## UNIVERSITY OF COPENHAGEN FACULTY OF SCIENCE

# In the absence of land rights

- A story of dynamics in the Hmong village Ban Huai Nam Khao





## Interdisciplinary Land Use and Natural Resources Management, 2016

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10.709 words

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Copenhagen, April 8<sup>th</sup> 2016

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## Abstract

This report is based on a field study conducted in the village Ban Huai Nam Khao (Moo 1) (Phetchabun Region, Northern Thailand) which is inhabited by the ethnic minority Hmong. Due to the history of the study area, the village is characterised by not having any formal land right. In this report we investigate how political and historical factors influence the village and through the concepts of access, social system and agricultural practices we discuss how the division of land affect local livelihoods. Three case farmers are presented in order to represent typicalities and rarities in the village.

Firstly, the study shows that a continuous conflict between the Thai state and the Hmong community has been causing lack of formal land rights to Hmong people. On the village level in terms of the social system, the kinship relations, the original division of land when the village was founded, and oral agreements based on trust, govern the access to and the distribution of land. This interrelates with the agricultural practices of the farmers, since owners of land are more willing to do long term investments, while renters are limited by short renting periods and are more vulnerable to market fluctuations. This difference in farming possibilities reproduces the social system including the inequalities and reliance of kinship in access to land.

# Acknowledgements

This research is part of the SLUSE Joint Field Course 2016 in Thailand arranged in cooperation between Kasetsart University, University of Copenhagen and Roskilde University. We would like to thank the villagers of Moo 1 for being hospitable to our presence, and to farmers' for answering our questions and showing us their properties. This has not only been invaluable to our research but also a great experience to us.

We thank the supervisors and organisers from Kasetsart University, Ajahn Ratcha Chaichana, Sopana Jantawong and Ajahn Wannana Soontornnaruerangsee, and Kelvin Egay from Sarawak University, Malaysia. We are very thankful to our supervisors from University of Copenhagen, Thilde Bech Bruun and Søren Brofeldt for their support, dedication and good advice before, during and after the fieldwork. We also wish to thank our Thai counterparts Sangjun Waitook, Siriporn Poltam and Sirichat Poopakdee for their cooperation. Last but not least we are deeply grateful to our interpreters Pieng-in "Peace" Punyaprasiddhi and Pipatsorn "Ploy" Silawatsakul who have been always on our side, helping us to understand Thai culture and becoming more than just interpreters.

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## Introduction

### Background

The highland areas in Thailand are primarily populated by ethnic minorities (Aumtung et al. 2009), who have often been labelled as "hill tribes", which is connected to many stereotypes such as poor land management (York 2002). Because of complicated relations to the Thai state, these ethnic minorities often lack formal land rights. Land tenure in general is an issue in Thailand and the bureaucracy around land titles is very complex. According to Lubanski, the complexity of the land titling system creates inequalities and maintains the power structures between the elite and the lower society (Lubanski 2012). In the village of Ban Huai Nam Khao (Moo 1) the inhabitants are almost all of the ethnic minority Hmong and do not have formal rights to land even if they are registered and have Thai IDs. Before the fieldwork, we were informed that the village has a large amount of surrounding land, which the villagers use for agriculture purposes, even though the land is still officially state owned.

## Objective

The objective of our research is to investigate the villagers' access to land under the conditions mentioned above. Through our research, we seek to understand the social system of Moo 1, how ownership of the land is managed, and how ownership (or the lack) of land influences the villagers' decisions on their farming practices. This lead us to the following research question and sub research questions, which reflect the three sections in the results chapter.

## **Research** question

How do access and rights to land interrelate with agricultural practices and the local social system in the case of Ban Huai Nam Khao (Moo1)?

## **Sub Research Questions**

- 1. How do different historical and political factors determine the current status and use of the land in Khek Noi?
- 2. How is access to land in Moo 1 regulated by different social factors?
- 3. How does the difference between owned and rented land, together with other factors, influence agricultural practices?

#### What is our study a case of?

Lund (2014) states that "a case is not "natural," but a mental, or analytical, construct aimed at organizing knowledge about reality in a manageable way." (Lund 2014 : 224). This statement makes it relevant for us to be aware of what our study is a case of.

The aim of our analysis is to generalise on the village level, through a number of concepts, and by using three individual farmers, who will be presented later, as sub-cases. By doing that, we are able to look for what Lund calls resonance, by which he means "that different elements, dynamics, and relations could be recognized from one case to the other. Indeed, they may be quite different, yet there are some elements that resonate between them." (Ibid: 226). Thus, we wish to find typicalities and rarities between the findings for each of the farmers. During the research we had to be open to the unexpected and we were aware that our hypothesis could fail, which is, according to Lund, a fundamental condition when doing social science research (Ibid: 228). As stated by Lund, "Our choice of concepts,…, partly defines a case." (Ibid: 228), and these concepts that were defined after the data collection, thus systematise the interpretation of the data.

Our research is a case of an agricultural community - Moo 1 - where access to land is managed by some specific social factors, and is influenced by local historical events. Furthermore, it is a case of how access to land influences the land use practices.

We will in the following go through some of the concepts that we use to interpret our information from the village. These concepts help to understand our data and to guide our interpretation of the data.

#### **Analytical framework**

In order to help the reader understand how we conducted our study and how we analysed the data we gathered, we have designed the following analytical framework.

Our research question addresses three main topics: "Historical and political factors", "Access and social system" and "The agricultural practices", that are related to the case of Moo 1. These three main topics are respectively related to the three sub research questions. The empirical elements and the concepts that we have included and used to interpret the data will be elaborated below.

#### Historical and political factors

Section 3.1 aims at showing the major impacts from outside the village. To do that, we use the concept of historical and political factors influencing the village. By these factors we refer to variables outside the village, on a regional or national level, that are influencing the villagers in their situations or decision-making. The empirical elements we include to investigate these factors, will be the interview with the Tamboon Administrative Organisation (TAO) mayor, and interviews from our case farmers. We add knowledge from literature by Hares (2009), Latt (2011) and Mongsawad (2010). In our case the major historical and political factors will be the villagers relation to the state caused by historical events, related to the lack of land rights and the Royal Project (RP) - an agricultural development program initiated by the King.

#### Access and social system

Since the villagers in Moo 1 have no formal ownership over their land, the access to farming land around the village is governed by other less legally formal structures. In section 3.2 we use the concept of *access* defined by Ribot and Peluso as "*The* ability *to derive benefit from things*" to investigate how land in Moo 1 is distributed. Furthermore, we use the concept of a *social system* defined by Hylland-Eriksen as "*a set of social relations which are regularly actualised and thus reproduced as a system through interaction*" to discuss how the distribution is determined by different social factors.

#### The agricultural practices

The aim of section 3.3 is to investigate the most important factors that influence decision making in relation to agricultural practices in Moo 1. By agricultural practices we refer to which crops the farmers cultivate and how they apply different methods to do this. We sought to find the most popular crops in Moo 1 and understand why farmers would choose to cultivate these types of crops. In order to investigate this, we tried to triangulate our results as much as possible, by gathering information on the same topics and by applying several methods, including questionnaires, interviews and PRA methods.

## **Description of study area**

Moo 1 is a village located in the Khek Noi sub-district, which is part of the Khao Kho district in the Phetchabun province. Moo 1 is mainly inhabited by Hmong people, which are one of the "hill tribe" minorities of Thailand. The Hmongs originated from Southern China from the ethnic group that is now called Miao. Under the pressure of political control of the main ethnic group in China, Han Chinese, some Hmongs migrated to neighbouring countries in South-eastern Asia region, including northern Vietnam, Laos, Thailand, and Burma (Hares, 2009: 383). Moo 1 was founded in 1982 after the war between the communists and the Royal Thai army ended, and today the village consists of 219 households and around 1,000 inhabitants. Some of the important locations in the village, e.g. the public school, the Christian church, the headman's house, the community center, and the health center, are shown on the village map in figure 2.

The average temperature in the Phetchabun province is 27.2 °C, ranging from 23-30 °C during the year. The annual precipitation of the province is 1,122 mm. The locals distinguish between two seasons: the dry season, and the rainy season. The dry season is from October until April, and the rainy season is from May until September, as can also be seen in figure 1, which shows the average monthly rainfall and temperature (ClimaTemps, 2015).



*Figure 1. A graph showing the average annual precipitation and temperature in the Phetchabun province, Thailand (ClimaTemps, 2015).* 

Moo 1 is located about 600m above sea level, and the fields are located on altitudes ranging from 600-1000 m above sea level as we could measure through our GPS.



Figure 2. Map of Ban Huai Nam Khao (GPS recordings).

## **Case farmers**

As a part of the data processing and analysis after the field work, we decided to choose three farmers as cases to be able to better describe their histories and their agricultural practices and from them abstract to the village level, something that cannot be found in the literature.

The reason why we chose these three specific farmers is that they each caught our interest and we found them relevant to our research focus. After the first explorative phase, where we interviewed a wide range of farmers, we then decided to go back to the selected case farmers to do interviews that were more focused. What these farmers have in common is that they contribute to draw a general picture of Moo1, but at the same time each of them has specific characteristics.

It is important to keep in mind that the information we got from these three farmers does not make up the case of the entire village and that in order to answer our research question we have been using data gathered from other farmers as well. Their stories do not have to be considered as the heart of our analysis but a useful tool to better understand it.

Table 1. Farmer specifics			
Name	VamMeej	Nruas	Choj
Newcomer	No	Yes - 10 years ago	No
Ownership of land	Owns	Rents	Owns
Amount of land	44 rai	Less than 0.5 rai	21.5 rai
Influenced by RP	SE - rice and cabbage	Yes - Greenhouses	SE - rice and cabbage, attending in workshops
Members in HH	5	4	5
Crops	Rubber, cabbage, ginger, pepper, rice	Sweet pepper, grapes	Cabbage, coffee, Sacha Inchi bean, rice, banana
Hires labour	No	No	Labour from village
Contract w/ company	No	No	Thai CMS (Sacha Inchi beans)
HH: household Rai: 1 rai = 1600 m <sup>2</sup> RP: The Royal Project SE: Sufficiency economy			

## VamMeej

VamMeej<sup>1</sup> is a farmer with a relatively big amount of land close to the village (the map in figure 2). He believes in the sufficiency economy (or the self-sufficiency economy), and therefore, he is to a great extent influenced by factors external to the village. Over time he has made changes in his

<sup>&</sup>lt;sup>1</sup> All names of informants are pseudonyms since they were told that they would be anonymous.

agricultural practices, and the information about these changes is relevant to our research about decision making in relation to agricultural practice.

His family was living in the forest with the communists during the war and they were there when the land was divided and the village was founded. This type of information, about the land division back in the days, is important as it has influenced how land is distributed today.

#### Nruas

This farmer is relatively new to the village - he arrived there 10 years ago - and this makes him interesting for us because he gives us the perception of the village as a newcomer and we can see how his agricultural practice is influenced today by this. His story gives us information about the struggle of accessing land as a newcomer. He owns no land, but rents his land through relatives and before he rented land through Christians. He had difficulties in finding land to rent, since he was cultivating ginger and had to change to new fields every season. He also represents an exception as he has invested a large amount of money in his rented land by setting some Royal Project greenhouses. This can be explained by the fact that there are major issues in the village related to land constraint, which may be a reason why he chose to do something different. Also Nruas is an example of the importance of having relatives, who owns land, to get access to land in the village.

#### Choj

Choj owns his fields, which he has inherited them from his father and he is a self-sufficiency economy follower. He told us about the informal organisation of the land and the oral agreements between Hmong people, which are related to the social system of the village. He grows a relatively wide range of crops and he has a contract and grows Sacha Inchi beans for a Chinese company (Thai CMS).

# Methodology

The initial design of our research was following a funnel approach, meaning that the more explorative methods would have been used at the beginning, for example, open interviews, walkabouts and participant observations. These methods would have been followed by different PRA approaches as community mapping, crop calendar, and crop ranking. After applying the more explorative methods, questionnaires would be done as they involve closed and definite questions, while leaving for the last days of field work more focused interviews with selected respondents. This approach can be visualised in the initial fieldwork timetable (Appendix II). Even if our initial plan had to be changed in the field, we still tried to leave explorative methods at the beginning and more specific ones in the end (Appendix II).

However, as it is hard to foresee possible obstacles and difficulties when not in the field, original plans had to be changed due to many reasons. In our case, the first obstacle we had to overcome was the argument we had with our Thai counterpart. The research group assigned to Moo 1 was initially composed by five students from Copenhagen University and three PhD students from Kasetsart University. The first meeting went perfectly fine and our research objectives seemed to go towards the same direction, however, during the second day some relevant arguments emerged. Since then our collaboration started being difficult, primarily due to serious disagreements about methods' application and therefore most of the time was spent discussing without finding any solution. Consequently, our supervisors together with the Thai supervisors, decided to give both teams a way out of the impasse by letting us take different directions and being able to separate. Three days out of ten had already gone but from then on we could carry our research smoothly and with no major constraints.

### **Participant Observation (PO)**

We had several occasions to do participatory observation. It was a way to better understand Hmong culture but also a way to get to know the people living in the village and let them know us.

This type of method was mainly used during the first days of research, when we had the chance of taking part in a Hmong funeral, a wedding, a Christian mass, being invited to eat with some of the villagers and staying overnight in the village. We see this method as very relevant for our data collection as it gives insight that could not have been discovered without it. Sometimes it was hard to take notes during these sessions as you are fully involved in the action but we tried to record everything with our sensorium and once the PO was over we could write down what happened. In

addition, as we did not speak Thai, every talk was mediated by our interpreters and could not flow as naturally as it could have been if we spoke the local language.

## Walkabouts

In order to get to know the village and its surrounding fields, we did four walkabouts with some key informants. We were taken around and we could ask our guide to show us the main points of interest or which crops they were growing. The biases we may have encountered are mainly related to the people we decided to talk to, as we could not talk to all the farmers in the village and we were forced to just choose some. These walkabouts were fundamental to our data collection as we could then compare the information with what we found through other methods, such as during the PRA session

### Semi Structured Interviews (SSI)

We conducted 18 SSIs during the field work, including a total of 14 informants, as some informants were interviewed twice in order to get in depth information. The first one was done with the headman together with the Thai students. It could have been prepared better but it also taught us the importance of informing our interpreters in advance and having a clear structure beforehand. Before the fieldwork, we had prepared an interview guide designed for SSIs with farmers (Appendix V). Towards the end we designed specific SSIs to address particular topics and went back to talk to some of the farmers we already talked to.

This type of tool made us gather a large amount of data and they could retrieve the specific information we wanted. It was difficult to meet the farmers since they were in the fields when we were in the village - some of the fields were far from the village and we could not go there with our driver as the road was in very bad condition - but we still managed to create contacts through the pastor and by staying in the village longer in the evening.

### **Informal interviews**

Informal interviews are defined as short, improvised interviews providing useful information, e.g. in extension to a questionnaire. The questions asked were very similar to the ones in the SSI guides but the setting was different as it was less formal and not really perceivable as a real interview. Informal interviews do not have the advantage of having well planned questions like an SSI but gave us the opportunity to talk to the people in a more natural way and still get useful data. These

types of interviews could not take much time as they were done while people were busy doing something else or because they had to leave after some time as they were not arranged interviews.

## Questionnaires

Questionnaires were used to gather information on different households and draw a more general picture of the village's conditions. We designed a first version before the fieldwork, which was a draft and was meant to be changed once in the field. As a matter of fact, we merged it with the Thai students' questionnaire and we could then carry out a pilot the day after in a neighbour village, Moo 5. The discussion on what had to be changed in the pilot fuelled the conflict with the Thai counterparts and after we split, a final version was designed during our fourth day of fieldwork (Appendix VI). It was shortened and made more coherent and we could gather 21 samples of this last version. The sampling strategy was a convenient sampling, opposite to a random sampling, as many people were in their fields during the hours where we were in the village (8 AM-4.30 PM) but we could still have a broad spectrum of ages and both genders were almost equally represented as we had 9 female respondents and 12 male ones. This was due to the fact that some days we stayed longer in the village and that some households were visited at different times of the day, meaning that farmers were home.

## **Participatory Rural Appraisal (PRA)**

A PRA session was carried out together with the Thai counterparts on March 8th in the community center. The meeting was arranged by the Thai students together with the headman, whom they asked to gather 10-15 people for a couple of hours. At the beginning not many people showed up but after an hour the room was full of people, kids, women and men.

The Thai group chose to take the men in charge of the village to create a timeline of the village, a SWOT analysis and a Venn diagram. As there were just two interpreters in the room and as they were already busy translating and conducting other PRA methods, no information other than the final results is available on the process of creating the analyses made by the Thai counterparts. Therefore it is doubtable whether we can use this data, since we cannot argue on the way this data was collected. On the other side, the community mapping, the crop calendar and the crop ranking were carried out by us and the interpreters, who were previously specifically instructed on how to do PRA.

Many people were in the room which at some point created a very chaotic environment and also the time chosen may have been problematic as many of the farmers were tired after a day in the fields. We then decided to cope with the chaotic situation by dividing the people in several smaller groups which also enabled more people to be involved.

Language was also a barrier as people were discussing in Hmong, which the interpreters did not understand. It was hard to make people discuss among themselves and to make them understand the purpose of the activities but the results gathered were anyway relevant and consistent with our results from other methods.



Figure 3. Community map 1. A result from the PRA session at the community meeting.



Figure 4. Community map 1. A result from the PRA session at the community meeting.

# Soil sampling

Before working in the field, our initial plan was to examine the soil of different fields in order to investigate potential environmental effects driven from agriculture. However, after our group split up from the Thai counterparts, we did not find the soil sampling relevant to our research.

# **Results and Analysis**

### Historical and political factors

#### Factors related to current status of land and Hmong

As far as we know, the land of Moo1 is officially owned by the state, by the Department of Treasury. In order to understand why the current status of the land is like that, we have to go back in time to make things clear.

In 1967, the Hmong community in the area of Khek Noi was split in two groups because of the involvement in the war between the communists and the Royal Thai Army. According to the TAO mayor, Sunyakul, the Thai communist party was able to convince almost 90% of the Hmongs to join them. Sunyakul calls it *"a big bloody war"*, a war that continued until the beginning of the 1980s, when the state started to invite Hmongs living in the forest to show up and register themselves as they would have been forgiven and given land. This measure was called *"Order 66/23"*- a policy that stated there would be no punishment for communists and for communists' collaborators - and the authorities spread flyers over the forest in order to convince Hmong people to register themselves and to settle down. People started to come out of the forest and it went on from 1980 to 1983. In 1983 almost 100 % of the Hmong people had come out of the forest.

The government however, who had promised 20,000 rai and a land certificate to the Hmongs that helped the Thai army, offered the same land in "*Order 66/23*" to the Hmongs that were living in the forest.

According to the farmer VamMeej, the authorities promised to give 15 rai for agriculture and 1 rai for the household to each family. He also mentioned that Hmongs were tired of living in a forest and they wanted to come out and "book" land themselves. The word "book" is how our interpreters usually translated it. In this context it refers to how the farmers started farming specific plots of land, the borders between which was agreed upon between the neighbours. Thus, at that time certificates of land ownership were not relevant to them, according to VamMeej. According to Sunyakul, also Hmongs from other districts and provinces were forced to move to Khek Noi and settle there, creating more pressure on land.

Our case farmer VamMeej, and Po Foom, another farmer we interviewed, lived in the area of Moo 1 before its establishment. VamMeej was born in the local area before the village was established and before the war. The communists were the ones to persuade the Hmongs living there to go to the forests with them, he said, and there they grew rice and raised cattle for them. According to VamMeej, he and his family did not fight for the communists. Before the war, Hmongs shared the land and worked together, according to VamMeej. Po Foom is one of the oldest villagers and he had been living in the forest with his family until the government propaganda made them come out of it and get registered at the official authorities. They then settled in the newly established village and they have been living there ever since. As claimed by VamMeej, the majority of the people in this village were communists and people returned on the same land that they used before they went to the forest.

These events in relation to the war can be seen as a major impact on the Hmong people living in the area at that time, and the repercussions of this history are still apparent today. In section 3.2 we will elaborate on how the division of land happened after the war and how this division to a large extent still exists today.

In relation to land rights and ownership, Sunyakul, during the interview, claimed that in 1982 the land that was promised to the Hmongs was taken over by the Department of Treasury without informing them. Since then the Hmongs had to pay rent for the land, but they refused. Recently, in 2009, the government wanted to do a land registration in order to collect the rental. Every Hmong refused, stating that they were promised that land this is why the conflict has not been resolved yet.

In the process of settlement in Thailand, Hmongs were able to get Thai IDs, but with some forced changes in their identity. One of them is changing their surname to a more "Thai-like" surname and the other is to choose their religion out of five that are officially recognised, between which there is no folk or ancestors' religion, because such are not recognized by the Thai state. Nowadays, many Hmongs who still believe in the ancestors' religion have Buddhism as stated religion in their Thai ID card. Only a few elders, including Po Foom, still have their original name, because they refused to change it.

Sunyakul said there are nearly 14,000 people in Khek Noi who are registered, but there are still thousands of unregistered Hmongs. According to him people are not sure if the government is going to ask them to return their land and then use it for other purposes... The government wants to see evidence of land ownership but Hmongs have been living there for a long time without any paper and do not have any proof of that. *"Hmongs feel like being treated differently"*, Sunyakul stated, referring to, among other reasons, the fact that today there are no Hmong representatives in the government even if the law says there should be a certain number of representatives from every ethnic minority. On the other hand, from VamMeej point of view, the government treats everyone in the same way – also former communists, justifying it with the fact that father of one of the Privy Secretaries of the king, was the secretary of the communists.

#### Factors related to the current use of land

From our research we can tell that the use of land is in some cases influenced by the state and by the King, in terms of the Royal Project and the sufficiency economy.

Official authorities recognised in the 1950's problems in the way "hill tribes", including Hmongs, were conducting their livelihoods, especially regarding "slash-and-burn" cultivation, deforestation, and opium poppy production. Since then the authorities have put efforts to overcome the issues with these minorities (Hares, 2009: 384).

The Royal Project was initiated in 1969 after the King visited some rural areas of Thailand, where he recognised the "hill tribe" problems (Hares, 2009: 390; Latt, 2011: 533). The main objective of the Royal Project, according to the official website of Highland Research and Development Institute (HRDI, 2016), is:

to solve the problems of deforestation, poverty and opium production by promoting alternative crops [...] One of the reasons [...] was humanitarianism [...] Another reason, [...] was to solve the problem of heroin. [...] A further reason which is very important is that, as is well known, the hill tribes are people who use agricultural methods which, if left unchecked, could bring the country to ruin. In other words they cut down trees and practice 'slash and burn' methods which are totally wrong. If we help them it is tantamount to the country in general having a better standard of living and security.

The Royal Project's main activities are research, development and marketing. It collaborates with farmers by providing seeds, fertilisers, equipment and other initial input from the project on a credit basis. After harvesting, the farmers are required to sell part of the harvest to the Royal Project. The initial cost of input is provided by the Royal Project and it will be deducted from the revenue of the farmers. The remaining part will be paid to the farmers as income (Latt, 2011:534).

According to our interview with Maiv, the headman's daughter-in-law, the matter of quantity to be sold to the Royal Project today it is estimated to be 20% of the yield. Now farmers are deciding on their own how much they want to sell to the Royal Project, the amount they are willing to sell on a market and the amount for their own consumption. In addition Maiv mentioned that farmers may come together to discuss the price they want the Royal Project to pay for their products in case they do not agree with the price offered by the Royal Project.

Differently from the Royal Project, the sufficiency economy, presented by the King in 1997, is a philosophy that pays attention to theories, knowledge and moral principles rather than technical

aspects and practices in Royal Project. The base elements of the sufficiency economy are three interconnected principles: moderation, reasonableness and self-immunity (Mongsawad, 2010: 127). The philosophy of the sufficiency economy aims at the application of knowledge (knowledge, wisdom, prudence) and of moral principles (honesty, integrity, sharing, altruism, tolerance) in order to develop and achieve harmony, security and sustainability of society and environment in the context of globalisation. One of the aims of the sufficiency economy is to improve human well-being and reduce vulnerability of the people of Thailand. According to proponents of the sufficiency economy, its principles could lead citizens to reduce overexploitation of natural resources, and to embrace and conserve the environment. (Mongsawad, 2010: 128).

According to the farmer VamMeej, the Royal Project was introduced approximately five years ago in Moo 1 and it is the only village taking part in the Royal Project in the Khek Noi sub-district so far. The project promotes the policy of "one village - one crop", which entails that every village should specialise in one crop, which in Moo1 is sweet pepper, as stated in both interviews with the agricultural extension officer and Maiv. VamMeej said he recently changed his farming practices according to sufficiency economy, which to him meant growing crops to feed his family and selling the surplus. In addition, during questionnaires we heard people's plans to do farming according to the sufficiency economy.

#### **Part conclusion**

The current status of the land of Khek Noi is that it is owned by Department of Treasury. Therefore, none of the villagers have land certificates. People who are using the land were offered to register their land and to pay a rent but they refused to do so referring to promises of land given by the state around the time of the war. However in spite of such promises Hmongs still lack recognition and protection of rights. This conflict caused by the events in the late 60s and the following years is thus one of the historical factors still influencing the villagers today.

#### Access and social system

The villagers in Moo 1, as we have explained, have no formal ownership over their land. Rather, the access to farming land around the village is governed by a range of less legally formal structures and land rights. This section aims to show how access to land in Moo 1 is determined by different social factors, which will be discussed through Ribot and Peluso's (2003) theory of access.

#### Access

Ribot and Peluso (2003) define access as "*The* ability *to derive benefit from things*" (ibid:153). By focusing on access, Ribot and Peluso aim to understand how different mechanisms, processes and social relations affect people's abilities to benefit from things (ibid:54). These things can include "*material objects, persons, institutions, and symbols*" (ibid:153). In the present context we are specifically interested in one kind of *things that* is arable farming land. In the context of our research we find it relevant to use this concept of access and thus follow Ribot and Peluso in trying to understand how different mechanisms and social relations affect farmers' abilities to benefit from land.

To put it simply, the ways of having access to land in Moo 1 are to "own" it, to rent it or to share it with family members who own it. Though we use the word "own" here, it does not refer to the possession of an official land certificate. Such a certificate, as we have explained, is not available to the villagers. Rather we refer to locally recognised rights to a demarcated land that is seen as belonging to a certain person or family. The rights of a family to the land usually go back to the founding of the village in 1982, after the end of the civil war. Many of our informants spoke of how they, their fathers or their grandfathers came out of the forest and booked the land that they still farm today. An example that we previously mentioned is VamMeej. He was born in 1958 in the area where the village is today and moved with his parents into the forest when the communists came. He was talking about the promises the government made at the end of the war:

Christopher: Did the government also promise land titles?

VamMeej: Yes, they promised 15 rai for agriculture and 1 rai for household.

Christopher: Did they then provide this?

VamMeej: No, but we did not really ask for it either. We were tired of living in the forest, so we came out and booked the land ourselves. (Christopher's field notes - Walkabout with VamMeej)

The way VamMeej puts it, the villagers, rather than waiting around for the state to fulfil their promise of land titles, divided the land by themselves. The land that now belongs to VamMeej has thus been in his family's possession since the founding of the village. Many of our informants repeat the story of land being divided at the founding of the village or when they "came out of the forest", referring to the time when the war ended and they settled where the village is today. The land will then usually be passed from father to son or in rare exceptions to a daughter. Family and

inheritance thus play a large role in getting access to land through "owning" it. In our questionnaire we asked the question "Do you have your own land?" We posed the question like this in an attempt not to imply official ownership<sup>2</sup> but instead to get answers about whether they had land they considered theirs. 91% answered this affirmatively. We then asked the respondents to specify how much of this land was "rented", "bought" or "other". To this 86% answered in the "other" category<sup>3</sup>. Specifying this "other"<sup>4</sup>, 56 % of the answers said it was their families or a specific family member's land and 31% said it was inherited. The last 13 % mentioned the Department of Treasury, which is the official owner of the land. We only met one family who had bought their land from someone else in Moo 1. The high percentage of answers specifying their land as family land, some of them also referring to family members outside their household, also shows us that group ownership rather than individual ownership plays a key role.

Another way of having access to land is through renting it. Farmers who did not own land would rent it, but also farmers who did own land would in some cases rent land for rice and ginger cultivation. For rice and ginger, as we will return to in section 3.3, farmers need new land every season. Therefore, access to rentable land - especially land that had not recently been used for ginger cultivation - was very important to some farmers. Like family plays a large role in owning land it also plays a large role in getting access to rented land. Many of our informants told us they would usually rent land from their relatives. Getting access to land in Moo 1 as an outsider seems quite difficult. This can to a large extent be explained by the important role of family and relatives in access to land. Since land is rarely sold, the way to get access to land as a newcomer is through relatives.

Ribot and Peluso distinguish between *access* defined as: "*The* ability *to derive benefit from things*" and *property* defined as "*the* right *to benefit from things*" (Ribot and Peluso 2003:153). In this case the villagers who "own" land do not only have *ability* to benefit from it, they also have locally recognised *rights* to benefit from each their field, as it has been demarcated by oral agreement at the village founding. As recognised by the other villagers the "owners" have rights to use their land, rights to pass it on to heirs and alienation rights. Many of our informants emphasised the importance of respecting the borders between fields. Using Ribot and Peluso's definition, we may

<sup>&</sup>lt;sup>2</sup> in a later question all the respondents answered no to having land tenure.

<sup>&</sup>lt;sup>3</sup> 24% answered in the "rented" category and 5% answered in the "bought" category.

<sup>&</sup>lt;sup>4</sup> this was posed open-ended and we have grouped the answers afterwards.

therefore see it as property to some extent. Though these rights are respected within the village, they are not officially recognised could in principle take over the land or sell it. In practice however, the state does to some extent respect these rights. In an interview, the TAO mayor Sunyakul, said that if any Thai businessman wanted to buy land in Khek Noi sub-district he would have to make an agreement with the Hmong "owner" and show a contract on this agreement to the Ministry of Treasury, the official land owner, to register the land with the state. There are obviously limitations to the state's recognition of these rights, since they still have not chosen to give the inhabitants official title deeds. Thus, the *rights* over the land are only partly recognized outside the village itself.

Even though "owned" land can be seen to some extent as property in Moo 1, we still find the concept of access more applicable since it also includes other ways of benefitting from land. Access includes renting but also using land that is not the farmer's "private property" but belongs to the family or a specific family member. With their *theory of access*, Ribot and Peluso direct focus to "*who actually benefit from things and through what processes they are able to do so*" (Ribot & Peluso 2003:154). Looking at our case we will now turn to examine further through what processes and relations people are able to benefit from land. We will do this through looking at the village as a *social system*.

#### The social system and kinship

The anthropologist Thomas Hylland-Eriksen (2001) defines a social system as "a set of social relations which are regularly actualised and thus reproduced as a system through interaction" and elaborates that "A social system is further characterised by a (more or less) shared normative system and a functioning set of sanctions" (Hylland-Eriksen 2001:75). For the purposes of this research we will emphasise kinship as an important social relation and the importance of unwritten oral agreements on land division as a part of the shared normative system, which is also protected by sanctions against violators.

As mentioned, family and relatives play an important role in land access. We found that among the Hmong in Moo 1 relatives usually refer to people of the same *Sae*. *Sae* is the first part of the traditional Hmong surname, which is followed by the name of a specific group such as *Lee* - the surname would in that case be Sae-Lee. Sae thus also refers to one of these groups. A person is considered related to everyone in the same Sae, even though they do not know each other. The Saes we argue can be understood as what anthropologists, such as Edward E. Evans-Pritchard (1964), have called clans. In an article on the political system of the Nuer of Southern Sudan, Evans-

Pritchard explains how clans order allegiance - if there is a conflict between two clans, everyone in the clan is supposed to support each other against the other clan (ibid.:292). In our case we did not come across open conflicts between clans, but allegiance and solidarity to the Sae was important in other aspects. Of course allegiance and solidarity often work in more complex ways and other factors such as religion may play a role. For example our informant Nruas used to rent land for ginger cultivation through other Christians because he could trust them, he said. In general nonetheless land is, as mentioned above, almost always acquired through inheritance or through sharing land with family members. Moreover land is usually rented through "relatives" - that is, people of the same Sae.

Trust plays a role in this since a ginger farmer for example, has to trust the persons he rents from that the land has not recently been used for ginger. As Nruas said, renting land for ginger cultivation is risky, because the owner of the land might lie. Trust also plays an important role in owning land. The security of a farmer's rights to his land is dependent on others respecting these rights and the borders of it. In this, kinship and solidarity play an important role. When talking about respect of borders our informant Choj said that a good thing about Hmong is that if they make an agreement, they keep it. There is no need for written contracts, he said, they trust each other. If an agreement is broken, he explained, the elders will be called to teach the conflicting parts a lesson. According to Choj, the ancestors never had problems with this but there can be problems now because "outsiders' " ideas are being brought into the Hmong community. This statement implies that solidarity between Hmongs plays an important role and that a part of the shared normative system, as Hylland-Eriksen talks about, is to respect oral agreements. An example of how it works in practice is the one border conflict we came across on our fieldwork. Sawm, who is a farmer living in another Moo in Khek Noi but who has his field in Moo 1, had a conflict with his neighbour over the border between their fields. The conflict was about whether a line of concrete poles or a line of trees approximately following the poles should mark the border. Even though it could seem like a small matter it was highly controversial, according to Sawm, that it could not be settled. This is a case of an oral agreement not being completely respected, which points to how important a role these oral agreements play.

#### Nruas' risky investment

Nruas has constructed a greenhouse as part of the Royal Project on land that he rents. He owes 38,000 baht to the Royal Project for this, that he cannot afford to pay off at the moment. This may at first sight seem irrational since he is investing in land that does not belong to him. This, we

argue, can be explained in part by his faith in the kinship solidarity. He is renting the land from relatives and has, as he says, no need for a contract because he trusts them.

Part of the explanation behind Nruas' risky decision can however also be the lack of other possibilities. Nruas moved to the village 10 years ago, and as a relative newcomer, he was not part of the original division of land. Thus he has no possibility of owning land and, like other of our informants, emphasised the lack of available land multiple times. In fact he mentioned the lack of available land as one of the reasons why he stopped cultivating ginger and started with the greenhouses instead. The plot of land he currently rents is less than half a rai. His income is enough to pay the rent but not to pay off the loan to the Royal Project.

This lack of available land was not only an issue for Nruas. It was mentioned by many of our informants and in our questionnaire, 100 % of the answers to the question "Is there any available land in the village?" was "No". This is especially an issue for newcomers such as Nruas, which brings us to the question of inequalities in relation to access to land.

#### Inequalities

An important aspect of Ribot and Peluso's access term is "who actually benefit from things" (Ribot & Peluso 2003:154). We have in this chapter outlined the processes through which people in Moo 1 can benefit from land. What is left is the question of who can benefit. As mentioned access to land is usually gained through relatives who "booked" it at the founding of the village and it is difficult for newcomers to get access to land. This is in spite of the fact that only about 40 % of the land belonging to the village is being used. The headman told us in an interview that anyone would be welcome to come and farm in the village and that he wonders why there are few newcomers. In practice however, the villagers experience a lack of available arable land and especially newcomers have difficulties gaining access to land. The headman also mentioned that land was allocated according to who came first but also according to the size of the household and their labour capabilities to cultivate the land. However, we found that there was no apparent relation between a household's size and labour capabilities and the size of their land. We even came across families who had lots of land that was not being used because they did not have the need or the labour. Thus there seem to be very different perceptions of how much available land there is in the village and significant inequalities in access to arable land. Some villagers, such as the headman who has 50 greenhouses, benefit from lots of land while others lack access to land.
### **Part conclusion**

This research sprung in part from an interest in issues surrounding the fact that the villagers have no formal land rights. However, what we have argued here is that the actual access to land is determined more by local social factors and locally recognised rights than by formal certificates and lack thereof. This also means that the access to land is in practice not so much mediated by the state. Nonetheless it does not mean that some farmers do not experience difficulties in getting access to arable land. Since access to land is determined by kinship and by who booked what land at the village founding, there are few possibilities for farmers who are newcomers, whose families did not get a large share in the beginning or who lack relatives in the village.

### **Agricultural Practices in Moo 1**

Moo 1 was located about a 30 minutes' drive from the national park where we were staying. On the way to the village we would sit in the back of our drivers' truck and we would drive through hilly and mountainous landscapes. The landscape would change from the dense forests of the national park with tall trees reaching towards the sky to a more open landscape where forests would be replaced by tree plantations and various crop fields. Every now and then some greenhouses would show, terraces with cabbage, or a field intercropped with banana trees and rubber trees.

### **Common crops**

The first farmer we acquainted with was the headman of the village. He cultivates ginger and cabbage, and has around 50 greenhouses where he grows grapes and sweet peppers. He told us that about 30,000 rai of land belong to Moo 1 and only about 40 % of the land is used by the villagers. From the 30,000 rai of land around 10,000 rai are covered by the community forest, where the villagers can collect non timber forest products for their own consumption. We talked with the headman about the occupations of the village, and he said that farming is the primary occupation of Moo 1. The most popular crops are ginger and cabbage, which are cash crops that are grown to make an income for the farmers. This information was consistent with the information gathered on the first community meeting, where a group of villagers made a crop ranking and agreed on sweet pepper, ginger, cabbage and rice being the most valuable crops, according to market price, scoring a 1st, 2nd, 3rd and 4th place, respectively, as shown in table 2. Sweet peppers are grown in greenhouses, which only a limited group of villagers have, whereas ginger, cabbage and rice are not. Results from our questionnaires confirm that ginger, cabbage and rice are the most popular crops in Moo 1, out of 11 reported crops from the questionnaires, as shown in table 3.

	Market price	Labour demand
1	Sweet peppers	Ginger
2	Ginger	Cabbage
3	Cabbage	Rice
4	Rice	

Table 2. Crop ranking. Ranking of crops made by farmers at the community meeting.

The Khek Noi agricultural extension officer informed us that the reason why ginger, cabbage and rice are the most popular crops, is because that they produce a higher yield, and therefore the income is likely to be higher.

During the crop ranking, the respondents also ranked the most labour demanding crops (table 2). They agreed that ginger, cabbage and rice were the most labour demanding crops. It may be taken into account, that the respondents only had the same crops in mind as ranked according to the market price. The reason why sweet pepper is not in this ranking might be that it is grown in greenhouses, and several respondents have informed us that cultivating crops in greenhouses decreases the demand for labour.

Farmers that cultivate ginger and cabbage report that these crops require a lot of fertilisers, both organic and inorganic, which is a problem because fertilisers are expensive. However, because the market demand for ginger and cabbage is high, they will provide a good income and can therefore be a 'safe choice' of the farmer. Though, there is a catch when it comes to cultivating cabbage. Several farmers complain that it is hard to satisfy the middleman that buys the cabbage. The headman's assistant and the farmer Tsawb say that the middleman wants to buy good looking cabbage grown without inorganic fertilisers and pesticides, but that it is difficult to satisfy these demands. If they use inorganic fertilisers or pesticides they will produce good looking cabbage, but the middleman will lower the price because of the use of fertilisers and pesticides. If they only use organic fertilisers the cabbage will not look good, and then the middleman will not offer a good price for the cabbage. This issue puts the farmers in a difficult position, since the demand for organic produce is increasing (Latt and Roth 2015), but the challenge regarding the middleman makes it a hard way to earn an income and cover production costs. Despite some obstacles in cultivation, cabbage is the most grown crop in Moo 1, as shown in table 3.

%	Questionnaires	%	Interviews
85	Cabbage	50	Cabbage
55	Rice	43	Rice
45	Ginger	21	Ginger
10	Maize	14	Sweet pepper
10	Sweet pepper	14	Lettuce
5	Green lettuce	14	Fruit trees
5	Mango trees	7	Rubber trees
5	Persimmon	7	Banana trees
5	Finger root	7	Pepper
5	Chinese cabbage	7	Chili
5	Japanese bunching onion	7	Grapes
		7	Coffee
		7	Eucalyptus
		7	Maize
		7	Sacha Inchi shrubs

Table 3. List of cultivated crops in Moo 1. The percentages are result according to informationfrom the questionnaires and interviews.

Table 3 shows the different kinds of crops respondents grow in Moo 1. Most of the crops are grown with the purpose of generating an income. Interviewed farmers informed us that rice and banana trees are crops that are grown for household consumption while maize would primarily be grown as fodder for the livestock. If the whole yield from the fruit trees and the cabbage is not sold, it will also be used for household consumption.

As mentioned, 85 % of questionnaire respondents and 50 % of interview respondents were growing cabbage (table 3), which might be because cabbage can be harvested two times per year, and that it is secure way to have an income if your produce looks good enough, regardless of using inorganic

fertilisers or not. According to Roberts (2015: 23) Hmong farmers in Laos would consider labour demands, and market value of crops when choosing which crops to grow, which is consistent to our findings in a different geographical context.

### Case farmers and their agricultural decision making

During SSIs with farmers, we wanted to get information about which factors influence the decision making on which crops to cultivate. We asked farmers why they had chosen to grow a certain crop, and what was good or bad about these crops. Most respondents answered income, need for labour, and investment in fertilisers as the factors they would consider the most. VamMeej answered that people from the Rice Research Center had analysed his soil and told him that it was good for growing cabbage, and so he did. The reason why he grows rubber trees was because the Rice Research Center told him also that his field was good for growing trees, and later on another organisation had contacted him and told him about the rubber trees, and so he decided to try with them. Choj was contacted by the company, Thai CMS, that wanted him to grow Sacha Inchi beans, and his contract with the company is stating that they have to buy the produce from his harvest. He thought it was a good investment so he started growing this crop last year.

The cases of VamMeej and Choj show that a good income is considered a crucial factor in farmers' decision making, which is consistent with the information gathered from several other farmers.

#### The differences of owned and rented land

Towards the end of our data collection, we began to see slight differences in which types of crops farmers' would grow dependending on the land status. According to IFAD (2012: 1) land tenure rights are important for people in order to be able to diversify their livelihoods. Land tenure status also affects the choice of agricultural practices and selection of crops (Ibid: 1). Farmers that we interviewed tended to invest in perennial crops and trees if they were owning the land, e.g. VamMeej, who cultivates rubber trees that last for about 20 years, and Choj who, cultivates coffee trees and Sacha Inchi shrubs, both of which last for about 50 years. Farmers would usually grow ginger or rice if they were renting the land. Some farmers that owned land, would also choose to rent land to grow rice and ginger, e.g. VamMeej had cattle some years ago and used his own fields for grazing land, and then he would rent land to grow ginger and rice. Today he does not have cattle anymore and therefore does not need to rent land for agriculture because he has enough

Both VamMeej and Choj own their land and have multiple crops on their lands, which puts them in a better position for making investments. In case of crop failure, they will still have an income from other crops. Furthermore, ownership of their lands let them free to invest in crops and trees that will last for several years, in other words, they are long term investments.

Five years ago VamMeej started growing rice and cabbage according to the Sufficiency Economy, promoted by the government. Choj also grows rice and cabbage according to this philosophy. This choice of crops allows farmers following the sufficiency economy to rotate between rice and cabbage during one calendar year, by growing rice from May to December and cabbage from January to April (table 4) while farmers growing only cabbage could harvest it up to three times a year. Growing rice in terraces according to the sufficiency economy is also characteristic for owned land, while rice cultivation on rented land would not be grown in terraces as it requires more labour. The rental period varies between one and two years, and rented land would usually be used for annual crops and not for long-term investments, which results from the interviews strongly imply. Unfortunately, our questionnaire could not confirm this result, primarily because it was not designed to focus on this hypothesis, and secondly because there are not enough respondents (21 questionnaires) to show any significant relation.

Nruas is an exception in this case, as he is renting land but he has invested a lot in it by installing greenhouses. It made us wonder why he would invest money in this project since his renting period is short, and greenhouses are a more long term project. Nruas told us that he was tired of growing ginger, because he had to rent new land every season and that there was not enough land in the village for cultivating ginger. Since Nruas is renting land from a relative, this might give him some security in keeping the same land so that he can continue the greenhouse farming. This feeling of security in renting land from relatives, could show the importance of kinship among Hmongs, and might also be a determining factor in agricultural practices.

Month\Crops	Jan	Feb	Mar	Apr	Feb Mar Apr May Jun		Jul	Aug Sep Oct	Sep	Oct	Nov Dec	Dec
Cabbage	3 <sup>rd</sup> gen	3 <sup>rd</sup> generation				1 <sup>st</sup> gen	1 <sup>st</sup> generation					
								2 <sup>nd</sup> generation	eration			
Rice												
Ginger		Plantin	g of rhi	zomes	Checki	ng for d	Planting of rhizomes Checking for disease*					
Tomatoes												
Coriander												
Rainy season												
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### The state's influence on agriculture

Hmong populations are known for unsustainable agricultural practices, such as shifting cultivation, where forest areas are cleared, burned down and used for agriculture until the soil is depleted from nutrients. The farmers will then leave the infertile fields and move on to new, unused areas (Latt and Roth 2015:224; Turkelboom et al. 2008: 102).

As previously described, the Royal Project was initiated to stop the production of opium among the "hill tribes" and to prevent further deforestation as a result of shifting cultivation. However, this might have had the opposite effect since preventing swidden farmers to access large areas would force them to shorten the fallow periods and consequently lead to soil depletion and a decrease in crop yields (Roberts 2015: 23). Furthermore, steeplands are more vulnerable to soil erosion and shortened fallow periods will accelerate its development (Turkelboom et al. 2008: 114). In our research we did not investigate in the length of fallowing periods or farmers' knowledge of soil erosion, but it is likely that farmers might have faced some of these challenges since many of the fields in Moo 1 are located on steep slopes. Two of our case farmers have recently started to cultivate trees and legumes, which might prevent the side effects of shortened rotation cycles (Ibid: 114).

#### **Part conclusion**

It was found that the most important factors influencing decision making on agricultural practices were the income and the labour and fertilisers requirements.

The most popular crops that the farmers in Moo 1 cultivate are cabbage, rice and ginger. Cabbage and ginger are crops that need a lot of fertiliser and have labour intensive periods, however, these crops provide economic inputs that overcome the high production costs of labour and fertiliser. This information was consistent in interviews, PRA methods, and with previous research (such as Roberts 2015).

## Discussion

The concepts that we framed and analysed in the previous sections influence each other to a great extent. We have looked at them one by one to get more specific information and now by analysing the dynamics between them we will see a more comprehensive picture. To do that we have developed the figure below. We are aware of the risk of simplification that using a figure implies but in order to visualise such complex aspects it is useful.



Figure 5. The arrows symbolise the way the different concepts are related and which ones are influenced by the others. The thickness of the arrows indicates the degree of influence.

Firstly, the access to land is influenced by the local social system (arrow no. 1). This is because of the initial division of the land after the end of the war, which determined the area that farmers have today. As a result, newcomers have poor chances of buying or renting land if they do not have any relatives in Moo 1, which reflects the great importance of the Sae kinship system.

Moreover, the access to land affects the agricultural practices (arrow no. 2), e.g. the difference in farming methods on owned and rented land. Some agricultural practices, e.g. cultivation of ginger, would put higher demand on the access to land than other, which emphasises the importance of the local social system. As Hylland-Eriksen (2001) states, the social system is "...actualised and thus reproduced as a system through interaction" (Hylland-Eriksen, 2001: 72). In this case one of the interactions that reproduces the system is the continuous reliance on kinship relations for access to land - this is one of the interrelations we see.

The interrelations we have seen before, between the social system and the access to land (arrow no.1) are a consequence of the lack of land rights, which justifies arrow no. 3 and 4. If the official status of the land changes, we imagine that it could influence the social system and the access to land because some of the normatives, e.g. the importance of kinship in access, will become secondary.

Next, the social system is influencing the agricultural practices (arrow no. 5) in terms of kinship and trust to relatives, this provides "security" both for farmers that own land, who trust that other people will not take away their land, and renting farmers, who normally rent land from relatives. This security influences farmers in their agricultural practices and then it also actualises the norm of the importance of oral agreements inherent in the social system.

Lastly, as historical and political factors influencing the village, we see the complicated relation to the state, being the major cause to the fact villagers do not have official land rights (arrow no. 6). Hence, this factor has indirectly an impact on all of the villagers, as opposed to the other factor, the Royal Project (arrow no. 7), which over the last five years has had an impact only on the farmers who joined it. Furthermore the inequalities inherent in the social system is reproduced by the influence of the Royal Project, because farmers need the financial capacity to invest in it. These two factors were chosen among many others because from our findings they were the more relevant ones.

## Conclusion

The continuous complicated relations between the Hmong community and the Thai state causes the current lack of formal land rights for the villagers in Moo 1. On the local level, kinship relations, the original division of land at the village founding, and oral agreements govern the access to land in the village. This reproduces inequalities and can create difficulties, especially for newcomers, who can have troubles getting access to land. Moreover, agricultural practices, as we have seen, are influenced by the access to land. While people owning land are more willing to do long term investments, farmers that are renting land have more limited options and are more vulnerable to market fluctuations. This difference in farming possibilities reinforces inequalities and thus the agricultural practices and access relates back to the social system.

## List of references

- Aumtong, Supathida, Jakob Magid, Sander Bruun, and Andreas de Neergaard. 2009. "Relating Soil
   Carbon Fractions to Land Use in Sloping Uplands in Northern Thailand." *Agriculture, Ecosystems & Environment* 131 (3–4): 229–239.
- Evans-Pritchard, E. E. 1964. "The Nuer of the Southern Sudan." In *African Political Systems*, edited by M. Fortes and E. E. Evans-Pritchard, 273–96. London: Oxford University Press.
- Hares, Minna. 2009. "Forest Conflict in Thailand: Northern Minorities in Focus." *Environmental Management* 43 (3): 381–395.
- Hylland-Eriksen, Thomas. 2001. Small Places, Large Issues: An Introduction to Social and Cultural Anthropology. London: Pluto Press.
- Latt, Sai, and Robin Roth. 2015. "Agrarian Change and Ethnic Politics: Restructuring of Hmong and Shan Labour and Agricultural Production in Northern Thailand." *Journal of Agrarian Change* 15 (2): 220–238.

Latt, Sai S.W. 2011. "More Than Culture, Gender, and Class." Critical Asian Studies 43 (4): 531–350.

- Lubanski, Jason. 2012. "Land Is Life: A Policy Advocacy Case Study of the Northern Thailand Land Reform Movement.".
- Lund, Christian. 2014. "Of What Is This a Case?: Analytical Movements in Qualitative Social Science Research." *Human Organization* 73 (3): 224–234.
- Mongsawad, Prasopchoke. 2010. "The Philosophy of Sufficiency Economy: A Contribution to the Theory of Development." *Asia-Pacific Development Journal* 17 (1): 123–143.

Ribot, Jesse C., and Nancy Lee Peluso. 2003. "A Theory of Access\*." Rural Sociology 68 (2): 153–181.

- Roberts, Michelle S. 2015. "Understanding Farmer Decision Making in Northern Lao PDR." *Culture, Agriculture, Food and Environment* 37 (1): 14–27.
- Turkelboom, F., J. Poesen, and G. Trébuil. 2008. "The Multiple Land Degradation Effects Caused by Land-Use Intensification in Tropical Steeplands: A Catchment Study from Northern Thailand." *CATENA*, Environmental change, geomorphic processes and land degradation in tropical highlands, 75 (1): 102–116.
- York, Jodi. 2002. "Forests for Whom? Ethnic Politics of Conservation in Northern Thailand, 1996-2001." *Berkeley Journal of Sociology* 46: 132–154.

### **Online sources**

HRDI. "Thailand's Royal Project". *Highland Research and Development Institute*. Link: http://www.hrdi.or.th/en/who\_we\_are/page/Thailand-Royal-Project. Last accessed 07.04.2016. ClimaTemps. 2015. Petchabun Climate and Temperature. *Climatemps.com* Link: http://www.phetchabun.climatemps.com/. Last accessed 07.04.2016

IFAD. 2012. *Land tenure security and poverty reduction*. International Fund for Agricultural Development.

Link: https://www.ifad.org/documents/10180/0f715abf-3f59-41f6-ac08-28403ebd271f. Last accessed 07.04.2016

# Appendix I

## **Applied methods**

Method	Number of respondents
Informal Interviews	8
Semi structured interviews	14*
Walkabouts	4**
Questionnaires	21
PRA: Community mapping	4
PRA: Crop ranking	6
PRA: Crop calendar	6
Total number of respondents	

\*18 interviews was conducted in total

\*\*three of the walkabouts is also counted as a semi structured interview, as the questions asked was from the prepared interview guide.

# Appendix II

## Timeline I

Scheduled activities:						N	/larc	h					
Activity	2	3	4	5	6	7	8	9	10	11	12	13	14
In Bangkok													
Departure for base camp													
Visit the village													1
Finalize the research proposal													1
Presentation of progress						<b>*</b>							1
Fieldwork/data collection													1
Participant Observation													1
Semi-Structured Interviews													1
- Village headman													1
- Identify farmers & key informants													1
- Key informants													1
- Farmers													1
- Focus group interview								?					1
Participatory Rural Appraisal													1
- Walkabouts													1
- Community mapping													<u> </u>
- Cropping calendar													<u> </u>
- Soil mapping													<u> </u>
Questionnaires													μ
- Sampling													<u> </u>
- Pilot													<u> </u>
- Collection													<u> </u>
- Soil sampling													<u> </u>
GPS monitoring													1
Transcription and data analysis													1
Prep for community meeting													1
Community meeting													
Return to Bangkok													

## **Timeline II**

Scheduled activities:						N	1arc	h					
Activity	2	3	4	5	6	7	8	9	10	11	12	13	14
In Bangkok													
Departure for base camp													
Visit the village													
Finalize the research proposal													
Presentation of progress													
Fieldwork/data collection													
Participant Observation					1	2			3		4		
Semi-Structured Interviews													
- Village headman													
- Identify farmers & key informants													
- Key informants													
- Farmers													
- Focus group interview													
Participatory Rural Appraisal													
- Walkabouts													
- Community mapping													
- Cropping calendar													
- Soil mapping													
Questionnaires													
- Sampling													
- Pilot													
- Collection													
- Soil sampling													
GPS monitoring													
Transcription and data analysis													
Prep for community meeting													
Community meeting													
Return to Bangkok													

## Appendix III

## **Informed consent**

The data collected during this interview are for academic purposes.

This interview is part of a joint research project between Kasetsart University and Copenhagen University.

You will remain anonymous.

There are no right or wrong answers, we are interested in your experience and knowledge.

We thank you in advance for your time and help, you are very important for our research.

ใบยินยอมด้วยความสมัครใจ ข้อมูลที่เก็บระหว่างการสัมภาษณ์นี้ใช้เพื่อจุดประสงค์ทางการศึกษา การสัมภาษณ์นี้เป็นส่วนหนึ่งของโครงการวิจัยร่วมระหว่างมหาวิทยาลัยเกษตรศาสตร์และมหาวิทยาลัยโคเป็นฮาเกน ชื่อของท่านจะไม่ถูกเปิดเผย คำตอบของท่านไม่มีทั้งผิดหรือถูก เราต่างสนใจในประสบการณ์และองก์ความรู้ของท่าน ท่านมีความสำคัญอย่างมากต่องานวิจัยของเรา ทางเราจึงต้องขอขอบคุณล่วงหน้ามา ณ ที่นี้ ที่ท่านสละเวลาช่วยเหลือเรา

## Appendix IV

### Interview Guide - Village headman

Thank you for agreeing on participating in this interview. We appreciate you taking your time to participate.

Introduction to the project:

We are students from Copenhagen University and University of Bangkok and we are here to learn about the farming practices of the farmers in your village.

We will be asking several questions about your daily life and hear your perspective on some of the things we are looking into. There are no wrong or right answers, we are just interested in you telling us about your way of living and daily activities. If there are questions that you do not want to answer, that it alright, and we will move on to the next question.

We would like to record the interview to be able to listen to it afterwards. Is that okay with you? Do your have any questions before we begin the interview?

Household ID: Date and time: Name of the interviewes:

Followed by some 'warm-up' questions:

What is your name?
How old are you?
How many years have you lived in Moo 1? (Whole life? Moved where from?)
Do you have an education? (Level of education?)
How many people are living in your household? (Be aware of the definition of household might differ. Maybe ask about number of children to specify?)
age of members

- age of member
- Occupation
- Other?

How does a normal day (or week) of work look like?

• Besides being headman, what other activities does he do?

(If farming, then ask the same questions as for farmers)

What is the main income activity in Moo 1? How much land is related to Moo 1? How many farmers are there in the Village? Are there both male and female farmers? How many of the farmers own their own land? Are there any farmers from outside of Moo 1 who is renting the land?

Which crops do you consider as the most commonly produced? Which challenges do you think most of the farmers of this village?

• how do farmers meet these challenges? Can they solve them by themselves?

When did you became the headman of Moo 1?

How did you become the headman? (Election? Who has the right to vote? how often are there elections?)

What is your job as being a headman?

Do you have a vision for Moo 1? How do you see the village as in the future? (Growing population, growing wealth, etc) (maybe ask about the future and not about visions)

How many villagers are using the community forest?

What do they use it for? (Extra income or safety-net in case of crop failure)

How is the management of the forest? (Who is in charge, and who else takes part in this management)

Are there any restrictions in the use of the community forest? (And what if these aren't respected?)

## Appendix V

[Small talk]

### **Interview Guide - Farmers**

Thank you for agreeing on participating in this interview. We appreciate you taking your time to help us. [*Informed consent*] Can we record the interview?

What is your name? How old are you? How many years have you lived in this village? (Whole life? Moved where from?) Who lives in your household?

What do you grow on your fields?

[Do simple cropping calender with these questions]

- Do you grow only one crop on these fields or more?
- Do you change from season to season?
- How often do you grow the different crops [ask for specific crops]?
- Do you use irrigation? If so, when?
- Do you use fertilizier? If so, for which crops and which fertilizer?
- Which months do you need the most labour?
- When there is a lot of work to be done on the field, do you get help from anyone? Who?

Do you sell these crops or use them yourselves?

Do you own the land that you use or is it rented (or neither)?

- How much land do you have in total?
- How did you and your family get access to it? By inheriting, buying, renting, given?

Have you changed what you grow during the past few years?

- What's good/bad about the crops you grow now [ask for specific crops]?
- What's good/bad about the crops you grew before?
- How much did you produce last year of each crop?
- How is this compared to the past years?

Why did you choose to grow the crops you grow?

Did the following factors influence the decision:

The price of the seeds?

How much fertilizer the crops need?

How much labour is needed for the different crops?

How easy the crops are to sell?

Are any of your fields better than others?

Do you plan to continue your farming as you do it now, or any future plans?

If money wasn't an issue, what would you then do with your fields? Why?

Do you have any livestock?

• If so: How many and what are they used for?

Besides farming, what other income does your family have?

How about: Selling products, doing labour work, remmittances (migrated family members sending money)

How does a normal day (or week) of work in the field look like?

What are the biggest problems/challenges that you face with your farming?

• How do you deal with these problems?

If you have an issue relating to the whole village, how is the decision made?\* We heard there's an issue about the roads to the fields.

- How does it affect you?
- What could be done about it? (rather than asking who has the responsibility)

There is no phone signal in your village?

- How does this affect you?
- Is anything being done about this? If so: where you included in the decision?

How can someone make a good living in this village?\*

Do you want to add something?

Do you have any suggestions for us about what to learn about this village?

## Appendix VI

### Questionnaire

แบบสอบถาม (Questionnarie)

วิถีชีวิตและการจัดการทรัพยากรธรรมชาติและสิ่งแวดล้อมภายใต้ข้อจำกัดของการถือครองที่ดิน ชุมชนบ้านห้วยน้ำขาว (Livelihood and Natural Resources and Environment Management under Land Tenure Constraint of Huai Nam Khao Community)

ส่วนที่ 1 ข้อมูลทั่วไปของผู้ตอบแบบสอบถาม (Part 1 General information of the respondent)

- 1. ชื่อ (Name).....
- 2. INF (Gender)
  - 1 หญิง (Female)
  - 2 ชาย(Male)
- 3. อายุ(age).....ปี(years)
- 4. เชื้อชาติ (Ethnicity).....สัญชาติ (Nationality).....
- 5. ศาสนา(Religion).....
- 7. สถานภาพสมรส (Marital Status)
  - 1 โสด (Single)
  - 2 สมรส / คู่ (Married)
  - 3 หม้าย(Widowed)
- 8. ระดับการศึกษา (Education)
  - 1 ประถมศึกษา (Primary)
  - 2 มัธยมศึกษาตอนต้น (Junior High)
    - 3 มัธยมศึกษาตอนปลาย (High)
  - 4 ปวช./ปวส./อนุปริญญา (Diploma)
    - 5 ปริญญาตรี (Bachelor)
  - 6 สูงกว่าปริญญาตรี (Higher than Bachelor)
    - 7 อื่น ๆ ระบุ(Other, Specify).....

### 9. อาชีพหลัก (Occupation)

- 1 เกษตรกรรม (สวน/ไร่/นา/เลี้ยงสัตว์) (Agriculture)
- 2 รับจ้างทั่วไป (Labour)
  - 3 รับราชการ/รัฐวิสาหกิจ (Civil Officer/State Enterprise)
- 4 ค้าขาย/ธุรกิงส่วนตัว (Own Business)
  - 5 ทำงานโรงงาน/บริษัท/ริสอร์ท (Factory/Company/Resort)
- 6 ทำงานบ้าน/พ่อบ้าน/แม่บ้าน (Housewife/Husband)

- 7 ว่างงาน(Unemployed)
- 8 อื่น ๆระบุ (Other).....

### 10. อาชีพรอง (2nd Occupation)

- 1 เกษตรกรรม (สวน/ไร่/นา/เลี้ยงสัตว์) (Agriculture)
- 2 รับจ้างทั่วไป (Labour)
  - 3 รับราชการ/รัฐวิสาหกิจ (Civil Officer/State Enterprise)
- 4 ค้าขาย/ธุรกิจส่วนตัว (Own Business)
  - 5 ทำงานโรงงาน/บริษัท/รีสอร์ท (Factory/Company/Resort)
- 6 ทำงานบ้าน/พ่อบ้าน/แม่บ้าน (Housewife/Husband)
  - 7 ว่างงาน(Unemployed)
- 8 อื่น าระบุ (Other).....

11. รายได้เฉลี่ยต่อเดือน.....บาท (Average income per month in TBH)

- 12. สถานภาพในครัวเรือน (Status in HH)
  - 1 หัวหน้าครัวเรือน (Leader of HH)
  - 2 คู่สมรส (Spouse)
  - 3 บุตร (Child)
    - 4 ผู้อาศัย (Inhabitant)
  - 5 อื่น ๆ ระบุ (Other).....

ถำคับ	ชาย	หญิง	อายุ	อาชีพ
(No)	(Male)	(Female)	(Age)	(Occupation)

15. ท่านอาศัยอยู่ในหมู่บ้านนี้(หมู่ 1)มา ...........บี (You have lived here for ...... years)

16. ระยะทางจากบ้านไปแปลงเกษตร .....กิโลเมตร (How far from field ... km)

17. ระยะทางจากบ้านไปตลาด......กิโลเมตร (How far from market .....km)

18. ระยะทางจากบ้านไปป่า.....กิโลเมตร (How far from forest .... km)

19. กิจกรรมสร้างรายได้และทำมาหากินในรอบปีของท่าน (Annual income making activities )

<u>ดำชี้แจง</u> ระบุกิจกรรม เช่น เก็บเห็ดป่า (ระบุชื่อ) เก็บหน่อไม้ จักสาน ไม้กวาด ปักผ้า เป็นต้น และทำเส้นแสดงระยะเวลาในการทำกิจกรรมต่าง ๆ ตามช่วงเดือน (Instruction: specify activities; for example, mushroom picking (specify name), bamboo shoot picking, wickerwork, broom making, embroidery. And make a timeline for each activity according to the month you do)

กิจกรรม Activities	ม้/ไม่มี Have/Don't Have	<sub>ราย</sub> ได้ / ปี Income/Year
1 พืชที่ปลูก (Crops)		
2 ปศุสัตว์ (Livestock)		
3 สินค้า (Commodities)		
4 งานอื่นๆ (ยกเว้นทำสวน (NFTP collection)		
5 ของป้ำ (ยกเว้นไม้) (Seasonal off-farm work)		
6		
7		

20. ชุมชนของท่านมีการรวมกลุ่มทำกิจกรรมต่าง ๆ หรือไม่ เช่น กลุ่มอาชีพ กลุ่มแม่บ้าน (Are there any associations in community?)

1 ไม่มี (NO)

2 มี ระบุ..... (YES, specify...)

21. ท่านมีที่ดินเป็นของตนเอง/ของกรอบกรัวหรือไม่ (Do you have your own land)

1 ไม่มี (NO) 2 มี (YES) - (1. เช่า (Rented)...... ไร่ 2. ซื้อ (Purchased) ...... ไร่ 3. อื่นๆ (Other)...... ไร่)

22. ที่ดินทำกินของท่านมีเอกสารสิทธิหรือไม่ (Do you have land tenure?)

1 ไม่มีเอกสารสิทธิ (No land tenure) 2 มีเอกสารสิทธิเป็น......(Yes, It is....)

3 ไม่ทราบ (Unknown)

23. มีที่ดินว่างเปล่าในหมู่บ้านนี้หรือไม่ (Do you have any available land?)

1 ไม่มี (NO) 2.มี (YES)

23.1. ทำยังไงถึงจะได้ที่ตรงนั้นเป็นของตัวเอง (How to get land?)

1. เช่า (Rent) 2. ชื่อ (Purchase)

3. อื่นๆ (Other).....

### 24. ท่านปลูกพืชประเภทใดบ้าง (What type of crops are growing?)

พืช	ผลผลิตรวมทั้งปี (กก.)	จำนวนผลผลิตที่ขายได้ (กก.)
(Crop)	(Yield)	(Sell)

25. ท่านขายผลผลิตทางการเกษตรโดยวิธีใด (How do you sell your products?)1 ขายตรง(Sell it yourself)2 ขายผ่านตัวแทน (Sell to the shop)

3 พ่อค้าคนกลาง (Middleman)

26.	ท่านได้ใช้ปุ๋ยในการทำการเกษตรหรือไม่ (Do you use fert	ilizers?)	
	1 1¥ (YES)	2	ไม่ใช้ (NO)

27. ถ้าใช้ ใช้ปุ๋ยอะไร ...... (If YES, what fertilzer do you use?

28. ท่านกิดว่ากุณภาพดินในไร่ของท่านเป็นอย่างไร (What do you think about soil quality in your field?)1. ดีมาก (very good)2. ดี (good)3.แย่ (Bad)4. แย่มาก (Very Bad)5.ไม่รู้ (Unknown)

### 29. ท่านมีฟาร์มปศุสัตว์หรือไม่ (Do you keep Livestock?) 1. มี (YES) 2. ไม่มี (NO)

ประเภท (Livestock)	ນີ (Yes)	เพื่ออะไร (งาย / กินเอง) (Purpose)
เล็ก (เป็ด/ไก่) (Small livestock)		
กลาง (หมู) (Medium		
livestock)		
ใหญ่ (วัว) (Big livestock)		

30. แหล่งน้ำเพื่อการเกษตรมาจากที่ใด (What is your water resources for Agriculture)

1 น้ำฝน (Rainfed)

2 ปั้ม (light pump)

3 nadi (canal)

4 เครื่องสูบน้ำ (pumping machine)

5 ระบบชลประทาน (irrigation system)

6 อื่น ๆ..... (other)

31. เครื่องมือที่ใช้ในการเกษตร (Agricultural equipment)

1 เครื่องจักรขนาดเล็ก (small machinery)

2 เครื่องจักรขนาดใหญ่ (big machinery)

3 เครื่องมือ เครื่องใช้ในครัวเรือน (tools used in HH)

- 4 ยุ้ง ฉาง (barn)
- 5 อื่นๆ ..... (other)

32. ท่านกิดว่าสภาพถนนและเส้นทางไปสู่พื้นที่ต่างๆเป็นอย่างไร (What do you think about conditions of the roads?)

1. ดีมาก (very good) 2. ดี (good) 3.แข่ (bad) 4. แข่มาก (very bad) 5.ไม่รู้ (unknown)

33. ท่านได้รับแหล่งเงินสนับสนุนครอบครัวได้จากแหล่งใดบ้าง ( Do you have any financial support?)

แหล่งเงินทุน	จำนวน (บาท/ปี)
(Financial Support)	(TBH/Year)
1. เงินสนับสนุนจากรัฐบาล (government	
support)	
2. เงินกู้/เครดิด (loan/credit)	
3. เงินบำนาญ (pension)	
4. เงินเก็บ เงินออม (savings)	
<b>5</b> . อื่น	
۹(other)	

34. ชีวิตความเป็นอยู่ตอนนี้เป็นอย่างไร (What do you think about your living conditions?)

- 1. พอใจมาก (very good)
- 2. พอใจ (good)
- 3.ไม่พอใจ (bad)
- 4. ไม่พอใจมาก (very bad)
- 5.ไม่รู้ (unknown)
- 35. มีสถานการณ์และการเปลี่ยนแปลงทางการเกษตร (you had agricultural situations and agricultural changes ?)

สถานการณ์ด้ำนลบ	2554 – 2559
Negative Shocks	2011-2016
1. ปริมาณผลผลิตตกต่ำ (serious crop fail)	
2. ราคาผลผลิตตกต่ำ (serious price fail)	
3. ภัยธรรมชาติ (natural shocks)	
4. ปัญหาการทำปศุสัตว์ (livestock loss)	
5. ปัญหาด้านเงินทุน (funding problems)	

6. เครื่องมือทางการเกษตรเสียหาย (agricultural assets loss)	
7. ค่าแรงตกต่ำ (wage loss)	
8. ปัญหาแรงงาน (employment loss)	
10. ภาษีสังคม (costly social events)	
สถานการณ์ด้านบวก (Positive Changes)	2554 - 2559 (2011-2016)
1. ฟื้นที่อยู่อาศัยและทำกินเพิ่มขึ้น (new land)	
2. พาหนะใหม่ (vehicle)	
3. ฝึกอบรมเพิ่มทักษะ (special trainigs/education)	
4. สาธารญปโภค สาธารญปการ (village infrastructure)	
5. การแต่งตั้งโยกข้าย (social changes/community)	
6. การสนับสนุนจากรัฐบาล (government support)	

## Appendix VII

Interdisciplinary Land Use and Natural Resources Management University of Copenhagen Thailand 2016 Village of *Ban Huai Nam Khao*, the Phetchabun Province

## Decision making and land use rights

agricultural practices and social structures in Ban Huai Nam Khao (Moo 1)



Picture from the field site taken by Thilde Bech Bruun

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Jeppe Grau Thomsen

(2515 words) February 26th 2016

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### Acronyms

TAO	- Tambon Administrative Organisation
GPS	- Geographical Positioning System
NGO	- Non-Governmental Organisation
NTFP	- Non-Timber Forest Products
PRA	- Participatory Rural Appraisal
SSI	- Semi-structured Interview
DO	Dartiain ant Observation

PO - Participant Observation

### Introduction

More than half of Thailand's population live in rural areas (FAOSTAT, 2010) and approximately 56.7% of its inhabitants are engaged in farming (Santihop et al., 2012), making agriculture the main activity and source of income. However, increasing population has lead to a high competition of lands both for residential, industrial and agricultural purposes (Kaewkallaya et al., 2013). The

highland areas in Thailand are primarily populated by ethnic minorities (Aumtung et al. 2009), who have often been labelled as "hilltribes", which is connected to many stereotypes such as poor land management (York 2002). Ban Huai Nam Khao is an example of a highland village inhabited by the ethnic minority Hmong (TAO statistics 2015). The Hmong often lack land rights and even citizenship. As far as we know, this is also the case of Ban Huai Nam Khao. Land tenure in general is an issue in Thailand. The bureaucracy around land titles is very complex and the richest 10% - among whom are many government officials - own 90% of titled land (Lubanski, 2012). According to Lubanski, the land titling system thus maintains the power structures between the elite and the lower society.

#### Objective

We are interested in the villagers land rights, since they are all of the ethnic minority Hmong, who often don't have rights to own land nor have Thai citizenship. Nevertheless the village Ban Huai Nam Khao has a large area of surrounding land, which the villagers use for agriculture, even though it is officially state owned land. We therefore find it interesting how the villagers on the local level organize rights to use the land; how they divide it between them and what norms govern it. We are also interested in how this local organization of informal land rights and the lack of formal land rights influences the decision making of farmers and their land use practices. The individual farmers' decisions and changes in land use practices may in turn also influence how rights to use land is distributed on the local level. This lead us to the following research question:

### **Research Question**

How do land rights and the social organization of the village interrelate with land use practices and decision making in the case of Ban Huai Nam Khao (Moo 1)

### **Sub Research Questions**

- 1. What are the land use practices in the village?
- 2. What are the formal land rights in the village and how do these affect the villagers?
- 3. How are the local norms and practices concerning the rights to use land?

4. How do internal and external factors influence the farmers decision making regarding land use?

In Appendix X we have specified objectives for each sub research question.

### The object of study

To structure this presentation of our study, first, we will present the analytical object, which will be the general thematics, and then the empirical object, which will be the local context, both in terms of the spatial and social context, we would like to focus on.

#### The empirical object:

The geographical setting of our study is the village Ban Huai Nam Khao (Moo1), Khek Noi, Phetchabun province. It's a village of 219 households that according to the Khek Noi TAO statistics are all of Hmong ethnicity. Many Hmong in Thailand do not have citizenship and thus lack formal land rights, which thus may also be the case in Ban Huai Nam Khao. We will return to this in relation to our analytical object. The village's main agricultural activities are rice for home consumption and cabbage and ginger as cash crops. Some villagers are also engaged in a Royal Project about establishing greenhouses. Moreover the village has access to a community forest, which is used for grazing and collection of NTFPs. Another circumstance, that is characteristic for Ban Huai Nam Khao is, that it has a relatively big area of land, which means the villagers rent land leaseholders from the region. to Our main informants are the farmers of the village and other key informants such as the village headman. We have chosen to limit our unit of analysis to the interhousehold level, as we try to understand the wider social dynamics in the village and the agricultural decisionmaking of each household. We are therefore less interested in the intrahousehold dynamics between individuals.

### The analytical object:

As the village that sets the scene for our research has some characteristics, as described above, we have chosen the analytical object in correlation to these. The fact that the village consists only of people of the Hmong minority, who supposedly have no citizenship, means that a central analytic object for our study will be the significance of villagers being an *ethnic minority* in the relation to the *decision making* regarding *land use*. In continuation hereof we want to focus on how the lack of

*formal land rights* for the villagers are related to their *land use practices*, and which other factors may impact the decision making. The relation between lack of land rights and the fact that they are an ethnic minority makes relationships between minorities and the state regarding land use a central and general theme. Also a theme will be the *social organization* of the village, since we assume that there must be some kind of informal or semi-formal rights and agreements within the village among the households, because of the lack of formal land use rights. This also points our attention to socio-economic differences and local hierarchies in the village.

### Methodology

In order to answer our research question and sub research questions, the following methods have been selected.

### Semi structured interviews

In our research project, we plan to undertake semi structured interviews with farmers in Ban Huai Nam Khao (Moo 1) and with key informants such as the village headman. The interviews will help us answer our second sub research question about how villagers organise the rights to land locally in more or less informal ways. They will also, together with PRA and other methods provide us data about people's land use practices and their own perception of these practices, of their land rights and of their challenges related to both topics.

The first interview will be carried with the headman of the village on the first day as he is the only key informant we currently have, other people may be selected for an interview on the same day by doing a snowball sampling. This method will surely imply some bias as it is not a random sampling but it can give a first insight into the village.

#### **Participant observation**

We plan to use participant observation throughout the fieldwork to get a general understanding of life in the village by engaging in as much of village life as possible. This will furthermore help us understand the social context of the information we obtain from other methods. More specifically, we would like to use participant observation to understand how people interact with their land and natural resources by accompanying them to the work in their field and to the community forest. We

will keep our eyes and ears open and be attentive to what goes on in the village to be able to siege opportunities to participate in activities that may inform our research.

### Focus group interviews

To address sub research question number 2.1 and find out which norms and rules exist within the village and how farmers decide to organise themselves and use their lands, focus group interviews may be a useful tool. This is due to the fact that through FGI, opinions can be shared and discussed and more useful information can be generated out of it compared to SSIs where the interviewee is by himself and therefore may forget to mention something.

However, it is not always easy to find the right people to talk to and also to create an efficient group, the chance of loosing time and not getting the data needed is fairly high as there is not much time available for selecting people and get a full picture of the villagers.

For this reason this method may not be used in the field and be substituted with higher number of SSIs.

### Soil sampling

In this research, soil sampling is applied in order to determine the characteristics and quality of the soil (e.g. pH, colour, mineral content) in the farm field that belongs to the village Ban Huai Nam Khao. Together with qualitative methods it is desired to investigate whether there is a correlation between what the farmers perceive as the best fields with the most fertile soil and the results from soil samples. Soil sampling could be done together with a transect walk with the farmers around to the fields.

Together with satellite images from current and previous years a picture of how land has been treated during the years can be drawn and results combined and triangulated together with soil mapping.

### Geographic positioning system (GPS)

GPS is used combined with other methods applied, to track routes, marks positions or measure areas. This would for example be to track a route when doing forest transects or walkabouts, to mark positions for soil sampling, track the area of a field or mapping important locations in the village.

### **Participatory Rural Appraisal**

"PRA is a group of approaches and methods to enable rural people to present, share and analyse their knowledge of life and conditions, so that they can plan and act." (PRA tools 1, found on Absalon).

In Moo 1, several PRA activities will be conducted, such as community mapping, a way of getting to know more about the village structure, both from a topographic and from social point of view, this tool will generate a more in deep knowledge of the internal structure of village and how the village works. Another PRA approach is soil mapping, by drawing a map of the soil distribution in the farming lands together with the farmers will give an insight into the social structures behind the land distribution. A creation of a cropping calendar will also be helpful to look deeper at the agricultural systems in use and find the reasons why farmers decide to grow certain types of crops and why they do so. Moreover, as the field work will last several days, different transect walks are expected, both in the fields and in the community forest.

These transects will be the perfect opportunity for a less formal approach to the villagers and give the chance to get directly some background information that may be harder to access throughout other methods.

### Questionnaires

This method is going to be used mainly to get a picture of the livelihoods patterns in Moo1. A draft design is going to be made before the departure but a final version is going to be created after some days of fieldwork together with the Thai student.

The current idea is to ask people about the composition of their household, their agricultural activities, the crops they grow and their access natural resources. These background data will help to see dependencies of assets and activities on decision-making process and triangulate data from other research methods in this study.

It is planned to cover between 20 to 30 households depending on the time availability.

### Sampling strategy

As a sampling strategy, the first interview will be a SSI with the village headman. From there it is expected to use snowball sampling, as the village headman hopefully will be able to connect us with other key informants. To avoid bias, it is a part of the strategy to recruit participants through other ways, and not only from the village headman. Therefore, we plan to do walks in the village and do SSI, walkabouts or give questionnaires to people who are willing to participate.

The plan is to do the questionnaires after some days in the village, so we are able to specify the questions, e.g. which factors can classify the socio-economic differences, and which conditions is significant regarding the social organization.

We are interested to interview diverse informants, like farmers, local administrative representatives or local extension officer and NGO. For PRA and focus group methods, different groups of 4-6 farmers will be asked to discuss given topics or do community mapping, soil mapping and crop calendar.

On this stage of the project it is hard to define which farmers are targeted as participants in PRA, focus group and questionnaires, but as a strategy we want to talk to villagers and farmers from different socio-economic classes and. Therefore we plan to identify some of the informant for the SSI after the questionnaires. It is planned to discuss sampling strategy with Thai counterpart on the field site, and to do a pilot questionnaire before the full samling.

For soil sampling, we expect to do stratified random sampling, as we expect to sample from different types of fields. From each plot there will be taken three samples in order to avoid bias.

### **Expectations and possible challenges**

No research, in progresses is a simple linear fashion and neither do we expect this field research to do. One possible challenge could be, if we find out that lack of formal land rights is not an issue to the villagers. This would potentially entail a restructuring of our research since the issue of land rights figures prominently in our research question. However, we may find that the farmers themselves do not perceive it as an issue, but that the way they locally organize rights to use land is still interesting. In continuation of this we are aware that we should be sensitive to other factors being important, than the ones we expected.

Another potential challenge could be in relation to sampling and potential conflicts or divides in the village. This can especially be an issue since we may get many informants from the headman, which would give him power over whom we interview and may associate us with him. It is therefore important to be aware of our own positioning, how the villagers perceive us and how this may affect our data. To cope with this risks, we want to find other ways to find informants, as described in the Sampling strategy. Our positioning may also be relevant in relation to questions about the lack of formal land rights. This may be a sensitive issue, since it can be understood as implying that the villagers are squatting illegally on state-owned land. It is therefore significant to

be aware of how we frame our questions. This may however be out of our hands since we work with interpreters

### Collaboration with counterparts in Thailand

This project will be conducted with a Thai counterpart of four Phd students from the University of Kasetsart, Bangkok. We are really looking forward to collaborating with them and we believe this will be an important opportunity as they could give an insight into their culture and help us understanding better the data collected.

### References

- Aumtong, Supathida, Jakob Magid, Sander Bruun, and Andreas de Neergaard. 2009. "Relating Soil Carbon Fractions to Land Use in Sloping Uplands in Northern Thailand." *Agriculture, Ecosystems* & Environment 131 (3–4): 229–39. doi:10.1016/j.agee.2009.01.013.
- FAOSTAT, 2010. Available at: http://faostat3.fao.org/browse/area/216/E. [Last accessed 19.02.2016].
- Kaewkallaya, Niramon, Rajendra P. Shrestha, and Anisara Pensuk Tibkaew. "Effect of agricultural land reform development project on rural livelihood: experience from Thailand." International Journal of Environmental and Rural Development 5, no. 1 (2014): 20-25.
- Lubanski, Jason. 2012. "Land Is Life: A Policy Advocacy Case Study of the Northern Thailand Land Reform Movement." http://digitalcollections.sit.edu/capstones/2565/.
- Roberts, Michelle S. 2015. "Understanding Farmer Decision Making in Northern Lao PDR." *Culture, Agriculture, Food and Environment* 37 (1): 14–27. doi:10.1111/cuag.12044.
- Santiphop, Thirapong, Rajendra P. Shrestha, and Manzul K. Hazarika. 2012. "An Analysis of Factors Affecting Agricultural Land Use Patterns and Livelihood Strategies of Farm Households in Kanchanaburi Province, Thailand." *Journal of Land Use Science* 7 (3): 331–48. doi:10.1080/1747423X.2011.587208.
- TAO (2015) Khek Noi Sub-district. 2015. Basic information of Camp Son Sub-district. Available at http://kheknoi.go.th/system/index.asp [Last accessed 19.02.2016]
- York, Jodi. 2002. "Forests for Whom? Ethnic Politics of Conservation in Northern Thailand, 1996-2001." Berkeley Journal of Sociology 46: 132–54.

# Appendix VIII

## Data matrix

Research question	Sub research questions	Specified objectives Informants		Method(s)	Expected sampling	Expected output
How do land rights and the social organization of the village	<ol> <li>What are the land use practices in the village?</li> </ol>	<ol> <li>Study what the agricultural practices and systems in the village are and which crops are</li> </ol>	s, n	SSI, PRA Snowba (community samplin mapping, crop Simple calendar/ranki random ng), samplin	all 1g. 1g.	Map of the land: crops and ownership
interrelate with land use practices and decision making in the case of Ban Huai Nam Khao (Moo 1)		<ul> <li>2) Examine the Farmers physical</li> <li>physical</li> <li>characteristics of the characteristics of the Farmers</li> <li>3) Understand how Farmers</li> <li>the farmers perceive Village the soils of their headma fields and how this influence decision making about</li> <li>4) Understand the Farmers</li> </ul>		PRA, walkabouts Soil sampling	Simple random sampling. Stratified random sampling. will be done when considered necessary in Snowball	Simple Farmers perception of random the soil quality. Identify sampling. physical characteristics Stratified Insight in which soil random characteristics the sampling. farmers value, and if farmers value, and if Stratification they make decisions in will be done relation of crop-types on when behalf of the soil considered characteristics necessary in Information about what
		-		cabouts		other natural resources the households/farmers rely on besides

Research	Sub research	Specified objectives Informants		Method(s)	Expected	Expected output
question	questions				sampling	
	1) What are the	e <b>5</b> ) Study how the	Farmers,	SSI,	Snowball	Information about
	land use	use of land has	Village	walkabouts,	sampling	former land use
	practices in the	practices in the changed over time	headman	PRA		practices, timeline
	village?					
	2) What are the	e 1) Understand the	Key	SSI with key	Snowball	Land use rights, legal
	formal land	formal land use	Informants,	informants,	sampling.	status of both the
	rights in the	rights	Village	background		villagers and the land
	village and how		headman	official data,		
	do these affect			Questionnaire		
	the villagers?			(with		
		<b>2</b> ) Understand how	Key	ISS	Snowball	Knowledge about the
		villagers perceive	informants/		sampling.	villagers' perception of
		their land rights and	Farmers			land use rights, and what
		their challenges				consequences/conflicts/o
		related to them				bstacles there might be
						in the context of land
						nce riahte
		<b>3)</b> Investigate the	Key	SSI, Focus	Snowball	
		what role the ethnic	informants	group?	sampling.	
		othering play in their				
		-				

Research question	Sub research questions	Specified objectives	Informants	Method(s)	Expected sampling	Expected output
	<ol> <li>How are the local norms and practices concerning the rights to use land?</li> </ol>	<b>3)</b> How are the <b>1)</b> Investigate howKeylocal norms and villagers organizeInformantpracticesthe rights to use theVillageconcerning theland in informal and headman,rights to usesemi-formal waysFarmersland?headmanheadman	Ś.	SSI, walkabouts, focus groups?	Snowball sampling.	Hierarchy, agreements and regulations inside the village
		2) Investigate how farmers perceive official rules and rights in land use	Farmers	SSI, walkabouts, focus groups?	Snowball sampling.	Information on how official rules affects the farmers
		3) Try to identify possible non- written laws in relation to land rights ruling the village	Key Informants, Village headman, Farmers	SSI, walkabouts, focus groups?	Snowball sampling.	Knowledge about the possible non-written laws within the village

Research	Sub research	Specified	Informants	Method(s)	Expected	Expected output
question	questions	objectives			sampling	
	3) How are the	4) Investigate if		PO		
	local norms and	d there are				
	practices	contradictions				
	concerning the	between these				
	rights to use	norms and what				
	land?	access people				
	(continued)	5) Investigate if	Key	SSI,	Snowball	Diagram of stakeholders
		possible conflicts of Informants,		walkabouts	sampling.	and interests
		interest may exist	Village			
		within the village	headman,			
		regarding land	Farmers			
		use/rights				
		6) Understand the	Farmers	SSI,	Snowball	Knowledge about the
		practices and		walkabouts,	sampling.	Hmong culture in terms
		ideologies in terms		PO		of agriculture and land
		of land use and				use of this particular
		agriculture of the				village
		village population				

Research	Sub research	Specified objectives Informants		Method(s)	Expected	Expected output
manank	currence h				Sundanac	
	4) How do	1) Understand the	Key	Od 'ISS	Snowball	Identifying main actors
	internal and	social organization i	informants,		sampling.	within the village, their
	external factors of the village		Farmers,			roles and their decision
	influence the		Village			making 'power'
	farmers'	<b>2</b> ) Investigate the	Key	Questionnaire Simple	Simple	Identification of
	decision	role of i	informants	s, SSI	random	socioeconomic
	making	socioeconomic			sampling	differences the between
	regarding land	differences between				the households, and
	use?	the households in				information about if and
		decision making				how the socioeconomic
		regarding land use				characteristics of a
						household interrelates
		<b>3</b> ) Assess access to <b>I</b>	Farmers,	SSI,	Snowball	What other natural
		the natural resources Village	Village	walkabouts	sampling.	resources are used in the
		of the village h	headman			village and what are the
						access to these
		4) Understand how				Information about how
		our findings from				internal and external
		sub-research				factors may influence
		question 1, 2 and 3				decision making related
		سمامنمه مم ممنمنمه				ممن لمعا مع