



**Reserapport 2017**

**Vietnam February 24- March 3**

Gerd Sävenstedt

Context;

We have just started the third and last year of the second project with the An Giang province in the Mekong Delta in the south east part of Vietnam.

The start of our cooperation was in 2010 when a delegation from An Giang Province was invited by Swedish Energy Agency, SEA to a conference in Sweden where among others Solander Science Park was invited to present what was going on in Piteå in the area of renewable energy. Among other things the gasification project which MEWA was carrying out in Hortlax drew the attention and interest to Piteå. The dream in An Giang was and is to use rice husk as we use residues from the forest to produce electricity on a small scale.

ICLD, International Center for Local Democracy, a SIDA financed agency encouraged Piteå to make an application for a 1-year pre-study in order to see if there was an area linked to sustainable development where the two could meet and work together.

New Year's Day 2011 a delegation from Piteå visited An Giang and later on a delegation from An Giang visited Piteå, an application was submitted and granted for a 3-year project, From Rice waste to Energy. Focus for an ICLD project is on developing Local Democracy and contribute to reduction of poverty. In this case the development of local democracy was by involving the target groups and among them rice farmers and encourage women to participate. One short term objective was to contribute to an increased awareness' regarding climate change, sustainability and possibilities with turning rice waste into energy.

A strategy plan was approved by PPC, People's committee, dated 2015-09-02, 241/QD-UBND. But what was missing was an activity plan for how to make this strategy plan to be real and contribute to the transformation into a green province. A new application was submitted and granted for the years 2015-2017, where the objective is to produce an activity plan for the time until 2030. In the project 3 demonstration projects are also included with an aim of showing the rice farmers how rice waste, mainly straw can be used instead of burning it. In these demonstration projects there should be 20 participants in each, whereof 50 % should be women.

From the Swedish side we have besides the Municipal participants', partners from LTU, Luleå Technical University and NLL, Norrbotten's County Council. This trip was mainly a meeting between the steering group members and in this participate Peter Roslund S, chairman of the Steering committee, Jan Dahl professor at LTU, Brith Fält V, chairman of the Community planning committee, and Gerd Sävenstedt, project leader.





*Brith Fäldt together with a H'Mong woman in the mountain area. Here they have developed an eco- friendly tourism.*

## **Vietnam**

You can see with your eyes that there is an economic growth in Vietnam. The economic growth is actually around 6, 7 %; new buildings, new businesses and foreign investors and companies who have moved their production from China to Vietnam as the salary level in Vietnam is lower compared to China. In Ho Chi Minh, the biggest city they have started to build a tube in the central part of the city. In certain areas there are huge investments in the tourist area and in these areas you see big billboards with names of foreign companies.

In the 80-ties 57 % of the population lived in poverty and according to UNDP today it is 10,7 %. In An Giang 70 % of the poor people are among the small rice farmers. The population in July 2016 was 94, 4 million and the population growth is 1 %.

Since 2014 there is no bi-lateral aid (SIDA) between Sweden and Vietnam but ICLD projects are still going on as there is a focus on development of Local Democracy and poverty reduction. In 2015 Sweden was importing goods from Vietnam for 8 billion SEK.

During the six years of cooperation we have been here on a regular basis we notice increased traffic, more cars, increased prizes and increased knowledge in English. What we also can see is the entrepreneurship, which I think has been there during centuries and there is a strong commitment to succeed. We can also see signs of how they use knowledge and inspiration they have got abroad,

when they for instance have been in Sweden and made a Vietnamese version of what they have seen.

To go by car from Ho Chi Minh City to Long Xuyen is like being in a movie for 6 hours. 200 km takes 6 hours, if you include a break on the way. One small town is often merged into another and there is not much space between the houses in the villages and towns along the way. Behind the houses, and now and then between villages there are rice fields and here and there are small private graveyards in the middle of the fields.



*A common sights along the way is family graves in the middle of the rice field*

You are crossing a number of small rivers and many of the houses along the rivers are made of patched plate with the bathroom in the end and I suspect everything from the toilets goes down into the river. Cars and small motor bikes on the roads, and there is an art of transportation; animals, building materials, doors, mattresses, piles of fruits and once we even saw transportation of pigs at a bike.

### **The trip**

Now we have got used to become millionaires when we are in Vietnam, 100 \$ is around 2,300 000 and to make it easy for us we calculate 100 000 to 50 SEK.

Sunday lunch we were picked up at our hotel in HCMC. Mrs. Xuan- the project leader and Mrs. Ha, member of the steering committee who lives in HCMC joined us in the small bus. It is good to have some time in the bus to talk and as we have had one night's sleep we are ready.

I had started the journey a couple of days before the others and been to Borås and met with them and Växjö for a couple of days, as they also have ICLD projects in Vietnam. Växjö actually has their project in the same province and partly with the same people. From that meeting we proposed that the delegation from Växjö and Piteå would go together for the final meeting in November.

Not far from Long Xuyen there is a ferry over the Mekong River. Last year they started to build a bridge over the river and hopefully it will be inaugurated 2018.

Internal we had a meeting to discuss how we are looking at the future, in which areas we can see a cooperation which will contribute to development in An Giang and also benefit Piteå. There is a will to continue the cooperation and in areas where a cooperation would benefit both parties.

In Piteå it is said that a new project will be under the Committee of community planning.

### **Monday morning;**



We started the morning with a meeting at the IT Center. Mr. Nguyen Huu Truc, called Mr. Cameraman has produced 3 video clips regarding the demonstration programs which have been aired on TV. These are also available on You Tube. An Giang Sweden : Mô hình Máy cuốn rơm | Straw collecting Model / Project Cameraman. The project is also presented on the <http://angiang-sweden.com/index.php/en/news/item/69-an-giang-straw-winders-improving-value-of-rice>.

Besides that 3 video clips had been broadcasted and were also published on You Tube. An Giang Sweden : Mô hình Máy cuốn rơm | Straw collecting Model / Project Cameraman

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This was kind of a pre-meeting before the steering group meeting where we had time to discuss issues later on brought up in the steering group meeting in the afternoon.

### **Towards a green province**

The target for the province is to decrease the use of fertilizers with 30% before 20130. This has been a successful for and already 2016 it is decreased with 48 % due to the awareness building activities which have been carried out in the province and they say that our projects have contributed to this.

Still the target is to build a pilot plant but there are problems to face; funding, low prices on electricity and policies for use of the grid.

There are ongoing discussions on building a Pilot plant in Cambodia with Swedish money involved as Cambodia still is a country where SIDA is carrying out project. These plans are still very uncertain.

We talked a lot about the value chain of rice where the production of silica is quite essential. When we started the project 6 years ago the big amount of rice ash was looked upon as a problem, today the ash is valuable resource as you can use it for production of insulation but also production of silica. High quality silica is used in many industry areas. Silica which is a little bit less clean can be used in tire and rubber industry. To combine silica production with a small power plan is an essential issue for the future.

## Steering group meeting



We are starting the morning with the steering group meeting. Even if the formal Steering group consists of 4 from each country there are always many more from the Vietnamese side- we have got used to it now.

We got a presentation about the progress of the project, where most of the activities that were planned for the second year also were carried out and that there were reasons behind the few things that were postponed.

The main task is an action plan named "Effective management and utilization of rice biomass for energy production in a climate change context". An activity plan until 2030 which will become a political document and contribute to turn An Giang into a green province. The aim is to build effective and sustainable rice production in the community, turning waste into valuable energy and environmental protection in the context of climate change. This plan also expresses the will to get the whole Society to participate in an active way.

They can see the effects of the climate changes in the country; damaging colds occur in the mountains provinces, saline intrusion in the Mekong Delta and drought in the provinces of South east. In An Giang, where most people are rice- farmers, it is a reality and they know that a lot of things need to be done. This activity plan is a tool which can be powerful as it takes a broad perspective, a budget is linked to the activities and there is a political will in the province to do something. There is a broad participation in the work with the activity plan where different target groups are involved in the process. We met later on with different stakeholders and discussed the plan more in detail. When we met in October we worked together with the plan but of course it is their main responsibility, a responsibility which they take very serious.



*Mrs Xuan, project leader in discussion with one of the members of the committee for the Swedish- An Giang cooperation*

There is a time table for being able to fulfill the activity plan on time before the end of the project time.

- Organize 1 review meeting at district level during March –April,
- Comments from Piteå on the plan ; beginning of March
- PMU arrange a stake holder meeting
- Completion of the 2 nd draft action plan – May
- Holding meeting with leaders of involved departments to unify the content which should be implemented, funded and Presented to PPC for approval– May
- Project delegation to Piteå and adjust the content – August
- Submit the action plan to PPC for approval – August, September
- Approved plan – October, November

### **Evaluation**

A discussion on how the evaluation would be done took place. In the budget there is an amount of 20 000 sek for evaluation. It was decided that there should be one from the Vietnamese side and one from the Swedish side. Mr. Binh from An Giang University was decided to be in charge from the Vietnamese side. He also made the previous one. It is not decided yet who will be the Swedish partner but it should be decided when we get home.

Professor Ha wanted to make a bigger evaluation, more like a research report but the money set aside in the budget will not cover the costs so it has then to be financed from other sources.

### **Future cooperation**

There is a will from both sides to continue the cooperation and submit a new application to ICLD in October, last day October 15.

In Piteå the Municipality will take over the responsibility for Grans Agricultural School, where there is a plan to develop the “green business” with knowledge and development of small enterprises. This could also be a starting point for our new Swedes who settle down in the Municipality. In An Giang they are developing a Science park, inspired by Piteå Science Park. There are many similar ideas at Grans and in the center in An Giang which can be something to build on in a new application.

### **Vietnam to Piteå in August**

A delegation of 10 people will come to Piteå August. Preliminary dates will be August 13 – 19. It will be the steering group and a project group. This time they wanted to stay at the town hotel (Piteå Stadshotell) and are willing to share rooms. As soon as we have the names we will send an invitation letter.

On the agenda there will be steering group meeting, time for the final work with the activity plan, preparation for a dissemination seminar in Vietnam in November and study/ site visits and preparation for an application for the new project. A core group will stay a few days extra in order to participate in writing of the new project proposal. It should also include capacity building in a

relevant area. The Vietnamese are interested in visiting and LTU but it might be hard as the University is more or less closed at that time.



*Mr Hiep and Mr Roslund*

### **Piteå to Vietnam – final wrap up**

The Steering group decided that the Swedish Steering group will join the project group in November for the final project wrap up. During the days there should be time set aside for a meeting focusing on lessons learned from the cooperation. There should also be meetings with the involved the target groups, with a focus on the process and the cooperation between the authorities and the target groups. One day there should be a seminar where people from other provinces are invited to share the experiences they have made in An Giang during these 6 years.

The issues was also raised that Växjö would join with their delegation and if so there has to be a coordination and cooperation during the visit in An Giang.



The wrap up of this day was a really nice dinner at Mrs. Xuans' house where we celebrated the three birthday girls. As always the food is delicious, the hosting excellent, the company is nice.

## Demonstration projects



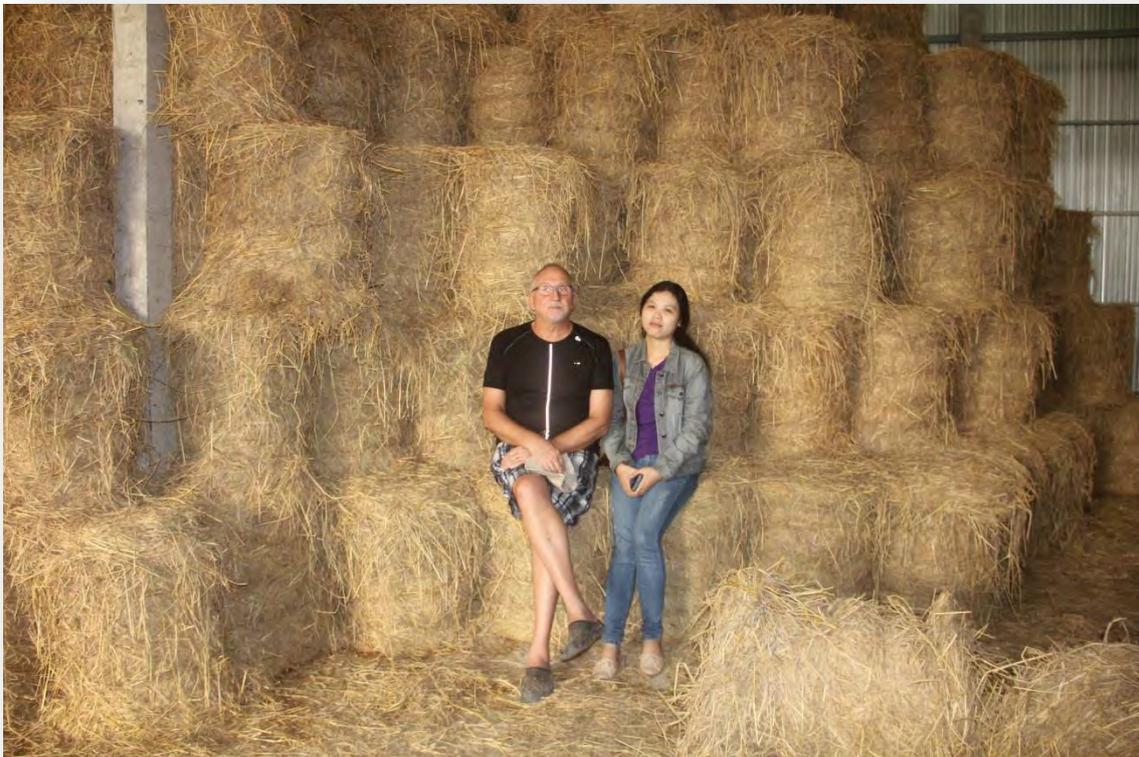
For the farmers to see in real life how the waste from rice farming can be used is of great value. 3 demonstration projects are part of the project; rolling machines, mushroom cultivation and use of rice straw for cow feeding.

During the meeting we got a report from the work going on with the demonstration programs, from the trainings that have been carried out with the three groups and we were also told how these farmers participating in the project have become role models for other farmers in the area.

60 people, 20 in each one of the three demonstration projects, have got training, technical advice and are active in the projects.

Later on during the week we visited a mushroom cultivation farmer and two of the participants in the cow feeding project.

## Collecting rice straw



*Mr. Bo Wiberg, member of the project group and Miss Kim Vo, project coordinator*

The normal picture is that about 20% of the straw is left and burned after harvesting. In these demonstration projects the aim is to use it in a more sustainable way. The objective is that 20% of the rice straw should be collected in 2020 but already after one year the estimated amount of collected rice straw is 14,3 % of the total amount. This is linked to the rapid spread of rolling machines. I remember when they first saw the white eggs on the Swedish fields, “what on earth was this”, the asked.

Last year the provincial government bought 7 machines to be used in the project. Some farmers bought these from the government with 30 % reduction and they also get some support with petrol and labor during the project time. I suppose you can say that it has become a success and today there are 40 machines in the province. There has also become a business of importing the machines from Japan, adjust them and sell them.

This means that a business has developed from collecting rice straw. A normal income for a farmer is roughly 150 000 ( ca75 SEK) a day and we were told that farmers with a machine could made 1 million a day and they calculated that the pay- they calculated that the back time for the machines would be around 1 year as they harvest 3 times a year. The worries were that there could be a shortage of rice straw. During a short time the collecting of rice straw had increased with 40 %.

## Cow feeding



*Mr, Tran Van Dung, owner of 3 cows is very positive to the project*

A big part of the rice straw which is collected is used for feeding the cattle. They mix the rice straw with urea in big plastic bags and process it for a number of days before they give it to the cows.

We visited two farmers, one small with 3 cows and another farmer, businessman who sold breeding cattle. Mr. Tran Van Dung, owner of 3 cows said that his cows grow much quicker and the use of the rice straw reduces his costs with 5 million dong for 2 cows during a time span of 15 months. This means that he reduces his costs with roughly 250 sek a month which is a lot for a small farmer. He also said that he had 2 other followers who learned from him and he saw himself as a fellow man who would like to teach other small farmers as he himself saw very fast the benefits. – I will be available to all who wants my help, he said.



Mr. Boh, was invited by the agricultural department to a workshop regarding using rice straw for cow feeding. He is a cow trader. He buys and sells between 1000- 1200 yearly. He has a 1 ha land of his own where he grows rice. He uses his own straw and buy some.

- It is easy to store and much cheaper than the grass I bought before, he said. He calculates that he can save about 50 000 sek a year by making these changes and tells us that he has had a number of visitors coming to his farm to take part of his experiences from the changes he has made.



*The wife o has her business in the house. She was making thousands of boiler pieces which she was selling*

### **Mushroom cultivation**



People have been growing mushroom on rice straw for a while but in this project they try 3 different methods in order to see how it can be developed. On three places there has been built 3 indoor plants of good quality. We visited one. The cost to build one is around 10 000 sek. This farmer wanted to install AC but this was not included in the costs. This means that they are not as dependent on the weather as they were before, they can have 4 harvests' a year. He saw it as a profitable business and with this new house the profit doubled. The profit for each harvest was 350 US\$. He wants to develop the business but has to take it step by step as he has too little security in order to get a loan from the bank.

So far there was no problem to sell everything he was growing- but it was all sold on the local market and of course if this area

will develop new issues, like storing, marketing and exporting has to be solved.

### Other Site visits



*Mrs. Huyen initiator of a science park inspired by Piteå Science Park*

Roughly 300 million Swedish crowns and 36 hectare of land is set aside for the huge area where construction work has started for development of the agricultural sector in An Giang. This will be the knowledge center and excellence in development in the agricultural area.



Since before there has been and still is a small plant for development and research cooperation with An Giang University. Besides the staff at the center we saw many master students working there to gather data for their master thesis.

The aim with the new plant is to link development of new ideas with research and business development. People who have an idea can bring their idea to the center, get a place and get support to develop their idea into a business. It has already started and we saw the result of wine production from blackberry but the production was on a very small scale in the owners own garden.

## The blackberry garden



We were taken to the blackberry garden to meet the owner and listen to his future plans. Until this day he was selling his products in the garden and the production was quite limited. But he had started to develop his products and saw the potential in it. We had a walk about in the quite big and very beautiful garden where I could see the potential of a garden where you could relax, have a glass of delicious juice or a glass of wine and just be away from the intense life in town.

