



Travel report from Vietnam, November 20 - 27, 2015

Background;

We are now ending the first year of our second 3-year project with An Giang in Vietnam. In October this year professor Jan Dahl and professor emeritus Björn Kjellström together with associative professor Van Ha from HUMRE, in Ho Chi Minh City conducted a one week's training course in An Giang for officials, members from the Center of excellence team and rice-mill owners.

The training was focusing on utilization of rice husk for production of energy. This training was planned to be in Sweden but was conducted in Vietnam in order to let more people participate in the training. Now there were 17 participants instead of 5/6. ICLD paid for the Swedish experts but as it was conducted in Vietnam not for the Vietnamese participants. According to an agreement between An Giang and Piteå, Piteå paid for 80% and An Giang for 20% of the costs for the training.



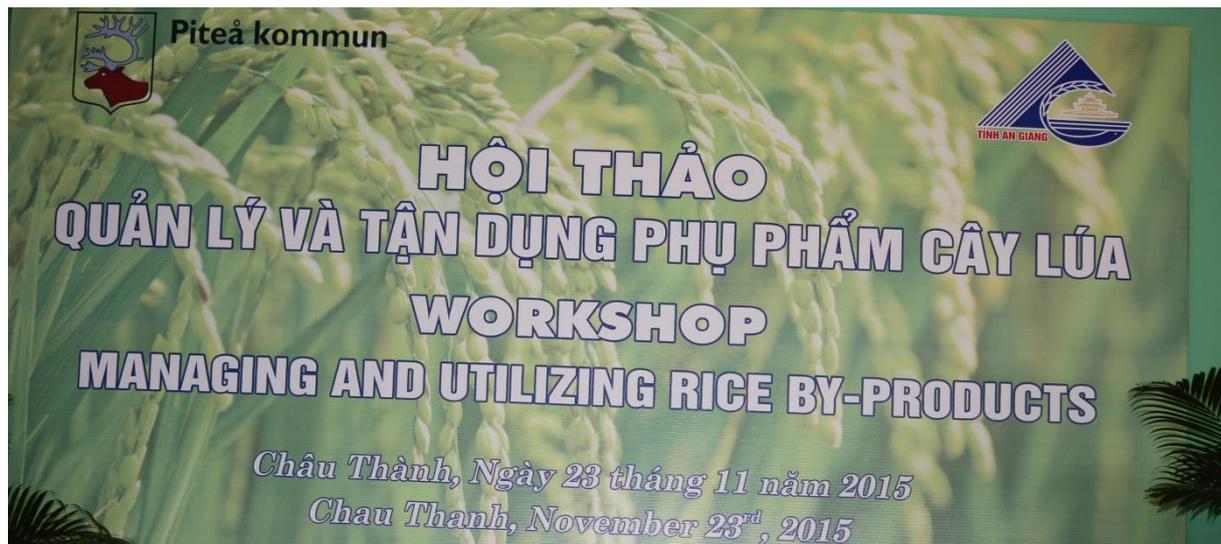
The objectives for the project is to increase awareness and know how on potential biomass energy achieved from the project, to produce an activity plan and implementation of action plan through three demonstration programs. Chau Thanh, a district not too far from the provincial capital Long Xuyen has been involved in the project from an early stage and even this project will to a great extend be the base for this ongoing project.

Mr. Phan Van Curong, chairman of People's Committee Chau Thanh

This time it was time for the project group to meet and work together. Bo Wiberg- with a special focus on the demonstration projects, Maria Widman- special focus on the action plan together with Åsa Wikman, who has joined the project again and Gerd Sävenstedt project leader. This time we went by Thai Air via Bangkok, which is the most convenient route, even if it takes about 18 hours from home to Ho Chi Minh City and then 5 hours by car to the provincial capital Long Xuyen. Vietnam is 6 hours ahead of us in time, so in order to function we normally sleep one night in Ho Chi Minh City before we get on the road for the last part.

Professor Van Ha who lives in Ho Chi Minh City joined us in order to participate in An Giang for two days.

Monday



This day they had invited farmers and rice mill owners for a workshop “Managing and utilization rice by-products”. Around 80 farmers, 20 rice mill owners and officials participated. Even TV and a newspaper were there to follow the workshop and in TV they aired quite a long feature and the headline in the newspaper was “Rice waste the gold of the future”.



Mr Hiep, PPC

Kim Vo and Mrs Xuan PMU

Television

Mr. Hiep vice chairman of the provincial People’s Committee had an opening speech where he introduced the day and said that just a few years back the bi-products from rice farming was just waste but today they want to stress and introduce the possibilities on a broader scale to use rice straw for animal feeding, back to the soil as fertilizers and a base for growing mushrooms. The husk which 5 years back was dumped into the river is now looked upon as a resource which the farmers are paid for (800.000/ton = ca 320 s.kr). In An Giang they look forward to when they have power plants run on rice husk.

Mrs. Xuan, the local project leader makes a presentation of the context for the new project and of the new project. I recognize some of the faces among those who participate and I assume that many of them also were involved in the previous project which was carried out here in Chau Thanh district.



When these three project years have passed there should be an action plan for effective management and utilization of rice bio mass for energy production in a climate change context for An Giang province up to 2013. This is also approved by People’s committee in the Province by decision no. 241/QD-UBND taken on February 9, 2015.

The decision taken says:

- Improving awareness on benefits of rice residues and role of power plants; training and capacity building for governmental management on biomass power generation,
- Development of Eco-industrial rice zone and encouraging enterprises to develop green products from rice- residues,
- Linkage of financial investors, banks with enterprises and farmers in financial supporting for waste-energy projects and green products. National and inter-national financial support for power generation with rice husk and for green products
- Scientific research on supportive policies on biomass energy development and other green products from rice- residues; research on power generation technologies, bio-fuel, silica, filter materials, insulation materials, fertilizers etc,
- International cooperation for capacity building on agricultural residues management, and for application of international advanced technology into waste to energy in An Giang.

The activity plan for the on- going An Giang - Piteå project was approved by the PPC in September this year but already in March we had a steering group meetings both in An Giang and in Piteå in May.

What has been done so far?

- Target groups have been established in Chau Thanh but also extended to Cho Mot, Thopi Son and Chau Phu districts,
- Participants in project management training conducted by and in Växjö,
- In Chau Thanh, linked to the Steering group meeting was a community seminar on how to use bio mass conducted in Chau Thanh,
- There is a plan for communication, the website has been improved and a brochure “Utilizing rice waste” has been produced,
- A kick-off workshop, integrated with kick-up workshop with Växjö,
- Training seminar regarding implementation of activity plan,
- Preparation of Actionplan
- Rice husk to energy training conducted by two Swedish and one Vietnamese professor
And now the ongoing workshop in Chau Tanh

Demonstration programs



One part in the ongoing cooperation between Piteå and An Giang is the demonstration programs. In the plan should the demonstration programs be prepared this year and carried out during 2016 and 2017. Mrs. Huynh, vice director of Science and Technology department presented the concept.

- Rice straw collection– for selling for mushroom cultivation and composting
- Rice straw composing – to process to feed cows
- Mushroom cultivation – potting material for cultivation.

Objective for these demonstration programs is awareness rising by enhance awareness on the value chain of rice, see how it can be profited from and improve capacity of management staff in utilizing agricultural waste.

In the demonstration program it is said that 50% should be participation from women.

For each demonstration they have a technical team, consisting of 5 people who will help and assist the farmers.

Rice Husk to Energy Course



Assoc. professor Van Ha made a presentation of the training course which was conducted during week 44 by Professor Jan Dahl, LTU, and Professor emeritus Björn Kjellström and herself. 17 officials from different departments, University and rice mill owners participated.

The content of the training include;

- Presentation of case studies,
 - Basics of thermodynamics,
 - Elementary theory of combustion and gasification
 - Mass and energy balances for rice-mills
 - Power plant options
- Characteristics of gasifier/engine power plants
 - Integration of power plan with rice mills
 - Regulations and incentives for on-site generation
 - Cash flow analysis and estimation of financial indicators and
 - Environmental aspects and hazards.
 - During these days they also made a study trip to a power plant in Thu Tan district and to a rice mill in Chau Phu district.

It was a very engaged group where all fully participated and according to the evaluation both students and teachers were very satisfied with the training and will look for means to make a follow up training course.

Bo Wiberg, NLL introduced and shared knowledge on technologies used in a Swedish context when it came to bailing but also showed video clips from Vietnam. The video clips shown really increased the interest and the discussion was intense and loud during the time they were shown.

Professor Ha also acted as the moderator for the discussion that followed. There was an interest among the farmers. That was shown in the questions raised and that they all stayed until the end of the workshop. People often leave when there is a tea break- but not this time. There were many questions related to Mr. Wibergs area so he “ghost- spoke” to professor Ha who could talk in Vietnamese to the farmers.

A number of the farmers expressed that they were not interested in owning the machines, as they were too expensive so one challenge is to find means for the farmers to have access to the machines without owning them.

I had the honor to share the final session with Mr. Hiep to have a closing speech where I focused on what we learn from each and together and challenges we are facing in an international project.

Field-trip



Mushrooms

After lunch we went on a fieldtrip. We started to visit a farmer where they had been growing mushrooms for many years. We met a woman who showed us her indoor mushroom farm.

The cost to build one was around 1 000 US dollar but according to her it was a good investment with profit. The family had been growing mushroom on paddy straws for many years and they were now building a second indoor plant. According to her it was quite simple.

The paddies have to soak in clear water and then being drained of the excess water. A bed and paddy piles had to be prepared. The temperature for incubation of the spores is between 32-34 degrees C and app. 21 days later they could harvest the mushrooms. All in all they today calculated a production time of 2 months. For each pile they can harvest around 1 kg. It was sold on the local market, and the market was peaking linked to Buddhism celebrations.



The construction of the plant was quite simple, like a tent. They normally harvested 4 times a year but to my understanding it is possible to increase it. I suppose that it is important with cleanness, but here there was only the nature as floor and I suppose that if they will do it more commercial there are areas which need to be developed.

If I understood her right there was better profit from the Mushroom farming then from rice.

Paddy as cow feeding



Bo Wiberg and their agricultural expert Mr. Tuan discuss cow feeding.



We also went to a farmer who raised cattle for meat production and he used paddies to feed the cows. It had been a long day and all of us who had been away had supper together on a nearby restaurant. Good food but noisy.

Two days of meetings



This fieldtrip was followed by two days of meetings. Present at the first day was professor Ha, Mr. Tuan, representatives from the monitoring team, students, officials and representatives for media and of course the Swedish team, all in all 13 Vietnamese and 4 Swedes.

As this was the first bigger meeting for the Action plan I think it had been better if the core group had had a meeting first as I am afraid that could be confusing for those who never had participated before.

A report "evaluation on economic, social and environmental impacts of current three models using straws in An Giang" was presented by Ms Hien Huyen Thi Ngoc. As some of the participants were working in this area it was a captured audience of could give constructive feedback and the report was further revised. The report was financed by the ICLD project.



Template for action plan

The most important thing was to agree on the template for the action plan. In the process there have been contacts between An Giang and Maria Widman regarding the template and during this day the template was further revised and hopefully it can now be used.

It was agreed on that the template should contain, objectives, specific objectives, expected results, indicators, target groups, follow up on action plan -results, action plan 2016-2020, deadline for action plan, responsible for implementing action plan, resources, risks and a communication plan for each objective.

There are 4 specific objectives

- Increase renewable energy production
- Increase the participation and interest of the whole society
- Reduce GHG
- Contribute to the economic growth in a sustainable way for rice communities in Chau Thanh had a working session when we divided into 4 groups and each group was focusing on one specific, and will be presented for the leaders. Some work remains to do before it can be presented.

What remains to do 2015?

The core group had a meeting in the late afternoon where we looked at the project plan and what we said that we should have done during this first year and what remains to do.

- More work with the target groups
- 1 stakeholder meeting
- Organize for training seminar

We also talked a bit of the activities for the next year and proposed that the next steering group meeting in Piteå would be in August during the Nolia week, where they want to have focus on An Giang during one day at the fair. I have talked to the information department in Piteå about it and they are positive.

Demonstration programs

The following day we had a meeting regarding the demonstration programs, growing mushrooms, bailing and cow feeding

Today roughly 20 - 30 % of the rice straws is used, for covering floors in livestock facilities, cattle feeding and mushroom cultivation. The rest is often burnt. It is a good source for feeding animals but there are challenges; to find the best methods for composting rice straws and to store it. One of the three demonstration programs will focus on this area.



We discussed the possibilities of Mr. Wiberg coming to An Giang in February and working with Mr. Tuan for a couple of days and having a 2-days workshop with the technical teams for the demonstration programs with a focus on the process of running these kind of projects. Mrs. Xuan would both check with Mr. Tuan and explore the possibilities for carrying out such a workshop. I am waiting for a response.

According to the program we should spend Thursday for the information plan but we added this part on late Wednesday afternoon when also Mr. Giang participated. They have produced a brochure and involved the public media quite a lot. Besides that they have worked a lot with the webpage. They have plans to make small features for television and buy airtime for that. After coming home I contacted ICLD and asked for a transfer of the information money for this year to the next. It has been approved by ICLD.

As always there was also time for meeting outside the meeting rooms and as always we have nice time together. One of the evenings Mrs. Xuan also took us to a massage studio run by blind people. It was an exciting experience.



Mrs. Huyen, part of the SC



her husband



and Ms. Kim Vo coordinator



Åsa Wikman



Mrs. Xuan –Project leader



Maria Widman



Mr Tuan



Bo Wiberg