



## **Field Trip Report**

*Field Trip Group 5: The issue of landslides and the adaptation of climate change*

### **1. Introduction**

Finishing five days of studying, theory exchange as well as practical experiences from lecturers and expert opinions from Germany, Austria, Thailand, Czech Republic and Viet Nam on transdisciplinary research (TDR) in the context of the project KNOTS (Fostering multi-lateral knowledge networks of transdisciplinary studies to tackle global challenges), seven teams went on fieldtrips in the Mekong Delta and around Ho-Chi-Minh-City to apply the TDR approach.

We, students from University of Bonn, University of Vienna, Chiang Mai University, Viet Nam Academy of Social Sciences and Ho Chi Minh City Open University, began the fieldwork in order to apply the TDR method approaches at Chom Xoai Hamlet, Thuong Phuoc 1, Hong Ngu district, Dong Thap province from March 23 – March 28, 2019. The chosen topic has been: Landslides under impacts of environmental change and human intervention at Chom Xoai Hamlet, Thuong Phuoc 1, Hong Ngu district, Dong Thap province.

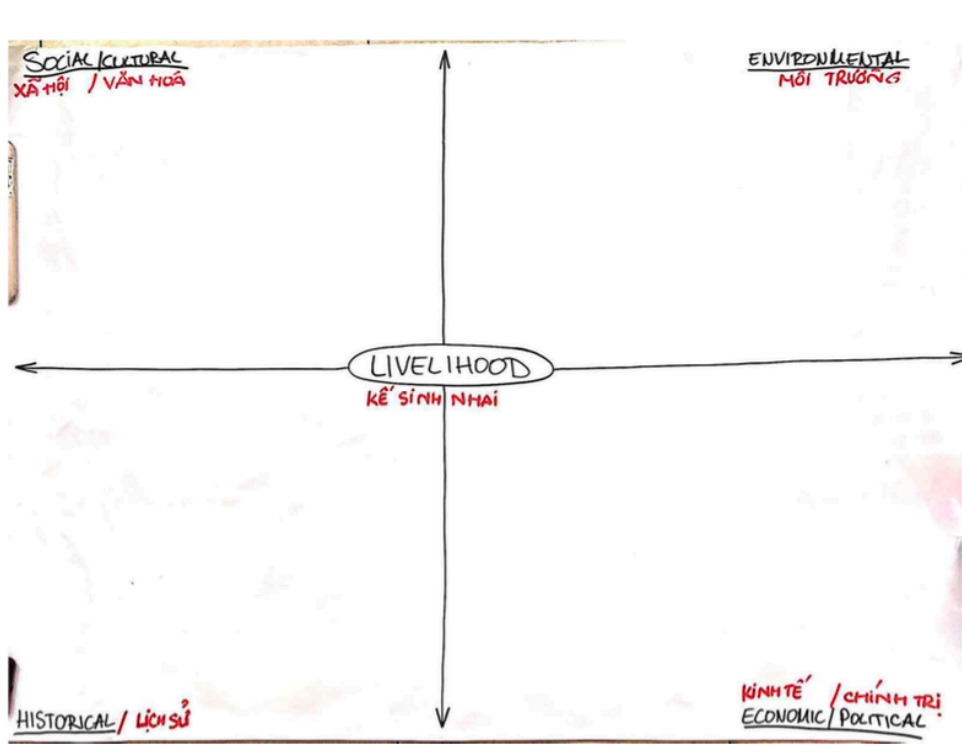
During the fieldwork we used techniques such as interviewing, drawing with kids, transect walk, observation, sketching, timeline and mapping. Through this we found another issue that turned into our final concern: The impact of water management on livelihood of local people at Chom Xoai, Thuong Phuoc 1, Hong Ngu district, Dong Thap province.

In order to complete this work, we had the great support from: Dr. Michael Kleinod – University of Bonn, M.A Nguyen Tran Cam Linh – coordinator from Ho Chi Minh City Open University; two translators: Nguyen Tran Tiet Vinh and Nguyen Thi Nhat Tram

### **2. The Initial Research Question and the Refocus process**

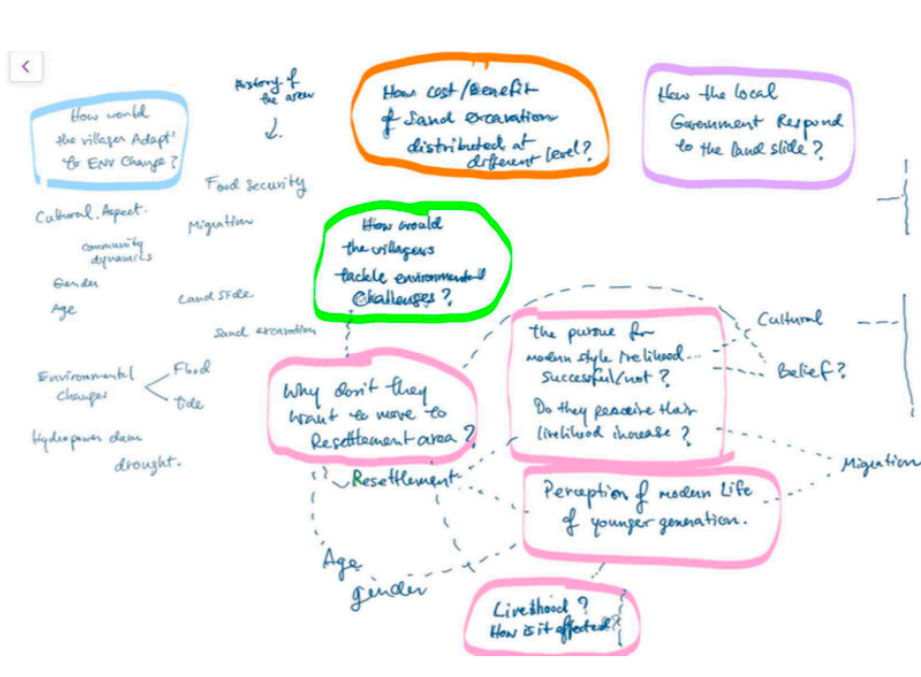
At the very beginning, we held several group meetings to debrief the research site. We heard from the Vietnam team members about the general information of the village and the current situations about the natural disaster and the disaster caused by human activities.

We also proposed a research framework, putting livelihood as a core concern in the middle of the frame. Following that, we separated the different sections with social/cultural, historical, environmental, economic/cultural aspects in the framework, trying to apply the framework as a guidance throughout our research practices.



**Figure 1: The initial framework of livelihood-oriented topic related with four sections**

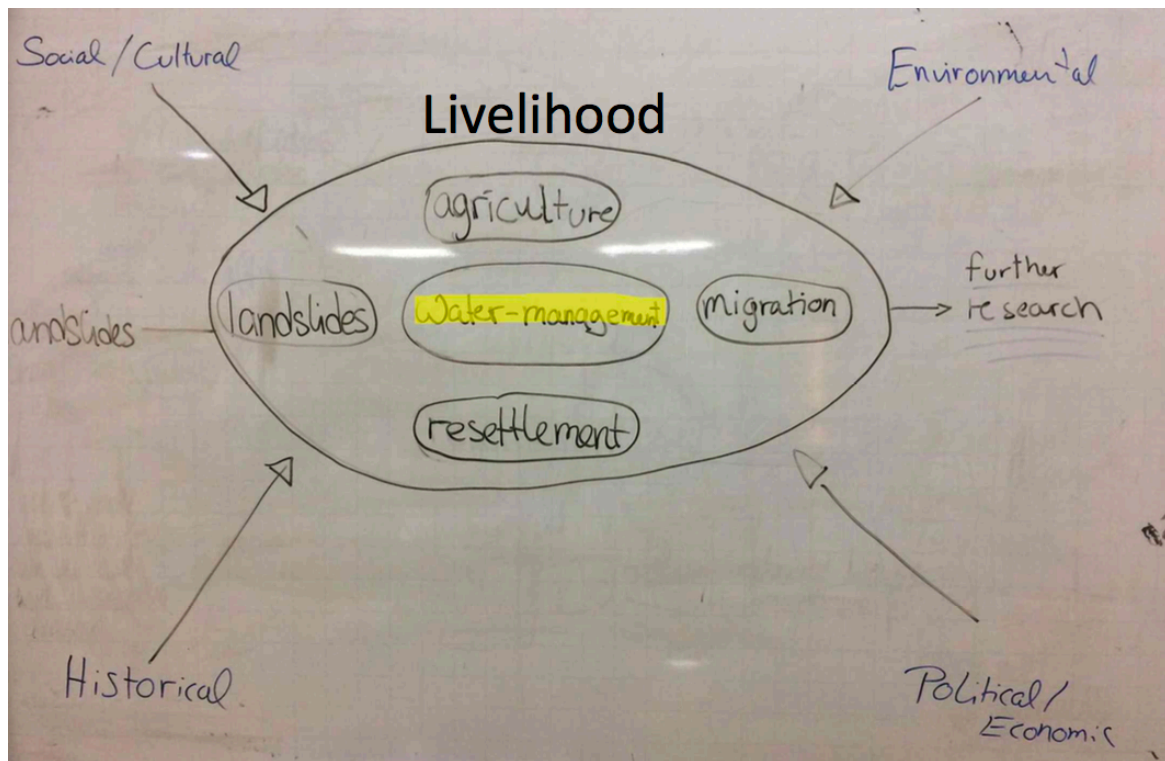
Then we started to brainstorm about our focuses on different issues, starting with the initial research question “how have the landslides affected the people’s life in Chom Xoai Hamlet, Dong Thap Province? Causes and Solutions”. After the brainstorming, we started to think about some tentative questions we might ask on site. It was then drafted as a mind map picture.



**Figure 2: The graphic for brainstorming the tentative questions in the field**



While we were in the field site, we encountered a more complex situation and a lot more issues related to the landslides that affected the local resident's livelihoods. So, we expanded our focus to research on some more extensive social, environmental, political and especially environmental issues. Our prime focus on landslides was gradually shifted to the water-management issues and the agricultural adaptation, flooding control and the political agenda to resettlement plans, etc.



**Figure 3: New framework with water-management in the center**

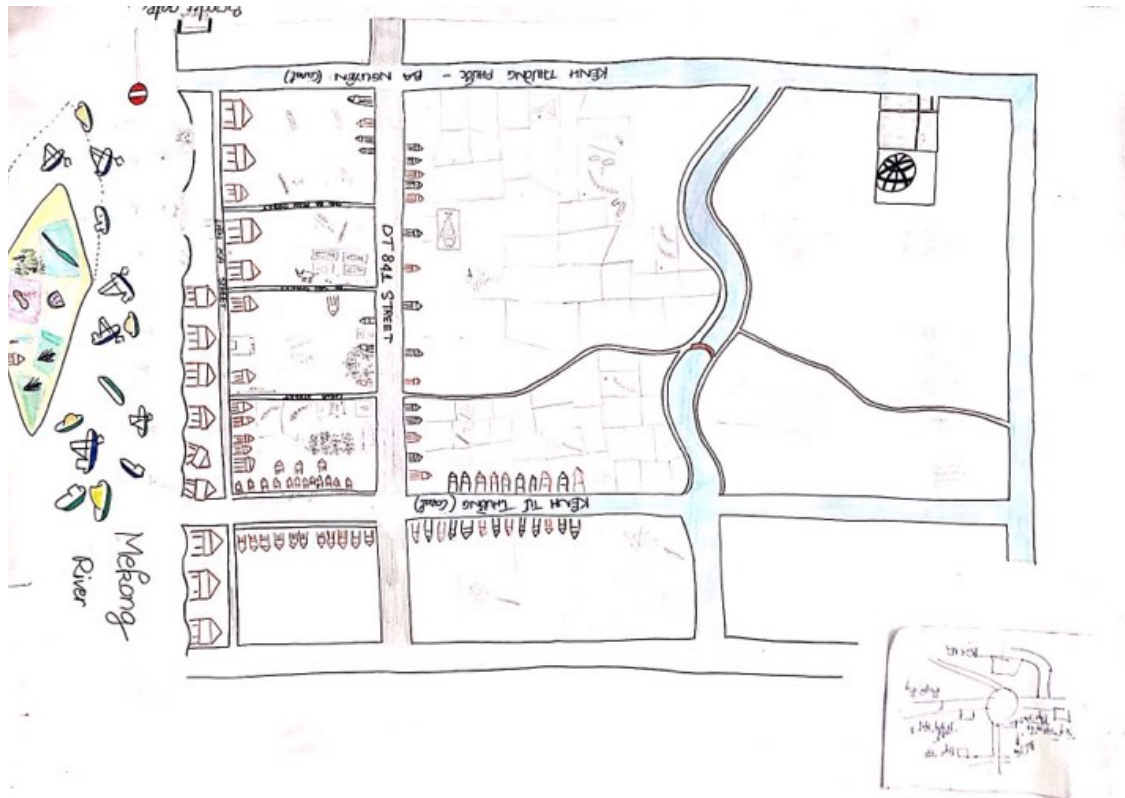
Thus, after the field work for over two days, while we sat down in the evening for fieldwork reflection, we started to work on our findings and the sharing of reflection, which led to very fruitful results and abundant gaining in the reflection process.

### 3. Methods

We went into the field without much of knowledge about the region and on how to proceed methodologically. Gladly before our arrival a formal interview with Mr. Binh, the head of Chom Xoai Hamlet, Dong Thap Province, was planned. He gave us an overview about the size and demography of the Hamlet and presented a few central facts of the region, the agriculture, landslides and first explanations of the resettlement areas. There were several formal interviews planned, which we conducted with the help of our two translators. To get a better insight of what issues might exist, we held informal talks with local people in the hamlet, alongside the border (café and market) as well as in resettlement areas. Along a transect walk with Mr. Binh some local people were addressed in informal interview situations, telling us about the living situation in the hamlet, landslides and how some people cope with the loss of their houses as



well as with direct governmental confrontations related to resettling. Since our hosts, the Linh Nhat family lived next to the local kindergarten, we used the opportunity and drew pictures with the kids. Unfortunately, we did not get the chance to analyze the pictures. One of our translators turned out to be a great drawer, which resulted in him sketching each site. This was a great filler for situation (border area) where we were not allowed or too busy to take pictures. Walking along the hamlet, the wider region and taking a boat ride alongside the Mekong River gave us the opportunity to observe sand mining, container ship traffic, agricultural works, landslide areas, dykes etc. participatory and non-participatory. In each situation we were able to hold informal talks and gain more information. We started to combine different perspectives, descriptions and ideas about the area. We started to integrate the local community in our informational conduction. In order to find out whether the landslides were still a major problem concerning the livelihood of the people in the hamlet, we drew a timeline with the help of locals. We found out that there was a major flood in 2018, but that the landslides had gotten less and less each year from 2008. Furthermore, we had local people draw maps of the region and agricultural areas which we then summed up into a big map. This map turned out as a key to summarizing all issues of the area, giving us a great overview and helping us to visualize the conducted knowledge. We showed the big map to farmers and people of the hamlet, with its help they told us more about their agricultural work and issues, farming, resettlement etc. All information that was found out through the different methods was reflected in the map.



**Figure 4: Map of Chom Xoai Hamlet and broader region**



Together with the Timeline we found that we needed to refocus and find a different research question.

#### **4. Tentative Findings**

##### **4.1. Landslides and Sand mining**

Initially we walked into the field with the presupposition that landslides are the most striking issue affecting the livelihoods of the local villagers in Chom Xoai Hamlet. People told us that for a long time already landslides occurred in that area along the Mekong River and significantly reduced the coastal land. In the last 10 years there were some severe landslide cases reported. During our transect walks we could observe already collapsed houses or houses that may be affected by landslides in the near future.

On the Mekong River at Chom Xoai Hamlet we observed dozens of boats involved in sand mining, which we connected directly with the landslides issue. Due to some interviews we collected many different views and opinions on these two topics.

Sand mining started about 20 years ago in that area. Authorities stated that boats started to illegally excavate sand 50 meters away from the shore. In the past there were more than 200 boats involved. 5 to 7 years ago the government then introduced regulations on sand mining, due to the illegal activities and protests coming from the locals. They limited the permitted amount of excavation and allowed boats to mine only in the area 300 meters away from the shore.

While some villagers also connected the sand mining with the landslide issue, others and also the authorities mentioned, that actually the situation got better through the sand mining. According to them the activities on the river changed the flow of the river, which before hit directly the shore and caused landslides. Moreover, there were other benefits stated. Because of the sand-mining, the depth of the river increased and allows now containerships to pass. Furthermore, the excavated sand can be used or sold in Vietnam/other countries where it is needed.

There was also the connection of the annual floods with the landslide issue. We were told that the floods are also a cause for landslides, but even more severe should be the dry seasons, because there the water hits constantly the shore.

To conclude on this issue, we can say that during our short stay it has been difficult to figure out the truth on this issue, because of differing opinions and the lack of hydraulic knowledge. Our result is that in general the landslides got less severe, but there are still locals fearing landslides and blaming the sand excavation, while others do not see a problem here and think the excavation is a benefit and lessens the landslides.

One solution of the government for the landslide issue is the resettlement program, we talk about in the following part.



As these findings differ from what we assumed, we tried to refocus and treat the landslides just as one of many issues and not as the main issue affecting the livelihoods of the locals in Chom Xoai Hamlet.

#### **4.2. The Resettlement and Trans-border**

The landslide issue is linked to the resettlement. For the villagers who have been affected by the landslide and who still live in the landslide area, the government provided the resettlement policy. The resettlement policy was firstly proposed in 2001 and has been implemented since 2002. According to the interview with a vice-head of people's committee of Thuong Phuoc commune, the resettlement area, which is 10km far away from the Chom Xoai Hamlet, is well-facilitated with infrastructure such as roads, hospitals, schools as well as houses (Personal communication, March 24, 2019).

However, the affected villagers have different opinions about the resettlement policy. While some villagers are willing to move to or are satisfied with the resettlement area, others still prefer staying in the landslide area.

About the villagers who are satisfied with the resettlement, there are several reasons. First, the villagers whose livelihoods do not depend much on farming and fisheries seem to be happy with the resettlement, because they can own a house in the resettlement area even though they have to pay back the house prices to the government within 10 years. Second, some villagers prefer working in the cities rather than working in the rural agricultural sector. Last, for their children's education and safety issue, the villagers are willing to move to the resettlement area. Regarding the villagers who don't want to move, there are also various reasons. The first reason why they just want to stay in the landslide area is that they own the land and house in the landslide area, so they think resettlement is not fair enough. Second, other poor people said that they have not enough money to move to the other area, so they decided to stay in the landslide area. Third, their ancestor's tombs are located near their house, so they cannot move to another place because they have to take care of them. The fourth reason is related to the geographical feature of this village. Chom Xoai Hamlet where we conducted our fieldwork is located in the border area with Cambodia. By motorbike or car, it takes just 5-10 minutes (2km) to reach the border area. So, some Vietnamese people cross the border and work at the Cambodia side as a wage worker in a Vietnamese owned business or farm. So, they don't want to be resettled far away from their working places. For this point, we can see that the resettlement issue is also connected to the trans-border activities. The fifth reason is that recently the impacts of landslide are getting less, because of the government's regulation on sand excavation. And lastly, the most important reason is that their livelihoods highly depend on the river and rice field near the landslide area. So, their livelihood based on the river and agriculture is linked to the second issue of Chom Xoai village, which is the agriculture and water management.



### 4.3. Agriculture

The livelihood of most villagers in the hamlet depends on agriculture and thus on how the water is managed. This will be discussed later in the text. People in the region grow aquacultures and cultivate fish in patties. On the fields they grow mostly rice, morning glory, peanuts, sesame, chili, watermelon, coconut or fruit trees. The panels differ in size and owners; hence a cultivation area belongs to several farmers. Depending on the location of the field the farmers can grow different crops. We found out that the fields closer to the hamlet could grow three crops, meaning they could harvest three crops a year.

Information that was provided by several stakeholders, was the consensus that the farmers want to grow three crops per season, because it is more profitable than two crops. However, three crops take away important nutrients from the soil and thus the first harvest is getting worse every year. To counteract this, many farmers use fertilizer, which over yearlong usage, further harms the soil and makes it infertile. In contrast, some farmers vary in nature of their crops. Instead of cultivating rice three times, they grow rice twice and cultivate a gentler crop. Thus, in the third season, they grow chili, peanuts, or sesame. The government also provides alternatives and suggests switching to fruit plantations.



**Figure 5: View from hard dyke onto soft dyke and fields that get flooded each year. In the lower middle, left of the boat one can see a pump. On the far-right side one can see the cemented part of the hard dyke.**

The villagers find that their agricultural preferences are not taken seriously by the state. This is also confirmed by a project that the state has initiated with the World Bank. In one area, behind the hard dike, where the field get flooded in the flooding season, the World Bank and Government suggest cultivating fish. However, the local population of “our” village does not implement this project, because they consider fish farming to be of little or non-profitable. It is important to state, that the World Bank project is closer to another village and that further exploration of the area is required to complete the picture of the fish cultivation/two-crop-three-crop issue. However, the fact is, that the people from the Chom Xoai Hamlet would rather grow three crops, even in the region, which is flooded due to the soft dike during the flooding season.



**Figure 6: View onto hard dyke. Far away one can see the reconstruction work**

However, this would mean the construction of a hard dike. For the implementation, the local people need the states permission, which they do not get. For a brief explanation: A hard dike is a fortified, high dike (approximately 6 meters), which keeps the water in the canal, away from the fields during the flooding season. This allows farmers to irrigate the fields in a controlled manner during this season. For this they must, however, be in the farmers' association and pay fees for the pumps along the canal. If they do not want to pay for these pumps, they need to irrigate their fields privately and pay the costs.

The paradox of the hard dikes is that in our region only a small section was cemented. During the flooding season, a part of the hard dyke slips away and has to be fixed again every dry season. When this happened in the first year, the local population had to pay for the damage privately. Now the state carries the costs of the reconstruction. This raises the question of why the state does not invest in a proper cementation of the dyke during the dry season. Surely a lot of money would be saved.





**Figure 7: One can see the soft dyke and beginnings of cementation which leads to nowhere.**

## 5. Challenges

Despite of the support from the KNOTS project and the local government, we also encountered the following challenges:

With the documents an information provided beforehand, we discussed for a long time before going to the field trip and even during the days at Chom Xoai Hamlet our main focus. It has been difficult for us to clearly define the focus and to stay with it during for example interviews.

Because of presumptions with which we went into the field it sometimes has been difficult for us to stay open for opinions, observations and information that did not fit our expectations regarding landslides, resettlement, agriculture , livelihood, migration, water management, etc. Landslides and other several topics seemed to be hot issues and quite sensitive in the locality, so during the interviews, we recorded quite a lot of conflicting results between the government and the local people. There were cases we did not get answers to our questions and it has been also difficult to then rephrase them.

We think, the time spent on each field trip was too short. We had only 3 full days to approach many issues.

Because most of us are foreigners and we were doing research at the border area, which is considered a sensitive area, the local government was monitoring us closely.



Language barrier has been another big challenge for us. We were completely dependent on the translators. They all did very well, however, sometimes it still was difficult to understand some of the topics, because you did not get the information first-hand.

## **6. What we found out and how to continue**

Our Initial assumption has been that landslides are the most crucial issue concerning the livelihood of the people in the Chom Xoai Hamlet in Dong Thap Province. However, people's livelihoods are of great complexity. They are influenced by landslides, sand mining, resettlement, (trans-)border activities, migration, agricultural adaptation and environmental change. So, we propose a new focus on the connectedness of livelihoods to water(management) in the Chom Xoai Hamlet in Dong Thap Province in the Mekong Delta region.

What we achieved through this time is an overview over nearly the whole setting. We propose now as a next TDR step to revisit the field with the new found focus and to establish a local research team. To frame the final problem definition, locals should be more involved and knowledges from developers (e.g. sand mining company), natural scientists (e.g. hydro scientists) and non-governmental organizations or international organizations are still in need.

We, Zhu Jinsheng (Chiang Mai University), Yeji Yoo (Chiang Mai University), Georgina Kress (University of Vienna), Tran Thi Thanh Tra (Ho-Chi-Minh Open University), Han Thi Thanh Lan (Viet Nam Academy of Social Sciences) and Aileen Sander (University of Bonn), want to thank the KNOTS project for this opportunity to conduct research in the context of the TDR approach. Also, a special thanks goes to our fieldtrip leader Nguyen Tran Cam Linh and Dr. Michael Kleinod as well as our translators Nguyen Tran Tiet Vinh and Nguyen Thi Nhat Tram for their great support and to Mr. Binh and all the interviewees. Thank you!