

# Sluse - ILUNRM Field Report Spring 2010

Interdisciplinary  
Land Use and  
Natural Resource  
Management,  
Thailand 2010

Cecilie  
Fernández,  
David Oruka and  
Anika Totojani



## [TENURE AND LIVELIHOOD]

An assessment of the influence of land tenure on livelihoods in Ban  
Kamphuan

## **Abstract**

This study assesses the impacts of the tenure system on livelihoods and livelihood strategies of villagers in Ban Kamphuan. An investigation to find out if and how the villagers are affected by their tenure status from the way they perceive their situation and opportunities. While agriculture is the main economic activity in Ban Kamphuan village, less than half of the 336 households have titled land. This implies that most villagers have no security regarding use and ownership of the land and are vulnerable to external forces and face a risk of being expelled from the land. The feeling of insecurity perceived by the villagers may lead to short term planning and low investment in the land used, which will have an impact on the income possibilities of the households.

Contrary to the above notion the findings showed no difference in the use of land or investment level between villagers with titled land and those without. The issue of land security through titled land is important for the villagers however the lack of it does not determine their livelihood strategies as expected. The informal tenure system in the area seems to have provided a certain amount of security in order to invest time, energy and capital in the land. And in fact the growing of long term crops such as para rubber, apart from providing income is used as one of the strategies by the villagers to secure land through the formal system.

## **Preface**

The following report is a result of a field study conducted as part of the Interdisciplinary Land-use and Natural Resource Management course (ILUNRM 2010). The field trip was conducted in Southern Thailand in the village Ban Kamphuan, Suk Sam Ran district, Ranong during 11 days. The work was done by three Master students from University of Copenhagen in cooperation with four Thai students from the University of Kasetsart, Bangkok. The course gave opportunity to apply qualitative, quantitative and participatory methods in a real setting and experience cooperation and data collection in an interdisciplinary, intercultural and international setting. All three students have participated and contributed to all parts of the report.

---

Anika Totojani

---

David Oruka

---

Cecilie Fernández

## Table of contents

Abstract.....	2
Acknowledgements.....	8
Structure of the report.....	9
Author list.....	9
List of Acronyms.....	10
1. Introduction .....	11
The local context: Ban Kamphuan .....	11
Defining the focus: land tenure and livelihood.....	12
Objective .....	13
Research question.....	13
2. Methodology.....	15
Qualitative method: Interview.....	15
Key informants.....	15
Household interviews .....	16
Quantitative method: Household survey.....	17
Participatory rural appraisal (PRA).....	17
Community resource map .....	17
Seasonal calendar .....	18
Paired matrix ranking.....	18
Venn diagram .....	18
Transect walk .....	18
GPS mapping.....	19
Observation.....	19
Secondary data .....	20
Data analysis .....	20
3. Characteristics of the land tenure system in Ban Kamphuan.....	21
Evolution of land tenure in Ban Kamphuan village.....	21
Types of certificate.....	21
Why few farmers have land certificates .....	22

Procedure for obtaining land certificate in Ban Kamphuan .....	23
Land ownership strategies in Ban Kamphuan.....	24
Land administration in Ban Kamphuan.....	25
Institutions and actors involved in land certification .....	25
4. Characteristics of livelihoods and strategies in Ban Kamphuan .....	27
Natural capital.....	29
Expansion of land.....	30
Other activities.....	31
Water .....	33
Financial capital.....	33
Physical capital.....	34
Social capital .....	34
Human capital .....	35
Migration.....	36
5. Importance of certification of land for the villagers in Ban Kamphuan.....	37
Income .....	37
Access to credit .....	38
Activities, land use and crops.....	39
Insecurity.....	40
Insecurity and investment .....	41
Long term planning .....	42
Compromising .....	42
Opportunities and Limitations .....	43
6. Challenges and retrospective reflections .....	44
Change of focus.....	44
Intercultural challenges .....	44
Language .....	45
Comparisons of groups .....	45
PRA.....	45
Validity of the findings .....	46
7. Conclusion.....	47
References .....	48

Appendix 1 Questionnaire .....	50
Appendix 2 Paired Matrix Ranking with villagers with land certificate .....	56
Appendix 3 Seasonal Calendar.....	58
Appendix 4 Semi structured interview guide (headman) .....	60
Appendix 5 Semi Structured Guide for Key Informants.....	62
Appendix 6 Semi structured interview guide households .....	63
Appendix 7 Transect walk .....	65
Appendix 8 Resource map .....	67
Appendix 9 Venn Diagram .....	68
Appendix 10 Table of applied methods .....	69
Appendix 11 Synopsis .....	70
Introduction .....	73
The local context.....	73
Identifying the problem .....	73
Objective .....	74
Research question.....	75
Definition of relevant concepts .....	75
Analytical approach .....	76
Methodology.....	76
Semi-structured interview .....	76
Group interview .....	77
Questionnaires.....	78
GPS .....	78
Participatory rural appraisal .....	78
Community resource map .....	79
Activities ranking exercise.....	79
Community history exercise .....	79
Observation.....	79
Transect walks.....	80
References .....	81
Appendix 1 - Data matrix .....	83
Appendix 2 – Time schedule .....	86

Appendix 3 – Questionnaire .....	89
Appendix 4 – Interview introduction and interview guides .....	94
Interview 1: Semi structured interview with the village headman .....	95
Interview 2: Semi structured interview with an Official from the National Park .....	97
Interview 3: Semi structured interview with 6 villagers .....	98
Interview 4: Group interview with representatives from village groups.....	99
Appendix 5 - Ranking exercise of activities.....	100
Appendix 6 - Resource mapping exercise .....	101
Appendix 7 – Community history exercise .....	102
Appendix 8 – Extra activities.....	103
Appendix 9 - Livelihood and livelihood strategies .....	104

## **Acknowledgements**

Many people have contributed to and positively influenced our experiences in the field. We would especially like to thank our Thai counterparts Duangmanee Damwichai, Kritiya Nuklang, Nopadol Kandee and Singto Poppadon for the good and fun cooperation and not least our two interpreters; Tah and Noon, who made the cooperation and communication possible.

We would furthermore like to express our thanks to our supervisors who guided us through the study period; Thilde Bech Bruun and Mattias Borg Rasmussen. A part from the Danish supervision the Thai professors offered guidance and advice which we very much appreciate.

Likewise our appreciation is extended to the driver of the Moo 3 truck and last but not least we would like to thank the villagers of Ban Kamphuan for their openness and willingness to be part of our study.

This final report would not have been possible without the help, guidance and cooperation of students, professors and villagers in Ban Kamphuan. We therefore would like to thank them all for the great intercultural and academic experience the field study in Ban Kamphuan 2010 has been.



## Structure of the report

The report is divided into 7 chapters. The first chapter holds the introduction and identification of objective and research question, followed by a chapter introducing the methods applied (Chapter 2). Chapter 3, 4 and 5 will present and discuss the data and results obtained in the field. It is done in three parts each representing the research topics. Chapter 6 consists of retrospective reflections on the study and a discussion of the methods and experiences in the field. Chapter 7 will contain the main findings, answer to the research questions and concluding comments. The authors responsible for the parts of the report are shown in the table.

### *Author list*

Chapter	Main Author
Chapter 1	Anika Totojani, David Oruka, Cecilie Fernandez
Chapter 2	Anika Totojani, David Oruka, Cecilie Fernandez
Chapter 3	David Oruka
Chapter 4	Anika Totojani
Chapter 5	Cecilie Fernández
Chapter 6	Anika Totojani, David Oruka, Cecilie Fernandez
Chapter 7	Anika Totojani, David Oruka, Cecilie Fernandez

## **List of Acronyms**

FAO- Food and Agricultural organisation

DFID- Department for International development

HIV- Human Immunodeficiency Virus

SSI- Semi structured interview

SC- Seasonal calendar

PRA- Participatory rural appraisal

PR- Problem ranking

GPS- Geographical positioning System

LC- Land Certificate

NLC- Non Land Certificate

PA - Protected area

Amphoe - District Office

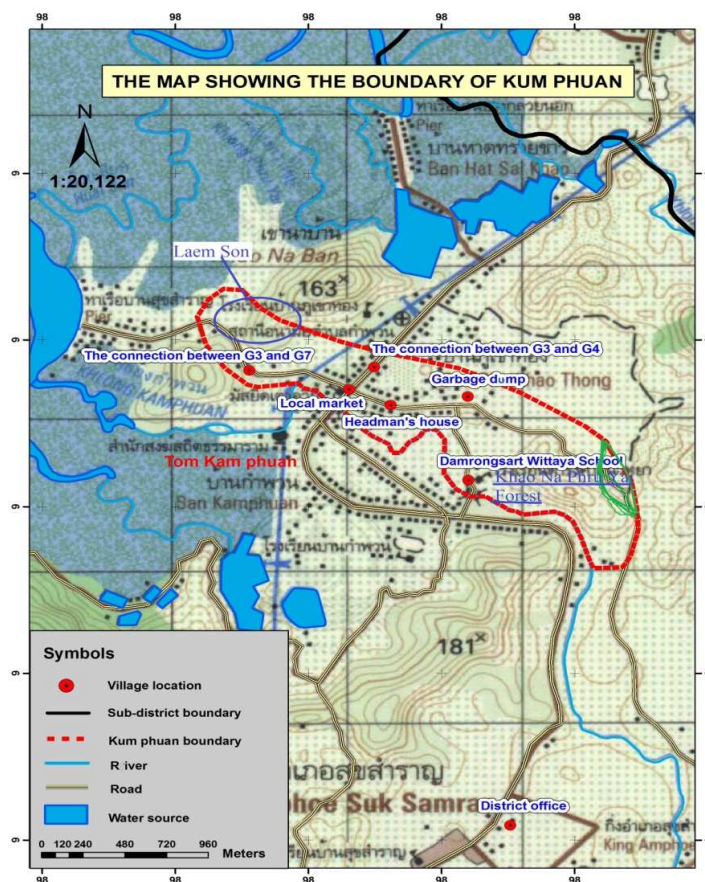
Ba Phru Na Kow Yai - Protected area. Under care of the Forestry Department

Laem Son - National Park

# 1. Introduction

## *The local context: Ban Kamphuan*

Ban Kamphuan village is located in the South of Thailand in the district Suk Sam Ran in the province of Ranong. It is considered an important commercial centre having various shops and a market twice a week, to which people travel from other villages and districts. The village was established about 60 years ago and is located between the National Park Laem Son and the forest area Khao Na Phru Yai. The main activities supporting the 336 households (Suk Sam Ran District Office 2009) are fishery and agricultural production implying that there is high dependency on access to natural resources such as water and land. The situation in the village however is that the majority of households do not have land certificates for the plots they use and therefore do not have formal right to the land as it officially is public owned (Village headman 12.3.10).



Map 1 Map showing the contours of Ban Kamphuan, the protected areas in each end of the village and the garbage dump indicating the unofficial line between the public land and the dominantly private owned land in the center.

## ***Defining the focus: land tenure and livelihood***

Land classification in Thailand can roughly be divided into private and public land (including protected areas) according to the Land Code of 1954, which to date stipulates procedures for issuing certificates for land<sup>1</sup> (Gine 2005). Land access and use is of great importance for the opportunities and livelihoods of rural communities not least in Thailand, where the agricultural sector is fundamental. Besides being one of the major economic activities in the country it is a whole way of life for the majority of the population. Apart from forming part of the natural capital (e.g. natural resources and biodiversity) agriculture provides occupation, culture and values for rural people (Thanwa 2002). Determinant for livelihood strategies<sup>2</sup> are the assets people have access to and how these are combined in the effort to ensure survival. Assets or *capitals* can be human, social, financial, physical and natural (DFID 1999)<sup>3</sup>. Land is an important asset in several ways and people who have extensive rights to land are generally more able to enjoy a sustainable livelihood than those with limited rights to land (FAO 2002). Land tenure is thus decisive for villagers' strategies.

There are many varieties of tenure, and distribution of land can be formalized through private property rights or done by e.g. customary law. The views on the effects of the different kinds of tenure are many, but according to FAO:

*“Property rights to land, together with labor, form the most common endowments used to produce food for home consumption as well as cash crops that allow the family or individual to pay for other needs such as health and education”* (FAO 2002).

Traditional economic theory similarly emphasizes property rights (formalized private tenure) as it is perceived a necessity to ensure investment and productivity of the land. One of the most

---

<sup>1</sup> Types of land certificates include: NS-4 (full legal title with right to sell, transfer and mortgage), NS-3 (“Certificate of Use”) and NS-3K (“Exploitation Testimonial”), both with the right to transfer and sell the land. NS-2 and SK-1 (time dependent and no right to sell or transfer), both are cancelled and no longer recognized.

<sup>2</sup> By livelihood strategy we refer to *“the range and combinations of activities and choices that people make/undertake in order to achieve their livelihood goals”* (DFID, 1999:23, section 2.5).

<sup>3</sup> For further description see Chapter 3.

important aspects is the opportunity to use the land right to acquire financial capital. The dominant belief is that formalized land security leads to long term planning and land improvements through investment in e.g. fertilizer (Dalrymple et al 2004). This seems to be the conviction of the Thai government who in 2003 launched a policy of “asset capitalization” with the aim of stimulating agricultural production and improving the conditions for the rural poor through issuance of land certificates.<sup>4</sup> Without property rights villagers can be said to have no security regarding use and ownership of the land and can therefore be expelled and have nothing officially hindering trespassers. This insecurity will lead to short term planning and low investment in the land used, which will have an impact on the income possibilities of the households and can furthermore have environmental affects as the short term planning rarely involve consideration of conservation (see Feder 1987, Dalrymple et al 2004, FAO 2002, Brasselle et al 2001, Pergamon 1996).

Based on these thoughts it seems crucial for rural households to hold certificates in order to produce and secure income and stability on a long term basis. As a big part of the households in Ban Kamphuan does not own official certificates for the land they use, the influence of the tenure status on the land use and livelihoods in the village is interesting to look into.

## **Objective**

The general objective of this study was to assess the impacts of the tenure system on livelihoods and livelihood strategies of villagers in Ban Kamphuan. It was investigated if the villagers are affected by their tenure status<sup>5</sup> in how they perceive their situation and opportunities and if there are any differences in the choice of activities and use of land between households with land certificates and households without. This interest leads to following research question:

## **Research question**

**How does the tenure status of the households in Ban Kamphuan affect the livelihoods in the village?**

---

<sup>4</sup> Government Annual Report 2003 <http://thailand.prd.go.th/ebook/review/content.php?chapterID=13>

<sup>5</sup> By tenure status we refer to the possession or lack of land certificate (NS-4 or NS-3).

The research question will be answered by seeking answer to three sub questions:

1. What characterizes the land tenure system in Ban Kamphuan?
2. What characterizes the livelihoods and strategies in Ban Kamphuan?
3. How do livelihoods and strategies differ between households with tenure documents and households without?

These are asked and will be answered in the light of following hypothesis:

- Lack of a land certificate will result in insecurity, short term planning and low investment.

**Box 1 Definition of relevant concepts**

*Household:* Refers to a group of individuals sharing food and who have a common goal of improving their socioeconomic status from one generation to the next (FAO 1992 in Messer and Townsley 2003).

*Land tenure:* The relationship (legally or customarily defined) among people as individuals or groups, regarding land (including natural resources such as water and trees). Rules of tenure define how property rights to land are to be allocated and how access is granted to use, control, and transfer land (FAO 2002).

*Certificate:* Refers in the report to a NS-4 or NS-3K certificate providing a formalized secure tenure status according to the Thai Land Code of 1954, (Gine 2005).

*Livelihood:* The way people make a living. Refers to the activities, occupations and the different factors influencing the possibilities to ensure an independent living (Messer and Townsley 2003).

*Livelihood strategy:* The activities and choices households undertake to achieve their livelihood goals (DFID 1999).

## 2. Methodology

In the following the different methods applied in the field to obtain data on tenure and livelihoods in Ban Kamphuan will be presented. All the cooperation and methods have been conducted with interpreters as mediators.

### ***Qualitative method: Interview***

The aim and strength of collecting qualitative data is thorough investigation of a smaller amount of data and it opens the possibility to explore attitudes, behavior and opinions (Bryman 2004:285). This was the reason for the interviews as we want to understand why the villagers choose and act as they do and their perceptions of their opportunities and of the legal or non legal use of the land. In the field study 14 semi structured interviews have been conducted.

### **Key informants**

5 interviews were done with key informants to get an overall knowledge on the village and the villagers in Ban Kamphuan from different perspectives. Upon arrival to Ban Kamphuan the first interview was held with the village headman who gave general information on the village and specific information regarding land use and land rights. Further information on social and economic activities and land tenure we got from interviews with the district deputy of security and a deputy of occupational issues at the district office. The 4<sup>th</sup> interview was conducted with a villager assisting the headman with the issuance of land certificates by collecting applications. He provided information on the households applying for certificates making it possible to identify them through the application forms we were trusted. Further information on land use and the possibilities and problems with land rights we got in the 5<sup>th</sup> interview conducted with the president of the Agricultural Processing group – a sub group of the Women Organization in the village.

key Informant	Role
key Informant 1	Headman Ban Kamphuan
key Informant 2	District deputy (security)
key Informant 3	District deputy (demography)

key Informant 4	Volunteering villager collecting applications
key Informant 5	President of Agricultural Processing Group

**Table 1 Key informants**

## Household interviews

9 interviews were conducted with villagers using and owning land in the village and in the surrounding areas. The interviews were semi structured and conducted with follow up questions to get in-depth information on the specific household and their activities, perceptions and reasons for acting and using the land as they do. 5 interviews were conducted with households with mixed tenure status to assess if there seem to be any difference in their use of the plot with and without certificate. Furthermore we conducted 2 interviews with households only using titled land and 2 with households only using untitled land. These were conducted to get insight into the land use and reasons for it in households with different tenure status. The reason for the unequal amount of informants from the different groups was the availability of the informants. However a minimum of 2 from each group was regarded a valid number as the purpose is a deeper investigation of the specific household and not a quantitative investigation.

Informant	Name	Location of plots	Tenure status
Informant 1	Tinakon	Outskirts + village 4	Titled plot + Untitled plot
Informant 2	Joern Sri	Center + outskirts	Titled plot + Untitled plot
Informant 3	Bangmadyha	Center + village 2	Titled plot + Untitled plot
Informant 4	Darii	Center + outskirts	Titled plot + Untitled plot
Informant 5	Hamina	Center+ outskirts	Titled plot + Untitled plot
Informant 6	Banghmard	Center + outskirts	Titled plots
Informant 7	Dukru	Center + outskirts	Titled plots
Informant 8	Rohna	Outskirts	Untitled plot
Informant 9	Chawalit	Outskirts	Untitled plot

**Table 2 Informants.**



## ***Quantitative method: Household survey***

A household survey formed part of our study in order to get quantitative data.

Formula:  $n = \frac{N}{1 + (e)^2} \times N$  (Yamane 1967 in Israel 2009<sup>6</sup>), was used to calculate how many questionnaires would be relevant for the study.  $n$  is the sample size,  $N$  is the number of households (336) and  $e$  is the level of precision (15 % error). This provided the study with the number of 40 questionnaires to be answered.

Selection of the households was done by stratified random sampling: in households which had land certificate and households without land certificate. The last group was defined from their status of applying for a certificate<sup>7</sup>, and were identified through a key informant interview providing a list over applicants. 20 households from the list and 20 non-applicant households were chosen by randomly picking them out after locating the different households on a map over the houses in the village.

Some households interesting for the study were selected for semi structured interviews.

## ***Participatory rural appraisal (PRA)<sup>8</sup>***

### **Community resource map**

A resource map was sketched by a group of villagers to get a visual overview of the village, and the distribution and use of land, showing the location of infrastructure such as the market, roads and canals, households with and without certificates, major crops, and location of the protected areas, and other important places for the villagers. Participants were selected from both households with certificates and those without from different parts of the village to ensure fair coverage. 5 men and 5 women both young and the elderly were selected to have a balanced representation.

---

<sup>6</sup> *Determining Sample Size: A Simplified Formula For Proportions*, available from <http://edis.ifas.ufl.edu/pdf/PD/PD00600.pdf>

<sup>7</sup> Though some had certificate for some plots they were considered as no-certificate households as we are interested in the land use of the different plots and the importance for the households using land without certificate.

<sup>8</sup> By inspiration from Selener (1999)

### **Seasonal calendar**

The seasonal calendar was developed by the villagers to help identify the different livelihood tasks and categorize responsibilities by season and intensity in the village. The villagers enumerated the major economic activities they were involved in all year round and the peak periods for them. During the process of generating the calendar, discussions on constraints and opportunities related to the activities in the calendar took place to get insight to the livelihood aspects of the villagers.

### **Paired matrix ranking**

A problem ranking exercise was conducted during the field study. The main idea was to look at different problems for NLC and LC villagers. This exercise was done twice, in parallel sessions. The villagers were divided in two groups (certificate and no-certificate) and asked to list their main problems or troubles in their lives. Afterwards they were asked to discuss the problems stated and to agree on the most important. When the exercise was finished, it was summed how many times the same problem appeared resulting in a score for each of them.

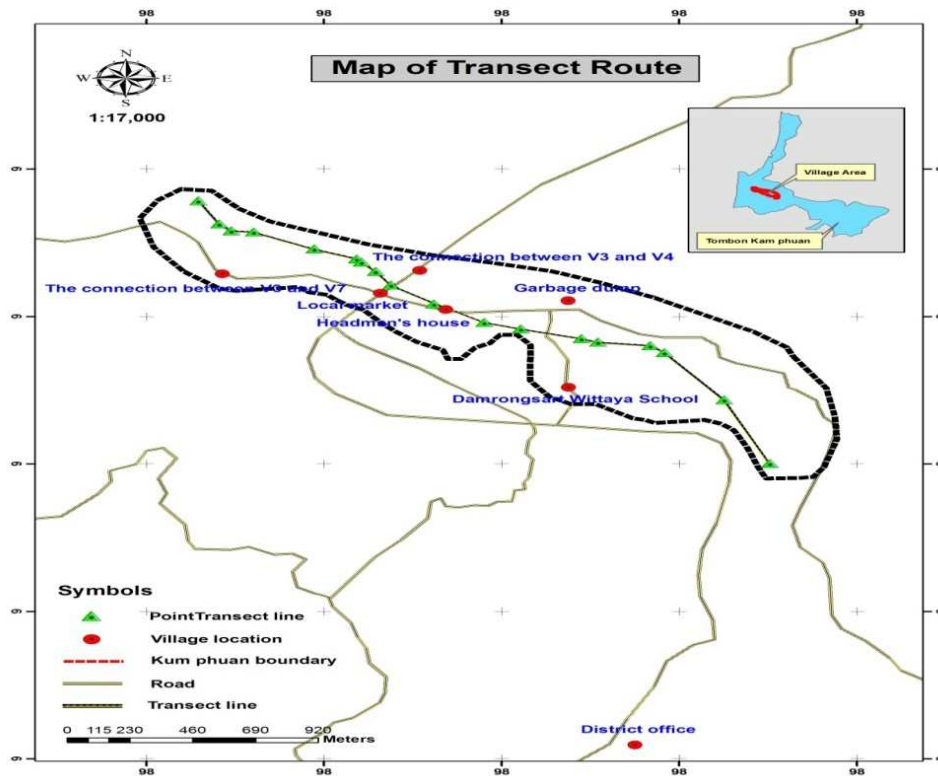
### **Venn diagram**

The Venn diagram was made after the problem ranking session with villagers with no land certificate. It was carried out to see the relationship between community members and different institutions that are involved in the procedure of issuance of land certificates. Participants mentioned the institutions and actors with importance for the process and they described the relation to each of them. Small circles of different size (according to their perceived importance) representing the different actors and institutions were placed around the community circle (in the center) in the distance according to the perception/feeling of the nearness or long distance of the institution from their lives.

### **Transect walk**

A transect walk of approximately 3 km was made to get an overview of land uses, resources, landscapes in the village and observe the plots. The reason of the route chosen was to have a picture of different land uses in different areas of the village (see map 2). The walk began from one outskirt where most of the households do not own land certificate, through the center where most households own land certificate and ended with households with no land certificate, in the other outskirt. A local person chosen for his knowledge on the village went with the group.

During the transect additional information was asked in relation to land use and land certification. GPS was used to mark plots and places of interest.



**Map 2 Indicating the route for the transect (green line)**

## ***GPS mapping***

GPS was used to create the different maps of Ban Kamphuan. First of all to locate the borders of the village and get an overview of the area where the study took place. Furthermore to establish the areas dominated by plots with certificates and the areas dominated by plots without land certificates. And finally one was made showing the route followed in the transect walk.

## ***Observation***

Observation has been an important part of the fieldwork. Through many visits and observations of activities, houses, plantations etc. valuable knowledge about the village was obtained. Through participation and observation of the villagers in their daily activities and surroundings e.g. the different types of houses and location and of their different reactions to questions we have gathered important information about the villagers, their opinions and relations which will be useful in the overall analysis of the livelihood strategies in Ban Kamphuan.

### ***Secondary data***

Secondary information about the village and economic activities of the villagers, group arrangements and major constraints was obtained from the Community Development Office.

### ***Data analysis***

Analysis of the data obtained was done mainly through SPSS and Excel sheets especially for quantitative data, considering the key variables of the study. Data from semi structured interviews was analyzed by meaning condensation and interpretation of the various responses obtained.

#### **Box 2: Community meeting/debriefing**

The study team organized a community meeting for key stakeholders and villagers in Ban Kamphuan. The mobilization was carried out by the village headman and a total of about 30-40 villagers attended the meeting including the village headman.

The purpose of the meeting was for the student group to brief the villagers on the objectives of the study and the elementary findings of it. These included the problems, the villagers perceive as the most important, the most important resources to the community, how they are distributed across the village and the location of households with and without land titles. The briefing was organized in such a way that it would confirm to the findings of the different methods used and at the same time evoke discussions on areas where the student team needed more information.

### **3. Characteristics of the land tenure system in Ban Kamphuan**

This section focuses on the land tenure system existing in Ban Kamphuan. It looks at the historical aspects of land ownership in the village and analyses the changes that existed up to present day. The different tenure arrangements are described as well as the opportunities and advantages associated with the different type of land certificate. Information about the historical tenure system and the existing land tenure arrangements was obtained through key informant interviews with the village headman and the villager involved in receiving applications for land certificates.

#### **Evolution of land tenure in Ban Kamphuan village**

The land tenure system in Ban Kamphuan has had many changes through different periods to present day. Traditionally the system of land acquisition and distribution in Ban Kamphuan was by the “Stick system” where by the first person to get to a piece of virgin land would stamp a stick (Ban) on the plot of land as a sign of control. However this has changed rapidly over time especially with the introduction of reforms in land administration. According to the village headman the increasing demand for private land and the need to conserve protected areas such as forests and national parks has of recent led to more bureaucratic approach to land certification and hence ownership. Information from key informant interviews gave insight into the nature of the different tenure systems, procedures for land certification and what each form of land certificate offers the land owner. Data from the District Office (Amphoe) show that Ban Kamphuan village comprises of 336 households, out of which less than half of the households possess some form of land certificate. This implies that a big proportion of the villagers use land which they have no certificates for.

#### **Types of certificate**

Three different types of land certificates existed in the village of Ban Kamphuan: SK 1, NS3-K and NS-4. However, SK1 was cancelled by the responsible authorities on 3<sup>rd</sup>, February 2010, rendering about 20% of the land users title-less (Headman). There exist two types of land certificates recognised in Ban Kamphuan; NS-3K and NS-4. NS-4 is a title deed and it is the most important for villagers. It is a type of land certificate that offers the highest security of the

land. The land owner with NS-4 (deed) marks the plot with a concrete pin dug into the ground at the boundaries of the plot a sign to show ownership of deed.

**NS-4** is the most desirable land title as it offers the following opportunities; It can be sold, can be mortgaged, its transferrable and can be used to guarantee evidence such as in court. It can also be used as collateral for securing loans from lending financial institutions. NS4 also has the highest value in case the land owner decides to sell as compared to any other type of land.

**NS-3K** on the other hand is a form of land certificate that is not a deed but as well offers high security. NS-3K offers the same rights as deed (NS-4), the only difference being that it has no well defined scope. The land with NS-3K is classified by fencing with using plants or trees as a way of differentiating from land with other forms of tenure status.

Following the cancellation of SK1 land title certificates many villagers have taken initiative to apply for valid land certificates (NS-3K and NS-4). The interview with the villager responsible for collecting application for land certificates revealed that about 160 applicants had requested or were requesting for validation of their land tenure. Since the majority of the villagers do not have certificates for the land they use, the informal tenure arrangement is characterized by humble agreements and common understanding of the common land boundaries among the neighbouring villagers.

### **Why few farmers have land certificates**

The key informant interviews and semi structured interviews to find out likely reasons why fewer villagers have certificates pointed out the following causes:

***Fear of taxation:*** Some villagers feared that once their land is titled it would attract mandatory taxation associated with land ownership. Hence they are reluctant to obtain land certificates. However there seems to be increasing community awareness against this notion

***Ignorance of benefits of land titling:*** Some villagers are generally ignorant about what the benefits would be if they had titles for their land. Coupled with the fact that there is almost no difference with owners of titled land in terms of use the motivation for obtaining certificates is very small.

**Bureaucracy:** The long and sometimes unsuccessful procedures taken to obtain land certificates have discouraged many villagers who would like to apply for certificates. In some cases corruption cases are cited whereby some influential community members are granted applications within the shortest time as compared to “common” villagers.

**Illegal tenancy:** Some villagers use land in the protected areas, an illegal act. Such community members have fear of being apprehended in case they appear to register such land or are simply denied if applying.

### ***Procedure for obtaining land certificate in Ban Kamphuan***

According to the village member responsible for collecting applications it takes about one year between application and obtaining the land title. The bureaucracy associated with the land title application for applicants who do not possess any type of certificate is outlined below.

Step	Activity
1	Villagers without land certificates apply by filling the application form
2	The village headman he adman verifies the information given by the applicant and endorses the application
3	Application documents are forwarded to the District Land certificate office for further verification where by the District governor writes covering letter for the application form
4	Application documents are further forwarded to Province Land Certificate office for further scrutiny.
5	Central land certificate check or Department of Land sends an official secretly to the village to confirm and cross check information about the applicant in question.

6	Then Land Department sets up a committee to make decision and make arrangements to meet with the village headman
7	The Sub district headman mobilizes the villagers and informs them about the visit of the officials to the village and the agenda of their visit. (Land certification)

**Table 3 Application process**

The district land officials will visit the said plots with the district headman; take necessary measurement and compares with the information given in the application. At this point the presence of the owners of the neighbouring plots of land is important so as to point out the correct boundaries.

After the above process the villagers have to answer more questions, which include: how that person got the land, how many years that person has been living there or used the land, how they use the land. The applicant has to prove that he has been living in the said piece of land for a long time and he and his family are depending on the land.

All the findings will be sent to the province Land Office and the title deed (NS-4) will be issued.

### **Land ownership strategies in Ban Kamphuan**

An interview with one of the key informants reveals the existence of a law about abandoned / idle land. Under this law, any land that is unused for crops or livestock is taken away by government. The period considered before government reclaims idle land however depends on the type of land certificate for the land in question; NS3k: 3 years and NS 4: 10 years.

Another law states that if a tenant lives in your land for 10 years that person may not be evicted from that land. He/she has a right of ownership of that piece of land.

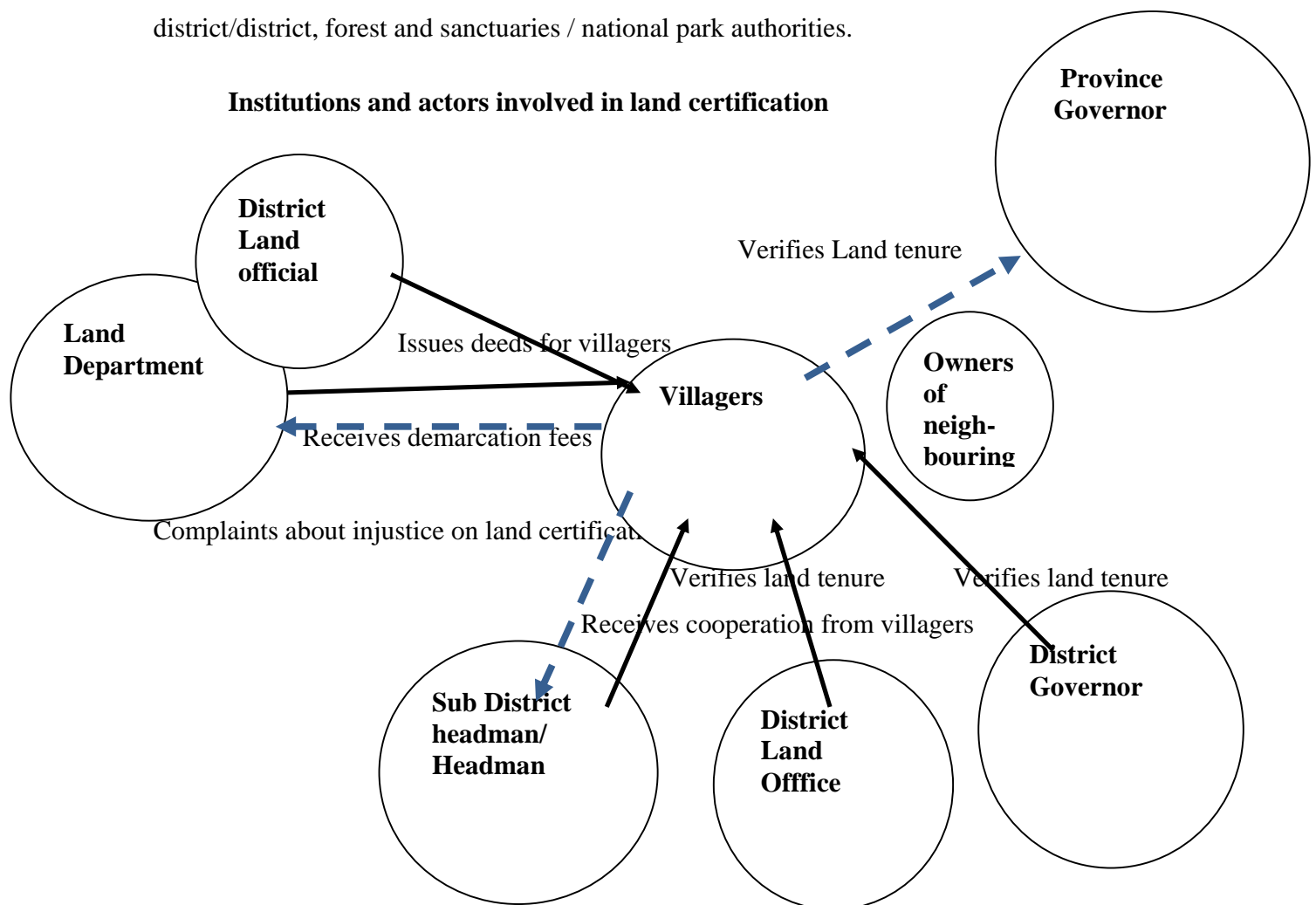
From the interviews conducted it was found out that villagers living in and bordering protected areas especially forest reserves grow long term/ perennial tree crops which take many years in the field. This helps them retain the land because during validation of land occupancy the authorities consider the time one has lived in the land and the value of the crops that person has in the field. “Compromise” between the villagers and the authorities responsible for land adjudication is the key factor in the strategy for one to retain the land.



### ***Land administration in Ban Kamphuan***

Many players are involved in matters of land administration in Ban Kamphuan, depending on the interest and jurisdiction of the concerned authorities. These include village headman, sub district/district, forest and sanctuaries / national park authorities.

#### **Institutions and actors involved in land certification**



The use of the Venn diagram in PRA showed that the villagers are well aware of the process of land certification and the actors involved as well as of their rights (e.g. they mention the actor to contact in case of any unjust experiences).

The role of the different stakeholders can be categorised into; verification of documents done by the governors both at district and province, verification of land tenure and issuing of certificates by the district land office. The role of the village/ sub district headman is mainly verification of

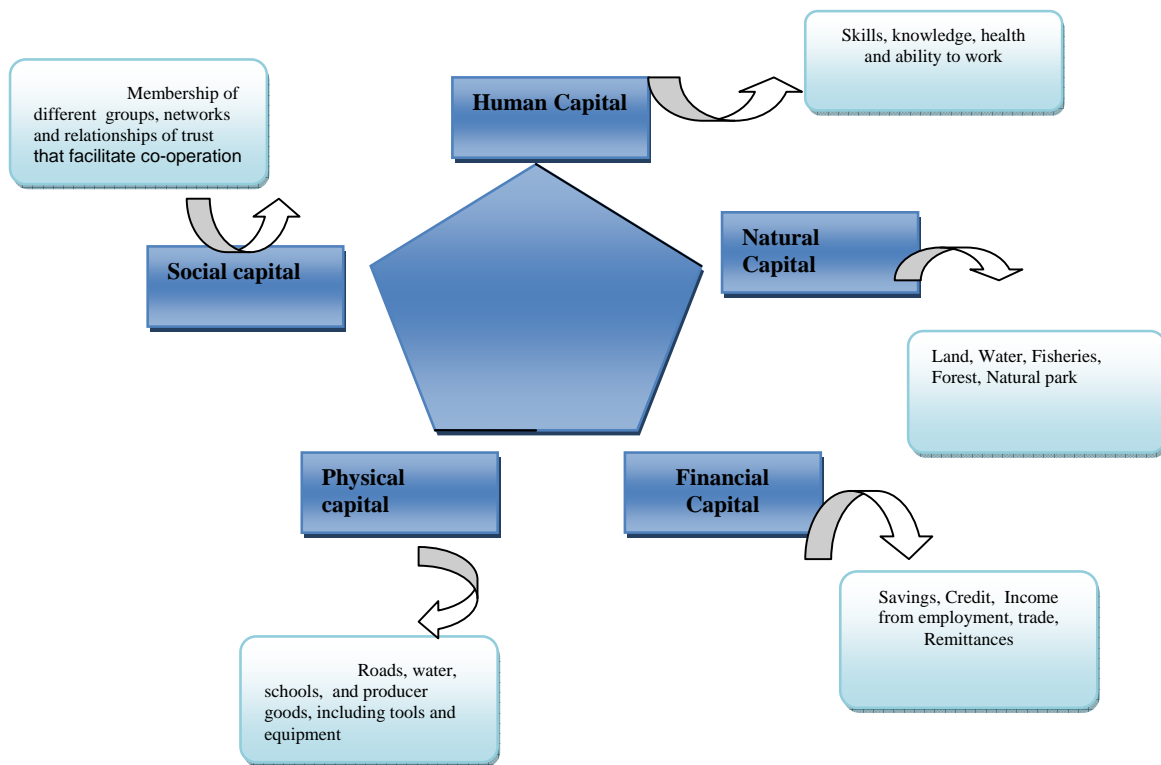
the applicant and tenure status of the land in question. The villagers have a responsibility of giving accurate information to the responsible officials.

From the outlook of the administrative structure and the layout of procedures for land titling formal arrangements would mean a more transparent process. However according to interviews with villagers and key informants it seems the informal system of negotiations and compromise play bigger role in tenure management. This has the risk of promoting corruption tendencies and result in unfairness as some influential members of the community have preferential treatment thus leading to occupation of gazetted land, delay or failure of titling land for deserving villagers and consequently undermining the existing land laws.

## **4. Characteristics of livelihoods and strategies in Ban Kamphuan**

Livelihood is an important concept when working with people in developing countries. It involves the way, in which people try to find resources and figure out how to make a living. People need some main bases to satisfy their interests and needs, but the idea is not only to get bread and shelter. It is equally important to identify status, identity, information, management of skills and relationships among people. Livelihood strategies compromise the capabilities, assets, material and social resources and all activities that are crucial to make a living. Livelihoods strategies have to be sustainable, so it is essential to respond to the needs of the rural community in both short and long terms (Phonsigiri). 5 pillars of livelihood: human, natural, financial, physical and social capital illustrate the relationship between the assets and people; how people are using these assets to reach their objective and their needs. Thereby it is shown the way that poor people struggle with everyday life. In fig 1 are shown schematically the assets (DFID 1999).

In the following section will be described main findings from different methods used in the study with regard to livelihood and strategies for each of the capitals.



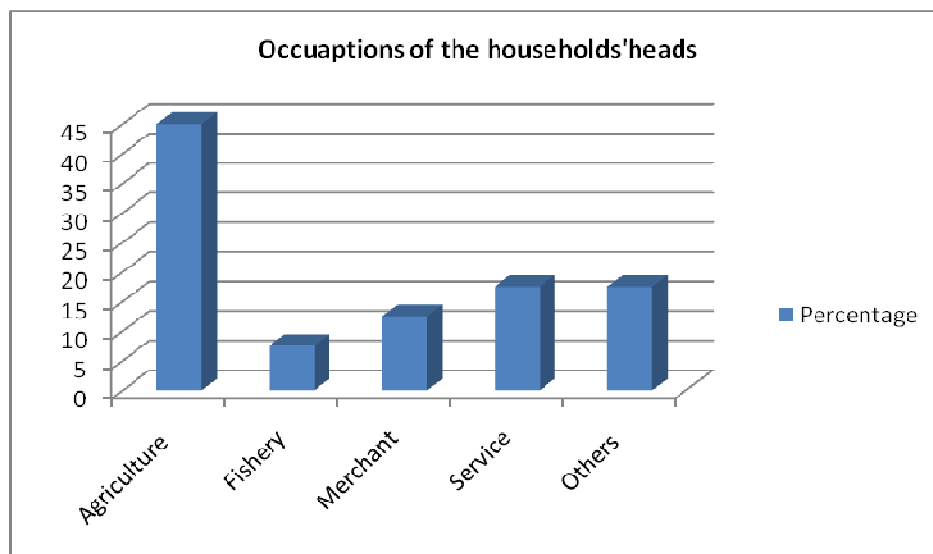
**Fig 1 Capitals/assets of livelihood framework<sup>9</sup>**

<sup>9</sup> DFID ( 1999)

## ***Natural capital***

Represents the natural resources such as land, water, forest, parks.

In order to provide more income, villagers in Ban Kamphuan are engaged in different livelihood activities to make sure that they can deal with uncertainties in their lives.



**Graph 1 Occupation of the household head**

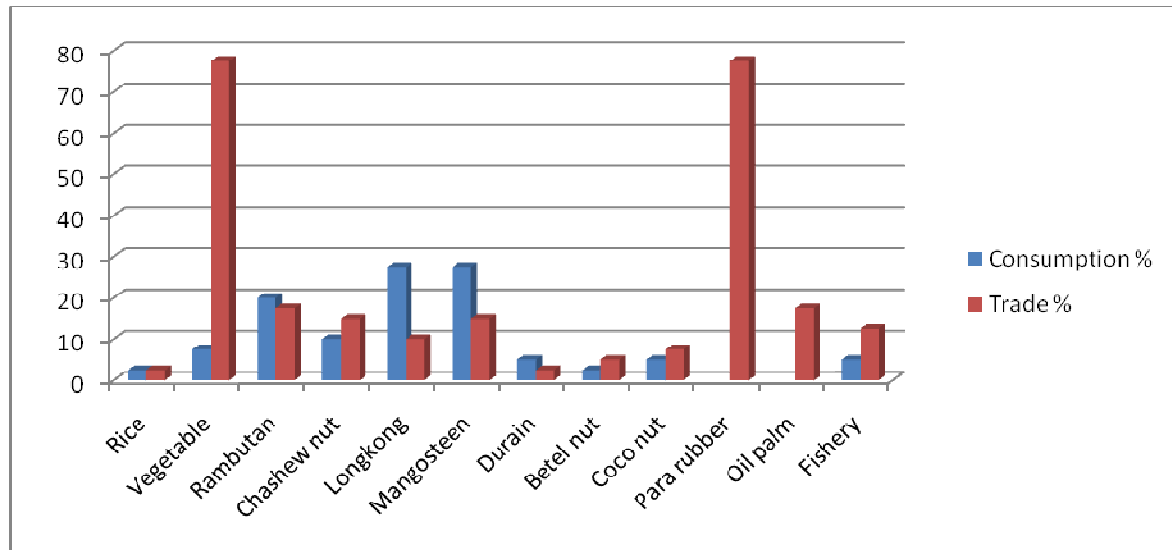
Graph 1 shows that: 45 % household heads are agriculturalists, 17.5% works in service and other activities. 12.5% are merchants and the lowest percentage 7.5% is represented by fishermen.

During the history of cultivation farmers in Thailand used to grow paddy rice, but after 1991 it was changed into field crop cultivation and perennial trees.<sup>10</sup> In the study it was told that farmers used to grow paddy-rice, but the problem with water supply and with pests led into changes. However in the last years their strategy of planting had changed. Farmers are more flexible to change the production. Nowadays they have switched into high value cash crops in order to provide sustainable incomes. The key informant<sup>11</sup> told that, fruit farmers stopped growing fruit trees and changed to grow para –rubber, oil palm trees, because they will give higher incomes in future. Para –rubber trees need less maintaining than fruit trees. Actually villagers engaged in

<sup>10</sup> Land Tenure and Production Structure of Agriculture in Thailand, 1991

<sup>11</sup> Volunteering villager collecting applications

agriculture have mixed orchard farms<sup>12</sup> (longkong, mangosteen, durian, rambutan, lansat, coco nut, cashew nut, betel nut, nitta tree etc), para –rubber and oil palm farms.



**Graph 2 Percentage of consumption and trade of different crops and fisheries**

## Expansion of land

The borders of the village are surrounded by national park and by the forest. Both these parts are public owned land, but villagers use the land for agriculture purposes, even though they do not own land certificate for the plots. Growth of population can lead to the need of more agricultural land and therefore encroachment into protected areas.

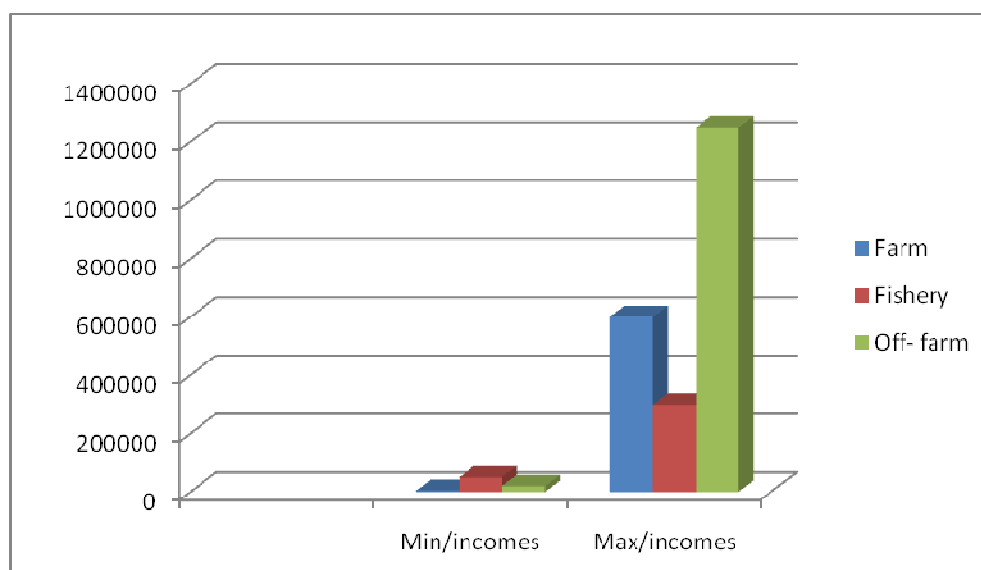
Although deforestation is not allowed in protected areas, people still practice agriculture there. They do not cut forest trees, but they plant trees, mainly para-rubber. Basically these activities are not legal as the land is protected but it is accepted by compromising with authorities.

Access to the land is crucial for agriculturalists, but of the same importance is to have land certificate for it. “I would like to be secure for my para-rubber plot and to do whatever I want with that, I can invest more without fear that someone can come and take it from me. I want to give it to my son as my father did with the house where I live.” – said one of the interviewees.

<sup>12</sup> Information from Seasonal calendar

## Other activities

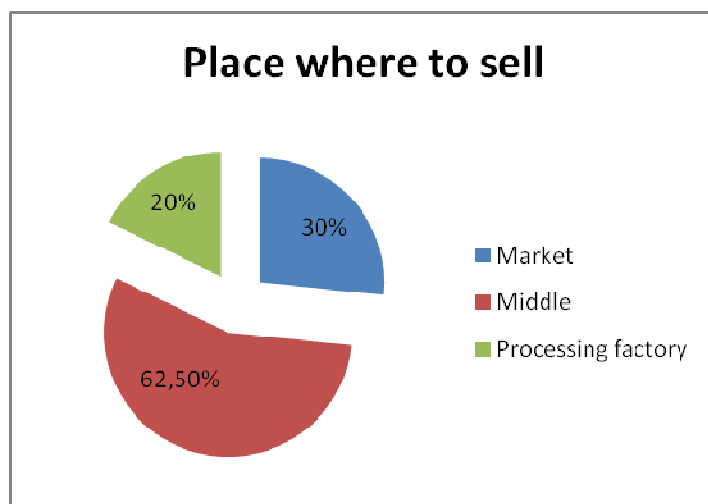
Agriculture is not the only activity that contributes to the incomes of the households. Villagers try to find other economic activities to have better incomes. Interviews and seasonal calendar showed told that villagers do different jobs; depending on the free time and on the season. Farmers cannot work in farms in the dry season. They instead do fishery, work as hired labor, sell in the market and some of them are local government employees. Villagers tend to diversify the agriculture production at farm level and diversify their economic activities.



**Graph 3 Min/Max income/year for farm, off-farm and fishery activities**

26 households have max 600,000 baht income from farm activities, 4 households have 300,000 baht from fishery and 29 households have 125,000 baht from off-farm activities

In relation to fishery activity, data from the paired problem ranking (people without LC) showed lack of right equipment to fish in the sea. Some of the fishermen are afraid of fishing again as a result of the tsunami. They fish, mainly short mackerels, shrimps, crabs, squids, sillagos, fish caged, jellies (see Appendix 3). They produce for self-consumption and surplus is sold in the market.



**Graph 4 Place where farmers sell their agricultural products and fish**

62.50 % of villagers sell their products through the middlemen and 30 % to the market, but there are also farmers, who sell to both places. Only 20% of farmers sell directly to the processing factory.

**Box 3: Visit to the market**

The market is open every day, but Wednesday and Sunday it is much bigger because other traders from the district come to sell. They gather products from other villagers, or other district of the South. They sold fruits such as: banana, mangos teen, pineapple, watermelon, cashew nut etc. Vegetables such as: tomato, local vegetables, carrots, cucumber etc. Generally traders were females, age 30-40 years old, and trading was the only occupation they had. They bought the agriculture products through middlemen (agent) and not directly from farmers. The prices of vegetables were higher compared to fruits. They said that they bought them at a higher price. Other factors that influence the prices are; seasonality, preferences of the consumers, difficulties in storage of the agricultural products etc. What makes agricultural production different from other production is related with seasonality, biological cycle, water availability, inputs (seeds, fertilizer, pesticides), way of cultivation, difficulties to store stock of agricultural products.



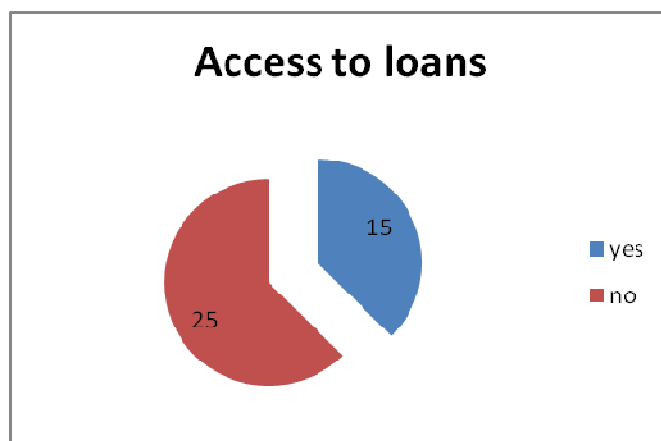
## Water

Regarding water resources data from problem ranking show that villagers face the problem of water supply: for consumption at home, at school as for agricultural purposes. Villagers who live near the village canal are fortunate, they use water to irrigate their farms (para-rubber, from observation during the transect), the others have to find alternative ways to secure the supply. According to the headman, scarcity of water is related to difficulties constructing water pipes because of the protected areas.

These natural resources/ public goods are supposed to serve the whole community, they don't have to exclude some and give more potential for use to others. Ways, in which these natural resources are distributed, normally create conflicts among stakeholders, but it isn't the case in BK village.

## Financial capital

It is represented by saving credit, income from employment, trade, remittances /economic transfers. SSI interviews showed that villagers do not borrow money from the banks; they rely mainly on themselves. In addition, villagers without land certificate do not have the opportunity to borrow money. They are not able to put land as collateral for loans. However villagers who own land certificates are afraid to get a loan: in case the production fails, they cannot honor the bank and they can lose the land. Regarding access to loans, only 15 respondents replied that they have access to loans; basically they borrow money from private organizations that provided money support after the tsunami: the Village Fund supported by the government and Islamic Bank. 25 respondents do not have access to loans.



**Graph 5 Percentage of villagers who have/don't have access to financial institution**

### ***Physical capital***

It is represented by infrastructure, rails, telecommunication, and access to water, energy, health centers and market. It seems that the infrastructure is well organized. There are no obstacles to reach very fast everywhere. The market is situated in the center of the village and farmers in general have access to it.

### ***Social capital***

It represents membership of different groups, informal networks and relationship of trust among stakeholders. The interview conducted at the Community Development Office at the District office, showed that 3 groups are actually functioning in the village: “The Women Association”, “Women Dressmakers of Kamphuan district”, Agricultural processing group”. After the tsunami there were many villagers who registered the different groups. They hoped to increase their own profits as a result of involvement in them, but after some time they left because of no additional profits. Factors contributing to disintegration of the groups were related to lack of management, lack of good profits for members, no permanent market, no marketing plan and lack of time to join groups.

#### **Box 4: Group organization**

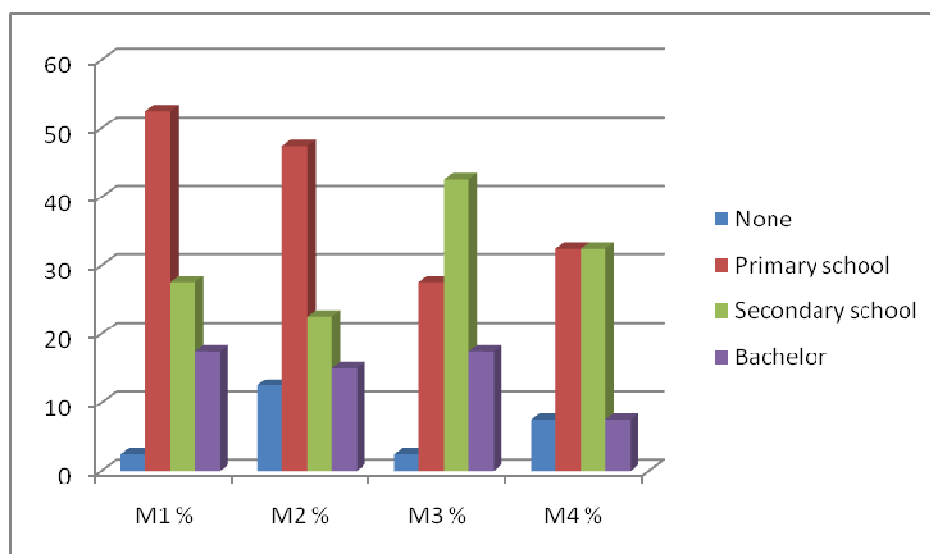
Group 1 “The women Association” made women clothes, scarves, and souvenirs and sold them to northern Thailand. They took care of children nursery, people with HIV virus and changed villagers’ attitudes toward people with HIV. There were good profits for members of the group as they had a secure market where to sell. Group 2, “Women dressmaking of Kamphuan district” made and sold pillows, women clothes. Group 3, “Agricultural processing group” prepared/processes OTOP products like banana snack. They dried and sold them, but didn’t get profits from this activity.

Information from SSI showed that few villagers were participating in the groups. Out of 40 respondents from questionnaires, only 12 respondents were part of different groups and 28 were not.

It would be a good opportunity for farmers being involved in inputs/marketing cooperatives. Being part of cooperatives can lead to better prices for inputs and for outputs as well. This involvement can therefore lead to improved returns, rather than always trading through the middlemen.

### ***Human capital***

It represents skills, knowledge, health and ability to work. Villagers base the production on their own knowledge; they themselves manage how to produce and how to make decisions for their families. They produce what gives more incomes to the households in order to satisfy their needs and objectives. Some of the villagers seek advice from friends or old farmers, who have more experiences. Others seek advice from the officials in the district office or from agricultural advisers. If agriculture is the main source of income and is productive, the owner of the land also hires labor, especially during the harvest time. The same thing happens with fishermen; they hire labor force to work with them.



**Graph 6 Level of education for members of each household<sup>13</sup>**

Almost 53% of the household heads have primary education, 28% have secondary and 18% owns a bachelor degree. Ban Kamphuan village is the commercial center of the district, which might explain the relatively high educational level as it can offer possibilities and incentives to

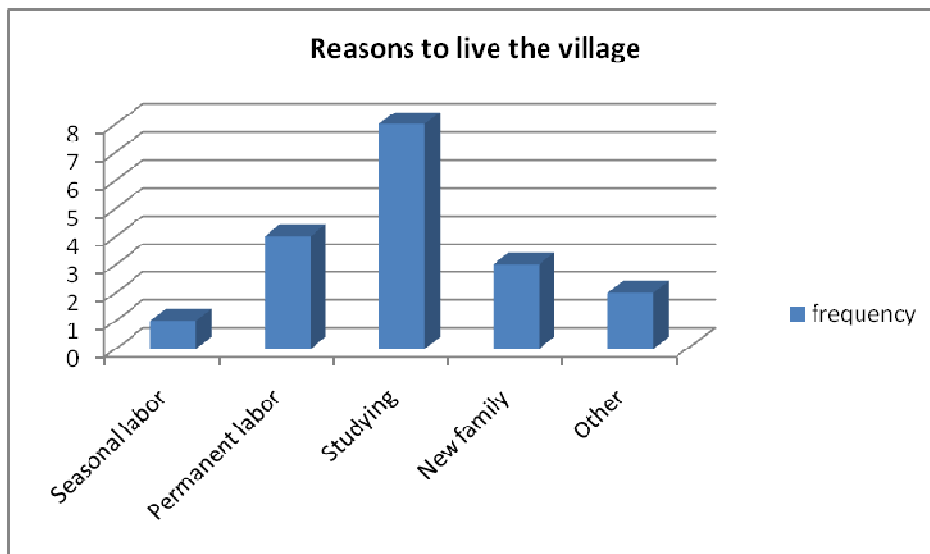
<sup>13</sup> Here are presenting only 4 households 'members. It is thought to have only that as the rest mostly are children

study as well as attracting people from other places (with education). It might lead them to want to stay and contribute to the community as it can provide income for the family.

## Migration

Out of 40 respondents in the survey 17 have family members migrated from the village. The reason for them migrating is explained in graph 7 but generally it is for education purpose.

It may be concluded that most of the villagers prefer to make their living in the village, as there is only a few numbers migrating as work labor.



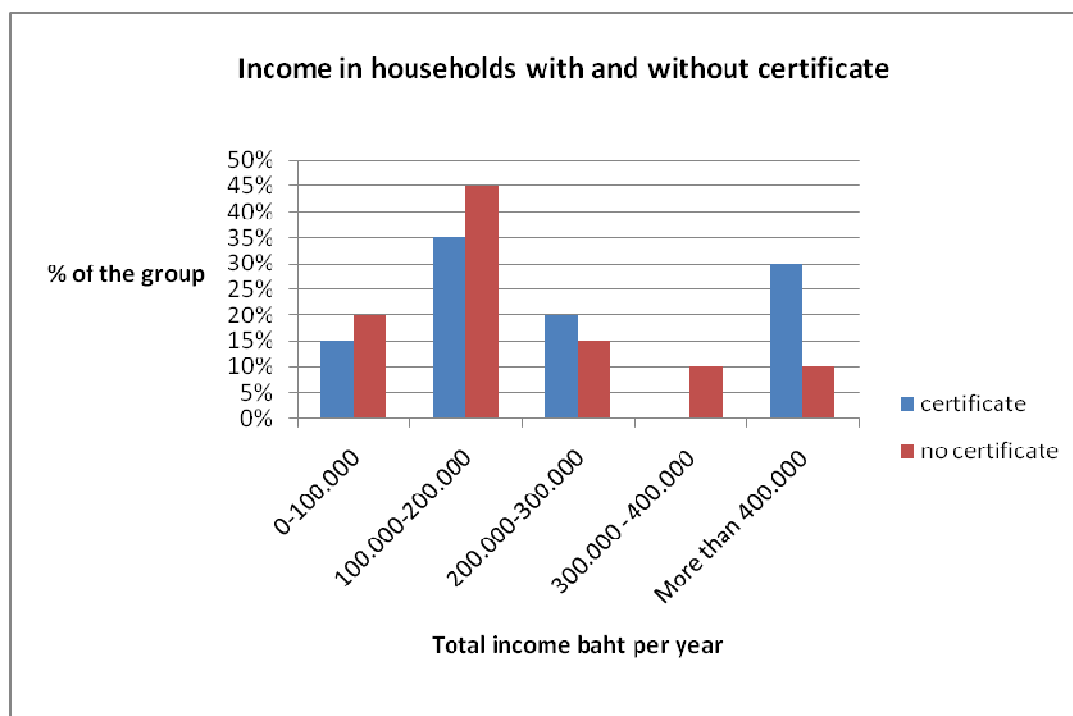
**Graph 7 Reasons for leaving the village**

## 5. Importance of certification of land for the villagers in Ban Kamphuan

Following section will consist of a discussion of the importance of the land tenure status for the households in Ban Kamphuan. It will be done by comparing the activities and characteristics of the households with certificate for their plots and the households without.

### *Income*

The household survey showed (Graph 8) that there is a slight difference in income between the two groups. 30% of the LC households have a total income of more than 400.000 baht pr. year. In the NLC households only 10% have an income higher than 400.000 baht. Likewise the educational level of the LC households seems to be slightly higher.



**Graph 8 Income in NLC and LC households**

The reasons for the variation can be many. From the data collected it is not possible to evaluate conclusively on the impacts of the tenure on the income and educational level. From our

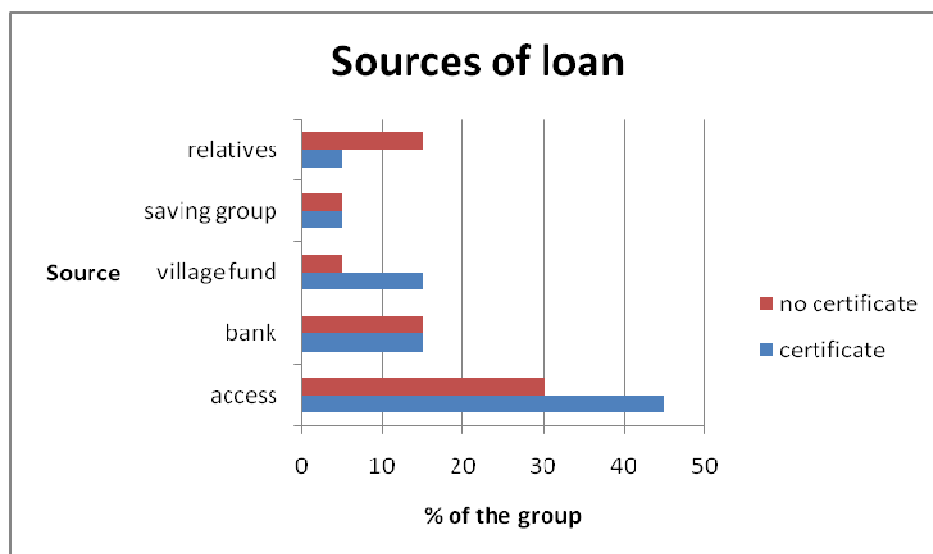
observations and interviews however, it does not seem as if the tenure status has major constraints on the income possibilities. On the contrary, it might be that the different variables, such as education and income, are what actually determine the certificate status. For a successful application, one has to prove a long term use and dependency on the land and in some instances possess negotiation skills (in order to prove your right and if disagreements about the borders arises). This might require a certain amount of human and social capital (as much as financial).

### ***Access to credit***

Graph 9 shows that proportionally more households with certificate (45% of them) have access to loan than the households without (30% of them). Furthermore the frequency of using relatives as credit source is higher in the latter group, which could imply lacking official sources<sup>14</sup>. However, none of the informants showed any interest in seeking credit through the land certificate (either owned or applied for). As mentioned in the previous subsection, the impression in general was that the villagers are reluctant to loan money from informal as well as formal sources and that there is an awareness of the risks of being indebted. This was by the president of the Agricultural Group mentioned as a possible negative effect of the opportunities brought by a land certificate – the access to credit. She herself lost her plot due to lacking payments for a loan. As the land was used as collateral it was taken over by the bank, leaving her to find new income sources.

---

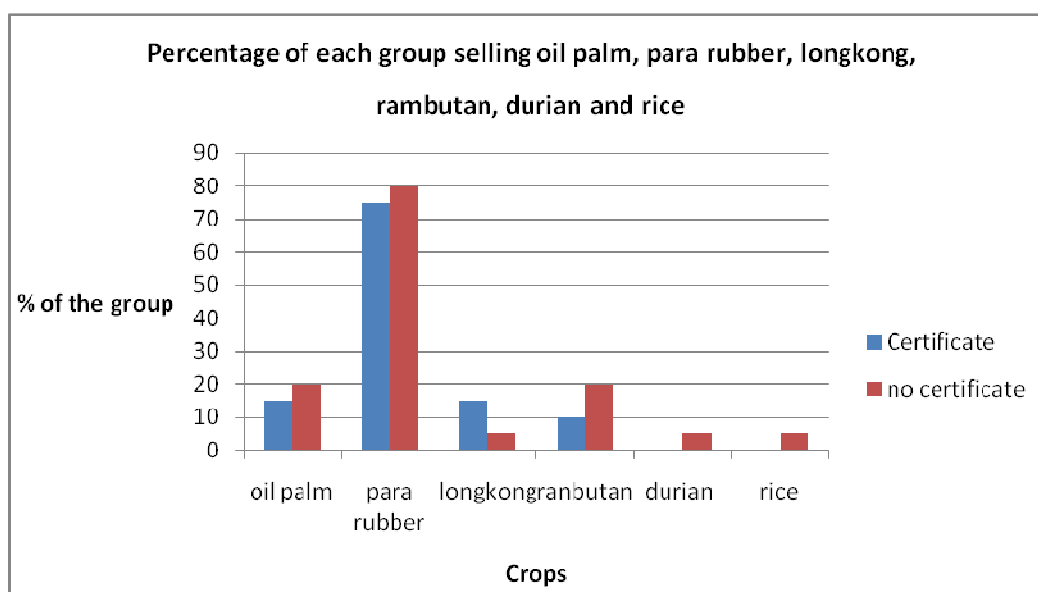
<sup>14</sup> The frequency of borrowing money from the bank is however the same. This can be due to the mixed status of some of the respondents in the ‘no-certificate’ group that actually do have access to bank loan (certificate for some land but other not).



**Graph 9 Sources of loan used by the two groups.**

### ***Activities, land use and crops***

As illustrated in graph 10 the majority of both groups (75% of LC and 80% of NLC) cultivates and sells para rubber. 15% of the LC group and 20% of the NLC group cultivate and sell oil palm and there are only few households selling other products such as durian, rambutan and betel nut. Regarding all crops with the exception of longkong the NLC group is stronger represented, which could imply that they tend to diversify their production more than the LC. Though the choice overall seem to be the same in the two groups as the main crops are the same.



**Graph 10 Showing the percentage of the NLC and the LC group selling the different crops**

The impression from the interviews was likewise that the crops chosen did not differ between the plots with and without certificate. In contrast to this, the household survey shows that 60% of the households with mixed tenure status<sup>15</sup> state that they use the two types of plots differently (see Table 4).

	Number of Informants	Percentage of informants who use land with and without certificate
Yes	18	60
No	12	40
Total	30	100

**Table 4 Answer to the question: “Do you use the land with certificate differently than the land without?”**

The survey did not tell us how they used the land differently. However the different land use in the village was observed during the transect walk and identified in the community map, which showed the differences throughout the village. The plots in the center of the village consisted mainly of orchard farming, where the outskirts were dominated by rubber plantations and cases of oil palm and cashew nut. From the interviews we know that the different land use most often is decided by the soil quality and opportunities of the plot location. Often the plots with certificate is at the center of the village where the household is also located and the plots without are located elsewhere and this offers quite different opportunities for the use of land. Therefore the different land use cannot be directly linked to the tenure status but is more likely determined by the characteristics of the specific plot (location, size, soil).

### ***Insecurity***

According to our informants, the most important aspect and the greatest advantage with a certificate is the security it offers. An example of the insecurity that the tenure status brings is

---

<sup>15</sup> During the survey we found out that more of the no-certificate households are of mixed tenure status as they both use land with and without certificate, why we also have asked if they use the different plots differently.



described by one informant, who lives near the garbage dump<sup>16</sup>. According to him, there are no clear official borders of the PAs surrounding the village, which also was the impression given from the interview with the district deputy who could not inform or show us the exact areas on a map. Plots therefore can be declared part of a PA from one day to another, as is described by the informant. According to him the effects are apparent random arrests of farmers, which creates insecurity as the borders and rules are unclear. According to this story, the farmers using land without an official certificate live therefore with the everyday risk of getting harassed, arrested or expelled from the land.

This description illustrates a top-down planning and land classification with no regards to the local circumstances. Another example of this is given by an informant living in the center and the president of the Agricultural Processing group. They describe how the borders of the national park (between village 3 and 7) in the beginning of the 1980's were drawn from the map without taking the local population and uses of land into consideration. This caused problems for the informant and other farmers in the area, as they officially were prohibited to cultivate the plots they had been using for decades. However, the person interviewed was allowed to continue cultivating after negotiating with the authorities and according to her, it didn't affect the production or income of the household. What do have an effect are intruders who now use and claim part of the land. She cannot expel them as she does not have any official right to the land. These conflicts have reduced her plot from 200 to 100 rais and have therefore had a great impact on her access to land.

### ***Insecurity and investment***

All the interviews showed a substantial amount of investment in different forms such as time, effort, fertilizer, hired work and construction on the land e.g. one informant living in the outskirts of the village has built a new big house on the land and another has hired a person to take care of her plot and to chase away trespassers (none of them have certificate for the plots).

The amount of energy and capital invested in the land did not seem to differ according to the tenure status, but more as a result of the capital available. The 6 informants using plots without

---

<sup>16</sup> See village map, Map 1

certificate all use fertilizer except from one, which was explained by the lack of funds (which is credible, given that the house and surroundings gave the impression of a low income household).

Asked about the importance of the tenure status the informants expressed the insecurity they live with, but spite of this, they showed no anxieties or lack of will to invest in the land. This was explained with the long period of use of the land and that all of them, with the exception of one, have used the land without problems or disputes.

### ***Long term planning***

As already illustrated, most households in Ban Kamphuan have chosen to cultivate and invest in para rubber regardless of having a certificate or not. The main reasons for this are that para rubber (in different amounts) can be harvested all year round, contrary to most other crops, it fits the soil quality and it is a valuable cash crop. Several informants were waiting for the rubber to be harvested as the tree needs a growing period of 7 years before producing rubber. This crop must therefore be seen as part of a long term planning. A possible reason for choosing para rubber and why it can be seen as a 'secure' crop is that para rubber production is being promoted by the Thai government. Due to changing prices in 2003 and the great importance of rubber production for the economy (the individual household and the agricultural sector) regulations and rules have been changed, so rubber production, though located in forest reserves, in some cases is allowed and gives access to resources and possibility of granting certifications<sup>17</sup>.

### ***Compromising***

As already described land has traditionally been distributed by the 'stick system' and agreements between the land users. Now this system seems to be mixed with the new bureaucratic system of private ownership and state owned forest areas. They are combined by negotiations and 'compromising', which we were told from official side – the district deputy and from several of the villagers. Through negotiation one informant has been allowed (by the officials) to build a house and connect electricity and another was allowed to use her land even though it officially was declared as part of the national park Laem Son. From our interviews these informal negotiations seem to work and benefit the villagers. This however, has to be seen in the light of

---

<sup>17</sup> Information from Thai Government Annual Report 2003:  
<http://thailand.prd.go.th/ebook/review/content.php?chapterID=13>

the conditions of our two informants, who are well educated and relative wealthy, which might enhance their negotiation abilities compared to a poorer or less educated villager. The informants less well off did not talk about negotiations or contact with the authorities except from mentioning the risk of corruption and bribery in the application process (in order to speed up the process for the certificate and to avoid being arrested).

### ***Opportunities and Limitations***

Besides the security, a certificate offers access to credit, as it can be used as collateral for loan and can lead to government support for para rubber production. The limitations are mainly expressed as the lack of the opportunities, but also the risk of getting arrested for unlawful use of land. Furthermore, the informants mention problems with corruption and bribery because of the uncertain tenure status. With regards to the application for certificates, it is mentioned that by paying the officials the approval can be passed quickly where it normally takes about a year. This can be seen in relation to the results from the problem ranking, where the main problem for the NLC households was the insecure tenure status. But unjust treatment from the authorities (government officials) was also mentioned as a relevant problem, which wasn't mentioned in the LC group. This could imply that due to the lacking land right the NLC households more often encounter problems with the authorities - such as bribery, harassment or the risk of being arrested.

## **6. Challenges and retrospective reflections**

### ***Change of focus***

Upon arrival to the village we found out that the key issues our synopsis was based on (conflict between government officials from the national park and villagers) did not fit the actual situation and inaccuracies in the basic information provided prior to the trip were discovered. The team therefore had to carry out a rapid rural appraisal so as to agree on the area of focus. The delays affected the time we could have used in other methods.

### ***Intercultural challenges***

Academic, cultural and language differences existed between the Thai students and the Danish group thus a lot of time was spent on agreeing on the study objective and e.g. harmonizing the questionnaires. Furthermore the Thai students showed a great orthodoxy in regards to the authorities and emphasized collecting information and making appointments with villagers through official informants such as the headman which resulted in time loss in the beginning of the study.

In the process of searching for information and making appointments with the different kinds of informants (for interviews, transect walks etc.), valuable time was spent and lost due to issues of protocol, reluctance from key stakeholders to share their knowledge and the process of creating trust between us and the villagers.

Reflecting on our role as foreigners it was important to assure the authorities and villagers that our presence in Ban Kamphuan was not to enforce a program or solve any problems but to learn from the villagers and the specific context in which they form their livelihoods. Relating to this, cultural and religious considerations have been important e.g. respecting the Islamic hours of prayer when making appointments. Similarly how much time we could take from the villagers collaborating has been a challenge and an ethical consideration, that in some ways have determined the scope of the information obtained

### ***Language***

Due to the setting of the field site and the fact that we as Danish students do not understand Thai, all data collection as well as communication with the counterparts has been done through interpreters. This will have influenced the information and knowledge obtained as it has been mediated through a third person, who spite good language skills and comprehension of the study area cannot avoid subjective interpretations and biases.

### ***Comparisons of groups***

Due to the complexity of the tenure arrangements in Thailand it is complicated making distinctive categorization of land owners such as titled and untitled land owners as many respondents fall under both statuses. This might have influenced the results e.g. regarding the (in) security the informants express as more of them actually have a partially secure status as well as the selection of households for the survey. However the team tried to focus on the use of the different plots and combined the use and perception of them as well as investigating the households without any certificate at all to see their attitudes, activities and behavior.

### ***PRA***

A constraint during the process of the PRA exercises was the language barrier. The Danish students were left out from valuable observations due to lacking understanding of the discussions going on. An issue possibly affecting the outcome of the PRA process is furthermore the behavior of the students in charge of the exercises as they were very active and controlling during the process, which conflicts with the overall aim of the participatory method of letting the participants be in charge. Furthermore the division of participants in a 'no-certificate group' and 'certificate group' might have made them aware of our interest in their specific status. An inherent problem when collecting data is the risk of informants wanting 'to please' the researcher especially in a developmental research context (Valentine 1997). It is therefore a challenge to balance the important notification of the participants of the aim with the research with the consideration of not 'telling too much' which counts for all the different methods involving informants.

### ***Validity of the findings***

There are many pitfalls in doing research in an interdisciplinary and intercultural setting. In order to ascertain the quality of the information and results we have sought to triangulate our data through the field study. This has been done through the collection of information and data from different sources and by using different methods. Though, we have to be aware of our own biases as we can't claim total objectivity and our opinions and worldview will influence the issues we notice and emphasize. However, we have pursued as objective and useful data as possible by involving the different stakeholders in our study and through a continually discussion internally in the group and with our Thai counterparts about the results and information obtained.

## **7. Conclusion**

Through the study it was found that the villagers in Ban Kamphuan are dependent on their land for agricultural purposes but increasingly are relying on other activities thereby diversifying their income possibilities further than within agriculture and fishery. We set out the investigation with the hypothesis that the formal insecure tenure status (because of no certificates for the land) would lead to short term planning – short term crops and low investment. The results we have gathered from the different methods in the field however show that this does not seem to be the case. They showed no different use of land or investment level among the two different status groups. On the contrary it seems that long term crops such as planting para rubber, besides being a valuable cash crop, can be used as an active strategy to obtain a land certificate. In order to obtain a certificate you have to show the dependence and long period of use of the land you are applying for. This can be done by cultivating a long term crop as para rubber, which requires a growing period of at least 7 years before the farmer can benefit from it. The amount of investment more seems to depend on the income level and the crops grown than on considerations regarding the future ownership of the land.

The tenure system in Ban Kamphuan is very complex and there are many different types of tenure statuses and perceptions of the security experienced. The security issue is important for the villagers but on the other hand most do not seem to have any problems or any greater preoccupations about getting the land taken away due to lacking certificate. It seems that the informal tenure system functioning in the village so far has provided sufficient security for the villagers to live of and use the land efficiently. They have coped through negotiations with the authorities that seem to be between two systems – the formal and informal thus strengthening the risk of corruption and biased treatment of villagers.

It can therefore be concluded that the hypothesis stated does not seem to fit with the realities in Ban Kamphuan village. However, the investigation of the interdependence of variables is a task that requires a thorough and multifaceted exploration, why it would be interesting to look further into the influence of land tenure in the village of Ban Kamphuan as well as in rural settings in general.

## References

- Brasselle et al** (2001) Land tenure security and investment incentives: puzzling evidence from Burkina Faso
- Bryman, A** (2004), *Social Research Methods*, second edition, Oxford University Press. Oxford
- Dalrymple, K et al** (2004), Innovations in Rural Land Policy and Tenure in Southeast Asia, Regional Conference, Jakarta, Indonesia, October 3-7, 2004
- DFID (1999)**, Sustainable Livelihoods Guidance Sheets, Department for International Development, UK.
- FAO** (2002) Land Tenure studies, *Land tenure and Rural Development*, FAO, Rome, Italy.
- Feder** (1987) Land ownership security and Farm productivity; Evidence from Thailand. *Government Annual Report 2003*:  
<http://thailand.prd.go.th/ebook/review/content.php?chapterID=13> (3.4.10)
- Gine, X** (2005) The World Bank Land Security in Rural Thailand Evidence from a Property Rights Reform, Available from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=654026](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=654026) (5.4.10)
- Israel, G** (no year) Determining Sample Size 1, pp 7 Yamane formula A Simplified Formula For Proportions, available from <http://edis.ifas.ufl.edu/pdf/PD/PD00600.pdf>
- Messer and Townsley** (2003), Local Institutions and Livelihoods: Guidelines for Analysis
- Narkiboonwong et al** (1991) Land Tenure and Production Structure of Agriculture in Thailand
- Pergamon (1996)**, Tenure, agricultural practices and land productivity in Burkina Faso: Some recent empirical results
- Phongsiri** (no year) *Thai Diasporas and Livelihood Strategies in Thai Society*. Available from: <http://www.trf.or.th/TRFGallery/Upload/Gallery/Documents/Files/1000000022.pdf> (11.2.2010)



**Selener, D; Endara, N; Caravajl, J.** (1999) *Participatory rural appraisal and planning*.

International Institute of Rural Reconstruction. Quito Pp.3-7, 18, 29 -42, 46-51, 56-84 , Nathan, I and Larsen, O. *Qualitative Methods in Agricultural Development* 2009, Compendium

**Sherbinin. Alex de** (2006), pp 8 *Rural Household Micro-Demographics, Livelihoods and the*

Environment available from: <http://www.populationenvironmentresearch.org/hh-pop->

[livelihoods-env2.pdf](http://www.populationenvironmentresearch.org/hh-pop-livelihoods-env2.pdf) [accessed on 20 February 2010]

**Thanwa, J.** (2002), *Sustainable agricultural systems for small-scale farmers in Thailand:*

*implications for the environment*. Available from the website of “Food & Fertilizer Technology

Center for the Asian and Pacific Region”: <http://www.agnet.org/library/eb/509/> (2.4.10)

**Valentine, G** (1997), *Tell me about...: using interviews as a research methodology*. Ch.7 in

Flowerdew, R and Martin, D (edi.), *Methods in Human Geography*, Lancaster University.

## Appendix 1 Questionnaire

### Land tenure and livelihoods in Ban Kamphuan Village

#### Introduction:

Dear respondent, we are a group of students from University of Copenhagen and University of Kasetsart carrying out a study on how occupation and activities have been influenced by land tenure. Selection of the households for this survey was done randomly. Your household happened to be one of those selected to give an overview of the whole village. Please feel very free to give your response as possible and ask questions whenever you need clarification on any issue raised during our interaction. The information obtained from your household will be treated with utmost confidentiality.

(Estimated time to fill the questionnaire: 30 minutes)

*To be filled out by the interviewer:*

Name of Interviewer: \_\_\_\_\_ Nr of household: \_\_\_\_\_

Interview No. \_\_\_\_\_ Date of Survey: \_\_\_\_\_

#### INSTRUCTIONS:

For questions with options, Tick the boxes provided or mark with sign x

##### 1. Information about household members

Household member	Gender 1.Female 2. male	Age 1. Below 18 2. 18-25 3. 26-35 4. 36-45 5. 46 +	Level of education 1.Not attended school 2.Primary school 3.Secondary school 4.Bachelor degree 5. Higher than bachelor	Main Occupation 1. Agriculture 2. Fisheries 3. Seller 4. Service/employee 5. Student 6. Others (specify)
1.				
2.				
3.				
4.				
5.				
6.				

**2. How long has the household lived in this area?**

Less than 10 year ☐      11-20 years ☐      21- 30 years ☐      more than 30 years ☐

2.1 Are there any members of the household living outside Ban Kamphuan? ☐ Yes ☐ No

**2.2 If yes: What are the reasons for them being away?**

- a. Seasonal labor ☐      b. Permanent labor ☐      c. Studying ☐  
d. New family ☐      e. Other ☐

**3. What are the sources contributing to the maintenance of the household?**

<b>Farm Activities:</b>	<b>Self-consumption</b>	<b>Commercial purpose</b>	<b>Income/year</b>
Rice production			
Para-rubber production			
Oil- palm production			
Vegetable production			
Rambuttan production			
Cashewnut production			
Longkong			
Mangosteen			
Fishery			
Non-timber forest products			

**4. What are the incomes/ year for No- farm activities?**

<b>Non-farm activities:</b>
Income / year

**4.1 How are your products sold?**

a) Directly at the market? ☐ Yes ☐

No

b) Through an agent/middleman? ☐ Yes ☐ No

c) To processing (e.g.) to a factory? ☐ Yes ☐

No

**4.2 How far away is your workplace or the place you sell your products?**

a) 1- 25 km ☐

b) 26-50 km ☐

c) 51-75 km ☐

d) 76-90 km ☐

e) more than 90 km ☐

**4.3** Main occupation: \_\_\_\_\_ Baht/ year

**4.4** Other activities: \_\_\_\_\_ Baht/ year

**5. Different assets**

What kind of off farm assets do the household possess?

Off-farm land

☐ Yes ☐ No

Car/Pick-up truck

☐ Yes ☐ No

Motorcycle

☐ Yes ☐ No

Boat

☐ Yes ☐ No

Remittances/economic transfers

☐ Yes ☐ No

## 6. Land ownership

Do you own any land?

☐ Yes ☐ No

If yes do you have certificate for it?

☐ Yes ☐ No

### 6.1 The amount of land owned:

Amount of land owned with title deed NS 3 K/NS 4	.....plots	Total.....Rai
Amount of land owned without land certificate	.....plots	Total.....Rai

### 6.2 When did you get the certificate (s)?

☐ Less than 5 years ☐ 6-10 years ago ☐ 11-15 years ago ☐ More than 15 years

6.3 Do you hire anybody to work on your land? ☐ Yes ☐ No

### 6.4 Land used without certificate

Do you use any land which you have no certificate for?

☐

Yes ☐ No

Do you use that differently than the land you do have certificate for?

☐ Yes

☐ No

If yes : For what do you use it?

Para-rubber ☐ Yes ☐ No

Orchard ☐ Yes ☐ No

Oil palm ☐ Yes ☐ No

Others ☐ Yes ☐ No

**6.5** Do you have any disputes because of overlapping land claims?

☐ Yes ☐

No

Do you have any constraints or problems due to lacking land certificate?

☐ Yes ☐ No

## **7. Local participation**

Are you a member of any village groups?

☐ Yes ☐ No

If yes: which?

Saving Group for Production Credit	<input type="checkbox"/> Yes	<input type="checkbox"/> no
Sustainable Agriculture Group	<input type="checkbox"/> Yes	<input type="checkbox"/> no
Artisanal Fishing Group	<input type="checkbox"/> Yes	<input type="checkbox"/> no
Environmental Protection Volunteer Network	<input type="checkbox"/> Yes	<input type="checkbox"/> no
Others, Please specify	<input type="checkbox"/> Yes	<input type="checkbox"/> no

## 8. Sources of loan and saving

Do you have access to loans?

☐ Yes ☐ No

Sources		
Did you borrow money from the bank last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you borrow money from any informal sources last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you borrow money from the village fund last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you borrow money from the village saving group last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Did you borrow money from your relatives last year?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Thank you very much for accepting to take part in this interview and for your time. Would you mind being considered for another session where we can learn more about some of the issues that affect this village?

Which day and time would be convenient for you?

## Appendix 2 Paired Matrix Ranking with villagers with land certificate

Problems	A	B	C	D	E	F	Total score	Ranking
Water supply A	X	B	A	A	E	B	2	3
Lack of water for agriculture B		X	B	B	E	B	5	2
Flood C			X	C	E	F	1	5
Infertile soil D				X	E	F	0	6
Low price for para-rubber E					X	E	5 <sup>18</sup>	1
Low fruit price F						X	2	4

<sup>18</sup> This was the major problem for the villagers, after they compare between problem B and C



### 1. Paired Matrix Ranking with villagers without land certificate

Problems	A	B	C	D	E	F	G	H	I	J	K	L	Total	Rank
	score													
Land certificate A	X	A	A	A	A	A	A	A	A	A	A	A	11	1
Injustice from the officials B		X	B	B	B	F	B	H	I	B	B	L	6	5
Seasonality(impact on agricultural products C			X	D	E	F	G	H	I	J	K	L	0	9
Lack of water for agricultural purposes D				X	E	F	D	H	D	D	D	L	5	6
Teenager unemployment E					X	F	G	H	I	J	K	L	2	8
Drug problems F						X	G	H	I	F	F	L	6	5
Low prices for fruit products G							X	G	I	G	G	L	6	5
Drought H								X	I	H	H	L	7	4
Low demand for fruit products I									X	I	I	L	8	3
Lack of water in the school J										X	K	L	2	8
Wrong equipment for fishing activity K											X	L	3	7
Lack of water supply L												X	10	2

## Appendix 3 Seasonal Calendar

It shows: Intensity of farm activities per month

MONTH Agriculture												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Pararubber												
Oil palm												
Longkong												
Mangosteen												
Durian												
Rambutan												
Lansat												
Coco nut												
Cashewnut												
Betel nut												
Nita tree (Satto)												

## Seasonal calendar

<div> <div>MONTH</div> <div>FISHERY</div> </div>												
	.JAN	FEB	MAR	.APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Short mackerel												
Shrimp gill het												
Crab												
Squid												
Sillago												
Caged Fish												
Jelly fish												

## **Appendix 4 Semi structured interview guide (headman)**

**Purpose:** To get an overview of the village, the main activities and relations in Ban Kamphuan.

**Duration:** Approximately 2 hours.

**Materials:** recorder, notepaper.

**Participants:** All members of the group and translators

### **Introduction of the informant:**

1. What is your name?
2. What is your occupation?
3. What are your role/responsibilities in Ban Kamphuan?

### **Introduction to the village:**

1. When was the village established?
2. How many inhabitants?
3. How many households?
4. What are the main occupations in the village?
5. What are the main land uses?
6. Have there been any great changes in the main activities and occupations since the establishment of the village?
7. What are the main problems in the village?
8. What are the main concerns in the village?
9. Are many people migrating from the area?
10. If yes, what are the reasons for people migrating?

### **Land tenure:**

1. How has land traditionally been distributed in Ban Kamphuan?
2. Has the way of distribution undergone big changes since the establishment of the village (and the park)?
3. Are there any territorial conflicts in the village?

### **Public Land, Protected Areas (National Park, Forest Land)**

1. When was the national park established?

2. Was the park established in cooperation with local actors?
3. How has the park influenced the village?
  - a) Any opportunities for the villagers?
  - b) Any problems for the villagers?
4. Are there any conflicts related to public land
5. Who are involved in the conflict (which areas, groups, households, individuals)?
6. Has the conflict had any influence on the activities, occupation etc. in the village?
7. If yes, on who and where?

## **Appendix 5 Semi Structured Guide for Key Informants**

**(Community Development Office; Volunteering villager collecting applications: President of Agricultural Processing Groups)**

**Purpose:** To get general information in relation with the activities in the village, organization of different groups/ land tenure

**Duration:** 1 hour each of them

**Materials:** Notepaper.

**Participants:** All members of the group for each interview + Translator

Part1.

1. What is the main responsibility of the Community Development office?
2. What are the main activates that contribute to the incomes of the households in the village?
3. Which kind of groups exist in the village?
4. What is the role of groups?
5. What kind of opportunities these groups offer?
6. What kind of limitations these groups offer?
7. What kind of problems/concerns exists in the village?

Part 2. To get depth information with regard to land certificate in the village/ land tenure system

1. How land is distributed in the area? (Traditionally/ Actually)
2. What are the main certificates that exist in the village?
3. What kind of security they offer?
4. How is the process to apply for land certificate?
5. What are the main concerns of the villagers in relation to security of land?
6. How many households have land certificate?
7. Do villagers change the strategy of planting when they don't have land certificate?
8. Do villagers have any concern in relation to public land?
9. Do they have any dispute with officials/ each other?

## **Appendix 6 Semi structured interview guide households**

**Purpose:** To explore the main activities (economical, social) of the villagers, the land use, their main concerns and perception of their opportunities and degree of security.

**Duration:** 1 hour each of them

**Materials:** notepaper.

**Participants:** 2 members of the group for each interview (+ translator)

### **1. Occupation and activities:**

1.1 Which activities does your family depend on?

1.2 What is the most important activity for your HH? Why?

### **2. Plots and certificate:**

2.1 How many plots do you have?

2.2. How many do you have with certificate and how many without?

2.3 Where are they located?

2.4. Are you applying for a certificate?

2.4 In your opinion what is the difference between families with certificates and people without? (in e.g. economical, social or cultural aspects?)

2.5 In your opinion what are the most important aspects about owning a land certificate?

2.7 Do you feel there are opportunities you miss because of the lack of a certificate?

2.8 Do you feel there are opportunities you get because of the possession of a certificate?

### **2. Land use:**

3.1 How dependent are you on the land you use?

3.2 What do you use it for – which crops?

3.2 What are your reasons for growing the crops you cultivate on the land with certificate?

3.2.1 What are your reasons for growing the crops you cultivate on the land without certificate?

3.3 How much do you invest in the different plots pr. year (e.g. pesticides, fertilizer etc.)?

3.3.1. And how labor intensive is the production pr. plot?

3.3.2 Do you hire anyone to work on your plot (s)?

3.4 What determines the amount of investment in the land and production?

3.5 Do you invest differently in the plot with certificate and the plot without?

3.6 Where do you seek advice or help regarding your land or production?

3.7 Are you a member of any village group or cooperatives?

3.7 Have there been any changes in the way you use your land? Why?

3.8 Do you have any disputes regarding access and use of land?

3.8.1 How do the disputes affect activities of the household?

**3. If applicant:**

4.1 Can you tell me about when and how you applied? (Where you in any way advised to and informed on how to apply?)

4.2 What are your reasons for applying?

4.2.3 Can you tell me a bit about what the lack of a certificate has meant to you?

4.3 Do you have any concerns in the way you cultivate which you wouldn't have if you had a certificate?

4.4 Have you had any problems or experienced any limitations because of lacking certificate? (e.g. problems with authorities, no funds available etc.?)

4.5 What is your experience with the application process? (Easy, difficult, problems, help from somewhere, information?)

**4. If not applicant:**

5.1 When did you get your certificate?

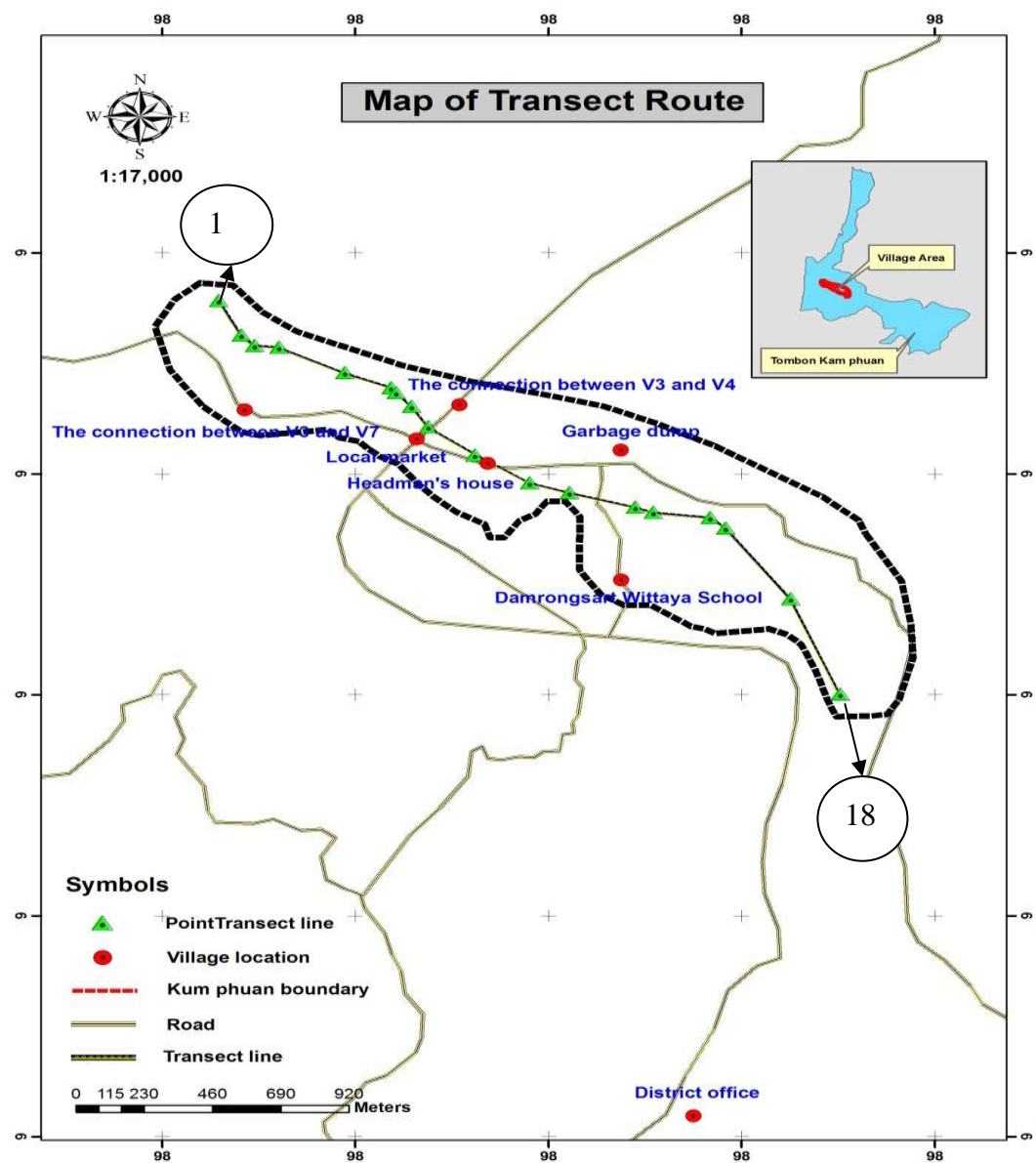
5.1.2 Did you inherit or apply for it?

5.1.3 Can you tell me about the process and how you got the certificate?

5.2 Have you changed crops or way of cultivation after the possession of a certificate?



Appendix 7 Transect walk



### Generall observation during transect

Nr of points	Land use	Ownership of land
1	Cashew nut farm	Without Land certificate
2	The foot of the hill	
3	Little oil palm trees	Without Land certificate
4	Para rubber farm	Without Land Certificate
5	Oil palm farm	Land certificate
6	Grave yard	
7	Para rubber	Without Land Certificate
8	Oil palm farm	No information
9	Abandoned paddy- rice field	
10	Oil palm and mixed farm ( mangos teen , banana, longkong	Land certificate
11	The house of the guide near the road	Land certificate
12	Mixed orchard farm	Land certificate
13	Kamphuan canal	
14	Para rubber ( 4 years)	No information
15	Mixed farm	
16	Durian farm	No information
17	Para rubber (2 years) with sprinkler, between the rows are plant mangosteen, 2 years.	Without land certificate
18	Para rubber farm, the foot of another hill	Without Land certificate

Appendix 8 Resource map



**Relation with actors / institution involved in the process of issue the land certificate**



## Appendix 10 Table of applied methods

Methods used	Quantity	Information
Questionnaire	40	Quantitative data on livelihoods and tenure
Key informant interviews	5	Depth information on activities, land use, organization of groups, tenure status, kind of certifications
Informant interviews	9	
GPS	2 maps	Map of village, borders, public land; Transect route
<b>PRA</b>		
Community resource map	1	Shows borders, public land, market, garbage dump, mosque, households
Seasonal Calendar	1	Activities by season
Paired Matrix Ranking	2	Shows the different problems ranked in order of importance for villagers with land certificate and without
Venn diagram	1	Relation with different actors, institution involved in the process of issue the land certificate
Transect walk	1	Shows the land use and land certificates in the route chosen from National Park to Forest area
Observation		Used in all methods

## Appendix 11 Synopsis

University of Copenhagen and Roskilde University  
SLUSE Joint Course  
Interdisciplinary Land Use and Natural Resource Management  
(ILUNRM), 2010

# Impacts of overlapping territorial claims on livelihood strategies

Case study in Ban Kamphuan, Thailand

## Synopsis

Word count: 2.461

2/24/2010

By: Cecilie Fernández  
Tadesse Mulat  
David Oruka  
Anika Totojani

## Table of contents

Introduction.....	1
The local context .....	11
Identifying the problem.....	73
Objective.....	74
Research question .....	75
Definition of relevant concepts .....	75
Analytical approach .....	76
Methodology .....	76
Semi-structured interview .....	15
Group interview.....	77
Questionnaires .....	78
GPS.....	19
Participatory rural appraisal .....	78
Community resource map .....	17
Activities ranking exercise .....	79
Community history exercise .....	79
Observation .....	79
Transect walks .....	80
References .....	81
Appendix 1 - Data matrix.....	83
Appendix 2 – Time schedule.....	86
Appendix 3 – Questionnaire.....	89
Appendix 4 – Interview introduction and interview guides .....	94
Interview 1: Semi structured interview with the village headman .....	95
Interview 2: Semi structured interview with an Official from the National Park.....	97
Interview 3: Semi structured interview with 6 villagers.....	<b>Fejl! Bogmærke er ikke defineret.</b>
Interview 4: Group interview with representatives from village groups .....	99
Appendix 5 - Ranking exercise of activities .....	100
Appendix 6 - Resource mapping exercise.....	101
Appendix 7 – Community history exercise .....	102

Appendix 8 – Extra activities ..... 103

Appendix 9 - Livelihood and livelihood strategies..... 104



# Introduction

## *The local context*

The village Ban Kamphuan is located in the south of Thailand in the district Suk Sam Ran in the province of Ranong. Ban Kamphuan is considered an important commercial centre in the district, as it is where distribution of commercial products takes place. The main activities that support the 321 households in the village are fishery and agricultural production (e.g. para rubber and fruit). The village was established about 100 years ago and is located close to the National Park X<sup>19</sup> (Basic Information Report 2009). Most national parks in Thailand have been established during the last 30-40 years<sup>20</sup>, why we presume that the village was there before the protected area. A current problem in Ban Kamphuan is a conflict between the villagers and the national park authorities. Both claim right to land and territory surrounding the village. Without title deeds on land it can be difficult to prove a legitimate claim in the modern bureaucracy. This can result in expulsion from the use of land, which villagers traditionally have used.

## *Identifying the problem*

The forest area in Thailand has decreased from covering about 50% of the total land area in 1961 to 20-25% in 2000, why the Thai Government has found it necessary to establish protected areas in order to stop the deforestation (FAO 2000). There is however an inherent conflict in biological protection as there often are people dependent on the natural resources, which they are excluded from in the establishment of protected areas. Historically development projects and environmental programs have been top-down focusing on conservation and not including the knowledge and interests of local communities (Wells and Brandon 1993). Most people in rural areas are very dependent on natural resources, not least for agricultural activities, why it can have a great impact on their livelihoods, if they are excluded from the use of the resources<sup>21</sup>. In Thailand the agricultural sector is fundamental. It is not only a major source of goods and foreign exchange, but is a way of life for the majority of the population. Besides forming part of the natural capital of the country, in

---

<sup>19</sup> At time of writing we don't know the name of the national park, as there are various in the area.

<sup>20</sup> Thailand's protected area system was established in the 1960s after passing of the Wild Animals Reservation Act (1960) and the National Parks Act (1961). During the 1980s and 90s area protection increased rapidly (ICEM 2003: 15).

<sup>21</sup> Furthermore studies have shown that incorporation of the local communities is a necessity for successful conservation of biodiversity and natural habitats, why it is important for the well-being of people as well as for environmental protection (Wells and Brandon 1993).

terms of natural resources, biodiversity and environment, agriculture provides an occupation, culture, traditions and values for rural people, who have long had their livelihoods based on a close relation to nature (Thanwa 2002). The possible effects on land access, land use and agricultural activities in a Thai community will therefore have an impact on the overall livelihood strategies<sup>22</sup>. Determinant for the livelihood strategies of poor people are the assets they have access to and how these are combined in the effort to ensure survival. Assets or *capitals* can be human, social, financial, physical and natural. If land, which is an important asset especially in rural areas, becomes scarce or changes in any way it will affect the villagers' strategies. Therefore land tenure is of great importance. Rural communities in Thailand have traditionally relied on common property resources with land distributed by customary law. Through this tenure system the villagers have access to and right to use land, which they do not necessarily have private property rights for (Vandergeest 1999). Because of lack of official property rights these relations are seldom taken into consideration when establishing protected areas like a national park. Most households in Ban Kamphuan earn a living by agricultural production and are dependent on accessible land. How the establishment and existence of the national park in Ban Kamphuan can cause conflict and how it influences the lives and livelihoods of the local villagers is therefore an interesting issue to look into.

## ***Objective***

The general objective of this study is to assess the effects of the overlapping territorial claims and the conflict with the national park on the livelihoods and livelihood strategies of villagers in Ban Kamphuan. We will investigate if the villagers are economically affected by the overlapping territorial claims and to what extent the dispute leads to new economic activities for the households in BK (e.g. changes in land use, migration, fishery, ecotourism). We will focus on economic activities, but will include the cultural, social and human aspects, which are important determinants for the livelihood strategy and outcomes.

This interest leads to following research question:

---

<sup>22</sup> By livelihood strategy we refer to *"the range and combinations of activities and choices that people make/undertake in order to achieve their livelihood goals"* (DFID, 1999:23, section 2.5).

## ***Research question***

***How do the overlapping territorial claims between the villagers and the national park influence livelihood strategies in Ban Kamphuan?***

To be able to answer the overall research question, we will first answer three sub questions:

### **Sub questions:**

- 1) What characterizes the livelihoods and strategies in BK?
- 2) What characterizes the tenure system in BK?
- 3) How is the national park managed?

These questions enable us to get an understanding of the local context and the different elements, structures and stakeholders involved in the territorial dispute between the national park authorities and the local villagers, which is a necessity for answering the research question.

## ***Definition of relevant concepts***

**Livelihood:** The way people make a living, in this study mainly focused on the economic resource base people have at their disposal and make use of.

**Livelihood strategy:** The activities and choices households undertake to achieve their livelihood goals (DFID 1999).

**Household:** Refers here to a group of individuals sharing food and who have a common goal of improving their socioeconomic status from one generation to the next (FAO 1992 in Messer and Townsley 2003).

**Land tenure:** Land tenure is the relationship (legally or customarily defined) among people as individuals or groups, regarding land (includes here natural resources such as water and trees). Rules of tenure define how property rights to land are to be allocated and how access is granted to use, control, and transfer land (FAO 2002).

## **Analytical approach**

To guide our investigation we are inspired by the livelihood approach described by DFID (1999). In contrast to the traditional approach to rural development that focused on agriculture and natural resources this is a bottom-up approach that takes departure in the multidimensionality of poverty and is focused on the agency and the capability of actors (ODI 1999). It emphasizes the investigation of the different assets people and households have access to and how they use them. Inspired hereby, this study will focus on the assets the households in Ban Kamphuan rely on and what determines the character of them and the access e.g. the importance of the national park. Structures and processes in the households, the community and at a macro level (e.g. governmental) influence the character of assets and access. We will therefore look at the structures shaping land tenure and protected area management in Ban Kamphuan. To get a full picture it is furthermore relevant to incorporate a time dimension, which will be done by exploring how assets and strategies have changed over time e.g. occupation and income sources (DFID 1999). Exploring the livelihoods and strategies of households is a complex matter and entails incorporating various aspects in the assessment of them and in determining the relation to other variables such as territorial disputes<sup>23</sup>. How we will assess these issues and answer our research question will be described in the following.

## **Methodology**

The knowledge and information for our study will be obtained through quantitative, qualitative and participatory methods. The methods used will help us answer our research question by providing data on the different households, stakeholders and land uses in the village as well as information on the protected area and perceptions and views of the national park. The data will be analyzed and compared in order to determine the effect of the overlapping territorial claims on the livelihoods in Ban Kamphuan.

### ***Semi-structured interview***

We will conduct 8 semi-structured interviews in Ban Kamphuan.

---

<sup>23</sup> See Appendix 9 for more on sustainable livelihood and the different factors influencing livelihood assets, strategies and outcomes.

- a) 1 interview with a key informant: the village headman. The objective is to get general knowledge about the village and the villagers e.g. economic, social and cultural activities and the different land uses, demographic features and the conflict with the national park. Through the interview we aspire to get information on households involved in the territorial disputes with the national park. This will be used in the sampling of households for distribution of questionnaires. Furthermore we expect to do a transect walk with the informant and gather further information through informal conversation while exploring the village.
- b) 1 interview will be conducted with a government official from the National Park. The objective is to achieve knowledge on the management of the park, the background for the establishment, the borders and regulations and how the park authorities cooperate with the local community and farmers. Furthermore it will provide a view on how the park is affecting the possibilities of the villagers in Ban Kamphuan from the governmental perspective.
- c) 3 interviews will be carried out with households, which in some way are involved in the territorial dispute and 3 with households who are not. The 6 households will be chosen by most similarities (e.g. size and location) to avoid as many differing variables as possible affecting the household. The results (answers, observations etc.) from the interviews with the two groups (involved and not-involved) will be compared in order to establish if there seem to be any divergences in their choices and activities and if that might stem from the territorial conflict.

### ***Group interview***

An interview involving a group of 4 to 6 participants selected from the various existing community groups in the village<sup>24</sup> will be conducted to obtain information on the different occupational activities in the village and what characterizes the livelihoods of the members of the groups. The group interview is aimed at providing insight in the main concerns of the villagers relating to the overlapping territorial claims, the people involved and changes in livelihood strategies that have resulted from the disputes. Through probing techniques more open discussion can be generated and

---

<sup>24</sup> Ban Kamphuan has various village groups. The ones we know of are: a saving group for production credit, a sustainable agriculture group, an artisanal fishing group and a natural resources and environmental protection volunteer network. Each group has between 150 and 200 members.

the interviewers can gather information from the village groups (Krishna 1987). Interviewers will also take notes on observations of the nonverbal behavior of the participants as well as own ideas and thoughts of issues raised during the interview.

## ***Questionnaires***

The group will carry out a household survey with 20 households to obtain quantitative data on characteristics and livelihood strategies in the village.

Selection of households will be done through a stratified random sampling, where the population is stratified into two categories; those involved in the disputes with the national park and those not involved and then randomly selecting 10 respondents from each of the two strata. This will be done from the information given in the previous interviews.

Information obtained about the livelihood characteristics of the two groups will be compared to see if there are any important divergences in the two types of households. 3 households from each group will be chosen for further exploration through semi-structured interviews in order to understand the reasons for the activities in the households and what role the overlapping territorial claims play in the villagers' livelihood strategies. The questionnaires will be administered by the group members.<sup>25</sup>

## ***GPS***

The GPS will be used for mapping the households participating in the survey so as to establish the location of the households involved and those not involved in the territorial disputes and to see if there's a spatial relationship between the main livelihood activities of the households and the involvement in the territorial disputes.

## ***Participatory rural appraisal***

In the field we will use PRA methods that provide the opportunity to get firsthand information from local people on the village and issues related to their livelihood strategies.

---

<sup>25</sup> When distributing the questionnaires we will besides the structured questions ask about working hours in order to know at what time we can gather the individuals for interviews or PRA exercises.

## **Community resource map**

A resource map will be sketched by a group of 10 villagers to get a visual overview of the village, and the distribution and use of land: infrastructure, households, crops, location of the protected area, the disputed areas (and type of land) and other important places for the villagers. 4 participants will be selected from households involved in the conflict (already visited in the distribution of questionnaires), and 6 will be selected randomly from different parts of the village to make sure all areas are covered. 3 men and 3 women will be selected to make sure any gender-specific knowledge is represented and with the criteria that they have their main economic activity in the village.

## **Activities ranking exercise**

This activity will be done with villagers participating in the community resource map exercise. The villagers will be asked to name all (economic) activities in the village, enumerate the various livelihood activities in the community and rank them in the order of importance. This method will indicate the most important activities for the villagers and through discussions it will provide information on the reasons for their priorities: why they rank as they do and if the priorities have changed due to the territorial disputes with the park (Selener et al. 1999).

## **Community history exercise**

In this exercise a group of 6-8 elderly villagers will be gathered to describe and discuss main events, activities and changes in Ban Kamphuan through the last decades. Participants will be chosen for their age, as they preferably should give us information on the village as far back as possible. Through this exercise we will be able to make a timeline with the most important events and why and how they have happened (Selener et al. 1999). Through the discussion we will obtain information on the reactions and effects of the establishment of the park and what characterized the village and the livelihoods before and after the park was established. It may also be used to compare with the results from the activity exercise ranking.

## **Observation**

Observation will be an inevitable and crucial tool in our fieldwork. Through observation of the villagers in their daily activities and of their responses and reactions in e.g. group discussions we will gather important information about the villagers, their opinions and relations which will be

useful in the overall analysis of the livelihood strategies in Ban Kamphuan and the connection to the territorial disputes.

### **Transect walks**

Two transect walks will be conducted, one in the village (to get an idea of the village, park, plots, crops, activities etc) and the other in the national park. Together with the village headman a transect walk will be carried out across the village. The various production and physical livelihood aspects of the village as well as topographical features, location of the fields and protected areas will be observed and described and analyzed in the making of a transect diagram. The aspects may include soil management, types of crops, forests, live stock, infrastructure, aspects related to natural resource conservation and management. Problems and potentials related to the above aspects will be noted. The transect walk in the national park will give an overview of the protected area and localize the official borders of the park. The two walks will furthermore show the location and type of land that is disputed.



## References

*Basic Information Report on Interdisciplinary Field Study for Sustainable Land Use and Natural Resource Management in 2010, Klong Kam Puan basin area, Suksamran district, Ranong* (2009)

FAO (2000) <http://www.fao.org/docrep/003/X6900E/x6900e0v.htm> (21.2 2010)

FAO (2002) Land Tenure studies, *Land tenure and Rural Development*, FAO, Rome, Italy.

DFID (1999), *Sustainable Livelihoods Guidance Sheet*, Department for International Development, UK

ICEM (2003), *Thailand National Report on Protected Areas and Development*. Review of Protected Areas and Development in the Lower Mekong River Region, Indooroopilly, Queensland, Australia.

Phongsiri (no year) *Thai Diasporas and Livelihood Strategies in Thai Society*. Available from: <http://www.trf.or.th/TRFGallery/Upload/Gallery/Documents/Files/1000000022.pdf> [accessed on 11 February 2010]

Selener, D; Endara, N; Caravajl, J. (1999) *Participatory rural appraisal and planning*. International Institute of Rural Reconstruction. Quito Pp.3-7, 18, 29 -42, 46-51, 56-84 , Nathan, I and Larsen, O. Qualitative Methods in Agricultural Development 2009, Compendium

Thanwa, J. (2002), *Sustainable agricultural systems for small-scale farmers in Thailand: implications for the environment*.

Upton.M (1996) *The economics of tropical farming systems* pp 247-252.

Vandergeest, P (1999) *Comment - Reply: Protected areas and property rights in Thailand*. Environmental Conservation, 26, Foundation for Environmental Conservation.

Wells, M; Brandon, K. (1993) *People and Parks – Linking Protected Area Management with Local Communities*, The World Bank, Washington D.C.

## Appendix 1 - Data matrix

Sub questions	Objectives	Methods
What characterizes the livelihoods and strategies in BK?	Determine the different occupations and assets in the village.	Semi-structured interview with the village headman Questionnaire Resource Mapping Activities ranking exercise Group interview/discussion
	Identify the different land uses in Ban Kamphuan (agriculture, fishing etc.)	Semi-structured interview Transect walk Questionnaire Resource Mapping Group interview/discussion
	Identify households involved in the disputes with the national park	Semi-structured interview with the village headman Group interview/discussion Questionnaire GPS
	Determine characteristics of the livelihood strategies of the villagers who are involved in the territorial conflict	Semi-structured interviews with villagers Activities ranking exercise
	Determine characteristics of the livelihood strategies of the villagers who are not involved in the territorial conflict	Semi-structured interviews with villagers Activities ranking exercise
What characterizes the tenure system in BK?	Understand how land traditionally has been divided and allocated and how it is currently done.	Semi-structured interview with the village headman Group interview/discussion Community history exercise

	Understand/determine from where/what the overlapping territorial claims derive	Semi-structured interview with the village headman and villagers Resource mapping Community history exercise
	Identify the disputed areas	Semi-structured interview with the headman Transect walk + diagram Questionnaire Resource Mapping
	Insight in the villagers' perception of the distribution of land (e.g. land controlled by the national park)	Semi-structured interviews Group interview/discussion Resource mapping Community history exercise
How is the national park managed?	Identify official regulations, rules and laws regarding natural conservation and the National Park.	Semi-structured interview with park authority representative
	Identify the borders of the National Park	Transect walk + diagram Semi-structured interview with park authority representative
	Assess how the park authorities/government officials view the relationship with the local community	Semi-structured interview with park authority representative
	Investigate if the villagers are incorporated in the activities/management of the park	Semi-structured interview with park authority representative Semi-structured interviews with villagers
	Investigating if there are problems with illegal activities in the park	Semi-structured interview with park authority representative

	Assess the villagers' view of the national park	Group interview/discussion Semi-structured interviews with villagers

## Appendix 2 – Time schedule

Time schedule Fieldwork 10<sup>th</sup> of March – 22<sup>nd</sup> of March

Date	Activity	Time
March 10	Travel to Research Station	Morning
	Meeting with our Thai counterparts Discussing and preparing the fieldwork with them Walk in the village	Afternoon
March 11	Preparations for the various activities: discussions, translations of questionnaires, interview guides etc.	Morning
	Walk and observation Make an appointment with village headman and a park official.	Afternoon
March 12	Semi-structured interview with key informant (headman of the village) and a transect walk with him through the village.	Morning
	Identify village groups representatives and make appointment	Afternoon
March 13	Semi-structured interview with park official + Transect walk with him	Morning
	Group interview with representatives from the village groups. Preparation of questionnaires and sampling	Afternoon
March 14	Household survey/marketing the households (GPS)	Morning
	Household survey/marketing the households (GPS)	Afternoon

March 15	Household survey/marketing the households (GPS)	Morning
	Household survey/marketing the households (GPS)	Afternoon
March 16	Evaluation of activities and data until now	Morning
	Follow up on activities if necessary Mobilization of villagers for the PRA exercises	Afternoon
March 17	Community history exercise	Morning
	Resource Mapping Activity ranking exercise	Afternoon
March 18	3 semi structured interviews with villagers	Morning
	3 semi structured interviews with villagers	Afternoon
March 19	Overview of data collected Follow up on the different activities and exercises and possible lacks	All day
March 20	Follow up and data analysis	Morning
	Data analysis	Afternoon
March 21	Data analysis	Morning
March 22	Departure from the Research Station	

\*Each evening the group will gather the information collected and make a short description followed by discussion. The plan for the next day will be updated.



## Appendix 3 – Questionnaire

### Introduction:

Dear respondent, we are a group of students from University of Copenhagen and Thai students carrying out a study on how occupation and activities have been influenced by land tenure - more specific, by the existence of the national park. Selection of the households for this survey was done randomly. Your household happened to be one of those selected to give an overview of the whole village. Please feel very free to give your response as possible and ask questions whenever you need clarification on any issue raised during our interaction. The information obtained from your household will be treated with utmost confidentiality.

(Estimated time to fill the questionnaire: 30 minutes)

*To be filled out by the interviewer:*

Name of Interviewer: \_\_\_\_\_

Interview No.: \_\_\_\_\_ ☐

Date of Survey: \_\_\_\_\_

### INSTRUCTIONS:

For questions with options, Tick the boxes provided or mark with sign x

#### Part 1: Personal Data

1.1. Name of the respondent (optional): \_\_\_\_\_

1.2. Gender: Male Female

☐☐

1.3. Are you the head of the Household? ☐ Yes ☐ No

1.4. Age ☐ 5-25 ☐ 26-35 ☐ 36-45 ☐ 46 and above

1.5. What is your level of education?

☐

Not attended school

☐

Primary school grade 1-6

☐

Elementary school grade 7-8

☐

High School

☐

University

Household member	Gender 1.Female 2. male	Age 1.15-25 2. 26-35 3.36-45 4. 46 +	Level of education 1.Not attended school 2.Primary 1-7 3. High school 4.University	Main Occupation 1. Agriculture 2. Fisheries 3. Government employee 4. Others (specify)
1				
2				
3				
4				
5				
6				

### Information about other household members

1.6 How long has the household lived in this area?

☐ Less than 1 year   
 ☐ 1-10 years   
 ☐ 11-20 years   
 ☐ 21- 30 years   
 ☐ >30 years

Comments: \_\_\_\_\_

1.7 What are the activities contributing to the maintenance of the household?

For what purpose  <b>Farm Activities</b>	Production	Self-consumption	Commercial (e.g. selling on the market)
Fruit production			
Rice production			
Para –rubber production			
Oil- palms production			

Vegetable production			
Rambutan production			
Cahewnuts production			
Livestock keeping			
<b>Non-farm activities</b>			
Fishery			
Collection of non-timber forest products			
Lumbering			
Factory work			
Government employment (e.g. in the park)			
Work outside the area (BK)			
Remittances/economic transfers			
Other			

1.8 Does the National Park affect your household activities? Yes ☐ No ☐

If yes: in what way?

New job opportunities	
Less job opportunities	

Less land available	
Restrictions on the choice of crops	

2. Do you own any land? Yes ☐ No ☐

2.1 If yes do you have title for it? Yes ☐ No ☐

2.2 What type of land ownership do you possess?

N.S.-4 (Full Title Deed) ☐  
N.S.-3 (Certificate of Utilization) ☐  
Others (Please Specify) ☐

Comments: \_\_\_\_\_

2.3 How many plots? \_\_\_\_\_ And how many Rai per plot?

Plot 1 \_\_\_\_\_ Rai

Plot 2 \_\_\_\_\_ Rai

Plot 3 \_\_\_\_\_ Rai

Plot 4 \_\_\_\_\_ Rai

Do you use land you don't have title deeds for? Yes ☐ No ☐

3. Do you have any problems with territorial disagreements? Yes ☐ No ☐

3.1. If yes: with whom?

Other households	
The National Park	
Other	

Comments: \_\_\_\_\_

3.2. Do you have any disputes with the national park? Yes ☐ No ☐

4. Are you a member of any of the village groups? Yes ☐ No ☐

4.1 If yes: which?

Saving Group for Production Credit	
Sustainable Agriculture Group	
Artisanal Fishing Group	

Environmental Protection Volunteer Network	
Others	

5. Do you have access to microcredit? Yes ☐ No ☐

5.1 If yes: from where?

Local bank	
Group savings	
Credit institutions	
Other	

Thank you very much for accepting to take part in this interview and for your time. Would you mind being considered for another session where we can learn more about some of the issues that affect this village?

Which day and time would be convenient for you?

## **Appendix 4 – Interview introduction and interview guides**

### **Aim of qualitative research**

The aim and strength of collecting qualitative data is the thorough investigation of a smaller amount of data and the possibility to explore attitudes, behavior and opinions, which is not captured in the quantitative methods (Bryman 2004:285). This is the reason for doing interviews in this study as we want to understand why the villagers choose and act as they do – what reasons lie behind the household activities, what is their perception of the national park and what are the links between the territorial conflict and the activities of the villagers.

### **Introduction to the informants and reflections on our role as researchers in the field**

As we are foreigners visiting and interfering in the normal life of the villagers in Ban Kamphuan it is important that we reflect on our role as out-comers. We have to be aware of local customs and habits and try as much as possible to act according to them. We find it very important to inform our informants and participants about the aim of our visit and study, so there won't be any doubts about our presence and the use of the data and information gathered. This is also necessary in order to gain the trust of the informants and establish rapport, which will facilitate the collection of useful data. Due to the traditionally top-down approach of development projects and studies this also seems particularly relevant as to ensure that our presence in Ban Kamphuan is not to enforce a program or the like but on the contrary to learn from the villagers and the specific context in which they form their livelihoods. This is furthermore important in order to avoid any misunderstandings regarding the purpose with our visit e.g. that we are not perceived as possible donors and links to aid in some way of another, which would have an effect on the relations we establish and the information given.

## ***Interview 1: Semi structured interview with the village headman***

**Purpose:** To get an overview of the village, the main activities and relations in Ban Kamphuan.

**Duration:** Approximately 2 hours.

**Materials:** recorder, notepaper.

**Participants:** All members of the group and a translator

### **Introduction of the informant:**

4. What is your name?
5. What is your occupation?
6. What are your role/responsibilities in Ban Kamphuan?

### **Introduction to the village:**

11. When was the village established?
12. How many inhabitants?
13. How many households?
14. What are the main occupations in the village?
15. What are the main land uses?
16. Have there been any great changes in the main activities and occupations since the establishment of the village?
17. What are the main problems in the village?
18. What are the main concerns in the village?
19. Are many people migrating from the area?
20. If yes, what are the reasons for people migrating?

### **Land tenure:**

4. How has land traditionally been distributed in Ban Kamphuan?
5. Has the way of distribution undergone big changes since the establishment of the village (and the park)?
6. Are there any territorial conflicts in the village?

### **National park:**

8. When was the national park established?
9. Was the park established in cooperation with local actors?
10. How has the park influenced the village?
  - c) Any opportunities for the villagers?
  - d) Any problems for the villagers?
11. Are there any conflicts related to the national park?
12. Who are involved in the conflict (which areas, groups, households, individuals)?
13. Has the conflict had any influence on the activities, occupation etc. in the village?
14. If yes, on who and where?



## ***Interview 2: Semi structured interview with an Official from the National Park***

**Purpose:** To get information on the park management, rules and regulation, the park area and the disputed areas. And to get a view on the relationship with the local community and the conflict from the perspective of a government official.

**Duration:** 1 1/2 hour (+ 2 hours for transect walk)

**Materials:** recorder, notepaper

**Participants:** All members of the group + translator

1. When was the park established?
2. Who established the park and why?
3. How were the borders determined?
4. Was it in cooperation with local actors?
5. How is the park regulated (local specific rules or overall general national rules)?
6. How are the rules enforced?
7. Who is involved in the decision-making processes concerning the park?
8. Is there any form of cooperation between the villagers and the park administration?
9. Are the local villagers in any way allowed to practice activities in the park?
10. How do you perceive the relation to the local community?
11. Are there any disagreements between the park authorities and the local villagers?
12. Are there any problems with illegal activities?
13. If yes, what do you about it?

### ***Interview 3: Semi structured interview with 6 villagers***

**Purpose:** To explore the main economic activities of the villagers, their main concerns and their perception of the National Park.

**Duration:** 1 hour each of them

**Materials:** recorder, notepaper.

**Participants:** 2 members of the group for each interview + translator

#### General information

1. What are the main activities that support the household?
2. Why have you chosen these activities?
3. Have you changed your occupation/the activities recently? Why?
4. What is most important for you in order to take care of your family?
5. Are you dependent on land access?
6. Do you have title deeds on all the land you use?
7. What is the accessible land used for? (if agriculture, which crops)
8. Have there been any changes in the way you use your land? Why?
9. Do you have any disputes over access and land use rights?
10. How do the disputes affect economic activities of the household?

#### Information regarding the National Park:

1. What is your opinion on the National Park?
2. Does the park in any way provide you with any opportunities?
3. Does the park in any way constrain your activities?
4. Are you in contact with the park's authority? How and for what?

#### ***Interview 4: Group interview with representatives from village groups***

**Purpose:** To gather spokespersons from the village groups representing a big part of the village population (each group has between 150 and 200 members) to get information on the livelihood strategies and perceptions regarding the National Park. They will provide information useful for the sampling of households for distributing questionnaires and semi structured interviews.

**Duration:** 2 hours

**Materials:** recorder, notepaper, refreshments.

**Interviewer:** 1 member + translator. All members present

#### **Questions:**

1. What are the main activities in the groups?
2. What type of members do you have?
3. What do the members gain from the membership?
4. Are your members dependent on access to or control over land?
5. Are the members in any way influenced by territorial disputes?
6. Does the national park offer any opportunities for (economic) activities for your members?
7. Does the national park in any way hinder (economic) activities for your members?
8. Which members/households are affected – any specific group?
9. In what way are they affected?
10. Where are the involved/affected households (any specific areas)?

## Appendix 5 - Ranking exercise of activities

**Purpose:** To identify the most important activities for the villagers and the reasons for their priorities and if they have changed due to the territorial disputes with the park

**Participants:** 10 villagers from Ban Kamphuan

**Duration:** 1 hour

**Materials:** paper, markers, refreshments.

**Facilitator:** Members of the group + translator

Example:

Respondents \ Activities	A	B	C	D	E	F	G	H	I	J	Total	Ranking
Agriculture												
Fishery												
Ecotourism												
Collectors (In the National Park (NTFPs))												
Collectors (Outside the National Park (NTFPs))												
Others												

1 is less practiced      x most practiced

## **Appendix 6 - Resource mapping exercise**

**Purpose:** to get a visual representation of the village from the perspective of the villagers. It will provide an overview of the households, plots, crops, land use and the disputed areas. In the exercise different opinions and perceptions of the relations in the village might also be revealed.

**Duration:** 4 hours

**Materials:** big pieces of paper, markers, color pens, refreshments.

**Facilitators:** all members of the group + translator

**Activity:** The participants will be asked to draw an overview of the village: roads, households, plots, the crops and different cultivations as well as key locations and places of importance (market, places of occupation). In doing this the participants will be gathered outside in an open space and asked to make an overview of the community and the spatial relations in the village by using natural materials (by drawing in the ground and using stones, sticks, leaves etc.). Afterwards participants, group members and the translator will gather inside (in the community hall) and draw the map on paper, which will provide the visual representation of the community and the resources present.

## **Appendix 7 – Community history exercise**

**Purpose:** Information on the main events and activities in the village as far back in time as possible. This is important in order to understand the current situation in Ban Kamphuan – the priorities, opportunities, problems and conflicts.

**Participants:** 6-8 elderly from the village

**Duration:** 2 hours

**Materials:** Big piece of paper, markers, refreshments.

**Facilitator:** 2 group members + translator

**Activity:** The participants will be asked to name all events and changes they find important as far back as they remember. The themes will mainly be traditional land use, occupation and the establishment of the national park but every aspect the participants bring in will be noted and followed up where relevant. The issues discussed will be noted on a big piece of paper or on a board to get an overview of all events influencing the community through time. The events may as well be drawn if it facilitates the process and discussion.

## **Appendix 8 – Extra activities**

Depending on the time available and the need for further information there are two activities, we might carry out during the fieldwork:

- a) A semi-structured interview with an official from the Administrative Office, who will be able to give us some overall information on the demographic characteristics of Ban Kamphuan and how they have changed through time. As it is an official office he may be able to provide some secondary data e.g. statistical data or the like on the area and the village.
- b) The second possible activity is a focus group interview with people involved and not involved in the territorial disputes to get their opinion on the national park and the opportunities and constraints it brings. Besides exploring the relationship between the National Park (authorities) and the villagers, this discussion could reveal the relationship between different villagers and show if there are any internal disputes amongst them regarding the national park or other issues.

## Appendix 9 - Livelihood and livelihood strategies

Livelihood is a very important concept working with people in developing countries. It involves the way, in which people tried to find resources and to figure out how to make a living. People need some main bases to satisfy their own interest and needs, but the idea is not only to get bread and shelter. It is equally important to identify status, identity, information, management of skills and relationships among people. It comprises the capabilities, assets, material and social resources and all activities that are crucial to make a living. Livelihoods strategies have to be sustainable, so it is important to respond to the needs of the rural community in both short and long terms (Phonsigiri).

Capital assets- is very important to take into account capital assets that farmers have in their disposition such as: livestock, buildings, machinery, equipment, agricultural chemicals, seeds, crops etc (Upton 1996). It is very important for farmers to have capital that is a possibility to go in with farming and produce to maintain their households. Many of the farmers in Thailand are small- scale ones, who produce for themselves and what is surplus they sell in the market.

Natural resource- Land is one of the most significant factors for farmers especially for poor ones. If farmers have access to land that lead to use it not only for direct and productive activities, but also for collateral for loans (DFID 1999). However it is crucial for farmers to have land title. In addition to our research, it will be investigated to see relation between villagers and National Park and how are they arguing for their land and their rights.

Other important resources are forest, wild-resource, water, air quality, conservation of biodiversity, protection from erosion. All of these are public goods and have to serve to the whole community, they don't have to exclude some and give potential for use to the others. Ways in which these public goods are distributed create conflicts among stakeholders. It should be taken into account interests, basic needs, and aim of all of villagers, even though conservation of biodiversity is a big issue.

*Physical capital* involves infrastructure (roads, rails, telecommunication, access to water, energy, health centers and market). Villagers, who don't have access to land has to find other opportunities and to choose in which sectors to be involved for other sources of income, thus will lead in new strategies for livelihood. However to be able to get this chances *social capital* has to be part of villagers' strategy. Personal skills, knowledge, all connections, networks and membership in particular groups to enhance collaboration, mutual interests, trust among members, should be taken into account. On the other hand *financial capital* is vital to ensure life, it can be converted through



structures and processes into other types of capital such as education or to be transformed into political influence, so villagers could gain power and thus be actively organized, be part of political decision to have access to natural resource (DFID 1999).