



Field Trip Report

Field Trip Group 4: Livelihood, Water Environment and Social Inequality in Long Thuận Island, Mekong Delta, Vietnam

1. Research Site

The research site took place on March 23rd to March 27th, 2019 in Long Thuận village in Đồng Tháp province. Đồng Tháp belongs to the western part of the Mekong Delta Region and near the Cambodian border. Long Thuận is an island of Hồng Ngự district where economy focuses on both agricultural and aquaculture production. Long Thuận is the first commune selected by Hồng Ngự District as a model for the new village model which is managed by the community. There are 104 households doing fish farming with over 700 cages. These cages are located along 2 km of Tiên River (one branch of Mekong Delta). Although Long Thuận aims to develop fish cage farming as a crucial economic model, Hồng Ngự district also tries to make Long Thuận as an attractive destination of ecological tours.

2. Overview

The report contains the research finding and lesson learned of group in applying Transdisciplinary Research (TDR) to conduct the research. Long Thuận village as the research site is considered as a modernized farming community. As it is located in Mekong Delta, the local's mode of production mainly relied on natural resources. Its traditional livelihood was natural farming, fishing on Mekong River and doing seasonal plantation. In present-day, though the major of villager still remains farmer but their farming practice changes to agroindustry, mono-cropping and fish cage for economic purpose. The local ecology has changed over time due to the local's mode of production, chemical and closed farm production harm to environment. Sand dredging industry causes to landslides. During the last 5 years, landslide became a serious issue. The numerous families along the Mekong bank have lost their home while many families are in danger. The effected local voice has not yet full-responded by the local government. Of course, here is socialism. The local government officer has authority over people. Their job is listening to the central government not to the local people. Therefore, the local people hardly complain and call for ending that sand dredging companies that got permission to run their business. Social inequality especially gender inequality is one of the community matters. The local people who are rich usually have close relations to officer. This group has more opportunity. While rich people have personal capital to invest, they also access to government support. Women tend not to have voices in family and in society. After marriage, women's power is reduced. Women have to contribute for family income like men. In the same time, they also take responsibility for housework, both their own family and husband family while men are not required to do so. Husband permission is necessary for women in some reason, hanging out with friend and going to hometown. In sum, there were three dimensions of inequality occurring. Firstly, inequality in regime structure, people is powerless, by contrast, government is powerful. The second thing is social inequality in community level, rich people and government officer have priority than people in general. The



third is about gender inequality, women's right gained less respect. Women power were reduced after marriage. Finally, looking through all inequality dimensions, women right was forced disappearance. Though during the field visit, the team got only one woman physically participating in the same position as men.

3. Methodology

From what we have learned so far, Transdisciplinary Research gives an opportunity for academic in different disciplines and non-academic fields to work together to solve problems which humanity is facing in modern world. Our researcher team are from three different countries and has various backgrounds. Diversity of the researchers had positive result in research direction. For example, at the same time, while one researcher was focusing in water issue, another saw the issue of inequality, and another one noticed about landslides.

Before conducting research in the field, the researcher team - including advisors, team leader, interpreters, and student - was focusing on water issue, the topic was ordered by the summer school which matched with the local geography and livelihood. In the preparation process, although the team decided to not make research questions at first, we discussed about the community in details and worked out on identifying stakeholders who should be interviewed and had meeting with.

During the field trip, we combined different methodologies including formal and informal observation, interview, formally conversation and group discussion.

- Observation: cycling trips along Long Thuan riverside and short trips to vegetable garden (melon, salad,...), organic vegetable farming, local fish cage and Pangasius production company.
- Interview: local people, head of local fish cage farming association, People's Council of Đồng Tháp, head of Vietnam Pangasius Association and Pangasius Company
- Narrative interview: local women
- Group discussion: local women and others

At the beginning of the field visit, the team was going to figure out water and environmental issues. However, during the field trip, the main problems which caught the researchers' attention were landslides and social inequality. While paying attention to what the summer school had ordered, the research questions were found based on the information gaining in field. For example, the team agreed to focus more social inequality especially gender inequality. We found that women didn't feel confident to respond to researcher questions. While we were searching on the summer school topic and local issues in general, we were also observing inequality matter. Therefore, the day after, the team decided into two groups, women and men which we strongly believed that it would allow women to talk freely. After all, it was such a useful approach.



In terms of the research possibility and limitation, time limit was the most challenged for field visit. There were plenty issues hiding under traditional and political limitation that needed time to gradually research. Translations process took extra time. The language barrier was both pros and cons. Some of the researchers can only use English to search, like Miss Wipawidee is Thai speaking and Miss Marina is German speaking. They had to rely on a proper translation. Luckily, Miss Ngo is Vietnamese and also speaks English and Mister Bui speaks Vietnamese, English and German. While interpreters translated, the researcher who understand local language could get in deeper meaning which was an effective contribution to conducting research with the time limit. Additionally, they helped translating and double checking information. Moreover, the team was facing gender traditional practice and political restriction. The police man went along with us like he was the member of the researcher team. However, the limitation lighted up to the hiding issues, such as social and gender inequality. The police man gave a clear picture of the reason behind community silence.

4. Research Findings

4.1. The Daily Learning

Day 1

There were several small markets on the street. Female street vendor sold fish, fruit and vegetables. However, the fish were sold in the markets didn't look like local species, so the researchers asked where the fish came from. The answer was that all fish came from fish cage farming, which it was confirmed on the days later by the fish cage farming association that most of fish consumption in the village come from fish cages. The reasons given are (1) there are few local fisheries still remain in present-day, (2) natural fish from Mekong river is rare which make the fish more expensive, so fisheries prefer to sell fish in a pricy market. In the same way, due to Đồng Tháp climate and position at Mekong, farmer can use land to cultivate many crops such as rice, beans, chili. However, there were some local fruits and vegetables but most of them were commercial tries.

Landslide is becoming a new serious issue in Long Thuận village. The local notices that landslide is consequenced of sand dredging. All of the researcher team crossed the Mekong river by ferry to Long Thuận, the village opposite side of Long Thuận. The researchers saw many construction machines that exploit sand from the river. Sand is used for construction industry and glass production. While the local have been getting negative impacted, the government agency and companies, perhaps foreign companies seem to be the most beneficial groups from sand dredging business. During past 5-6 years, numerous of households were dropping into Mekong river and nowadays many households are in danger. Regrading landslide, there are new formed village known as resettlement sites.

Throughout the local practice transforming to modernize lifestyle and landslide becoming serious issue, Lotus still remain as the signature crop of Dong Thap. Lotus is cultivated in large ponds. Lotus is well-known as the symbol of Đồng Tháp province. In the western world, lotus



is an expensive plant. Seeds can be cooked in soups or dessert. Roots are eaten like potatoes. Leaves are used as cooking tool. Even stems are used to make lotus silk. Lotus is also a high price material for making clothes.

Day 2

Location: an organic farm and then fish cages along the riverside in Long Thuan island, Hong Ngu district, Dong Thap province, Mekong Delta, Vietnam.

Stakeholders: vegetable farmers, Duong Minh Sang – director of the cooperation of Producing and Consuming clean vegetables in Long Thuận, fishing farmers and the representative of Long Thuận fish cage association

Findings: listed by following activities:

1) Experiencing growing vegetables in the membrane house and having a talk with Duong Minh Sang - the director of the organic farming in the membrane (in the morning)

- The aims of the cooperation (Production cooperative consume safe vegetables in Long Thuận):
 - + To raise a higher income to other members
 - + To share knowledge and update the farming techniques and information
 - + To form and develop ecotourism in the area (homestay, gardening and cooking activities...)
- They make sure that the area they chose for the farming is safe to avoid landslides' effect.
- There are 80 households who are farmers with 160 hectares farming land in the cooperation. They often have a monthly meeting to share and update information about the farming techniques. If they have a big order for the products, they will meet regularly and find ways to complete the order.
- In an area of 1000 square meters, they can harvest 3 tons of vegetables each season. But the investment for building the membrane and automatic irrigation followed by technology from Israel is around 1 billion VND (around 50000 USD). However, if farmers don't want to use this expensive technology and only build the membrane, they will spend around 150 million VND. If they can do that by themselves, the government will support them 50%.
- Techniques and equipment are imported from Israel with the support and guiding from Nha Nguyen Company.
- They only use organic fertilizer to grow and nurture the vegetables. The period of time from growing to harvesting is approximately the same as normal farming (using chemicals).
- Products will deliver to some regional supermarkets (Coop mart) followed by VIETGAP standards.
- They are planning to organize the ecotourism combining all the farming and cooking activities using the organic products from the farming. All of the activities will be held right the farm and use fresh products directly from the farm.
- Every week, there are around two groups of foreign visitors (Germany, France, The USA...) who join the Mekong tour to visit and observe their model.



- The association will be the mediator to introduce products to consumers

2) Visit a fish cage farming and find out how they grow fish (in the afternoon)

- The farmer is raising 3 kinds of fish: “He” fish, “Bụng” fish and “Lăng nha” fish. Also, he is raising one cage of fingerlings.
- Everyday there are tens of fish died. The fish farmer said that it’s normal and natural. He would call it “every day loss”. He usually throws the dead fish to other cages to feed the other kind of fish.
- He uses GreenFood and small natural fish from the sea to feed the fish. The food is made from corn, wheat, fish powder, vitamin, etc.
- The fish will be exported to Cambodia (the biggest consumer).

3) Meeting with Head of Long Thuan fish cage farming association (in the afternoon)

- The fishery business has lasted for more than 50 years, but Long Thuan fish cage association has just been established since last year (July 2018). They normally have a meeting every month to share knowledge about the market fish and fish disease.
- More than 10 years ago, there used to be a lot of fish in the river. Due to the high demand and over fishing, the people started to raise fish in the cages.
- There are 57 members among 195 households per 700 fish cages.
- The main aim: + Gather all the members to protect their right.
+ Unify fish farming activities.
- They raise many kinds of fish including a kind of catfish (basa), “he” fish, “rô phi” fish, “diêu hồng” fish and “lăng nha”- which is the most profitable fish.
- Traders from Cambodia will buy directly at the fish cage. Some of the fish are exported to the regional market.
- Most of the fishing households compete each other to sell their fish to the traders, which create a chance for traders to bargain and reduce the price. They don’t want to join in the association because they want to keep their own customs and mindsets.
- The capital used to invest in the fish cage and equipment is very expensive (2-10 billion VND). That’s the reason why young labor has to move to another town or city to find jobs since they don’t have big amount of money to invest.
- Salinity doesn’t affect them because they are in the upstream of the river.
- They are thinking about organizing ecotourism (only planning and have no specific ideas how to do it).

Day 3

Location: House of the old farmer in the village and the Local Pagoda in the village (Long Thuan island, Hong Ngu district, Dong Thap province, Mekong Delta, Vietnam.)

Stakeholders: Field trip’ s team members, an old and experienced farmer in the village and head monk of the local pagoda



Findings: The flood season often reaches the highest water level at 4 meters 2 years ago, the pollution of water source caused people to relocate and the massive dead fish problem. Breeding from folk since 1975 to raise fish from that time until now. In the past, people used to catch basa fish from Cambodia, but now they are raising fish, so the Germans don't like fish now because of poisoning. In the old days, this place was Viet Cong. The main export markets of pangasius and basa fish of some informative traders are the US and China. Every fish harvesting season, they will send people to check the quality of fish to buy in large-scale and sell to the US and Central markets. People need to invest and support more information about the market and how to manage the planning of developing fish stalls to be assured of production and export. The development of the pagoda here is due to the rapid growth of the people and the contribution of merit to building the pagoda. The unfair distribution of income leads to blind religious beliefs. When there are people who suddenly get rich due to the fish season they think they are blessed by the Supreme Being in the local religion.

Difficulties or challenges: The government invests 50% of the initial capital of 150 million for organic vegetables growing model but people still do not work because the capital is very high. It is difficult to replicate the model of organic vegetable cultivation in Long Thuan because the investment cost is too high. Moreover, the local people have been getting used to traditional culture, so it is hard to discipline to follow the industrial producing style. Social inequality is a serious issue in this area.

Day 4

In the morning

Location: House of Mr. Duong Nghia Quoc

Participants or stakeholders:

Field Trip's team members (academic stakeholders),

Mr. Duong Nghia Quoc (Former director of the Department of Agriculture and Rural Development, former director of Duong Nghia Quoc Department of Science and Technology. Currently the Chairman of Vietnamese Pangasius Association. Expertise is a doctorate in veterinary medicine.)

Findings:

- About Vietnamese Pangasius Association: 139 members (100 cooperative enterprises and 39 individuals). Including enterprises on processing, exporting and aquatic veterinary drugs.

The Association's missions:

+Gathering members to provide information on market and farming technologies for members to acknowledge and implement.

+Guiding policies on pangasius farming as well as export for businesses and farming households.

+Participating in trade promotion in domestic as well as export markets.



- + Coordinating domestic and foreign project programs on seed, commercial farming, processing, and commercial farming.
 - + Currently focusing on the production chain, from seed production technology, feed, farming technology, processing technology to meet the requirements of the international market.
 - + Developing a scheme of research on breeds of the Ministry of Agriculture and Rural Development, why the breeds are clean and grow well to put into production.
- Bringing high-quality food, research on how to reduce the negative impact of the environment.
- Businesses such as IDI in Dong Thap use fish fat and fish skin as collagen and have by-products that scientists are being called to study to take advantage of this by-product. The goal is to develop value chains for sustainable goods.
 - In the local, there are local fishing associations that help people connect with businesses.
 - There are usually 3 ways of dealing between businesses and people like the way a business sells food to people and then buys and exchanges with fish (for households without cash), the second way is for farmers to buy always food and pay cash to buy fish food of the business, etc.
 - Over 70% of households receive fish feed and sell fish to businesses, 20% of fish farmers buy cheap fish and sell it to that enterprise, only 10% of people buy fish with cheap price and wait to sell for businesses that pay a high price (but this way is less and business is unsustainable).

Difficulties or Challenges: Recently, some diseases are caused by bacteria which lead fish with kidney and liver disease and hemorrhage. To make a vaccine for the fish disease, vaccination is used one by one. They find difficulty in producing Vaccine food for fish is because of the inheriting from broodstock to fry. Now there is food such as a vaccine against transmission to fish but only against broodstock, but it cannot be immunized to fry. Another problem is the collection of sludge from fishponds and treatment ponds because currently, sludge in untreated ponds pollutes the environment. That sludge is so muddy that the collecting technology to serve fruit trees and rice is very important now but it has not been done yet. Sludge from processing plants is not equal to the source of ponds but it is also an important source to collect to serve as a fruit crop fertilizer. This sludge must be collected if it is not given water, it will cause environmental pollution.

In the afternoon

Location: Fatifish company limited, Lot B3, Street No.2, My Hiep Industrial Zone, Cao Lanh district, Dong Thap province

Stakeholders: the Management of the Phat Tien Pangasius Company

Findings: We had a meeting with the board of management and directors in the company. After the interesting talk, we went visit the producing factory. They have 150 ha farming area, 8 km away from the factory. The farm supplies 300,000 MT raw material per year for production. Based on the information they mentioned in their official website that they are ahead of:



- Designing ponds with attention to the water condition and surrounding environment to ensure the water flow. It means the fish health and farming condition are strictly inspected.
- Controlling the use of drug and/or any forbidden chemicals to avoid antibiotics and GMO.
- Selecting the qualified fingerling fishes and feeding them with clean food to guarantee the product safety.
- Products from Pangasius are produced in many different ways including whole fish, fillet, block...
- Products will mainly depend on the demand of European market (mostly) following strict standards (labels, labor, the temperature...)
- Also the products have to require some national standards and international standards such as ISO, HACCP, BRC, IFS, HALAL, GLOBAL GAP and so on.
- Raising fish and producing process are in strictly control followed a closing process (raising fish, food for fish producing, producing fish products and exporting)
- They use underground water for the production which is checked regularly (they take a sample of water every month and write a water report to submit the environment department every 6 months)
- The director also shared that during 1990s people in Long Thuan district raised lots of Pangasius along the river in cages but now they mainly raise fish which is suitable to sell in the local market and supermarket (cá hú, cá basa, cá vồ...). Later on, some raise Pangasius in the ponds, which are dug in the agricultural land.
- They have 2 kinds of water tanks or factories. One is the supply water factory which inputs water from underground through a filter system. Another one is the output water factory which collects waste from the production. They also said that they spent a lot of money on the water treatment system and it still works very well after 10 years.

4.2. The analysis of The Daily Learning

4.2.1. Livelihood

- People in Long Thuận are dependent on agricultural productions. Main products are fish, rice and seasonal vegetables. Fish are kept in cages which seem to be a very effective farming method. Vegetables are grown in seasons. In every season different vegetables will be grown.
- Life is still very traditional oriented. Women need to follow the men and traditional gender roles, which is still rooted in the society.

4.2.2. Social inequality

- Social inequality is a big issue in Long Thuận which was caused by environmental problems. Due to landslides, Long Thuận village was built as a new settlement for people who lost their homes because of landslides. But compensation from government were only based on house hold registration (hộ khẩu), others aspect like size of the former house wasn't considered.

4.2.3. Environment

- During our field trip we observed landslides as one the the biggest and newest serious issue in Long Thuận village. The local notices that landslide is caused by sand dredging. All of the



members in the researcher team crossed the Mekong river by a ferry to Long Khánh, the village in on the opposite side of Long Thuận. The researchers saw many construction machines that exploit sand from the River. Sand is used for construction industry and glass production. While the local has been getting negative impacts, the government agency and companies, perhaps foreign companies seem to be the most beneficial groups from sand dredging business. During the past 5-6 years, numerous of households were dropping into Mekong river and nowadays many households are in danger. Regarding landslides, there are new formed villages as known as resettlement site. Water pollution is still one big issue due to lack water treatment and regulations. Unfiltered water which is discharged directly into the Mekong might cause fish death and endanger fish farmers.