

Opportunity for Practice Change Vietnam

Improved Manure Management through increased utilization of manure and bioslurry

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Netherlands

Development

Organisation



SMART DEVELOPMENT WORKS

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About SNV

- Netherlands based non-profit, international development organisation, with >50 years of on the ground experience.
- Local presence: 1300 professionals in 38 developing countries in Africa, Asia and Latin America.
- Making markets work for the poor.
- Over 20 countries in which biogas and bioslurry activities have been implemented, > 700.000 biogas digesters installed



Biogas programme in Vietnam

- SNV and Ministry of Agricultural and Rural Development Vietnam
- > 150.000 biogas plants
- > 750.000 beneficiaries
- 750.000 t CO₂ eq. reduced/year
- >1600 enterprises
- >1000 govt. technicians



Benefits of domestic biogas



Bioslurry is a potent organic fertilizer

Yet despite training efforts only around 40% effectively uses the bioslurry

Training needs assessment



100 people interviewed about their training needs and barriers to slurry application:

- Lack of knowledge on application
- Time intensive
- Fields are far away
- No crops
- Difficulty of transportation
- Lack of storage tank
- Fear of application
- High dilution ratio (Vietnam specific)
- TNA document:

<https://www.dropbox.com/s/mg20uwyf0mx28in/Final%20Report%20%206%20Evaluation%20on%20FYM%20and%20bioslurry%20management%20%20and%20Need%20for%20training%2C20160112.pdf?dl=0>

Training of Trainers

- Developed based on TNA
- Extensive training document, available in English here:
<https://www.dropbox.com/s/5s0op4qxjmqun9/Final%20version%20TOT%20training%20material%20document%20in%20English.pdf?dl=0>
- 93 government technicians from 5 provinces received training



Field based schooling



4743
farmers
trained

End line study ToT

- 10 in depth interviews with trainers
- 90% rated knowledge of trainer as very good
- 90% rated interaction as very good
- 80% rated information provided as being of high quality



Nguyen Van Long: "I have attended many ToT trainings before but this time I really learned how to give optimal field based schooling"



Tran Truong Tri: "Before I was unaware of the benefits of bioslurry. Now I understand the benefits of bioslurry and the environmental risk of discharging"

Field based schooling

- 14 in depth interviews with farmers
- Training met expectation of 93% of farmers
- All households started to apply the new composting method
- Average score given for the field based schooling 8,9
- Average satisfaction about the trainer 9.4



Tran Thi Minh: "I advise you to encourage more people to come to the training to learn about this topic. The topic is important and local pollution is terrible. I hope you can raise this to the provincial authorities for us"

Ngo Van Do: "With organic fertilizer my corn grows much bigger. One corncob weighs between 700 and 800 grams now"



Mission accomplished?

- Overachieved compared to the project proposal
- Additional unplanned end-line study in same budget
- Very positive evaluation by



- Effectiveness of one off training
- >145.000 households did not receive this training

What is needed to fully accomplish this mission

- Long term intervention
- Creation of demo plots in each district for farmers to show the benefits of bioslurry and composting of fresh manure
- Train the trainers in 58 remaining provinces
- Follow up training for farmers
- Convince the national government to more strictly monitor discharge of bioslurry and fresh manure
- Funding



Follow up projects – USAID Vietnam Forest Deltas



ADB Gender and climate change



Quang Binh
Province

Training for women
to use bioslurry to
increase their
income

Former biogas mason
Joined ToT training
40.000 USD
investment
Now collects bioslurry
to dry and sell as
organic fertilizer



Private sector development



Methane as entry point

1 biogas plant reduces 5
tonnes CO₂
equivalent/year
750.000 tonnes/year

Training on bioslurry
usage essential to ensure
high utilization rate