experts/trainers, ToT)
- Information Dissemination.

OBJECTIVES

Disseminate information and technique about GHG reduction through training to government extension agents, technical institutes, university students, small - mediumholder dairy farms.

Improve analytics of inputs to feed ration formulation software for the dairy industry for different ecological areas and farm scales.

Analyze the opportunity to reduce greenhouse gas emission from Vietnamese cattle production

TRAINING (ToT)

Participants:

- Cattle farmers (from 12 provinces have a large number of cattle)
- Technical staffs:
 - **National level:** From Department of Livestock Production (DLP), National Center for Agriculture Extension (NAEC) & Local agricultural extension workers - from the provinces having a big number of cattle, who directly works with farmers so that they can provide technical guidance and supervise the actual practice.
 - **Research Institutes/Units:** National Institute for Animal Science (NIAS), Vietnam National University of Agriculture (VNUA) – to work together for further development of the software (customizing with local feed ingredients,...)
 - **Companies:** TH truemilk, Vinamilk, De Heus feed company, Phu Dong, Bavi, Dalat, Mocchau Dairy farm – to encourage them using the software into to their existing feed formula.



TRAINERS

- Trainers are experts having doctorate degrees, professional qualifications in the field of animal husbandry and veterinary, working at animal husbandry establishments, university, research institutes.
- They also have pedagogical skills and experience in production practice, enthusiastically advising delegates on nutritional knowledge.



TRAINING

Training Content:

Climate Change and Global Warming

Livestock Production and GHG Emissions

Managing GHG Emissions from Livestock – enteric methane mitigation practices

Feed and Feeding Management

Manure Management Practices

Nutrition and feed for cattle.

Animal husbandry techniques to reduce greenhouse gas emissions.

Guiding the use of PC- cattle, PC-Dairy Feed Ration Formulation Software.

Visiting cow raising model; practice collecting raw materials and formulating ration of cattle and dairy feed to reduce greenhouse gas emissions.

TRAINING METHOD

- Grouping participants and providing them PC with software installed to practice directly, along with the training session.
- Flexible application of methods, combining many types at the same time centering around the perceiving of participants:
 - Presentations
 - 2-way information exchange
 - Discussion
- Combining with field trip to apply the training knowledge to real-life practice
- Encouraging participants giving feedbacks on training content, concerns and difficulties in the reality of animal production in their locality.



TRAINING

Results:

- The technical training workshops are beneficial and highly appreciated by participants.
- Most of the participants:
 - Gained basic knowledge about Climate Change & Global Warming, nutrition and animal feed;
 - Be able to use PC- cattle, PC-Dairy Feed Ration Formulation Software and apply it to their production for GHG Emissions reduction;
 - Know basic techniques for handling animal waste (bio-composting and biogas)
- The information collected from expert and participants' suggestion was used to updated the actual feed ingredients in Vietnam by region, region, and season.



INFORMATION DISSEMINATION

- Propaganda on VTV2, VTC16, website of NAEC, newspapers about techniques to reduce GHG emissions.
- Advertisement on USB given to participants.
- Leaflets: Techniques of Cattle/Dairy Production to Reduce Greenhouse Gas Emissions

CONCLUSION & SUGGESTIONS



To raise awareness about livestock production to reduce GHG emissions in farmers and technicians, offline training, practicing and information dissemination are still the effective ways; practicing (on PC and during field trip) is a key factor.



In Vietnam, mainly large farms use software to develop feed ration to reduce GHG emissions. Smaller breeding households mostly use available (traditional) fine feed, fermented urea and lime straws to feed the cattle, which also help reducing GHG emission.



The number of trained cattle farmers and technical staffs is still limited while it is necessary to broadly disseminate techniques => To promote the awareness and guidelines via wider media channels (integrated with forums, seminars; TV broadcast, news).



Consider the longer duration for the training workshops (suggested time: ?)



Promoting the practicing of GHG emission reduction along with financial/economic benefit gained from practicing this technique, encourage the engagement and highlight the role of participant in GHG reduction.

THANK YOU FOR YOUR ATTENTION!

