

Interdisciplinary Land Use and Natural Resource Management (ILUNRM)

Report On

National Park Management and Local Livelihoods in Ban Suk Sam Ran



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Preface

This paper was written as an obligatory part of the thematic course: Interdisciplinary Land Use and Natural Resource Management (ILUNRM). The data was obtained during a field study in the Ranong Province, Thailand. The authors of this paper have contributed equally to the completion of every part of the paper.

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Livelihood systems: Sen

Management of NP: Anna

Impact of NP on local Livelihoods: Tolera

Conclusion: All

NB: We have all been the co-writers on the sections of fellow group-members

Table of contents

Chapter 1: Introduction	7
1.1.The orthodox vs. the new conservation approach.....	8
1.2. Case study: the Sri Phangnga national park and local livelihoods in Suksamran village	9
Chapter 2: Methodology	11
2.1. Sample size	11
2.2. Sampling methods.....	11
2.3. Data collection techniques	11
2.3.2. Seasonality calendar.....	12
2.3.3. Transect walk	12
2.3.4. <i>Key informant interview</i>	12
2.3.5. <i>Secondary data</i>	13
2.3.6. <i>GPS</i>	14
2.3.7. <i>SSI</i>	14
2.3.8. Questionnaire	14
2.4. Methods of data analysis.....	15
Chapter 3: Results and discussion.....	16
3.1 Livelihood systems in Ban Suk Sam Ran	16
3.1.1 Livelihood assets.....	17
3.1.2 Income.....	23
3.1.4.Livelihood strategies	27
3.1.5.Livelihood outcomes.....	28

3.2 Management of the Sri Phangnga National Park	29
3.2.1. Background: National policies on National Parks in Thailand	29
3.2.2. Park management approach in the Sri Phang Nga National Park	30
3.2.3. Enforcement of park regulations	31
3.2.4. Park policy concerning the overlapping area	31
3.2.5. The conflict resolution process from villagers' point of view	33
3.3. The Impact of national park on the livelihood of the people	34
3.3.1 People's Perception of management style of NP	34
3.3.2. Respondents View on nature preservation	37
3.3.3. Impact of national park and changes in Livelihood	38
4. CONCLUSION	40

Abstract.

This study focuses on how the management of the Sri Phangnga National Park affects the livelihood of villagers in Ban Suk Sam Ran, Thailand. The paper stressed on looking at the management style of the national park, livelihoods of the villagers and the impact of the national park on the livelihoods of the local people. Both primary and secondary data collection methods were used and respondents were classified in to two strata by using proportional stratified sampling methods. Accidental sampling was employed to select respondents for survey. The collected data was analyzed via description, graphs and percentages. Livelihood strategies were analyzed using the livelihood analysis frame work. The findings show that the management of the Sri Phangnga National Park is characterized by a top down approach where the local people are not involved in any planning or decision making. The livelihood strategies of the local people are highly interlinked with the national park, seeing that many villagers rely on water- and forest resources within the protected area. The paper also shows that the national park has a greater effect on the livelihood of the local people who have land inside or adjacent to the park area. Land and resource tenure security problems in the overlapping area are the main problems the villagers are facing in association with the national park establishment.

Acknowledgements

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Chapter 1: Introduction

During the past 50 years there has been a marked increase in the creation of protected areas in the developing world. Seeing the rapid rate of deforestation the international community have put emphasis on the importance of forest preservation, and worldwide large parts of the remaining forest have been made into protected areas. Many developing countries are today promoting programmes of nature conservation through the establishment of national parks and wildlife sanctuaries, with the purpose of securing biodiversity and, in many cases, to further recreational areas to support a flourishing tourism industry (Ghimire 1994).

However this development has affected the lives of local inhabitants living inside or adjacent to the protected areas and relying on forest resources. In many cases the establishment of protected areas has lead to displacement of local people and disruption of their livelihoods when access to vital resources has been denied (Ghimire 1994, Suwanmanee 2009).

In Thailand the state's view on natural resources has undergone a significant change. Previously the value of forest resources was connected solely to utilization, but during the last fifty year emphasis has been placed on the tropical forest landscape as "a beautiful recreational scenery for human recreation, biological study, and wildlife conservation" (Suwanmanee 2009:2). This change is reflected in the increased number of protected areas during a relatively short period: From the 1950s to the 1970s only three national parks and one wildlife sanctuary were established (Ghimire 1994). But during the 1970s and 1980s, Thailand experienced a rapid increase in the number of protected areas, with the establishment of 60 national parks and approximately 31 wildlife sanctuaries (Suwanmanee 2009:2). However the establishment of the protected areas was done with little concern for the local inhabitants who were considered as an undesirable group standing in the way of the forest preservation objective (Johnson & Forsyth 2002 in Suwanmanee 2009) and such groups have been viewed as obstructive and incompatible with good national park management (Hares 2008 in Suwanmanee 2009).

1.1.The orthodox vs. the new conservation approach

The previous description reflects the orthodox conservation approach, where human beings are regarded as a threat to nature and therefore nature conservation programmes should build on a strict separation of nature and culture. According to this approach humans should be excluded from the protected areas (Suwanmanee 2009).

In contrast a new conservation approach where humans are seen as a part of the ecosystem is today being largely promoted¹. This new conservation approach promotes sustainable resource conservation through participation of the local people living inside or adjacent to the protected areas (Suwanmanee 2009). According to this approach nature conservation programmes need to consider the survival needs and livelihood systems of local inhabitants. In part, the new approach has been developed in order to avoid exploitation of protected resources by locals who have been denied access to resources that were previously available to their community. In many cases the top down planning of conservation programmes have resulted in illegal activities in the protected areas and an overuse of the forest resources outside the area. Therefore, efforts to protect forest resources have often been accompanied by further environmental deterioration, including higher rates of deforestation (Ghimire 1994).

In Thailand the orthodox conservation approach has been, and still is, predominant but in recent years, steps towards a more participatory approach have been made. The Thai government has acknowledged the role of local people in the 1997 Thai constitution (Johnson & Forsyth 2002 in Suwanmanee 2009) and in this report we will present other examples of the same development in national conservation policies (Chapter 3).

But although there has been a change in national conservation policy the actual implementation of the new approach staggers. In practice, the local people are seldom given a real opportunity to participate in the planning process which is still characterized by top down decision making from government level (Ghimire 1994:196).

¹ Today the international community (e.g., UN, the World Bank and US Aid) is promoting this approach, recognizing the need for conservation programmes to take local peoples' livelihoods into consideration.

1.2. Case study: the Sri Phangnga national park and local livelihoods in Suksamran village

It is with this overall context in mind that we look to the case of the village Suksamran.

The village of Suk Sam Ran is situated in the rural outskirts of the Ranong Province in a mountainous area, covered by forest, which stretches over 14.275 Rai. Suk Sam Ran is populated by 588 villagers living in 117 households and the village history can be dated back to the mid 1960s when the village was officially founded. The villagers rely largely on their farming activities from which the majority of the population get their income. The most dominant land use types are oil palm, durian, mangosteen, longon, rambutan, mixed orchards. But Para rubber trees seem to be the most important farming activity.

For the past four years there has been an ongoing dispute between the village and the neighbouring Sri Phangnga National Park, regarding a substantial part of the village farmland which is overlapping with the protected area of the national park:

In 1988 The Sri Phangnga National Park was established, however the demarcation of the boundaries of the protected area was not made until ten years later, in 1998. After the boundaries were made it became clear that part of the land adopted by the national park was actually being used by local villagers who considered this land their own. The Sri Phangnga administration first began to enforce park regulations in 2006 which instigated a conflict with the villagers who were doing rubber farming inside the official park boundaries.

As an attempt to solve the conflict, the overlapping area was made into a special use zone, where farmers who had been using the land before the demarcation of the park boundaries were allowed to continue their use, however, they were not allowed to cut down the trees on their plots or in any other way disturb the existing state of the natural resources. Furthermore, no expansion of the plots was allowed. It is this compromise which still exists today, but the conflict has not yet been solved: Approximately 50 households in the Suksamran village have plots within the special use zone and villagers argue that they do not have free access to the plots. At present village representatives and representatives from the national park administration are trying to solve the conflict, but according to both sides the process has come to a halt.

This paper sets out to study how the current management approach of the national park is affecting the livelihoods of the villagers in ban Suksamran. It is our intention to investigate the current conflict as described above, but also to see the impacts of the national park on the population in general. This allows us to stay open to positive effects from the national park and to get a more wholesome picture of the relation between the national park and the local livelihood systems.

It is from this overall context that we formulate the following research question:

How is the management approach of the Sri Phangnga National Park affecting the livelihoods of the people in Ban Suksamran?

In order to answer this question our objective is twofold:

- To study the conservation approaches and policies dominant in the management of the national park.
- To study the livelihood strategies in the village of Suk Sam Ran in regards to national park resource utilization.

Definition of Terms

Management approach: The prevailing conservation approach determined by national conservation policies; and the nature of the enforcement of park regulations.

Livelihood: We will be looking at the local livelihoods at household level. By livelihood we mean the different activities that people carry which contribute to, or affect, their ability to ensure a living for themselves and their households (Messer and Townsley 2003).

Chapter 2: Methodology

2.1. Sample size

Originally, a total of 30 respondents were proposed to be sampled from both strata (1/3 from inside the national park and 2/3 outside the national park). However, after going to field we found that the total number of households in the village was greater than what we had expected. So, we decided to sample 25% of the total population: which is 42 households (28 from the outsiders and 14 from inside the national park). According to sample rule, this sample size is statistically valid to represent the entire population.

2.2. Sampling methods

Proportional stratified sampling was used to sample respondents from the entire population. Stratification of the respondents was made purposively based on the plot position of the local people. Accordingly, those who have land inside the national park (*the insiders*) are considered as one strata and those who lives in the village without having land inside the protected area (*the outsiders*) was classified as other class of strata. The research focuses on the assessment of livelihood of the local people in connection with the national park. Hence, it is worth to look into the livelihood of the villagers as a whole than focusing on the insiders alone as the outsiders also affected by the establishment of the national park. Simple random sampling was proposed in the selection of respondents from each stratum. However, due to absence of the chosen respondents from their homes, we were forced to shift to the accidental sampling where households are asked in 'Knock and ask' form. With accidental sampling, we managed to get the proportion 1/3 and 2/3 from the inside group and the outside group respectively.

2.3. Data collection techniques

2.3.1 Trend analysis

Information on changes in the livelihoods over time before and after the establishments of the national park was collected by using this method. The use of trend analysis helped us to look in to the general changes in income, food security, local economy, land security and other resources security in relation to the establishment and enforcements of the rules of the national park. This was conducted by gathering local peoples who have better knowledge and understandings of the area.

2.3.2. Seasonality calendar

Seasonality calendar was used to look in to the main livelihood activities carried out throughout the year. The main peak and down periods in income and employment, seasons of vulnerability and shocks, coping mechanism of the local people during the tough times of their livelihood activities. Sufficient and reliable information were gathered by these methods because the local elders participated and agreed up on the information.

Challenges for both PRA methods

- Women did not participate in the discussion. In the village, culturally, women do not equally participate with men in public meetings.
- Domination of one individual during the discussion was also a challenge.

However, we overcome the challenge by motivating the whole group to participate in the discussion. The data was also collected via questionnaire to cross check the reliability of the methods used.

2.3.3. Transect walk

Information on the *natural capital* and other capital assets, park boundaries and resources in the overlapping area, land use type and potential opportunities and problems in the village was collected during the transect walk. It was conducted by walking from the hill area inside the national park to lower area across the village for 5km. Talks with the local people during transect walk gave us the necessary information on the available assets and park boundaries. GPS was used to locate the position and height in our track. It helped us to depict the landscape while we identified the types of land use in our tracks.

2.3.4. Key informant interview

Key informant interview (KII) were used in order to collect information on national park management, rules and law enforcement style in the area, land and resource security in the area. Furthermore the KIIs gave us valuable information about the conflict over the overlapping area and conflict resolution measures used by national park management. Necessary information was collected from the national park administration, district offices and (the present and the former) headman of the village.

Challenges

- Absence of the interviewees from the public offices. Finding the right person at the right time was one of the biggest challenges we confronted to discuss with the district officer and national park administration. We managed to visit the district several times before we managed to get the interviews.
- Unwillingness to give necessary information by the interviewee was another challenge we faced. Due to the sensitive nature of some information on the national park management, they were reluctant to give the give elaborate information
- Contradictory information from different respondents.

However through triangulation from more interviews we began to get a full picture of our research topic.

2.3.5. Secondary data

Information's on socio-economic and cultural aspects, the agricultural production system, and Park management rules, regulations and policies were collected from secondary sources before departure to field and during field work.

Challenges

- Finding up-to-date secondary data,
- unavailability of compiled data in the local offices at the field site and
- language barriers,

To overcome these barriers, the research group employed primary data collection methods along with the secondary sources to crosscheck the reliability of the data from the secondary sources. Translators also were of great assistance in helping us translate the available data from Thai into English.

2.3.6.GPS

In order to check the national park and the village boundaries, we used GPS methods and made the approximate boundary of the overlapping area with the help of local villagers.

2.3.7. SSI

Initially this method was proposed to be used to collect in-depth information from the respondents on conflict and conflict management strategy. However, we decided to conduct it along with questionnaire due to time limitation. We realized that conducting semi structured interview with 15 people was difficult with the translators within the available time.

To get the required information, Open ended questions were added in to the questionnaire and respondents were asked to discuss on the open-ended question along with questionnaires. Probing the questions was done by the researchers to harvest sufficient information on spot. However, some people were reluctant to answer the open ended questions.

2.3.8. Questionnaire

Structured questions concerning the livelihood strategies of the villagers were designed and prepared before the field. Pilot testing of the questions were done and changes were made on the questions.

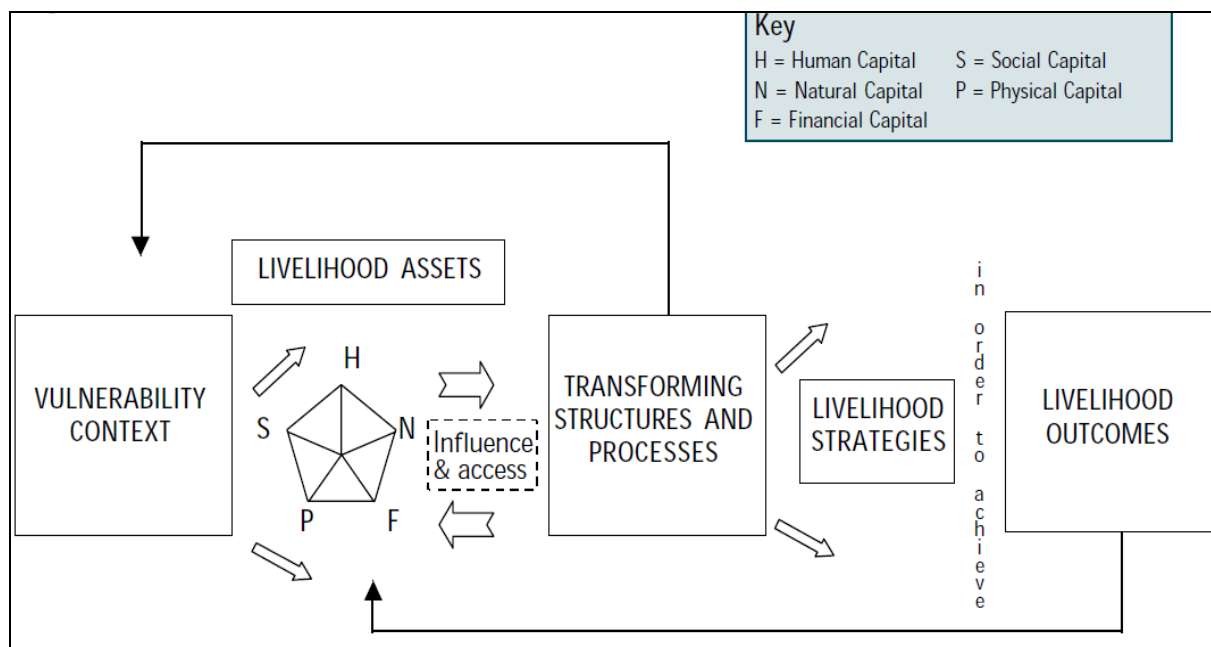
Challenges

- Developing and combining questionnaire with Thai groups where the main challenge
- Translating the language from English to Thai and from Thai to English was the main challenges.

We used translators to overcome the challenges.

2.4. Methods of data analysis

Quantitative data were analysed by using, percentages and rankings and it is presented in graphic and tabular form. Qualitative data that are collected from the respondents are interpreted and described. The Sustainable Livelihood Framework (DFID 1999) has been used to analyse the relation between the asset stream, livelihood strategies and the outcome of the livelihood strategies. Livelihoods of the villagers were studied and presented with the guidance of livelihood frame work. The linkage between different streams of the livelihood framework is used to guide and present the findings from the field. The use of the framework helped us to logically look in to the link between the factors. The following framework is used to guide the research.



Source: DFID, 1999

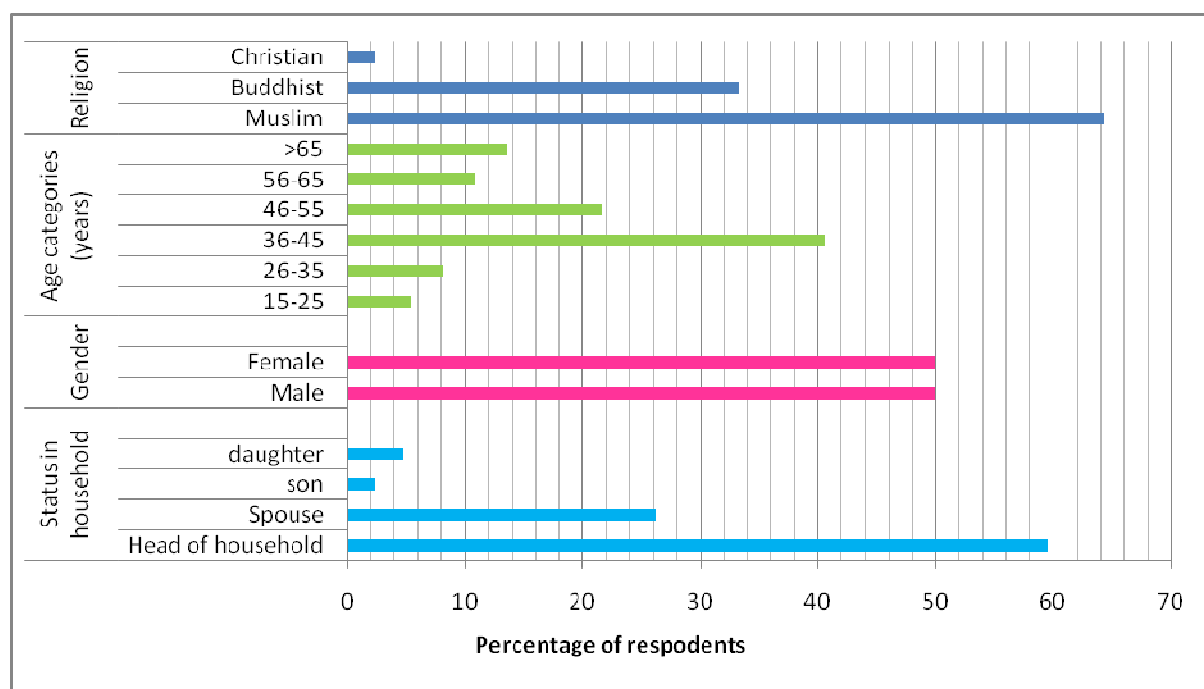
Chapter 3: Results and discussion

In this chapter the main findings from the field study in Ban Suk Sam Ran is presented. In the first part the livelihood systems of the local villagers will be depicted. The second part concerns the management approach of the Sri Phangnga National Park, while the third deals with the relation between the management approach and the local livelihoods. The first section is mainly descriptive, whereas the following sections will discuss the collected data more in depth.

3.1 Livelihood systems in Ban Suk Sam Ran

Description of respondents participating in the survey

In this part we will present our findings. Firstly, we will introduce some demographic information about the 42 respondents who participated in the survey.



Graph 1. General information about gender, age, religion and the status in household of the respondents (Source: Own field survey)

According to our survey, 64% of respondents are Muslim, 33% are Buddhist and the remaining 3% are Christian (Graph 1). The highest proportion of the respondents (41%) lies in the age category of 36-45 years and 14% were more than 65 years old (Graph 1). The male and female constituted 50% and 50% of respondents respectively (Graph 1). Considering the

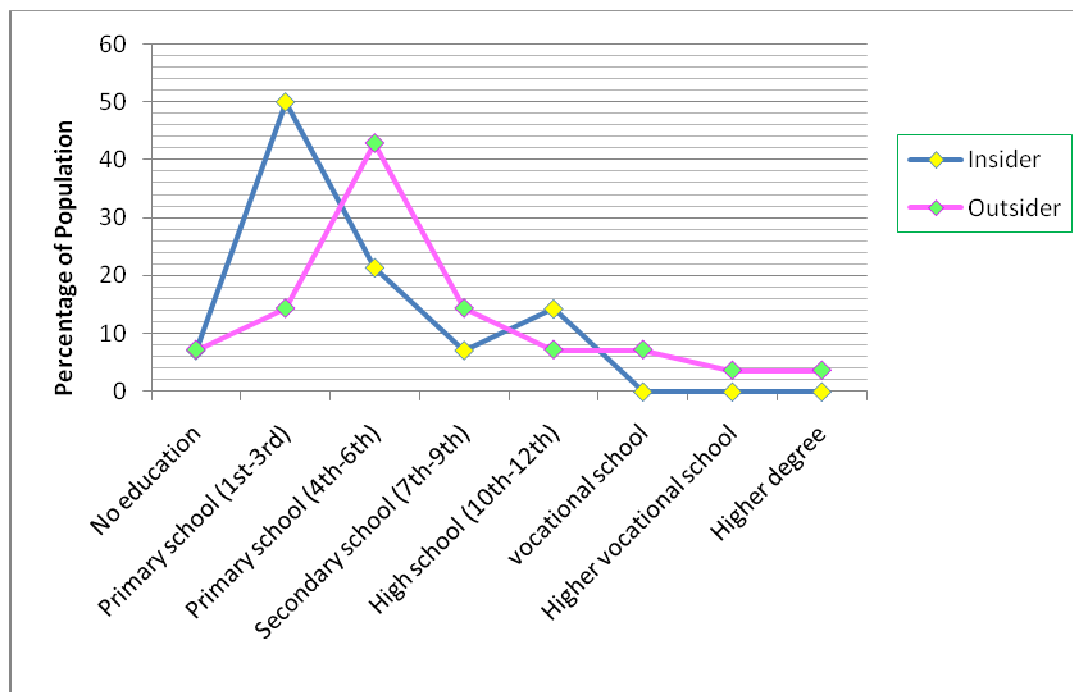
status in household, 59% respondents of our survey was the head of their households (Graph 1).

In this section we are going to introduce the different livelihood assets of the village which are available to the local people. We will also introduce their different livelihood activities and the long term outcomes obtained from their activities.

3.1.1 Livelihood assets

3.1.1.1. Human capital

Our survey results denotes that 92.86% of the total population in Ban Suk Sam Ran are educated. This makes the villagers bright to use their other livelihood assets in a proper way. But few people in this village have higher education. We also found that 50% insiders and 42.85% outsiders were educated from primary school with 1st to 3rd class education and 4th-6th class education respectively



Graph 2. Educational level in Ban Suk Sam Ran and the percentage of population

(Graph 2). Although the percentage of uneducated people is similar for both insiders and outsiders, the educational level is higher for outsiders than that of insiders (Graph 2). However, during our field survey, we have realized that both the insiders and outsiders have

deep knowledge about nature preservation. This represents 82% of insiders and 82% of outsiders (source: own field survey).

Therefore, the higher percentage of educated people and the deep knowledge and skill of the local people are assisting the village to manufacture a well-built human capital.

3.1.1.2. Physical assets

(The following information regarding the physical assets was obtained mainly through the transect walk)

Infrastructure

There are 2 schools in the village which include 1 public school and 1 religious school. The villagers are also facilitated with 1 public health centre. The Suksamran District Office is situated in the centre of the village. There is also a mosque for prayer as the majority of the total population is Muslim. The roads of this village are typically smoothed, cleaned, paved and constructed to allow easy travel. Public rest houses have been built at every public junction. All the public institutions (schools, public health centre etc.) are situated near the main roads so that villagers can get the services easily. Most of the houses are made of wood and cement. There are more than 3 water sources in this village. All of these water sources come from the mountain inside the national park area.

Communication

Villagers have access to telecommunication services, electric services and satellite dishes. Although there is no public bus service inside the village, local people use their motor bike or car to go everywhere within and outside of the village. During our transect walk we have found bridges over the lake which connect Ban Suk Sam Ran to other village. Thus the villagers can easily go to the other villages through the bridges.

Market facility

Although there is no market in his village, the local people go to the central market which is 10 km far away from the village and they buy their necessary goods. There are also small

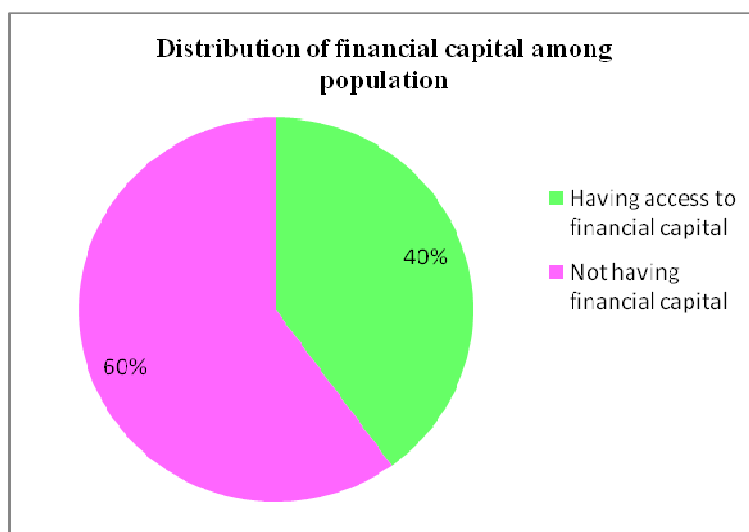
grocery stores providing the daily necessary goods. Mobile markets² come to the village every day and they sell all kinds of vegetables, fishes and meat to the local people. Normally, the villagers sell their products to the middle man. Therefore, the middle man sells the products to the retailers.

Water supply and sanitation

The channels which bring water from the national park have been blocked and diverted by the rocks and roots of the trees near the water source. Therefore, the villagers are faced with problems of water shortage during the summer period. The villagers have their own water storage reservoir to overcome the dry season. However, during our transect walk, villagers also informed us that their storage water is not sufficient to solve the problem. Villagers also have access to healthy sanitation service. They have access to keep trash basket in their house where all trash materials are deposited and throughout by the government once a week. The households pay 0.90\$ per month for each trash basket. Trash baskets are also supplied on the both sides of each road for public service. Thus, the service keeps the village clean and protects the residents from diseases caused by sanitation problems. (Source: Transect walk and discussion with villagers)

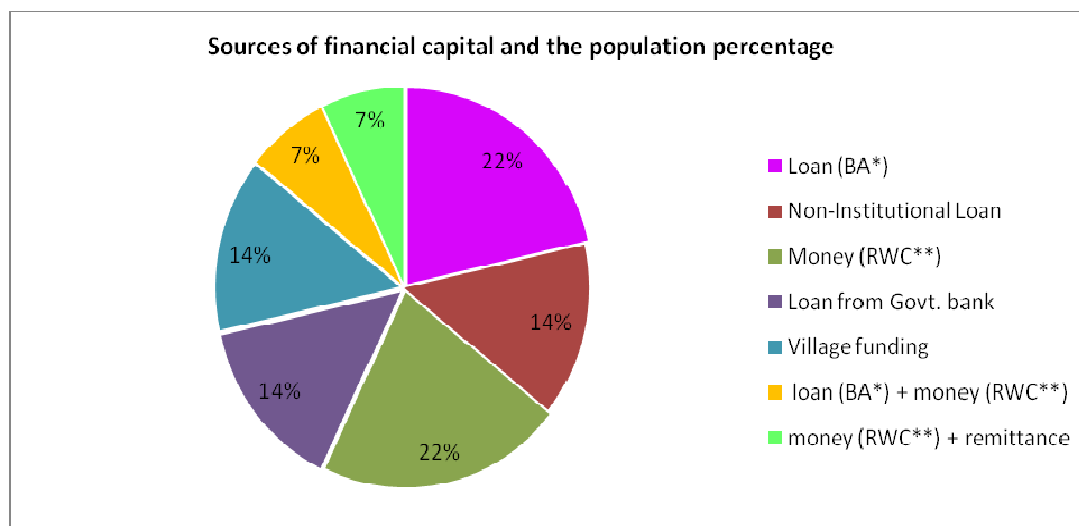
3.1.1.3. Financial capital

Our survey results shows that 40% of the total population in Ban Suk Sam Ran has access to financial capital. The remaining 60% don't have access to the financial capital (Graph 3).



Graph 3. Percentage of population and dependence on financial capital. (Source: own field survey)

There are different financial service institutions available in the village. Within the people who have access to the financial resources, 22% get loans from the Bank of agriculture for their agricultural practice (Graph 4). The other 22% villagers get financial support from their relatives who are working outside the district but within the country (Graph 4).



Graph 4. Different source of financial capital and percentage of population. *BA=Bank of Agriculture and ** RWC= Money from relatives within the country. (Source: own field survey)

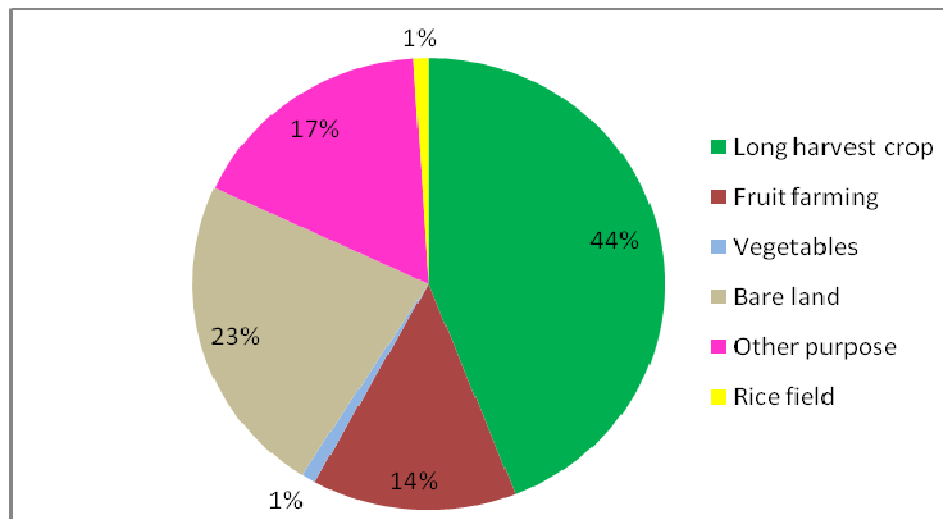
The Government Bank provides loans for housing and other purposes which constitute 14% of the financial capital dependent population. The local people have also access to village funding which is funded by government and distributed by the district office at the village level (Graph 4). However, sometimes the local people borrow money from others as non-institutional loans. The lowest percentage of people (7%) are getting money from the relatives within the country and the remittance while the other 7% people get the loan from Bank of Agriculture and the money from their relatives. During our survey, we have found that the above mentioned available sources of financial capital are influencing the villagers' income. (The part will further explain in income part).

3.1.1.4. Natural capitals

Land utilization

The total amount of land is about 14,275 rai which includes 8826 rai land with certificate. Although the recorded land with certificate for agriculture is about 2753 rai, the actual amount of practiced land for agriculture is about 2098 rai. About 1616 rai of total agricultural land is used for the production of economical plants (Department of agricultural extension).

Highest percentage of agricultural land (about 44%) of this is occupied with long harvest crops (para rubber, oil palm etc.) (Graph 5).



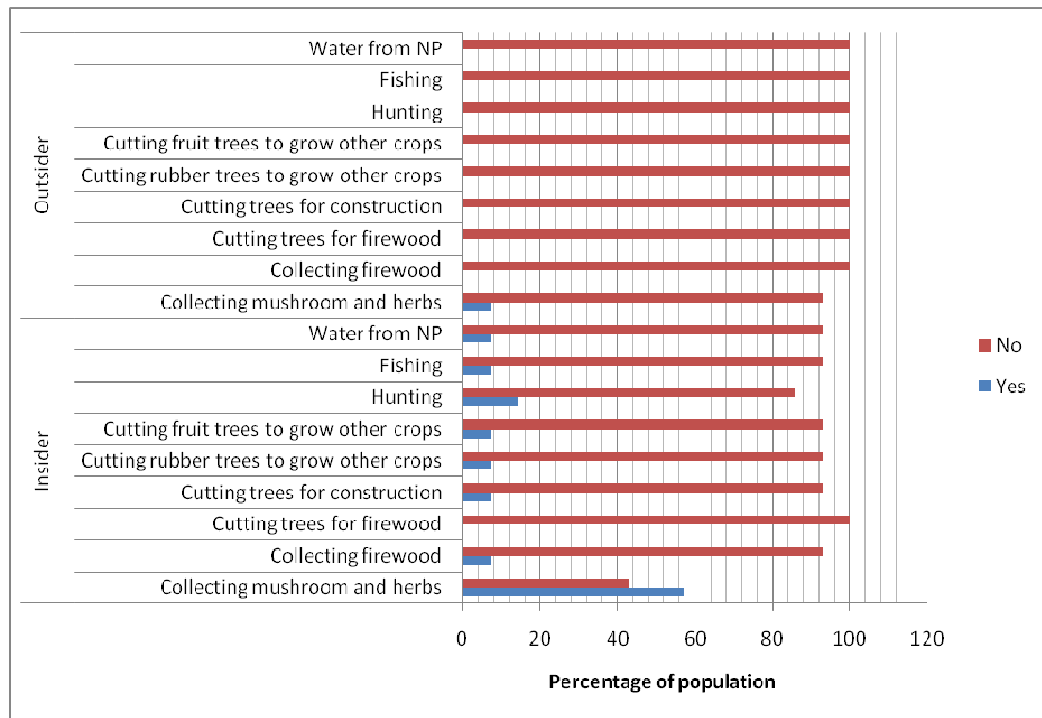
Graph 5. Utilization of agricultural land in Ban Suk Sam Ran (Source: Department of Agricultural Extension, Local office)

The second highest part of agricultural land about 23% is left as bare land. Some households of this village use their land for fruit farming which is 14% of the total agricultural land (graph 5) (Department of Agricultural Extension, Local office).

During our transect walk, we have found that many households have unoccupied land in front of their home. When we ask them about planning with their bare land, they replied us that they are not yet deciding to do anything on that land. However, there is a great opportunity for the villagers to enhance their income level if they use their unoccupied land for farming system.

Use and dependency on forest resources

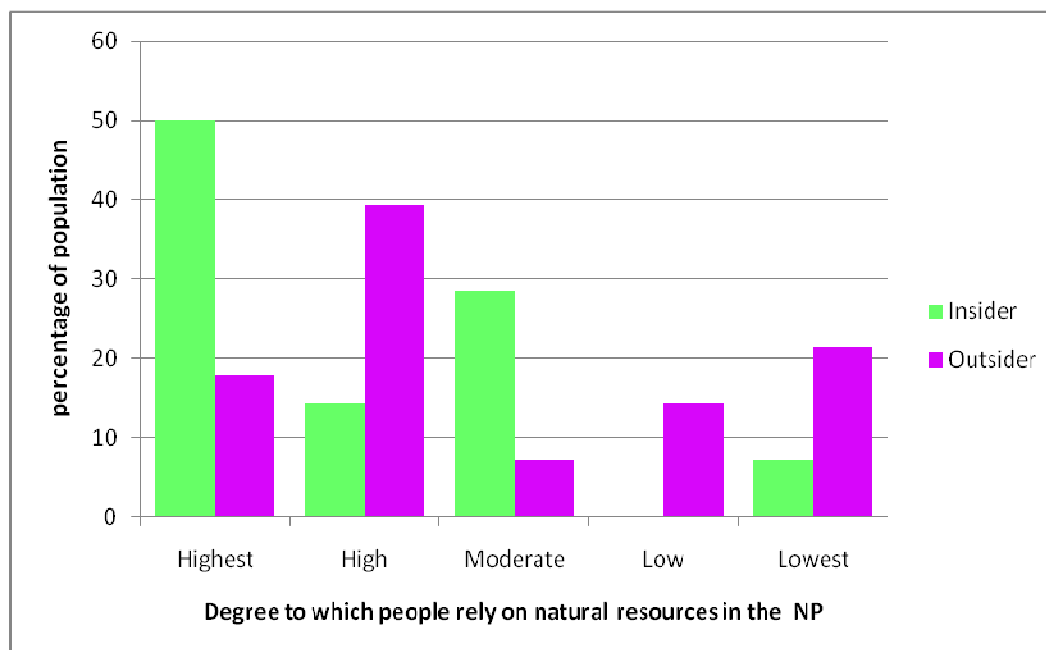
Insiders participated in all kinds of activities in the national park except for cutting trees for collecting firewood (Graph 6). Most of the insiders (57%) collect mushrooms and herbs from the national park area (Graph 6). Outsiders rarely (about 7% of outsiders) collected



Graph 6. Different activities inside the National park carried out by villagers within the past year

(Source: Own field survey)

mushrooms and herbs from the national park (Graph 6). They did not engage in other activities in the national park. Thus, our results denotes that the insiders are mostly dependent on the national park while the outsiders are less dependent.



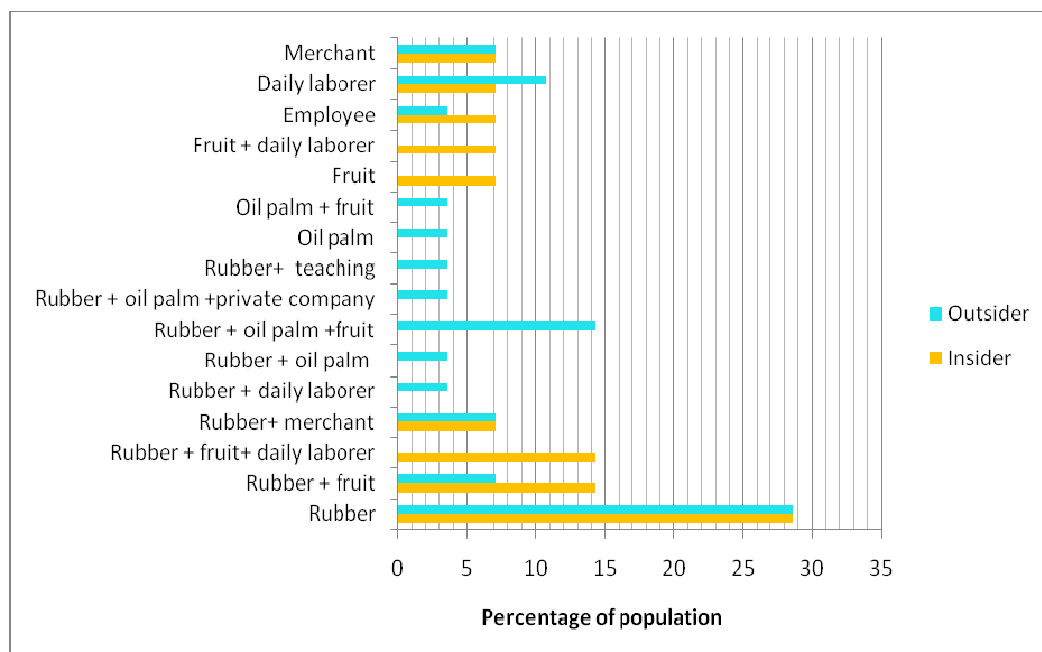
Graph 7. Dependence on the natural resources from National Park and the percentage of population. Highest: excessively dependable and cannot survive without any natural resources in the NP, Lowest: can survive without any access to the NP

Our results shows that 50% of insiders are excessively dependent on the natural resources in the national park and they cannot survive without any natural resources from the national park (Graph 7). They are dependent on national park for collecting forest products like mushroom and herbs for their household consumption and selling to the market. They also depend on NP for collecting firewood, collecting food through hunting and fishing, tapping the rubber tree and water source from the national park. Our results also denote that the remaining 50% of the insiders have alternative source of income. However, only 18% outsiders are excessively dependent on the national park (Graph 10). During our survey, we have found that this part of outsiders lives very close to the national park. Most of the outsiders claimed that they are mainly dependent on the national park for the source of water.

3.1.2 Income

Income from occupation

Our survey results indicate that both the insiders and outsiders are mostly dependent on para rubber farming (Graph 8). The second highest percentage (about 14%) of insiders practice rubber and fruit farming while the also work as daily laborer. The insiders also diversify their occupation by merchant with their rubber farming.



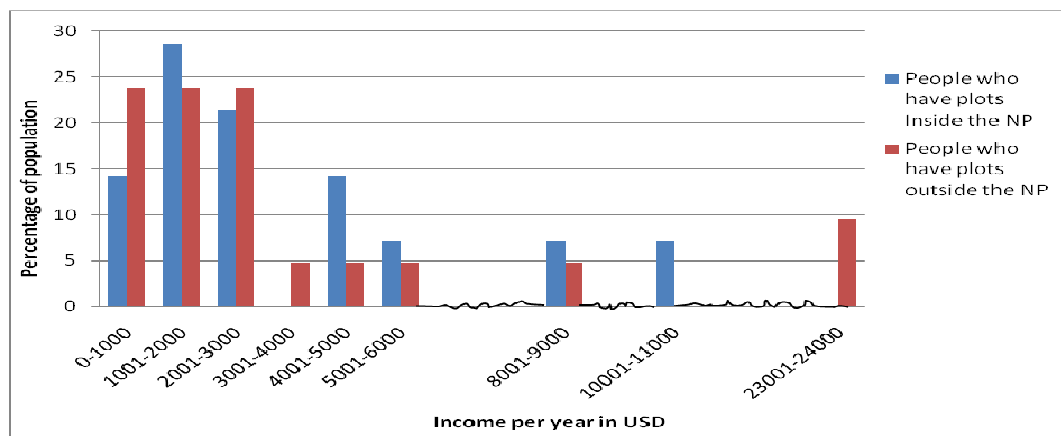
Graph 8. Sources of income of villagers and the percentage of population. (Source: own field survey)

On the other hand, the second highest percentage of outsiders (about 14%) are practicing rubber farming with oil palm and fruit farming (graph 8). Oil palm farming is only practiced

by the outsiders and not by the insiders. Our findings show that the rubber farming is the main source of the insiders' income. In contrast, the main source of the outsiders' income is also rubber farming followed by oil palm farming.

Income difference

There is a large income difference within and between the insiders and outsiders (Graph10). The lowest income group (0-1000\$) comprises 14% of insiders where the lowest income for insiders is 600\$ and for outsiders is 180\$. This group includes highest percentage (24%) of outsiders. But the second lowest income group (1001-2000\$) includes highest percentage of insiders 28% (Graph 10).



Graph 10. Different income groups and their population percentage for both insiders and outsiders. (Source: own filed survey)

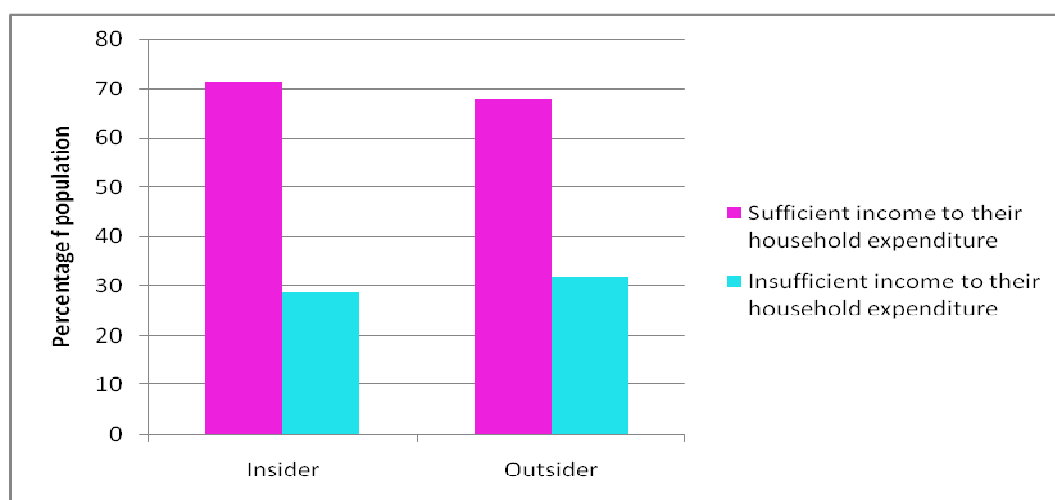
The top 7% of insiders lies within 10001-11000\$ as highest income group of insiders while the top 9% of outsiders lies within 23001-24000\$ comprise the highest income group of outsiders (Graph 10). Thus it shows that there is large income difference between insiders and outsiders.

Within the lowest income group of insiders, our results shows that most of them have no any source of financial capital. Few of them receive money from the village funding. Contrary, the highest income group of insiders has diversified source of financial capital.

But our survey findings show the opposite fact for outsiders. Lowest income groups form their financial capital either from the non-institutional loan or from the loan form bank of Agriculture. On the other hand, most of the people within the highest income group do not have any source of financial capital. But most of them has diversified source of income including rubber farming, oil palm farming and merchant. Moreover, the lowest income

group has smaller size of farming area ranging from 3 to 20 rai while the highest income group has larger size of farming area ranging from 67 to 86 rai. Thus this group has highest income difference from the other income groups of outsiders and all income groups of outsiders as well. Size of farming area and the diversification of source of financial capital affect the income level of the villagers.

Though there is large difference in income, we found that the insiders' sufficient income to their household expenditure was more or less similar to that of outsiders' (Graph 11). Moreover, of people from both groups have insufficient income to their household expenditure (Graph 11).



Graph 11. percentage of population and their sufficient or insufficient income for both insiders and outsiders (Source: own field survey)

Sufficiency or insufficiency was determined based on their household expenditure, but not whether they have highest or lowest income.

3.1.3. Land tenure security

Table 1. Land tenure security, utilization of land and the percentage of population

Plots position	Right to land		Utilization of the land by people		
	People having land with certificate (%)	People having land without certificate (%)	(%)	Residence	Farming area Both residence and farming area
Inside the NP	14.68	85.72	7.14	35.72	57.14
Outside the NP	85.7	14.3	10.72	42.85	46.43

Source: Own field survey

Our survey results show that most of the insiders (85.72%) are utilizing their plots without any land certificate. There is no plot inside the national park with title deed. We have also found that the highest percentage of insiders (57.14 %) have both residential and farming area inside the national park (Table 1). This group of insiders are now living and tapping their rubber trees in the overlapping area. We have also found that 35.72% of insiders have only the farming area inside the national park and they live outside of the overlapping area. However, the small remaining group of insiders (about 7.14%) have only the residential plots inside the national park (Table 1).

On the other hand, 85.7 % has their land with title deed (Table 1). Most of the outsiders (46.43%) also utilized their plots for both residential and farming area. About 42.85% and 10.72% of outsiders are utilizing their plots as farming and residential area respectively (Table 1). There are only 14.3% outsiders who do not have any land certificate.

As the most of insiders don't have any land certificate, their land tenure security is limited. The consequences of the current status on villagers tenure security will be elaborated in the following sections .

3.1.4.Livelihood strategies

We have got a clear picture of the villagers' livelihood strategies during our PRA (seasonal calendar) exercise with the local people.

Rubber farming

The villagers have the highest activities during the peak period of rubber tapping ranges from December to February. During this period, the villagers get the highest income opportunity to sustain their livelihood as they get higher market price at this period from their rubber farming. Their rubber production is also highest at this period. Thus, it enhances the employment opportunity during this period as they need more labour at this period. They also have highest activities during May and November to apply fertilizer and pesticide and remove weeds from their rubber plots. As the maximum labours are available all the year round, this is well suited to their all kinds of farming system.

Oil palm

They harvest their oil palm twice in a month all the year round. But the oil palm production is highest during February and July. But the better market price of oil palm ranges from February to April which is not coherent to their production. Moreover, during the June and November, the villagers get the highest income opportunity from the oil palm which is also not harmonic with the production and the market price. Therefore, the villagers deprive of the higher market price during their peak production.

Fruit farming

Villagers also practicing different fruit farming including rambutan, mangosteen and laung-guang. They peak period for havesting of rambutan and mangosteen is July.The harvesting period for laung-guang is August and September while the August is the peak time for harvesting.

The rainfall duration of this village ranges from June to November and it rains heavily from August to October. During this period, the villagers get available water for their farming activities.

Shocks

Immediately after the rainy season, the villagers fall in water shortage from December to March and they face the severe water shortage during the March. The villagers also face challenge with pest outbreak during different months for different economic plants. May and July is the sensitive period for pest outbreak in rambutan and durian farming respectively. The peak period of pest attack in para rubber tree is August and September. Moreover, the June and from September to November are considered as vulnerable period for the disaster in this village.

3.1.5.Livelihood outcomes

- Currently the income of the villagers is sufficient. However, the sustainability of their livelihood is under question in the long run because of the challenges to their income.
- Sustainability of natural resource base will be threatened in long run due to the NP park management rules and regulation over the villagers restricted access to natural resources inside the NP

3.2 Management of the Sri Phangnga National Park

One of the main objectives in our research has been to study the style of management in the Sri Phangnga National Park. We were interested in seeing to which extent the local people in the Suksamran village were involved in the management; to which extent their livelihoods were considered a factor, and more specifically; how attempts to solve the conflict had been carried out.

As mentioned in the previous chapter (methodology), we have done a number of interviews with key informants whom we expected would have valuable information about the management issues. The interviews added to the knowledge we had obtained from secondary sources such as academic writings on similar case studies.

In this section we will present our findings on the park management in general and special emphasis will be put on the case of the overlapping area.

3.2.1. Background: National policies on National Parks in Thailand

The National park administrations in Thailand formulate their park regulations according to the national policies on forest preservation. According to the National Park Act of 1961 the main objective of national parks is to protect the area in a primitive state where human impacts are not permitted, except for education and scientific purposes (Pipithvanichtham 1997 in Nepal 2002: 754). This somewhat orthodox conservation approach seems to be predominant in Thailand. However, as mentioned in the introduction, in recent years the government have made steps towards a more participatory approach. The role and rights of local villagers has been recognized the Thai constitution of 1997 (Suwanmanee 2009). Further steps towards a more participatory conservation approach were taken when the cabinet passed The 1998 Cabinet Resolution. The resolution was passed when it became clear that the rapid increase in the creation of preserved areas in Thailand in many cases had resulted in conflicts with local populations. According to the resolution long term users of land that has been adopted by the state preserved areas should have the right to continue their use of the land; however, they should not be allowed to expand the cultivated area or to cut and replace the crops for any purpose (Vipak, Jongkroy and Onprom 2008). In the 9th National Economic and Social Development Plan³ (2002-2006) the protection against forest loss and the alleviation of problems from forest degradation, through participation of local stakeholders, is included as an important part of the five year plan. It is stated that the development of forest areas should be reached through the participation and collaboration of local villagers, governmental organizations, NGOs and community based organizations, with special focus on forest plantation, maintenance and sustainable use of forest

³ The National Economic and Social Development Plan is a 5 year plan stating the overall economic policy of Thailand, which is revised every 5th year. The latest is the 10th plan (2007-2011), however the policy described here was first presented in the 9th plan (2002-2006).

resources (NESDB 2005). So, at present the government is promoting a more participatory approach in order to consider the livelihoods of local people who depend on forest resources and land inside the protected areas. However studies on the actual implementation of these policies show that although the new concept has been accepted in park policies it has not yet been incorporated into the actual practice of park officials (Suwanmanee 2009).

3.2.2.Park management approach in the Sri Phang Nga National Park

The administration of the Sri Phangnga National Park formulates the park regulation in accordance with the above mentioned policies. Any human interference in the natural state of the forest is strictly forbidden.

According to Mr. Ruamsin Manajongprasert the national park administration has tried to involve different local stakeholders in the decisions guiding the national park management. In 2007 a temporary organization (The National Park Organization) was created which was supposed to exist for a period of two years. Members of the organization committee (The consultant Committee of the National Park Organization) were the head of district, the head of the sub-district administrative organization, the head of the Sri Phangnga National Park, the head of the Suksamran public school, and the village headman as a representative of the local people in Suksamran. According to Mr. Manajongprasert, the main outcome of the organization is that the villagers now have the needed knowledge about park regulations, and he believes that it has resulted in less confusion about the park boundaries. However the establishment of the organization has not lead to any changes in the park management style or in the way of enforcing the park regulations. In reality, the engagement of local actors in the national park committee has served more as a means of communication from the administration level to the villagers, rather than a way to involve the local population in the decision process. Mr. Manajongprasert explains the 'one way' communication with the fact that the administration is tied by the national policies which do not allow the NP administration to make any sort of compromise regarding the current park regulations. So the suggestions from the villagers have been heard but the park regulations have remained unchanged.

The The National Park Organization was temporary and it has now dissolved, however Mr. Manajongprasert is certain that the organization will be formed again for another period. It is now in process.

3.2.3.Enforcement of park regulations

Even though the Sri Phangnga National Park was established in 1988 it was not until 1998 that the boundaries were made. Previous administration of the park neglected to enforce the park regulations seeing that there was no clear demarcation of the protected area and no solution had been found to the problem of the people living and doing farming in the overlapping area. However in 2006 when the current head of the NP had taken office, the first arrestment was made (see box X). It was this arrest which started the conflict regarding the overlapping area. According to the villagers (the inside group) they were not informed that the enforcement of park regulations would be sharpened, and arrests were made without any further explanation from the administration or the local park officers.

In our research we had difficulties getting an overview of the exact number of arrests made or fines given as a result of illegal activities in the NP. As described in the methodology chapter (Chapter 2) it was difficult to get any type of information from the local authorities. From the information that we managed to get, we discovered that there seems to be a great difference between the number of actual arrests and the villagers' perceptions of this number. According to the authorities (District Office representative and the head of the NP) there has only been the one arrest in 2006 where charges were raised against three individuals. In contrast, the villagers would tell us about numerous arrests since the demarcation of the park boundaries and the creation of the overlapping area. Trying to explain this fact would lead us into speculation. However, a likely cause is that what has been presented to us as cases of arrests could be a matter of apprehensions where no charges have been raised.

But what we can conclude is that the lack of information on park regulations and the uncertainty of the exact limits of the national park in some cases have caused the fear of arrest to exceed the actual risk of being arrested. For instance, during the survey many villagers stated that gathering forest products in the overlapping area would lead to arrest, however such activities are actually allowed according to park regulations (interview with head of NP, date).

3.2.4.Park policy concerning the overlapping area

It is the policy from the 1998 resolution that has guided the conflict resolution process in the case of the overlapping area between the village of Suksamran and the Sri Phang Nga National Park.

According to the head of the national park, Mr. Manajongprasert, the park policy regarding the overlapping area is today clear: The long time users (the farmers that were there before the establishment of the NP boundaries) are today allowed to use their plots. They can pick the fruit and

tap the rubber, but they cannot expand the cultivated area and nor can they cut or harvest their crops in order to replant (Interview 15.3.2010).

However there seems to be some discrepancies in the story told by the villagers and the one presented by the park administration. Many of the farmers who have plots inside the overlapping area say that they are not allowed to use their plots, even though they should be considered long time users. In order to tap their rubber trees they have to “sneak inside the forest” and their relatives will keep watch in order to avoid detection from the park officers. After several interviews a possible explanation for the different perceptions presented itself. Since the first demarcation of the park boundaries there has been no systematic official registration of the farmers who were there before the NP. So the group of farmers who are actually entitled to continue their use of the plots have no official documentation of this right.

Mr. Manajongprasert confirms this explanation, stating that the way the park officials determine the duration of the land utilization in the overlapping area is by deciding the age of the trees on the different plots. However this approach seems somewhat problematic seeing that many farmers have changed their crops in the period after the establishment of the national park.

According to Mr. Manajongprasert, the park administration has planned an official registration of the group entitled to use the land (determined by the age of their crops). The registration will be done by photographing the farmers who have trees that can be dated back to the time before the national park.

The current solution still leaves one major problem for the group of farmers who are entitled to continued use of their plots. The crops grown on the plots are rubber trees and fruit trees. At some point these trees will no longer be productive, however the farmers will not be allowed to cut them down in order to grow new ones or in order grow other crops. This actually means that the farmers are faced with the potential loss of income if a solution is not found. This point will be elaborated in section 3.3.

The head of the national park, Mr. Ruamsin Manajongprasert, states that although the park administration is aware of the current problems regarding the overlapping area, he is not authorized to do anything about it. The park administration relies on national policies, and so far there is no policy that entitles the long time users to official ownership or the right to fully dispose over the plots in the overlapping area. Only the 1998 resolution has offered part of the solution. Mr. Manajongprasert says that he has “told the government” about this issue and that they are aware of it, also seeing that it is a problem in several villages surrounding national park, but from his point of view the government seems reluctant to bring forth a solution.

In sum: Judging from the information given by the head of the NP, the management approach of the Sri Phangnga National park is top-down. The administration of course acts in accordance with national policies. And although efforts have been made in order to involve all stakeholders in the formulation of park regulations, at present the national policies do not present the local park administration with any options to make a solution that would consider the livelihoods of the local farmers.

3.2.5. The conflict resolution process from villagers' point of view

In the previous section we have described the management style of the Sri Phangnga National Park as top-down. During our research this impression was confirmed by the villagers who participated in the survey and a number of informal interviews. The people in Suksamran say that there is little, if any, information on decisions made at the administrative level, and the participation of local villagers in the conflict resolution is limited. In the questionnaire we asked about the respondents' participation in the conflict resolution (attachment # ?, question ?). Many of the villagers, especially those who have plots inside the overlapping area have participated, but when asked about the nature of their participation they all state that they have attended community meetings where this issue was raised. A few respondents state that they have actively participated in the meetings by making suggestions for a possible solution of the conflict. However, all respondents who attended the meetings describe the outcome as fruitless.

The former village headman, Mr. Manoon Janpud, represented the villagers in the resolution process when he was still the headman and he was a member of the previously mentioned committee. In his own words, he tried to come to an agreement with the park administration and to find a compromise that would both consider the lives of the villagers and the preservation of forest resources. The suggestions he presented on behalf of the villagers were:

1. The people who were already using the land before 1998 should be allowed to continue their use.
2. And they should be allowed to cut and re-grow the rubber trees.
3. If so, they will not have to invade other areas.
4. The local people will "come together" and take care of the forest.

However, from his point of view, the attempts to solve the conflict have not paid off. He stresses, that none of the farmers from the inside group have any intention of expanding their

cultivated area. They just want to be able to dispose freely over the land, which they consider rightfully theirs.

3.3. The Impact of national park on the livelihood of the people

The management approach of the Sri Phangnga National Park and the local livelihood strategies have been treated under the previous sections. In this section, people's perception of the national park management and the impact of the national park management on the livelihood of local people will be treated.

3.3.1 People's Perception of management style of NP

Participation in national park management

In Ban Suk Sam Ran, as it is explained in section 3.2. the management of Sri Phangnga National Park follows the "blue print" approach where decision making linearly flows from top to the bottom. Decisions are made, imposed and implemented by the national park management without any consultation with the local people.

On the other hand, results from the survey depicts that 65% of insiders and 32% of outsiders stated that they want to actively participate on matters pertaining national park. As it is described under section 1 (graph 10), it can be concluded that the insiders are more interested in the participation because their livelihood is highly dependent on the national park resources as compared to the outsiders.

According to the Village headman, the absence of participation in the national park management results for two main consequences.

- Firstly, the needs of the local people are hardly incorporated in the decision of the national park management. Accordingly, he emphasized that the livelihood of the insiders who are extremely dependent on the national park resource (see Graph 10) would be under threat unless their needs were considered.
- Secondly, local people illegally use the resource inside the national park as a means of sustaining livelihood. As it is described under section 1(Graph 9), people cut trees and use other resources illegally from the protected area for income and consumption. This illegal activity can cause decline in the resource

This implies that the poor representation and participation of the local people in management of the national park has a dual effect on both the local livelihoods and resource deterioration in the area.

Boundary Demarcation of national park

In the study area the boundary of the national park is not clearly set. According to the villagers this is part of the reason for the conflict between the national park and the local people who live in the overlapping area. According to information from respondents, the confusion about the exact boundary between the national park and the villagers has impaired the optimal resource utilization of the community. Villagers in the overlapping will only tap rubber and collect fruits from the forests. However this is done despite the villager's fear of arrest. Furthermore, they are not allowed to cut trees and or make alternative investments for the plots in the overlapping area.

Moreover, absence of clear park boundary affects entitlements of the local people over the resource in the overlapping area. Respondents stated that they are not utilizing the resources on their plots to the full potential and 79% of the respondents from insiders stated that they would potentially utilize their resources if the boundary of the national park is clearly set.

As information from the district officer in charge of Security implies, local peoples are urging for the establishment of clear national park boundaries for different reasons.

- First of all, the insiders assume that they will be awarded land title with the establishment of park boundaries. Individuals occupying land and other resources in the overlapping area will be given the ownership right and title only when the boundary of national park is clearly demarcated. They implied that those peoples who has been using the land for long time should be given land certificate and resource tenure when the boundary is set for the national park.
- Secondly, they fear that they will be arrested and displaced from the overlapping area by the national park administration as they don't have legal title over the land.

However, as information from the same source implies, demarcation of the national park boundary in the overlapping area has been pended by the park administration and government bodies for different reasons.

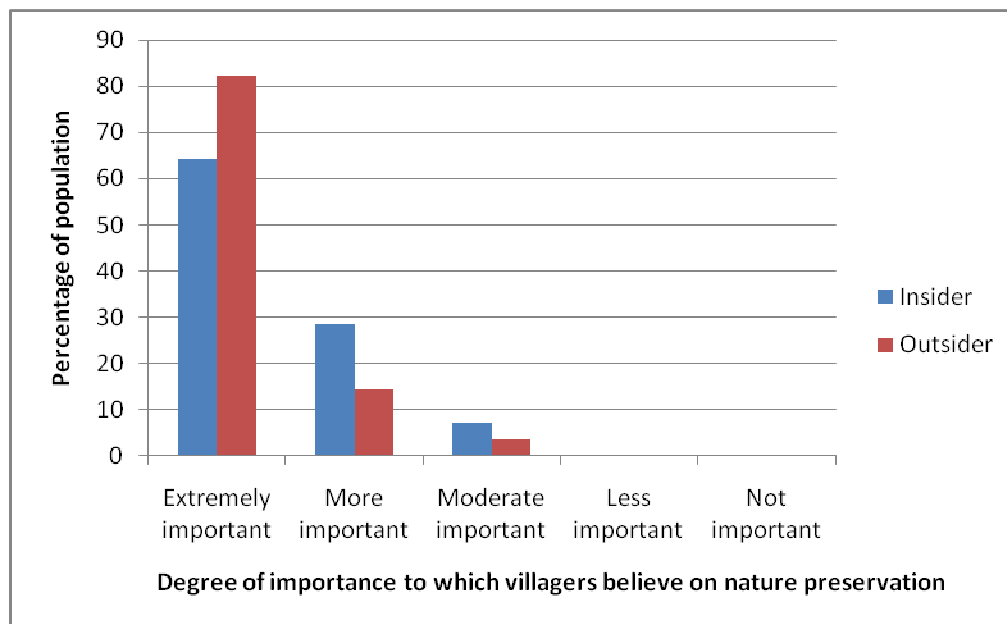
- Firstly, making boundary for the national park will displace the local people from the overlapping area. Contradictory to the above mentioned idea of the villagers (where land in the overlapping area is considered as property of the villagers), the national park administration considers the overlapping area as the part of the national park. Hence, making boundary for the park will displace the insiders from overlapping area.
- Secondly, making boundary by setting aside the overlapping area to local people will work against the national park laws and policies, seeing that the lands in the overlapping area are legally classified as protected areas.

This implies that the absence of a clear marking of the national park boundary will affect the livelihoods of the local people. At present people are restricted from using the land for alternative investments (re-plantation). In the long run, the villagers will face income and economic problem unless the policies of the national park will change.

Land certificate in the overlapping area

Among the people who live inside the national park, 78% of them want to get certificate for the land they occupied. The need for the land title by the villagers over the overlapping area mainly emanates from the desire to make alternative investment over the land. As it is explained earlier in this section, peoples who are living on the overlapping area are not allowed to cut trees and replace it with other farming system. Moreover, respondents described that they are looking for land certificate to have ownership of the land and hence get free from fear of displacement from the area.

3.3.2. Respondents View on nature preservation



Source, own field work

In the previous section (Section 1), we presented the finding that the outsiders value nature preservation higher than the insiders. This is (most likely) because the livelihoods of the insiders are dependent on the utilization of the resources in the national park. The inside people mostly rely on the resource from the national park for their consumption and maintaining their livelihoods as compared to the outsiders. The outsider's value for the long-term effects of the natural resource as their contemporary livelihood is not directly involved in the national park. However, this doesn't mean that the insiders will not be concerned about the nature preservation. As the data from the above graph shows, 62% of the insiders classified the importance of nature preservation as extremely important. Whereas, no one stated that natural resource preservation is less important or unimportant.

This indicates that even if the long time users were granted the right to fully dispose over their plots, they would not be likely to engage in activities that would damage the forest area

3.3.3. Impact of national park and changes in Livelihood

According to result obtained from the survey, 92.85% of the insiders and 67.86% of the outsiders said that the local people has problem with the national park management. This implies that the insiders have serious problems and challenges with the Sri Phangnga national park management as compared with the outsiders. As it is explained in Section 3.1, this is associated with the degree of dependence on the national park, the data obtained during the trend analysis shows that, the establishment of national park affected the livelihoods of the local people.

Resource security

Accesses and right over the use of resources inside the national park proved turn down after the establishment of the protected area. Information from the PRA shows that the resource, which is now considered as national Park, was the main source of income and food for the the insiders. Before the establishment of the national park, local peoples were freely accessing and using the available resources without any problems. However, after the establishments of the park, there is trend where the right and access over trees and other natural resources getting worse and hence directly affecting the livelihood of the villagers. Most specifically, livelihoods of individuals who are entirely dependent on park resource have seriously affected.

Land security

Along with resource security, villagers who occupied the land before the foundation of the national park, has experienced challenges in their livelihood due to the restriction over the use of the land. According to Information from PRA and survey, the villagers were managing their lands in the way that produces benefit for their livelihood improvements. But, after the foundation of the park, peoples are prohibited from managing the land and hence creating reduction in income and land productivity. They also stressed that the livelihood of the people, who has land inside the park, are keeping declining from time to time due to declining in productivity of resources over the land. This implies that national park management is threatening the livelihood of the insiders.

Food security

The trend in the food availability implies that there is a tendency of decreasing in the availability of the food after the establishments of the national park. The villagers were

finding foods from the forest via hunting and gathering during the hard times of their livelihoods. They were collecting and storing for risk and uncertainty periods. By the implementation of the park policies, access to food and water sources which is found in the national park is restricted. These put the livelihood of the villagers under treat and risk especially during the down times of their livelihood strategies.

Economy

In addition to the food and tenure security problems, incomes of the people are getting worse after the national park establishment and law enforcement. Villagers were farming inside the national park and their income sources were the farm and fisheries which is now protected as the national park boundaries. The denial of access to the land and products inside the national park has affected their income sources and created decline in their economy.

Social Changes

Information obtained from Trend analysis depicts that there is decline in the social network after the establishment of the national park. The social groups and local associations, which was formed to help each other via sharing labor during work stress, and other collective work has dismantled due to establishment of the national park. The villagers scare to enter in the overlapping area to help each other due to fear of arrestment by the national park administrators. This dissolution of the social bond has affected the social assets of their livelihood creating income disparity and work burden between the villagers.

However, during our discussion with outsiders, some of them stated the positive contribution of the national park to their natural environment. They underlined that productive micro-climate has created after the coming of the protected area. Moreover, they accredited the income they are getting from tourism due to the presence of the national park.

In sum, the negative impact of the national park on the livelihoods of both the insiders and the outsiders outweighs the positive contribution. From this, it can be concluded that that the establishment of the *Sri Phangnga national* park has affecting the livelihood of the local people in Ban Suk Sam Ran.

4. CONCLUSION

With this report we set out to see how the management approach of the Sri Phangnga National Park was affecting the livelihoods in the village Suk Sam Ran.

Our findings show that there is a lack of communication between the national park administration, local villagers and the local organizations concerning the management of the national park. The management approach in the national park is top-down and the participation of the local people in national park management is limited.

The analysis of the data from our research has shown that the livelihood strategies of the local people are highly interlinked with the national park, seeing that many villagers rely on water- and forest resources from within the protected area.

Our findings show that the main concern for the villagers who do not have plots inside the overlapping area is the water shortage problem.

For the inside group who rely largely on land inside the overlapping area, the national park is considered a threat to their livelihoods. The main issues of concern are tenure security and the lack of a clear demarcation of park boundaries.

Because there has been no official registration of the group of farmers who were cultivating the land inside the park area before the boundaries were set, they now struggle with the uncertainty of their present and future access to this land, which they consider rightfully theirs. In addition, the declining productivity of their crops means that they are faced with a substantial loss of income if the policies on the overlapping area is not changed.

Subsequently, what we can conclude from our study is that the management approach of the Sri Phangnga National park is affecting and in many cases disrupting the local livelihoods. However we can also conclude that a solution to this problem can only be found if the national conservation policies change in favour of a more participatory conservation approach which will consider the livelihood systems of local people living inside or adjacent to the protected areas.

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6. Appendix

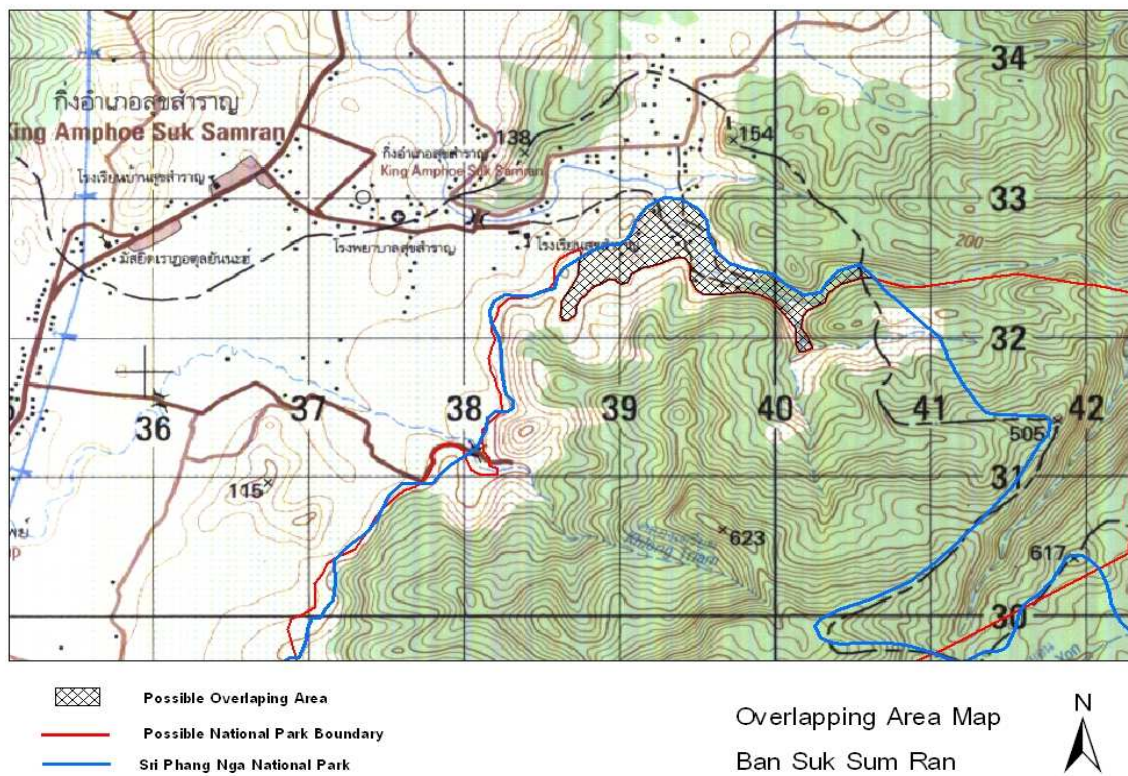
Annex 1. Seasonal calendar

Activities		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	Cropping pattern												
	1.1 Para rubber tree	Tapping(XXXXX)				Fertilizer/ Pesticide(XXXXX)						cut grass/ fertilizer (XXXXX)	Tap rubber/Fertilizer (XXXXX)
						pesticide / fertilizer						cut grass	fertilizer
	1.2 Oil palm tree	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX
	1.3 Fruit												
	- Rambutan					XXX	XXX	XXXXX					
	- Mangosteen							XXXXX		XXX			
	- Long-gaung								XXXXX	XXX			
2	Production												
	2.1 Para rubber tree	XXXXX	XXX	XXX	XXX	X	X	XX				XXX	XXXX
	2.2 Oil palm tree	XXXX	XXXXX	XXXX	XXXX	XXXX	XXXX	XXXXX	XXXX	XXX	XXX	XX	XX
3	Market price												
	3.1 Para rubber tree	XXXX	XXXXX	XXXX	XXX							XXX	XXXX
	3.2 Oil palm tree	XXX	XXXXX	XXXXX	XXXXX							XXXX	XXXX
4	Income opportunity												
	4.1 Para rubber tree	XXXXX	XXXXX	XXX	XX								XXXXX
	4.2 Oil palm tree	XX	XX	XXXX	XXX	XXXX	XXXX	XXXXX	XXX	XXX	XXX	XXXXX	XXX
5	Pest					Rambutan		Durain	Para rubber tree				

Annex 2. An overview of methods applied

Applied Methods	Frequency
Key Informant Interview	Key Informant Interview with national park administration
	Key Informant Interview with district officer
	Key Informant Interview villageheadman
	Key Informant Interview
Questionnaire	Questionnaire 14 (insiders)
	Questionnaire28(outsiders)
Open-ended questions(SSI)	Transect walk (14 Insiders)
	Transect walk (28outsiders)
GPS	GPS for transect walk
	GPS for boundary marking
Trend analysis	1 trend analysis
Transect walk	1 Transect walk
Seasonality calendar	1 Seasonality calendar

Annex 3. Map of the overlapping area



Synopsis: Resource Conservation and Local Livelihoods

A case study on the
village of Suk Sam Ran,
Thailand

By
Tolera Senbetot Jiren
Liton Chandra Sen
Anna Glent Overgaard

TABLE OF CONTENT

<u>TITLE</u>	<u>PAGE</u>
1. Introduction	2
1.1. The local context: Ban Suk Sam Ran.....	2
1.2. Thematic context: Resource conservation and livelihood.....	3
1.2.1 Resource conservation: Two Approaches	3
1.2.2 Natural resource conflict.....	4
1.3. National Parks in Thailand.....	4
2. Aim and Objectives.....	5
2.1. Research questions and sub questions.....	5
3. Methodology.....	6
3.1. Sources and method of data collection.....	6
3.2. Combining qualitative and quantitative methods.....	7
3.2.1 Questionnaire/ Household survey.....	7
3.2.2 PRA and Semi structured interviews.....	7
3.2.3 Semi structured interviews	7
3.2.4 PRA methods.....	8
3.2.5 Key Informant interviews.....	8
3.2.6.GPS.....	8
3.3. Methods of data analysis.....	8
3.4. Validity& Reliability	9
4. References.....	10
5. Appendices	11
5.1 Work plan.....	11
5.2 Data matrix.....	15
5.3 Sample questionnaires	22
5.4 Sample semi structured interview.....	26

1. Introduction to the study

1.1. The local context: Ban Suk Sam Ran⁴

The village of Ban Suk Sam Ran is placed in the rural outskirts of the Ranong province. The village area stretches over a mountainous area of 14.275 Rai which is surrounded by forest and cultivated land/ fields. West of the village is The Andaman Sea. The community has a population of 567 people living in 167 households. The most dominant land use types are oil palm, durian, mangosteen, longon, rambutan, mixed orchards. Finally Para rubber plantations cover as much as 410 Rai and seem to be an important part of the land use system.

Recently there has been a dispute between the village and the neighbouring Sri Phangnga National Park, regarding a substantial part of the village farmland which is overlapping with the protected area of the national park. There has been some disagreement about the exact limit dividing the village land and the protected area. But now it is clear that about 50 village households (one third of the total number of households) have rubber plots inside the park area, some of which may be inhabited by members of the Suk Sam Ran community.

As far as we are informed, the enforcement of the park regulations is strong, and outsiders are not allowed to make use of any of the forest resources. This means that that even though the rubber trees in the village plots are old and getting less productive, the villagers are not allowed to cut them.

At present there are attempts to solve the dispute through a teamwork effort between the leader of the community, the administration officer of the Suk Sam Ran District and the national park staff. At present we do not know the exact nature of the teamwork, but what we do know is that there still seems to be a conflict between the villagers and the national park administration.

In our fieldwork we will look into the nature of this conflict and the process to solve it. Furthermore we will investigate to which extent the management of the national park and the subsequent limited accesses to the plots are affecting the livelihoods in the village.

⁴ The following information on the village of Suk Sam Ran is derived from the 2010 report 'Basic Information Report on Interdisciplinary Field Study for Sustainable land Use and Natural Resource management in 2010', developed by the Thai SLUSE/ILUNRM counterpart 2010.

1.2. Thematic context: Resource conservation and livelihood

As a result of the increased awareness about problems of deforestation, many developing countries are today promoting programmes of nature conservation. Large parts of the remaining forest are made into protected areas such as national parks and nature reserves, with the purpose to secure biodiversity but also to further recreational areas and tourism (Ghimire 1994).

At first glance this is a positive development, seeing the rapid rate of deforestation. However, these measures are often made with little concern for the local people who live inside or adjacent to the protected areas and are relying on the forest as a vital source to their livelihoods (Ghimire 1994, Suwanmanee 2009).

1.2.1 Resource conservation: Two Approaches

From an overall perspective it is possible to distinguish between two approaches to resource conservation: One is the orthodox conservation approach, which builds on the separation of nature and culture. Here humans are seen as a threat to nature and therefore they should be excluded from the protected areas. From the other approach humans are considered part of the ecosystem in a protected area. This has been called “the new conservation concept” (Suwanmanee 2009). Here emphasis is placed on sustainability through participation of the local people living inside or adjacent to the protected areas (Suwanmanee 2009: 6).

Today international organizations such as UN, The world Bank, US Aid and IUCN recognize the new conservation concept and emphasize that nature conservation programmes need to consider the survival needs and livelihood systems of local inhabitants (Ghimire 1994: 195, Suwanmanee 2009: 3).

However Ghimire (1994) states that many of the actual efforts to take local people's needs into account are designed first and foremost to reduce conflicts over the conservation projects, rather than to actually offer sustainable livelihood alternatives for the local communities. Furthermore, in practice, the local people involved are seldom consulted during planning, where the process is characterized by top down decision making from government level (Ghimire 1994:196).

1.2.2 Natural resource conflict

Conflicts concerning the establishment of protected areas can be seen as a conflict between two opposed objectives: Nature preservation on the one hand and protection of local livelihood systems on the other hand (Ghimire 1994:198).

This is of course a rather simplified illustration of such conflicts, and one could argue that the pursuit of one objective should not exclude the other. However, the discrepancy arises when the state fails to take both objectives into consideration. The establishment of protected areas such as national parks has often led to displacement of people from their homes or denied (or decreased) access to important resources within the protected area (Ghimire 1994).

1.3. National Parks in Thailand

The establishment of protected areas in Thailand began in the 1950s (Suwanmanee 2009), however until the 1970s only three national parks and one wildlife sanctuary were established (Ghimire 1994). During the 1970s and 1980s, Thailand experienced a marked increase in the number of protected areas, with the establishment of approximately 60 national parks and 31 wildlife sanctuaries. This development reflects a large change in the state's perception of natural resource conservation. Up until the mid-twentieth century the forest was seen as a rich resource to be used (mainly by the logging industry), but since then the emphasis has been placed on the tropical forest landscape as "a beautiful recreational scenery for human recreation, biological study, and wildlife conservation (Suwanmanee 2009:2)."

In Thailand the orthodox conservation approach seems to be predominant. According to the National Park Act of 1961 the main objective of national parks is to protect the area in a primitive state where human impacts are not permitted, except for education and scientific purposes (Pipithvanichtham 1997 in Nepal 2002: 754). The new concept has been accepted in park policies; however it has not yet been incorporated into the actual practice of park officials (Suwanmanee 2009).

2. Aim and Objectives

With this overall context in mind, the aim of the report will be to investigate the influence of the national park on the livelihoods in the village of Suk Sam Ran. Through our field study we will pursue the following objectives:

1. Examination of the conservation approaches and policies dominant in the management of the national park.
2. Examination of the livelihood strategies in the village of Suk Sam Ran in regards to natural resource utilization.
3. Examination of the ways in which the national park management is affecting the livelihoods of the people in the Suk Sam Ran village.

2.1. Research questions and sub questions

Ad A. National park management

1. What are the current national policies on national park management?
 - What are the different rules and regulations on local peoples' access to forest resources?
2. How are these policies carried out?
 - What are the management strategies?
 - To which extend does the policy implementation include the local community?
3. How is the conflict perceived from a park administration point of view?

Ad B. Livelihood strategies

1. What are the livelihood strategies of the people in Suk Sam Ran?
 - What natural-, human-, physical-, social-, and financial capital do they have to maintain their livelihoods (Focus on natural capital)?
 - How are these assets used in order to sustain livelihood?
 - What are the outcomes (actual and expected) of these activities?
2. What is the prevailing land tenure system in the village?

- What type of access does the community have to which kind of resources?
- How secure are their rights over land and other natural resources?

Ad C. Relation between the national park management and livelihood strategies in Ban Suk Sam Ran:

1. How is the implementation of park policies affecting the people's resource use?

- What are the villagers' perceptions of opportunities/ limitations in their resource use resulting from national park regulations?

2. How is this affecting their livelihood strategies?

3. Methodology

3.1. Sources and method of data collection

The study at hand will be based on both primary data (directly from the respondents) and secondary data (from published and unpublished sources). The primary data will give us first hand information about the local context, e.g. the relation between the management of national park and the livelihood strategies of the local people. Secondary Data will help us to get information on for instance the management approach of the national park and the overall thematic context of the subject.

To gather primary data, semi-structured interviews with respondents, PRA techniques, and key informants' interviews will be employed along with a household survey. Semi structured interviews will be used to collect a range of information directly from the respondents while different PRA techniques like trend analysis, transect walk will be used to harvest further information from the respondents.

3.2. Combining qualitative and quantitative methods

In our field study we will be using both quantitative and qualitative methods. Where the quantitative method is descriptive and gives us more analytical breadth of coverage, the qualitative research method will be employed for a deeper, context bound understanding of the different issues relevant to our research (Holland and Campell 2005:5).

In the following we discuss the planned methods and their relevance to the study.

3.2.1 Questionnaire/ Household survey

We will conduct a survey in order to collect the necessary factual information on house hold compositions, livelihood strategies and land tenure securities. We will conduct the survey by visiting the selected households and helping the respondents in answering the structured questions.

The community of Ban Suk Sam Ran is considered the sampling frame for the study and the population will be stratified into two categories: The households who have plots inside the national park and those who do not. Taking the available time and resources into account, 30 respondents from a total of 167 households will be selected from the sampling frame of the proportional stratified sampling method, with 1/3 from those who have plots inside the park and 2/3 from those who do not have plots inside the park. This reflects the composition of the village where one third have plots inside the park area.

3.2.2 PRA and Semi structured interviews

The quantitative data that we get from the questionnaires will mainly be factual information about the composition, resources and income of each household. We will thereby get an idea of the trends and tendencies regarding the livelihoods of the people in Ban Suk Sam Ran. However the questionnaires will tell us little about the understandings and perceptions present in the village. For instance, we are interested in knowing what type of considerations motivate people's choices: In the eyes of the villagers, what are the challenges and opportunities influencing their livelihoods? And more specifically; how do they perceive the constraints and/or opportunities related to the national park. What is their understanding of the conflict with the national park?

In order to get this information we will use PRA and semi structured interviews.

3.2.3 Semi structured interviews

The semi structured interview consists of a number of standardized questions. However the idea is to allow new elaborate questions and a change of focus if the respondent comes up with new relevant information (Bryman 2004: 321). This means that the interviews are likely to move outside of the prepared questions, which can give us a better understanding of how the respondent views the issue in question. However, it is important that we make sure that all respondents answer the standardized questions. This way it will be possible to compare similarities and differences in the answers from the different respondents. Before going to

the field we have prepared a rough sketch of questions for the SSI's, but the idea is to wait with the final wording until we have the help and input from our Thai counterparts.

We will conduct these interviews with 15 respondents. Seeing the limited time and manpower, we will keep the interview questions few but well considered in order to get as much useful information as possible.

3.2.4 PRA methods

We will make a *trend analysis* and a *seasonality calendar* in order to get information on the trends and changes in livelihood strategies and natural resource management before and after the establishment of the Sri Phangnga national park. We will conduct trend analysis with elderly members of the community who have long term experience with the area and who have knowledge about the livelihood strategies in the community. This will give us an impression of how changes in livelihood opportunities (before and after the establishment of the national park) are perceived by the participants.

We will do a *transect walk* to observe the resources, assets and infrastructure available to the villagers. This technique will help us triangulate information gathered by the survey and the semi structured interviews.

3.2.5 Key Informant interviews

We will identify two key interviewees who have in-depth information about the land policies and rules, functions of local institutions and how management of the national park is taking place. The key informants will be the village headman and a relevant person from the national park administration.

3.2.6 GPS

Information on the total area of land the local people has inside the park will be measured by using GIS. The use of GPS will help us to locate the type of resource the community has inside the national park. We will measure the area of land the local community has inside the park and observe the resource available on the land.

3.3. Methods of data analysis

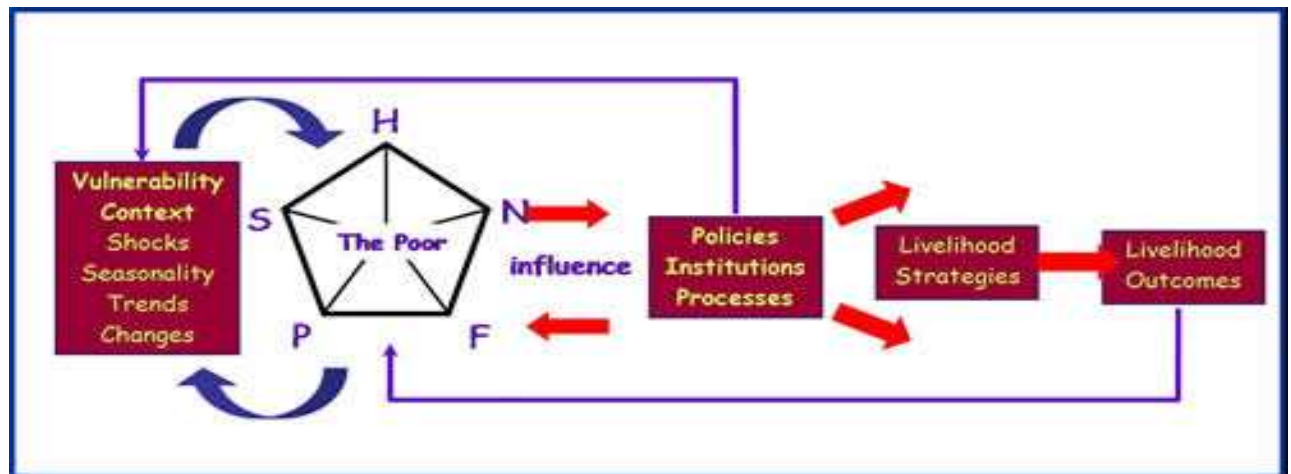
This research will be guided by the analytical framework for sustainable livelihood analysis.

The framework draws on the main factors that affect people's livelihoods and the typical relationships between these factors (DFID 1999).

We will look into the village households' livelihood assets with special attention to their natural capital (natural resources), we will investigate the national park policies and

institutions. While looking at the vulnerability context focus will be on the current conflict with the national park. The framework will help us see how the different aspects are interrelated.

The relations between the different livelihood factors are depicted on the following sustainable livelihood framework.



3.4. Validity& Reliability

When considering validity and reliability in our research, one thing we have to be aware of is the need to be critical with the information we gain from the interview respondents and participants in the PRA exercises. We are dealing with people and therefore they are bound to be biased somehow. This does not mean that the information we get is not perceived as truthful by the respondent, just that he or she will be subjective and act according to his or hers own perceptions and interests. It is however just as important that we are aware of our own predispositions, and that we put them forward in our report and make them known to the reader. As researchers we already have some ideas and expectations regarding the field of study and it is very important to take those into consideration. Another way to deal with this is to constantly be aware of the information that stands out from the rest and to put forward those examples that challenge our readings of the different research results (Silverman 2001:254).

4. References

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5. Appendices

5.1 Work Plan

Time	Activities to be done	Date	Duration in days	Responsible person or groups	Remark
Before Field Work	Discussion on Research question	2-8/02/10	6	Life Team and Thai students	Extracting research questions.
	Draft Synopsis preparation and submission	8-15/02/10	7	Life team	Developing synopsis after getting the research question approved by the advisors (teachers).
	Presentation of synopsis	17/02/10	1	Life team	Presentation of the draft synopsis to the life students and teachers. This is to get necessary feedback on the research question, objectives and proposed methodology.
	Inculcating feedback in the synopsis and Preparation of draft survey and Interview questions	18-24/02/10	6	Life team	The draft synopsis will be amended according to the feedback from the staff and the counter student group Draft questionnaire and semi structured interview preparation
	Final synopsis submission	24/02/10	1	Life team	Uploading the final version of the synopsis on absalon
	Preparation for final synopsis presentation	25/02/10	1	Life team	Preparation of presentation on the final synopsis Preparation of questions for the counter groups final synopsis.

	Final synopsis presentation	26/02/10	1	Life team	Presentation of the final synopsis
During Field work	Meeting Thai counterparts	11-12/03/10	2	Life students , Thai students and translators	<ul style="list-style-type: none"> -Getting to know each other -briefing on what and how to do -New flexible group formation -rephrasing and translating questioners
	Transect walk and observation	13/03/10	½	Life students, Thai students and local people	<p>Observe the local conditions and assets which will help us triangulate it with the other data collection tools.</p> <p>We will do this with the local people who will tell us about the condition while observing the situation.</p>
	Identification of respondents	13/03/10	½	Life students, Thai students and local peoples	Identification of 30 respondents for survey incl. 15 respondents for Semi Structured Interview. We will identify respondents with the local administrators who will show us those who has plot inside the park and not. We will also identify respondents for PRA and appoint them by telling purpose of conducting PRA with them.
	Household survey	14-15/03/10	1 and 1/2	Life students, Thai students and local translators	Total of 30 respondents will be interviewed by two groups. We will be grouped in to two with translators and each sub group will visit the house hold and assist the respondent in clarifying the questions to get the necessary information.
	GPS	15/03/10	1/2	Life and Thai students	Measure the total land of the local people in side the national park and get information on the resources

					available on that land.
	PRA Trend analysis Seasonality calendar	16/03/10	1	Life and Thai students, local translators	Both trend analysis and seasonal calendar will be conducted. We will conduct PRA with local peoples and this will be done by prior identification and informing the respondents. Both subgroups will come together around some discussion place and discuss about the general trends in livelihood with the cause of change. We will also get information on seasonality of activities and the coping mechanism during different seasons.
	Semi structured interview	17-18/03/10	2	Life and Thai students, local translators	After knowing our respondents for semi structured interview, each sub group will interview 4 households per day with the help of the translator. The data obtained will be compiled during the night by sharing experience with the other sub group.
	Key informant interview	19/03/10	½	Life and Thai students, local translators	The two groups will conduct key informant interview with local headman and national park administration. One sub group will interview the local head man and the other will do with the national park administration.
	Data compilation	19/03/10	½	Life and Thai students, local translators	We will organize the data collected by the above all methods. This will be done to check that we have collected all the necessary information which satisfies our objectives. The collected data (which was roughly analyzed each day) will be compiled for presentation.

	Village presentation	20/03/10	1	Life and Thai students, local translators	The findings from the community will be presented for the concerned people in the community and discussion will be held on the findings.
After field work	Data analysis	25-27/03/10	3	Life students	After coming home from the field, the collected data will be analyzed by respective analysis methods.
	Report writing	28/03/10-5/04/10	9	Life students	We will structure the result of field work and write final report of the findings.
	Report submission	6/04/10	1	Life students	Uploading and submission of final report

NB: There will be everyday discussion in the evening during field work about compilation of the day activities.

5.2 Data Matrix

QUESTIONS	CONCEPTS	DATA NEEDED	METHODS PROPOSED	NOTES
LIVELIHOOD STRATEGIES				
What resources does the house-Hold Have?	Social	-Different social networks between the community -Formal and informal groups that operates with in the village -Common rules and regulations that govern the society-Mechanism of participation in decision making.	-Questionnaire with 30 house holds -Observation of the local condition to triangulate and check the reliability of questionnaire methods	This information will help us to know the social capital of the house hold and how it contributes to the livelihood of the people.
	Physical	-Infrastructures that assist the community -Different Tools and technology that enhance the livelihood of the people	-Questionnaire with 30 house holds - Transect walk and Observation of the local condition to triangulate and check the reliability of questionnaire methods	This will help us to know how physical capital positively favors the livelihood of the community. Structured questionnaires will be prepared on the physical assets and the transect walk will also used to observe the available physical capital.

	Human	Human labor availability Health and educations status of the people in the area.	Questionnaire	Data will be obtained on the availability and contribution of human capital to betterment of local livelihood.
	Financial	Wages, credits, loans	Questionnaire	Data on financial capital including the means and source will be obtained via questionnaire
	Natural	-Land and its product, -Other resources	Questionnaire	Data on the natural capital will be collected from the respondents via structured questionnaires.
How the households do uses the resource?		-means of transforming assets to livelihood	Semi structured interview	Information on how the livelihood asset is transformed to outcome will be explored from the respondents.
		-Timing of activities	Seasonal calendar	
What are the farming strategies of the area?		<ul style="list-style-type: none"> - Cropping pattern - Livestock production - Alternative livelihood 	Semi structured interview with 15 sample households Questionnaires	The farming system of the area and its contribution to livelihood, the reason for farming system selection will be explored.

Respondent's perceptions of Livelihood?	-Constraints to attain the desired sustainable livelihood goals in the area -Opportunities for livelihood -peoples attitudes towards natural resource status	Semi structured interview	The general environment of the livelihood of the people will be seen.
	-Type of shocks and vulnerability that will affect Livelihood. -means of overcoming or coping mechanisms in the area	Seasonal calendar/ trend analysis Semi structured interview	The main vulnerable season and the type of shocks will be discussed. We also look at the coping mechanism during vulnerable season.
Degree of dependence on Natural resource?	-Cash crops -Subsistence -Income	Semi structured interview/Questionnaire	The extent of dependence on the natural resource and other sources of income will be discovered
What are the outcomes (actual and expected) of the livelihood activities?	-Living conditions -Resource status -production (income) level -marketing	Semi structured interview Questionnaire	Description of the outcome of the livelihood strategies will be obtained.

LAND TENURE SECURITY IN THE AREA

What type of rights do the people have over the land?	-Existing land policy	Key informant interview secondary data	Secondary data will be retrieved from various sources such as documents from Bureau of Agriculture and Rural Development and relevant NGOs. This will mainly concern information about the institutional level: Land tenure policies, rules and regulations, and management structure of the national park.
	-Access over the land	Key informant interview secondary data	This information will be obtained from the administrators and secondary data and it will help us know the type of access people have over the land and how it will enhance the livelihood strategies of the people in the area.

	<ul style="list-style-type: none"> -Land administration and governance -Types and nature of local institutions -Influences in sustaining Livelihoods 	Key informant interview	We will explore this data from the administrators and secondary sources on how the management and governance of land is taking place, the nature and type of local institutions and the relation with the livelihood strategies of the people will be seen.
What access do the villagers have over resources?	Access and control over other resources.	Semi structured interview	This will be collected from the respondents to know the access and control rights of people over different resources and how it will affects the livelihood of the villagers.
How does Land Tenure system affects the local income	The relation between land tenure and their income	Semi structured interview	This data will be obtained from the respondents and it will help us to know the relation between land tenure and the income of the local people.
	Impact on Financial and Economic	Semi structured interview	

	return		
IMPACT OF NATIONAL PARK ON LIVELIHOOD			
How and when national park was established?	When it was established How it was established	Trend analysis Key informant interview	PRA methods will be held to collect the situation during the establishment of the national park. This will help us to know the compensation to the people and other related information.
How NP is managed?	Management style of National park	Key informant interview	With this we will explore the management style (top down or bottom up) of the national park and how it will affect the livelihood of the community. It will address the question Who will decide what.
	Existing rules and regulation in NP management	Key informant interview Secondary data	Secondary data and information from key informant interview will disclose the existing rules and

			regulations of national park that may affect the livelihood of the villagers.
How it affects Livelihood	Impact of rules, regulations and policies on House Hold Livelihood	Semi structured interview	The impact of national park management on the livelihood of the local people and the benefit to the national government will be assessed.
	Attitudes of people on National Park	Semi structured interview	The perception of the people on the presence of national park will be assessed