



Investigating Overlapping Land Claims at the Border's Edge: A Livelihood Analysis of Ban Suan Hom, Thailand

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ABSTRACT

Through an interdisciplinary approach, the objective of this case study has been to investigate the livelihood effects of the Thap Lan National Park Land Claim, on residents living in Ban Suan Hom, Thailand - a small, rural village encapsulated by the National Park. The study thereby contributes to the contemporary academic attention on the formation of protected areas and the problems arising from top-down enforced laws and policies.

Through the use of a structure-agency oriented approach, we spent ten days in the field in March-April 2019 investigating the perspectives of the local residents, combined with a focus on people in positions of power related to the Land Claim. Through a complementary use of methods from natural and social sciences, such as participant observation, questionnaires and GPS mapping, we found that residents had been indirectly affected by the decline in tourism that the Land Claim had caused.

Insecurity of land tenure and lack of socioeconomic opportunities in Ban Suan Hom means that the residents rely on a precarious job sector, either within agriculture or resort/leisure home-based wage labor - consistently without the security of formal contracts. The indirect effects of the Land Claim thereby further contributed to a general institutional mistrust and increased insecurity, further distancing the residents from political influence and motivations to resist their current situation.

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1. Introduction

On the backdrop of global climate change and an increasing focus on sustainability, protecting life on land has become an increasing priority on the international development agenda. Protecting biodiversity through conservation is not only for the sake of nature itself but is also related to the knowledge that a healthy environment is important for humans. The knowledge of the negative impacts of our activities has created an awareness of the need to carefully manage and protect the natural environment (Steffen *et al.*, 2007). As Kareiva (2012) argues, “...the fate of nature and that of people are deeply intertwined... Many of the activities that harm biodiversity also harm human well-being”.

In the past century, the number of protected areas, including national parks (NPs), has risen exponentially around the world, especially in developing countries (Kelly, 2013). As a result, people living within and around NPs have felt the effects of changing access to natural resources, impacting their livelihoods and ways of interacting with their surrounding environment (Roth, 2004). Although involving local communities in decision making has become more commonplace, many have a limited say in conservation practices (Bugna, 2001). This study aims to investigate the effects of NPs on local people's livelihoods, using the village of Ban Suan Hom (BSH) situated within the Thap Lan National Park (TLNP) of Thailand as a case study.

Historically, the management of forests in Thailand has been influenced by the colonial practices in neighboring countries, resulting in a strategy that prioritizes national and international interests over needs of local communities (Roth, 2004). These management practices can be traced back to the foundation of the Royal Forestry Department (RFD) in 1896, which aimed to control concessions over teak and other valuable timber species in northern Thailand (Roth, 2004). In the past century, Thailand experienced a big reduction of its forest resources due to over-harvesting of timber, and the rapid growth of both the economy and the population (Bugna, 2001). Awareness towards forest and wildlife conservation grew on the national and international scale, leading to the implementation of several protective measures and programmes¹. In the 1960s, two important pieces of legislation, the Wild Animal Preservation and Protection Act (1960) and the National Park Act (1961), laid the legal foundation for creating protected areas such as wildlife sanctuaries and NPs (Bugna, 2001). Modern conceptions of nature and conservation in Thailand have been influenced by Western notions of separating people from the natural environment (Roth, 2004). Through NP policies the RFD and the military gained the legal authority to displace entire communities from protected areas (Ganjanapan, 1998). This approach to nature conservation has led to several

¹ In 2014, the government formed a new policy, the Forestry Master Plan of 2014, with the aim to increase the forest cover from 33%-40% within 10 years (WRM, 2014). This goal has involved the enforcement and reclamation of land for forests that have been used for other purposes, often agriculture, without official permission, often at the expense of local communities living there.

problems since a large part of the Thai population lives within protected areas and relies on the natural environment for their survival. The right of landless, poor communities to use the forest has only been partly guaranteed in the early 1990s by Thailand's Community Forestry Bill, which legitimizes poor rural communities' access to the forest and encourages them to manage conservation of the forest areas (Johnson and Forsyth, 2008).

The implementation of protected areas led to a limitation in expansion of farmland into the forest, which therefore impacted negatively on the agricultural sector (Rattanabirabongse *et al.*, 1998). In order to keep the agricultural sector growing, land titles were given to farmers providing access to subsidies and loans for investments in more efficient and productive farming systems. Through the Thailand Land Titling Project in 1984, over 5.5 million land titles, such as Sor Por Gor 4², were distributed to land owners (ibid). People living inside NPs were not included in the land titling program which was also the case of the village of BSH, creating conflicts over the ownership and use of the land. The entire area of BSH is classified as Por Bor Tor³ land which means residents have no official ownership claim to the land.

1.1 Literature review

In the following section, we will present the contemporary and relevant literature concerning protected areas' effects on local communities in Thailand. As we have only found a few studies relating specifically to TLNP which is the foundation of our fieldwork, we have also relied on less geographically precise articles mainly from conservation-studies in Northern Thailand. Our case study thereby investigates a geographically specific situation that has not received much academic attention.

The effects that protected areas, including NPs, have had on the livelihoods of local communities have been widely studied. With increasing prevalence and attention, the expectations placed upon protected areas have also increased (Watson *et al.*, 2014). According to Watson *et al.* (2014), protected areas are now established not only to conserve the natural environment, but also to contribute positively to local livelihoods and promotion of economic development. Challenges to achieving successful conservation outcomes in Thailand's protected areas include poor governance, lack of management and attention to local development, according to a study by Bennett and Dearden (2014). They argue that trust, and

² "Sor Por Gor 4 is an allotment of land from the Land Reformatory Committee under the Ministry of Agriculture and Cooperatives, and under no circumstance may this land be bought or sold. It confers the right to occupy only and be transferred only by inheritance. The land should be used for agriculture only." (Treue, 2019)

³ "Por Bor Tor 5 is a document that certifies that the occupier paid taxes on the land. It provides no evidence of a valid claim to ownership but can be used to prove possession against private parties. This document was formerly used to establish that the holder was occupying a plot of land and could apply for a Sor Kor 1. Often the actual/legal owner of the land is the government." (Treue, 2019)

a good relationship with local communities would improve conservation outcomes, as this fosters support and compliance with the rules amongst local communities living in the protected areas.

Many studies we have found also emphasize benefits to local communities when protected areas are created. Bennett and Dearden (2014) review such positive impacts, describing how these can lead to new livelihood opportunities, empowerment, improved governance, education and cultural benefits, if managed effectively and by involving the local communities. In recent years, the importance of forests to local livelihoods and poverty reduction has been brought to light (FAO, 2008; Hogarth et al., 2013). A statistical, economic study by Andam *et al.* (2010) found that many rural communities in Thailand benefited economically from proximity to protected areas. The specific mechanisms behind this outcome were not investigated, but other studies have pointed towards tourism, improved infrastructure and the benefits of ecosystem services as possible factors (ibid).

On the other hand, studies also often depict the conflict that arises between local people's long-standing traditions of using the environment for their own survival (collecting timber and non-timber forest products, hunting or clearing for agriculture), and national governments' wishes to protect natural resources and biodiversity by rendering ecosystems untouched (Dearden *et al.*, 1996). The previously mentioned study by Roth (2004) also describes how conflicts over land in Thailand is: *"...intensifying as the Royal Forestry Department (RFD) classifies remaining forests as protected areas, regardless of their standing as home for highland farmers"* (ibid:1) and he further elaborates how NGOs have assisted residents to; *recognize their precarious legal position and encouraged them to resist the establishment of protected areas in the absence of greater livelihood security"* (ibid:14).

Issues of insecurity also derive from land tenure systems that conflict with the official legal system (Neef *et al.*, 2006). This creates situations of *legal pluralism*, where official registers of land tenure and actual circumstances diverge (ibid). Legal pluralism leads to insecurity on behalf of community members, as conflicting narratives cast doubt about individuals' and local communities' rights to the environment they live in (ibid).

In summary, we have found two main tendencies that characterize the relevant contemporary literature at hand for this report. The first is that protected areas such as NPs, if managed in cooperation with local communities will bring along positive outcomes and general economic improvement. Secondly, the literature emphasizes a focus on conflicts when protected areas and NPs are implemented and managed through a government top-down approach, which often seems to be the case in Thailand. Conflicts arise due to negative impacts on people's livelihoods caused by restrictions on access to the forest and products on which their livelihoods depend, as well as insecurity of land tenure.

As our current study will show, the situation of BSH is atypical in the sense that residents do not make use of the forest resources as part of their livelihood strategies. Much of the literature we have found on park-people relations in Thailand have typically focused on political and

ethnic conflicts in the north, our study is therefore also distinguishable from other conflict-conservation studies from the northern regions, as the residents of BSH are ethnically Thai, and located much closer to the administrative and political capital of Bangkok. Our research thereby articulates a knowledge gap that has not received much academic attention.

1.2 Case study: Ban Suan Hom - An awaiting village

The focus of this research is the Ban Suan Hom village, part of the Wang Nam Khiao district in Thailand's central Nakhon Ratchasima province (see figure 1). The village is officially located within the TLNP. The TLNP was established in 1981 and covers an area of approx. 2235 km². This surrounding area, according to a study by Pongpattananurak (2018), has become a well-known tourist destination for Thais, due to its natural environment, agriculture and cultural activities.

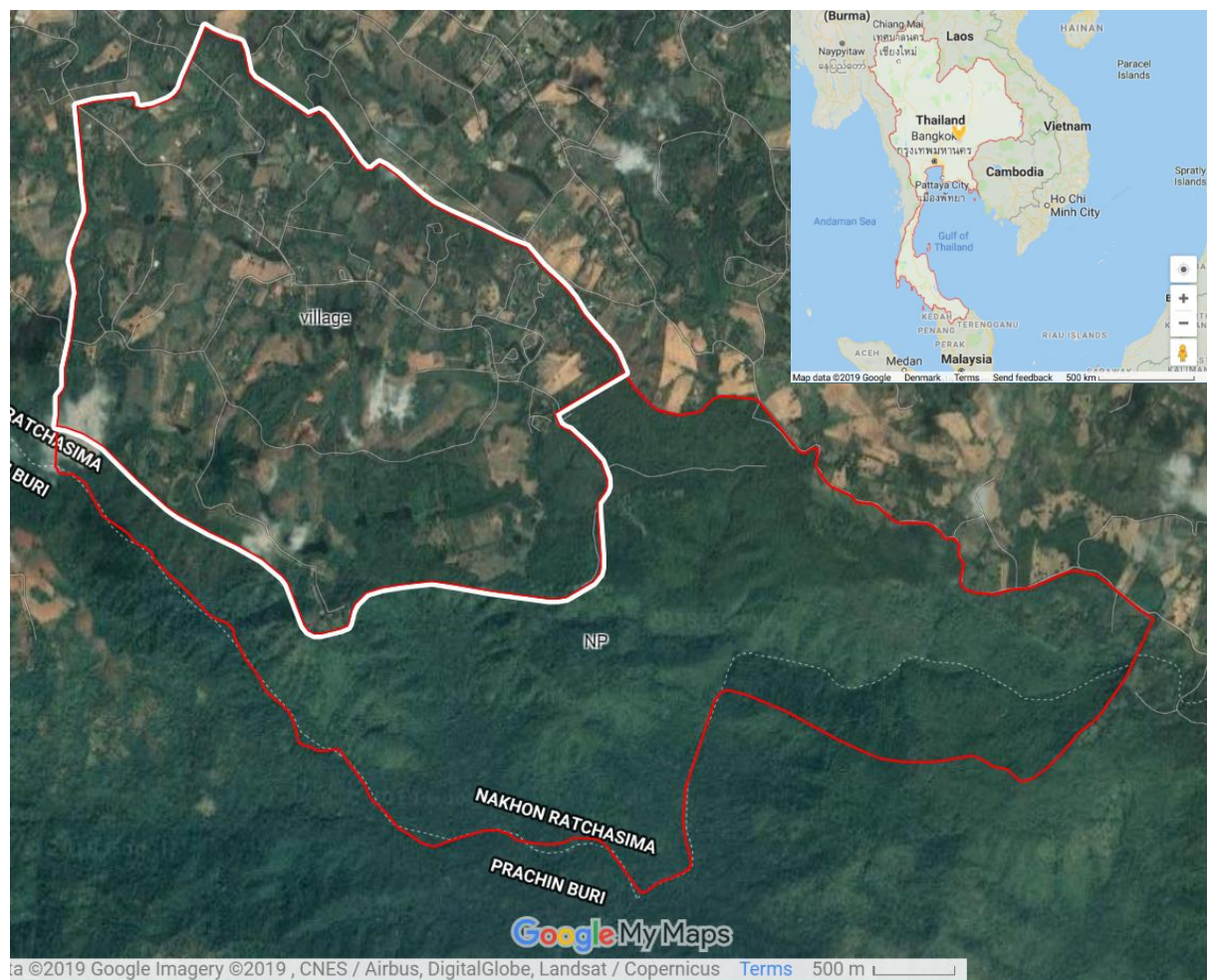


Figure 1. Map of Thailand, Ban Suan Hom (village), and Thap Lan National Park (NP). Sourced from Google Maps, 2019. Village and NP boundaries have been marked by the authors.

In 2011 the NP authorities carried out a land claim, which was used to enforce the boundary of the park and enhance protection of the forest. Though land claims are generally associated with the displacement of people and their crops and houses being destroyed, this was not the case in BSH. The Land Claim⁴ resulted in a decline in tourism, which since the early 2000s had been the main form of employment for villagers, who had previously sold their land to newcomers investors.

On arriving in BSH, the effects of the Land Claim seemed obvious. The first impression was that of a sleepy town, with little obvious activity. On the first day of arrival, we are lucky to meet Preeda, an elderly lady who should turn out to become one of our key informants.

Preeda's story

We meet Preeda under her improvised workstation in the edge of her small lettuce-farm. A plastic bag containing different salad seeds is hanging from the roof above a big bag of fertilizer, the radio is playing music and her great grandson, spending his weekend to assist Preeda in the field is dancing the Fortnite-dance like every other boy around the globe his age. Preeda is renting this plot of land from one of the big landowners in Ban Suan Hom, and for the time being, she can only afford to cultivate half of the plot, the rest is covered in breast-height weeds.

Being one of the first families in the village, Preeda has a lot of knowledge regarding the development of Ban Suan Hom and is eager to share her story. The 65-year-old lady has lived here since she arrived with her parents as a nine-year-old in 1963. Since then a lot has changed; The early settlers arrived to cut down the valuable teak trees, which were then transported to the nearest highway by use of elephants. The clearing of the old forest led to years of different forms of agriculture combined with resource gathering and hunting in the forests surrounding the village. A decline in agricultural prices in the beginning of the 2000's resulted in the informal selling of the villagers land and the establishments of resorts and leisure homes. Preeda, like so many other villagers at the time sold her land and relied on wage labour work either in the resorts or on other people's fields.

Bending down collecting tamarind fruits from the ground, she hands them out while she explains the loss of her family land. She regrets the selling, but at the time she didn't have a choice, prices of corn and cassava, her main crops in 2002 were too low, and her farming didn't pay off. The new investment-owner of her land didn't make use of it and fearing that it would turn into wilderness again either naturally or as part of the Thap Lan reforestation strategy, the new owner allowed for the Village-head to plant banana trees on the area. Preeda explains that she doesn't directly benefit from that agreement but tells us with a smile that she once in a while enters her old land and grabs a stem of bananas for her own use.

⁴ This enforcement of the boundary was used to target newcomers, resorts, and leisure houses. The actual enforcement involved few evictions of resort owners, and left the rest of the residents' land unaffected. However, this action still instilled a fear among them regarding the security of their own land. Many local residents and newcomers still have their land today and even the resort owners that have been arrested or are involved in land cases still have access to their land.

The story of Preeda encapsulates the historical effects that outer circumstances have had on the local residents of BSH throughout the years, and in many ways Preeda's story is broadly shared by many of the residents of BSH. It is a story in which dropping crop-prices and ever-changing legislations on land titles determine people's economic situation. People, like Preeda, are trying to cope with this situation by following job opportunities where they arise. The aim of this report is to investigate the most recent of these changes, an enforcement of the NP boundary and regulations carried out through a land claim in 2011.



Image 1. Farmer in the field. Photo taken by authors.

1.3 Research Objective

The case of BSH and the TLNP Land Claim has led us to ask the following main research question:

How has the Thap Lan National Park Land Claim affected the livelihoods of the residents⁵ of Ban Suan Hom?

The following sub-questions guided our study:

1. Why did the Land Claim in BSH happen?
2. How was the Land Claim implemented?
3. How have resident's livelihood assets, activities and strategies changed due to the Land Claim?
4. How has the Land Claim affected resident's hopes and expectations for their future?
5. What kinds of resistance have residents pursued in order to counteract or alleviate the effect of the NP regulations?
6. How has the Land Claim affected resident's villagers' relationship with the Thai government and NP authorities?

1.4 Hypotheses

Based on the provided information of our case study as well as our literature review (section 1.1) we hypothesized the following:

(i) Since the Land Claim, the NP authorities have been impeding on the residents' activities such as, agricultural practices, wage labor in tourist resorts, and access and use of the forest, which has resulted in a change in their livelihood strategies and wealth situation. (ii) The forest of TLNP is an important natural capital of residents, providing food, fuel, timber and other materials which influences their livelihood activities and wealth situation. (iii) Therefore, the access restriction to the forest created conflicts and worsened the relationship between the residents and the NP rangers. (iv) Due to the top-down approach and the lack of involvement in decision making, we assumed that residents would lose faith in the national government, and (v) would organize and exercise different forms of resistance towards the NP authorities, NP regulations and governmental institutions. This could be either organized in direct political groups, articulating demands and paroles, formed unions, or would have performed fewer public forms of resistance such as squatting on abandoned land, sneaking illegally into the NP, bending the rules of their wage-labor etc.

⁵By residents we mean permanent, local villagers who have lived in BSH since before the Land Claim. This is opposed to newcomers or leisure house/resort owners.

1.5 Theoretical Context

As our research project is interdisciplinary, we will draw on different theoretical approaches. Our study will position itself in the academic area of conservation science drawing from different backgrounds relating to economics, agriculture, geography, and anthropology.

Conservation Science

According to Peter Kareiva (2012), conservation science is based on a few core postulates. The first is that there is no “pristine” nature that has been untouched by humans. Secondly, that the fate of nature and humans are deeply intertwined. The third assumption is that nature can be surprisingly resilient, though often it is seen as fragile. Lastly is that human communities are assumed capable of utilising and preserving natural resources by working together and managing them in a sustainable way (ibid).

Conservation science combines ideas from both the natural and social sciences and acknowledges that conservation efforts are likely to succeed when they strive to both maximize conservation and economic objectives. We chose to approach our research with a theoretical context of conservation science because the combination of methods and ideas is necessary in order to grasp the complexity of livelihood changes such as our case-study of BSH represents. Our main research question focuses especially on the concept of livelihoods. Livelihoods are defined as the wide range of activities that people pursue in order to sustain their daily needs and make a living (Ellis, 2000). Studying livelihoods involves investigating the assets and activities which households possess and pursue in their daily lives (ibid). Assets refer to various resources that a household can make use of as part of a livelihood strategy, and can either be human, natural, physical, social or financial (ibid). The ability to make use of various assets depends on the opportunities within the specific context in which the household is located, and the surrounding structures and processes shape how households can transform their assets into a livelihood strategy (DFID, 2000). How all these parameters affect livelihoods can be visualized and analyzed through a livelihoods framework. To this end, we will use the DFID (2000) sustainable livelihoods framework to show how livelihood strategies and outcomes are the result of a dynamic interplay between assets, contexts of vulnerability, and surrounding structures and processes.

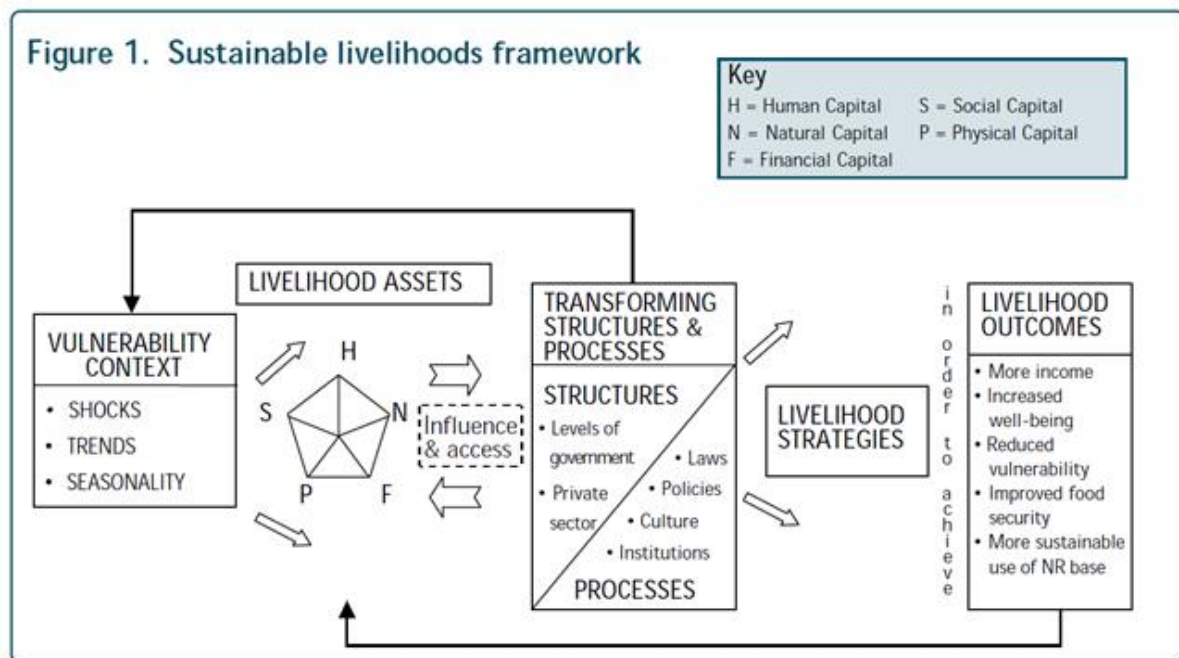


Figure 2. Livelihoods Framework, figure 1 in DFID (2000).

The livelihoods framework is useful as an analytical tool to structure and frame an analysis of livelihood and income data. The livelihoods framework however, does not necessarily help in explaining *why* people follow certain livelihood strategies and why they change. We will build upon the livelihoods framework by drawing on a variety of anthropological concepts to explain and discuss the effects of NPs on local communities, the main concept being that of *precarious life* which originates from the American philosopher and sociologist, Judith Butler (2015). This theoretical perspective was originally explained as a “*shared bodily vulnerability and interdependency, and the demand to be protected from the potential exposure to (state) violence*” (Tijdschriftframe, 2017). Later studies transformed the concept beyond the use of the bodily experience and rather defined precarity as “*the structural financial and existential insecurity brought about by the advent of neoliberalism, the dismantling of the welfare state and social security*” (ibid). The context in which we will apply the concept, is slightly different from the classical neoliberal critique. Therefore, we will rely more on the general definition of precarity as “*the state of having insecure employment or income*” (Oxford Dictionaries, 2019), which is the understanding we ascribe to the concept.

Judith Butler is deeply inspired by French sociologist and anthropologist Pierre Bourdieu, and by referring to these perspectives we position ourselves within this school of thought, emphasizing both a focus on structure and agency. The focus on structure lies within our interviews with forest officials and representatives from different governmental agencies, while the agency focus was investigated through a constant presence, participation and engagement with the residents.

When studying conflicts over land in a rural setting in Thailand, it is highly relevant to draw on the influential concept of ‘everyday resistance’ (Scott, 1985), who sees subordinated people

as subjects of agency, and who, by the use of different means, possess agency to challenge the system of property and domination (ibid).

There are many similarities between our case study of BSH and James Scott's study (1985) of conflicts within a rural Malaysian community in 1978-80, for instance both villages consisting of around 70 households (ibid). The expectation of finding signs of 'everyday resistance' was further reinforced by an article from December 2011, explaining an uprising and civil obedience immediately after the authorities demolished the first resorts as part of the Land Claim (Asia News Monitor, 2011).

2. Methodology

Due to our interdisciplinary backgrounds, we were able to approach our study with both a natural and social science base, but as our study focused primarily on livelihood strategies, we chose to conduct mainly social science methods. The proposed methods were all chosen in order to gather and construct data and shed light on our main research question.

2.1 General Reflections

When conducting fieldwork in a completely new setting, all data is always constructed according to ones positioning in the field (Wax, 1971). When arriving in BSH, our group of nine students, including our Thai counterparts and translators, definitely stood out as foreigners as we drove around BSH on top of a red pickup truck, sometimes accompanied by our teachers in yet another four-wheel drive.

This obvious positioning as outsiders did not make first contact easy, but an initial meeting with the village head, gave us a reference point we could use when speaking to people the first time. Moreover, working with Thai students and translators made it easier to approach residents.

Working on the same project with Thai students was sometimes challenging in terms of communication within the group⁶. Despite smaller communication issues, working closely together expanded our methodological approaches.

Even though we made contact at an early stage to many residents and relied on the snowball effect for further contact, we must assume that much of our data was affected by how we were perceived as outsiders, and that many residents would modify their answers to many of our questions. Some preciseness of the answers we received was probably lost in translation from Thai to English as our translators were also students and using this project as a learning experience.

As a regular academic custom, we have decided to anonymize all our informants' names, since some descriptions and attitudes of the informants, in the eyes of others, might seem controversial. Moreover, we always asked for informants' consent.

⁶ For instance, on our first day of fieldwork we realised that the location of BSH, which we expected to be rightfully located on google maps, turned out to be 10 kilometers away. The previous evening had been spent on looking and discussing maps on (our) assumed location, but language-barriers and politeness from the Thai students meant that they never challenged our mistake



Image 2. Our research group at the retail shop in BSH. Used as our base while in the field. Photo taken by authors.

2.2 Questionnaires

We constructed and made use of questionnaires as a tool to provide quantitative data to achieve an overview of important factors affecting residents' livelihoods. This included finding information regarding household compositions, livelihood activities, income sources and assets before and after the Land Claim (Appendix C). Because the number of households in BSH is only around 70, we aimed to achieve a full sampling by going door-to-door to people's houses. This proved to be difficult due to people not being home or not wanting to participate. We ended up getting 23 questionnaires answered in total. The questionnaires were conducted face-to-face, as an interview, with the help of a translator. They lasted about 45 minutes each. In the questionnaires we used both open-ended and closed questions. The questionnaire was inspired by Poverty Environment Network (PEN) prototype questionnaire (CIFOR, 2017). We included many open-ended questions because our time in the field was short, and we wanted to allow for discovery of new information. Questionnaires were carried out only with residents of BSH, not newcomers, resort- or leisure house owners.

Reflections: We made our questionnaire while we were in the field and it ended up being quite long, in order to get a more in-depth livelihood analysis. Though we only obtained 23 questionnaires in the end, the interview-like length of the questionnaire gave us a more qualitative dataset which proved to be useful in accounting for the general attitudes and feelings of the residents towards these issues.

2.3 Interviews

We prepared semi-structured interviews with:

- The village head of BSH
- TLNP Chief Ranger
- Agricultural Extension Officer
- TLNP Director Assistant
- Community Development Officer

We also conducted a focus group interview that was made up of eight people, the village head and seven wage laborers.

We made use of semi-structured interviews (SSI) throughout our fieldwork in order to gain more contextual knowledge surrounding the reasons and motivations behind the Land Claim. Some of the characteristics of the SSI are the open-ended questions as well as an informal atmosphere, which we saw as an advantage because our fieldwork had a limited time frame, and we wanted to gain as much information as possible.

The interviews shared a common goal of outlining the historical, legal context of BSH and the TLNP. It turned out that we were originally misguided as to the background for our study, thinking that the issues at hand were related to the *implementation* of a boundary rather than the *enforcement* of an old legal boundary. Therefore, it became essential for us first to understand the historical context of BSH and settle important events influencing the current situation. Outlining BSH's historical timeline (Appendix E), became a priority.

The interviews provided us with different perspectives and narratives of how the current situation in BSH came into being.



Image 3. Interview in action. Photo taken by authors.

Reflections: The interviews proved to provide valuable perspectives in contextualising the historical events surrounding the Land Claim and BSH's history. It was difficult in the beginning to get used to interviewing through a translator. It was also the translator's first time translating in the field, so they had to get used to working with us as well and sometimes information was lost. In general, these interviews were crucial for understanding motivations behind the Land Claim, how it was carried out, and the effects resulting from it.

2.4 Village Tour

We were able to schedule a tour of BSH with the village head in which she drove us around the area pointing out where the borders were distinguishing the village from the NP. This was also a valuable resource in that we were able to directly questions regarding the land - who owned it, whether it was legal, and what the history was behind the ownership.

We supplemented this tour with another villager tour with Preeda, a local villager who became one of our key informants. Having her as a guide provided us with supplementing perspectives on some of the important historical land changes in BSH.

Reflections: These tours were useful in getting a sense of the surroundings of BSH within the first few days of our field work. Because we were in the back of the pickup truck while Preeda and the village head were inside the truck during driving, we were not able to get as much information while driving, which could have been useful. However, the village head was able to give us a lot of information regarding the border and illegal activities happening within it. Preeda was also able to give a lot of information about her land she used to own and what happened to it after it was sold.

2.5 GPS

GPS⁷ proved to be an integral part of our fieldwork because it was important in being able to define where the actual borders are between the NP and village. There are a few different ways we planned on using GPS as a tool:

- Village mapping: We were able to create a comprehensive map of BSH that includes borders, resorts, leisure houses and those that are involved in lawsuit cases.
- Marking the TLNP border, established in 1981, and comparing it to the village border of BSH which was established in 1983. We also marked the current village-forest border which came after the resizing process of 1994.

Reflections: One of our Thai-counterparts turned out to be extremely well versed in GIS and GPS mapping which proved to be extremely helpful to our research. GPS mapping was quite time consuming, so we chose to map points of interest to the study, rather than mapping out entire plots of land in the village. At the same time, GPS was a flexible method which we could perform throughout the entire fieldwork, while doing other methods such as questionnaires or the village tours.

2.6 Participatory Rural Appraisal (PRA)

PRA can be used to involve the villagers in the data collection process. We were able to hold a PRA session within a focus group. The focus group was made up of mainly elderly women who seemed politically minded and invested in their community. We had one person facilitating the session and two translators.

- Village Drawing: We asked them to mark where they lived on a printed map of BSH as well as different important landmarks or places in the village.

⁷ GPS is a satellite-based navigation system that was developed by the US Department of Defense for military purposes (Birch-Thomsen, 2019).

- We also asked them about advantages and disadvantages of potential land titles they could have in the future: title deed, Sor Por Gor land, Royal State Property Land, and community owned land.



Image 4. PRA workshop. Photo taken by authors

Reflections: It was difficult to follow what every person said in this session as the structure was very loose, meaning that everybody was able to speak at the same time and the translators had a difficult time translating fast enough. This made it hard to analyse interactions between participants, which is one of the purposes of PRA sessions. Only elderly women were present at this PRA session, meaning we only obtained information from this particular group's perspective.

2.7 Participant Observation (PO)

Being an interdisciplinary group of students from different cultural and educational backgrounds, a settled weekly schedule proved necessary, but gave little room for the time consuming and spontaneous approach characterized by PO (Dewalt and Dewalt, 2010). Conducting PO, therefore, turned out to become more of an underlying method we used throughout the fieldwork, and was an approach we found useful when having informal conversations with farmers, asking if they could use some assistance, or most commonly, when we used the retail-store as part of our daily routine. The retail-store, located very central in BSH provided a very welcoming place for relaxing, writing, eating and having conversations

with customers and residents. As the days went on, our presence there changed from being positioned as complete outsiders, to a more recognizable group of students, that people would wave at when passing by.

Reflections: The need of a structured schedule counteracted the methodological benefits of participant observation. Also, the distance between BSH and the basecamp where we slept, meant that our presence in BSH was limited to the daily hours. We, therefore, rarely had the possibility to spontaneously meet villagers or observe and talk to people outside their daily work-routines, which also meant that we only at a few occasions had the possibility to participate and assist in the residents' regular activities.

2.8 Presentation to residents

On the last day of fieldwork, we had the opportunity to present our findings to the residents. This was also a chance to explain what we had been doing throughout our time in their village. It was also to see if the residents agreed with what we found. Around thirty people participated. All of us presented, with translators and we had prepared visual aids in Thai. At the end we gave the residents the opportunity to give us feedback and ask any questions they might have had.

Reflections: The village meeting provided a perfect arena to receive additional information that we were missing or had overlooked, as well as confirming our main findings from our fieldwork in BSH. Once again mostly women were present, with only two men. The community meeting also turned into a vivid discussion amongst the residents themselves, which deepened our understanding of the Land Claim conflict.

3. Results

The following results section will be structured according to our sub-questions found in section 1.3.

3.1 Why did the Land Claim in Ban Suan Hom happen and how was it implemented?

The following information is extracted from interviews with the TLNP Director Assistant, TLNP Chief Ranger in BSH, the village head of BSH, questionnaires with residents, and an interview with a resort owner.

The first pioneers arrived in BSH in around 1965 and later in 1983 the Thai government officially recognized BSH as a village (big boundary, figure 1). In 1981, TLNP was established, but due to insufficient ground-truthing, many existing villages, including BSH, were included in its territory. Before the NP establishment the region used to be classified as Reserve Forest, which gives residents the opportunity to apply for land titles such as the Sor Por Gor. However, since BSH was engulfed by the TLNP, the village had to adhere to NP regulations⁸. NP's have the strictest laws among all protected areas, including that individuals cannot own the land themselves, only public authorities.

Following requests of local communities in 1994, the NP authorities intended to reclassify the area of BSH and other villages inside the TLNP back into Reserve Forest. Between 1994 and 2004 the NP authorities began mapping the inhabited and cultivated areas inside the territory of TLNP in order to resize the NP and draw a new forest-village border (small boundary, figure 1). The purpose of this mapping process was to register the people who had arrived before the establishment of 1981, the location of their houses and agricultural land. During this process, the authorities noticed that many residents were selling their farmland illegally to investors from other provinces, the so-called "newcomers", and therefore, stopped the process of reclassifying the area into Reserve Forest. This moment coincides with a difficult period for local farmers, who were accumulating debt and driven to give up farming due to low crop prices and inability to compete in the market.

This backdrop made it easy for investors to buy big areas of BSH at relatively cheap prices, and the potential reclassification of the area into Forest Reserve made the investment even more attractive due to less restrictive regulations. The NP authorities were put in a dilemma, on the one hand wanting to stop the trend of illegally buying, *de facto*, farmland, which became, *de jure*, NP land in 1981, whilst on the other hand wishing to avoid displacing people who had lived in the village since before the NP establishment in 1981. Accordingly, the authorities referred to the Thai Cabinet resolution of 1998, which redefined the land rights of people living

⁸ For National Park regulations, see: AsianLII, 2019

inside protected areas such as NPs. This resolution determined that only people who had been living inside the NP before its establishment were allowed to live and practice agriculture or other low investment activities there.

The land of the newcomers bought after 1981 could not be registered, and they were therefore not allowed to live inside the NP nor use the land for any purpose. Nevertheless, the trend of residents selling land to newcomers continued almost undisturbed until the Land Claim in 2011. By the early 2000s most newcomers started to build tourism resorts and leisure houses and changed the landscape of BSH significantly by planting orchards, rubber and teak plantations. As a result, many residents began to work in construction and as wage laborers inside the resorts or leisure houses. Tourism in and around BSH was booming, which increased wealth and job opportunities for the whole community (section 3.3).

In 2012, the newly appointed NP Director-General gave the order to stop all illegal activities inside NP, prosecute resort and leisure house owners and claim back the land that newcomers had illegally bought.

3.2 How was the Land Claim implemented?

In BSH, the order of arresting and prosecuting all newcomers who owned land, resorts or leisure houses, was executed by a task force of 12 rangers led by the head of the local ranger station. Their duty was to identify and locate the GPS coordinates of all buildings and land owned by newcomers. While executing this order, the rangers encountered several obstacles, such as residents lying to them about the *de facto* owners of the buildings and the land they were working on, saying it *de facto* belonged to residents. Not being able to count on the support of the residents, the rangers had to identify resorts and leisure houses by judging on their architectural appearance. Through GPS coordinates, they tracked down the owner through electricity bill payments. If the person was not registered as a local resident, thus considered a newcomer, and the NP authorities would proceed by denouncing the newcomer for owning land and buildings on NP territory. The resorts and leisure houses would consequently close, and the owner would face a trial and pay a fine between 150,000 and 200,000 Baht. If the, *de facto*, owners of resort and leisure houses lost their cases, the resort or leisure house would have to be destroyed, the owners charged for all costs, and the confiscated land had to be returned to the NP authorities which then would consider reforesting it or leaving it abandoned⁹ (Image 5).

⁹ National Park Act 1961, section 22.



Image 5. Banner showing closure of resort.

According to the NP authorities, all resorts and leisure houses have been tracked down and their owners are now facing a trial. However, during our fieldwork and mapping assessment of BSH we realized that this is not exactly the case. Some resorts, and especially leisure houses, have not been denounced by the authorities. Furthermore, we identified two cases in which residents have been charged and were waiting for a verdict. One was accused of having built a camping facility for tourists and the second case was accused of owning a resort. The authorities of the NP stated that only already existing structures, that serve as houses, shops, restaurants or homestays, are tolerated on NP territory that was under, *de facto*, cultivation when the NP was officially established. The resorts in BSH stayed closed for at least 2 years after the Land Claim because the owners and the laborers were afraid of being arrested and charged for practicing illegal activities.

In the current situation of 2019, some resorts remain closed, while others are up and running again - even if they are facing a trial - but with much fewer tourists than before. By assessing the whole area of BSH with GPS devices, we were able to map of leisure houses and tourism resorts inside the village boundaries (Figure 2). During this assessment, we identified 37 leisure houses and 34 resorts, from which 19 leisure houses and eight resorts have been spared by the Land Claim and thus have not faced any trial.

In the last three years, the number of tourists visiting the forest in BSH has increased significantly from 743 in 2015 to 6,353 in 2017 (Appendix D) which indicates increasing tourism in the region. The increase in tourist flow of the last two years has also been confirmed by local resort owners, who reported a similar number of visitors as before the Land Claim. The same resort owner described how he was no longer afraid of their land being claimed since the trial verdict can be protracted for any length of time. This statement should not be generalized but indicates a form of everyday resistance used by leisure house and resort owners facing a trial.

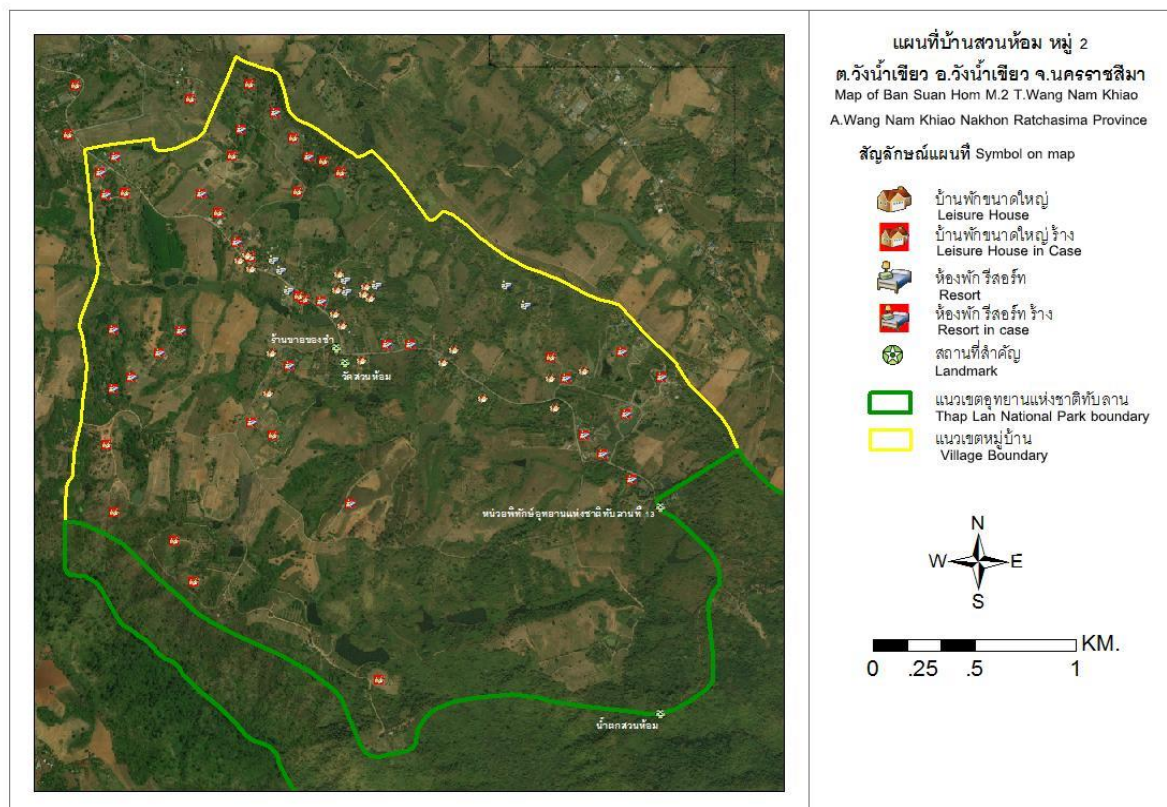


Figure 2. Map of Resorts and Leisure houses in Ban Suan Hom, recorded using GPS and marked by the authors.

3.3 How have local resident's livelihood assets, activities, and strategies changed due to the Land Claim?

The following information is extracted from questionnaires with residents and semi-structured interviews with residents.

The following results assessing the livelihood impacts of the land claim are drawn from the questionnaires carried out with residents of BSH. We completed 23 questionnaires. Of the respondents 15 were women, and eight were men. The average age of the respondents was 53 years, ranging from persons of 22 to 87 years of age. The average household size was four people, ranging from two to ten household members. The levels of education vary, with most not having completed high school¹⁰.

Main occupations of respondents were wage labor (12), farming (7) and own business (3). The rest did not work or were retired. We focus on these three groups of occupations to analyze how the land claim affected livelihoods of residents in BSH, because we expect the land claim to have an impact on income from these activities due to reduced tourism. Table 1 below illustrates some main findings and comparisons concerning these three occupations.

Questionnaire Data			
	Wage Labour	Agriculture	Own Business
How Many People	12	7	3
Average Age	47	53	57
Average Income (per month)	7100 baht	7800 baht	11,000 baht
Gender (percent female)	67%	43%	100%
Officially Poor (Thai government classification)	67%	14%	0%
People experiencing wealth decrease since LC	67%	29%	100%

Table 1. Livelihood data concerning main occupations of residents in Ban Suan Hom. Data sourced from questionnaires.

The following sections will elaborate on the main livelihood trends of the three occupational groups, and how the land claim affected each.

¹⁰ Four respondents have no education, four went to primary school, eight completed secondary school, two completed high school, two went on to vocational training, and two respondents completed a bachelor's degree.

Wage laborers

Out of the 12 respondents working as wage laborers, ten worked in leisure houses or resorts. The remaining two were previously involved in the construction of resorts. Often wage laborers had other household members working in the same resorts or leisure houses. The average working hours in this occupation was 41 hours per week. Evidently there is still work available in resorts and leisure houses, however all respondents noted how there used to be more work before the Land Claim. Some wage laborers now diversify their livelihood strategies by also growing and selling crops, but the resort work was still their main income source. Most wage laborers reported higher incomes before the land claim, up to twice as much. Even though most have a lower income today than before the Land Claim, all claimed that their wealth situation today was better compared to 20 years ago, when the tourism sector was not as developed.

Especially those working in construction were driven to change livelihood strategies following the Land Claim. One managed to continue construction in other villages, but others changed to resort keeping a combination of construction and agriculture, or a complete switch to agriculture. Wage laborers had, on average, the lowest income of the three occupational groups.

Famers

Crops grown by farmers include corn, cassava, melon, durian, lettuce, eggplant and bok choy. Corn and cassava used to be more widely grown 20 years ago, but practices increasingly included horticulture, which is better suited to smaller land plots. Most farmers sell their products to middlemen, but one sells directly to villagers and tourists. The ability to sell to tourists was one of the main drawbacks of the land claim for farmers. Another drawback was the restriction of using heavy machinery.

Own business

Two of the questionnaire respondents are shop owners and the third owns a restaurant. All business owners had their income reduced by up to half following the Land Claim. An additional questionnaire respondent who used to have her own business selling soy milk and snacks also experienced her income being halved due to the Land Claim. Another had tried to sell noodles for a few years but could not sustain her business due to lack of customers. One of the shop owners described how *“everything stopped after the land claim”*. The other shop owner described how before the Land Claim, *“she could buy anything”*, whereas now, she has to *“plan her economy carefully”*.

Use of the forest

It was found that only five out of 23 respondents used the forest as part of their livelihood strategy. In the forest, one person gathered mushrooms, one hunted squirrels, one collected

vegetables and all four reported gathering of bamboo shoots. Only one respondent would sell a forest product, bamboo, for 2 Baht/kilo. Another bamboo collector noted that she *“used to get a lot, but now not a good relationship with park rangers”* caused her to collect less. Another respondent reported that they *“collected less because the forest is much less productive now than in the past”*.

In addition to these four, two respondents reported that they used to collect in the forest but stopped after the Land Claim. Another two respondents highlighted that collecting products from the forest had become illegal following the Land Claim, which is why they do not pursue this activity. In another vein, one respondent commented that it is not worth the effort to collect forest products when you can simply buy the products instead.

Land

The questionnaires also gave an idea of the division of land in BSH. Table 2 gives an overview of respondent's land tenure situation.

Land	
<i>How many own land?</i>	70%
<i>Average amount owned</i>	6 rai
<i>How many bought land?</i>	35%
<i>How many inherited land?</i>	39%
<i>How many sold land?</i>	17%
<i>How many rent land?</i>	22%

Table 2. Overview of land tenure situation in Ban Suan Hom. Data sourced from questionnaires.

Most land sold has been to newcomers from Bangkok, between the early 80s until 2009. The sales took place using informal contracts, and the local farmers do not have copies of the papers themselves.

To summarize it seems that the job-sector of residents in BSH throughout the years has changed from agricultural activities to service-sector jobs, and now back to a combination of service-sector jobs and agricultural practices on either rented land or as day laborers. Very few people still own large portions of land, and some households get a small substitute income on orchards, etc. on their house-area.

3.4 How has the Land Claim affected local resident's hopes and expectations for their future?

Future wealth and land issues

In reference to land tenure security, there was a more or less equal divide between those who believed to be safe from land tenure issues, and those who were afraid that the land they owned and worked on would be taken in the future. All of those in fear, except for one, owned their own land. Three were farmers, and the rest worked with resorts and leisure houses.

Expectations Towards Future Wealth

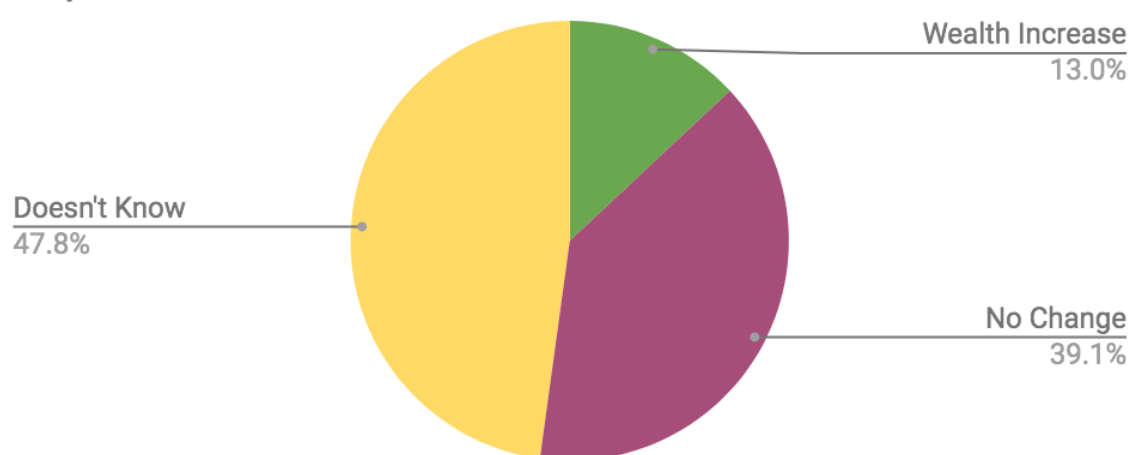


Figure 3. Overview of expectations towards residents of Ban Suan Hom's future wealth situations (%). Data sourced from questionnaires

Respondents gave varied answers regarding expectations of future wealth (Figure 3). Many respondents explained how changes would depend on the national economy, NP authorities, politics, and the upcoming elections.

From the PRA workshop on future scenarios of land tenure, the most popular scenario that residents could imagine was receiving title deeds for their land, thereby receiving full, individual ownership in official terms. Participants of the PRA session had no disadvantages to report from this scenario. Advantages included feelings of land security, being able to pass on land to their children and the ability to mortgage or sell the land. Other scenarios, having Sor Por Gor land or land being under state property, were both criticized for not giving residents the opportunity to feel secure, inherit or sell. The scenario of giving a community title deed to the village was feared to cause unfair advantages, discrimination, and continue to instill a fear of the land being taken back by the government.

3.5 What kinds of everyday and possible organized resistance have the residents pursued and continue to pursue in order to counteract or alleviate the effect of the NP regulations?

The following results have been pieced together through a combination of participant observation, questionnaires, field notes and different forms of interviews.

The first sighting of political activity happened approximately a week into our fieldwork. It was rather by coincidence, that we witnessed a gathering of many of the elderly women of BSH including the village head. At the time we were familiar with many of them and walked over to greet them. The village head answered short-tempered and said they attended a secret meeting in the hillsides and did not want to talk about it. Nevertheless, she shortly after gave us a brochure with a district political candidate with a military background, who we recognized from street advertisements on the main road. Besides this, we did not get the impression that people formed other social groups such as the expected unions or cooperatives.

Other small findings arose from a combination of data from interviews, regular conversations and through questionnaires. Here, it turned out that the bad relationship between the residents and the rangers in the past meant that both shop-owners and residents wouldn't sell products to the rangers, from either the retail-stores or the marketplace. This social sanctioning seemed to be mutual in that the local ranger would also strictly enforce the border-policy despite the TLNP head office official stating that they were 'relaxed' in this regard.

Another account of everyday resistance lies in the engagement of residents who counteract the reforestation process by maintaining the abandoned plots so they will not regrow and be reclaimed by the authorities. We saw an example of this when Preeda showed us her old family land and explained how the village head used the land (section 2.4). Preeda also admitted to stealing bananas from the land, a small but clear sign of everyday resistance that we assume must be much more widespread due to the big amount of fruit trees and crops on abandoned resorts, leisure homes, and old farmland. Nevertheless, we never heard of anyone else who admitted to this practice. When reflecting on the nature of our data-collection and our positioning in the field it seems obvious that people would not tell us of either individual or organized harvest of produce on abandoned areas.

The use of abandoned land, as the above example shows, can be seen as a small tool of resistance within the reach of the residents, a constant struggle for territory, and a dispute over land between residents and the authorities. We even heard of instances where residents took care of abandoned land plots by cutting the grass, because once the NP authority considers land as abandoned, even agriculture is prohibited.

Residents would also lie towards the NP-authorities when asked about ownership of both small plots and bigger areas closer to the forest cover¹¹. Whether this lying is either forced upon them or should be seen as a resistance-practice is too speculative to conclude. There are simply too many unknown factors in this regard. One factor could be potential threats from the landowner's sides,¹² another could be tactic lies in order for the land not to fall into NP-authority hands.

3.6 How has the Land Claim affected residents' relationship with the Thai government and NP authorities?

This information is taken from interviews with the park chief ranger, national park officer, a melon farmer, and a group interview and the community meeting

From our community meeting, we found that there were immediate protests and riots following the enforcement. This immediate reaction nevertheless became more passive over time.

At the community meeting, we found that most residents were still quite hostile towards the government and many still feared that their land would be taken. The melon farmer told us, *"they should have arrested the officers that destroyed the resorts because the officers knew the resorts were being built and didn't do anything about them until they were finished being built"*. Frustration over the erratic enforcements was also repeated by multiple residents during the community meeting. According to the residents, all construction in BSH had been approved by the local authorities. A lot of people, including the village head were frustrated by how disorganized the government has been. The village head, in particular, seemed frustrated by many different officials saying opposing things and enforcing different rules, so the people of BSH are left confused regarding what they are allowed- and not allowed to do.

The relationship between the ranger and the residents initially following the Land Claim was extremely hostile. According to the ranger, *"the residents would not speak to me and the shops would not sell to me"*. Now he claims that they get along well due to time and planned activities together. From his point of view, residents have become less hostile towards him and *"they love each other now"*. However, during our group interview, we found that people still did not like him, one even referred to him as a *"bad guy"*.

We wanted to find out if there had been any deals between the NP officials and the residents that would benefit the residents and therefore, improve relations between the two. The assistant to the Director General of the NP, for instance, said that the residents are allowed to take

¹¹ When seen from another perspective, this practice de facto means that the residents also are part of preventing the reforestation process. As a perspective for further investigation it would have been fruitful to shed light on how the reforestation process is characterized by an incoherent regrowth, while a simultaneous clearing is taking place closer to the forest-cover.

¹² Or the Thai-mafia which often was mentioned as a big land-owner factor in BSH

mushrooms and bamboo shoots from the forest. However, the ranger disagreed with this statement directly, saying that nothing is allowed to be taken from the forest by anyone. Also, very few residents used the forest for collecting products. This was because some were afraid, but also because it was easier and safer to just buy what they needed at the market or in shops. In summary, the relationship immediately following the Land Claim was very hostile and tense, both towards the government and to local rangers and still today there exists conflicting narratives as to whether this relationship has improved or not.

4. Discussion

4.1 Conflicts Resulting from Overlapping Land Claims

Our findings show how the overlap of the TLNP and village territory has negatively affected the socio-economic development of BSH. Being on NP territory means to be under NP law and to be deprived of the right of owning official land titles that secure exclusive rights to the land people cultivate and have built their houses on.¹³ According to Rattanabirabongse *et. al* (1998), secure land tenure rights are necessary to increase agricultural productivity and economic growth in rural areas.¹⁴ Unfortunately, the inhabited and cultivated areas of the TLNP were not included in the Land Titling Project of 1984, perhaps because the National Park Act of 1961 prohibits any land ownership on NP territory. Before the establishment of the TLNP in 1981, the area of BSH was categorized as Reserve Forest, a protected area category which implicates the legal right to own official land titles. Therefore, the attempt to resize the TLNP and to classify its cultivated and inhabited areas back into Reserve Forest in 1994 was probably the only way to include the local community in the Thailand Land Titling Project. Nevertheless, for many farmers, a reclassification of BSH into Reserve Forest in the '90s came too late, since their bad financial situation had already forced them to sell their farmland and give up farming. Therefore, the selling of their land is an indirect result of the land tenure insecurity caused by the NP law.

Not being able to receive subsidies for agriculture from the government, the rural development of the community depended on external investors, the newcomers, that took the risk of investing illegally on NP territory. Furthermore, the lack of official land titles encouraged the establishment of customary laws, that were necessary to regulate who *de facto* owns and *de facto* rents land inside BSH. This case reflects the concept of legal pluralism, described by Neef *et al.* (2006), who argues that customary land tenure systems often conflict with the official legal system. This is also the case in BSH where the customary law conflicts strongly with the official NP law, forbidding residents to sell land, and newcomers to own and use land inside NPs. By giving up farming and selling the land, the community of BSH became economically dependent on the tourism sector, illegally created by the newcomers. Thanks to these investments and the favorable location of BSH tourism flourished and increased the general wealth situation of the whole community, which might be a reason for the harmonious and stable relationship between newcomers and the local villagers, who did not seem to any conflicts in selling transactions or renting agreements. This economic dependency on the

¹³ An exclusive right is a right to exclude third parties from particular uses of a given resource.

¹⁴ The possession of land titles gives people the exclusive and long-term rights to land, which creates a strong incentive to invest in maintaining or improving the value of the land. Furthermore, official land titles are a basic requirement for governmental subsidies and loans.

newcomer's investments strengthened the customary laws and, at the same time, put the local population in a very vulnerable situation since these investments are illegal.

The Land Claim demonstrates the vulnerable situation of the residents. While the original idea by the NP authorities was to target only newcomers, by claiming their land, and destroying their resorts and leisure houses, it indirectly affected the resident's livelihoods (section 3.2). Furthermore, this shows how a top-down approach of enforcing an order without the inclusion of the local population, led to undesired outcomes. The establishment of the TLNP boundary without sufficient ground truthing was the first top-down approach that led to the negative impacts of the Land Claim in 2011. The resizing process around 1994 was an attempt by the government to fix the problems caused by the overlapping land claims which the establishment of the NP boundary in 1981 caused. However, this process failed because the local communities were not well informed and therefore not aware of the consequences of selling their land to newcomers. Therefore, even if the initiative of reclassifying the inhabited areas into Reserve Forest was initially in favor of the local communities, the lack of their involvement in the process, once again, led to a negative result. Therefore, we see the top-down approaches by the authorities as important historical events that led to the negative consequences of the Land Claim and led to dissatisfaction with the government as hypothesized in (iv).

Today, the illegal tourism sector, directly targeted by the Land Claim is beginning to return to its previous activity, since the authorities are not pushing for faster proceedings of the pending court cases.

4.2 Indirect effects of the Land Claim to local livelihoods

According to the livelihoods framework (Figure 2), the Land Claim in 2011 can be considered a "shock" to the livelihoods of the residents in BSH. The event caused changes to their livelihood activities and sources of income as we hypothesized in (i). The shock increased local residents' vulnerability, as it decreased income from main income generating activities, i.e. wage labor and farming. The Land Claim did not lead to significant changes in the type of activities that people engaged in, which suggests that people were not impacted severely enough, or lacked incentive or opportunity to change livelihood strategies. Our literature review also led us to hypothesize that the enforcement of the NP border would directly affect the livelihoods of residents in BSH due to a restriction of access to natural resources, their natural capital (see hypothesis ii). However, in BSH we found this not to be the case. Unlike other cases in the literature (FAO, 2008; Hogarth, 2013) our livelihood analysis showed that this rural population did not depend on the forest for their livelihoods. Rather, residents prefer buying products from the markets, than collecting them in the forest.

Though the residents do not depend on the forest for resources, the presence of the forest still plays a role in their income, because natural environment attracts tourism from which they can make a living i.e. working in resorts and leisure houses or selling products to tourists. This

finding supports the study of Andam *et al.* (2010), who finds that proximity to the forest gives economic benefits to local communities.

The livelihood effects of the Land Claim in BSH were manifested more indirectly by limiting job and income opportunities, rather than directly reducing the natural capital of local residents. Residents are a part of the commercial labor market, not following a subsistence livelihood lifestyle. Wage labor was an important occupation held by more than half of the questionnaire respondents, almost solely in the tourism industry.

Each occupation that we analyzed, faces varying levels of precarity. Precarity, as we interpret it, refers to the state of having insecure employment or income in general (Oxford Dictionaries, 2019). Farmers seem to be wealthier, on average better educated, and were more financially secure than resort workers as they experienced less income decrease following the Land Claim. Their households had more diversified livelihood strategies, as household members typically had other occupations than farming. Wage labor workers had less diversified household incomes and were among the poorest of the questionnaire respondents. This means that the Land Claim affected the poorest, or pushed wage laborers into poverty by lowering income and heightening job insecurity. Ultimately, wage laborers found themselves in the most precarious situation as their livelihood activities were impacted by the shock of Land Claim most drastically. Shop owners were the most affected by the Land Claim in terms of income change. Their income is highly dependent on tourism and the economic wellbeing of BSH so their income decreased by 50 to 75 percent. This was a large loss in income, but they continue to be in a less precarious position than the wage laborers due to the financial stability of their shops and the comfort that they will not be closed down by the government, like resorts. They will always at least have the business of the local resident's as a base despite economic swings dependent on tourism.

Another important livelihood impact of the Land Claim was on land security. Before the Land Claim, selling their own land became a popular livelihood strategy for residents, as farming practices were giving poor results and people lacked the funds to invest in improving agriculture. Selling land left residents with little land to farm and drove the switch to wage labor activities in not legitimized resorts and leisure houses. Many people we spoke to regretted selling their land. Whether this was due to a desire to have continued farming, or rather to be able to resell it for a higher price we do not know. It could also be that residents realized the consequences of the land sales, which halted the conversion into Reserve Forest in '94. In any case, there was a unanimous desire to receive title deeds documenting full ownership of each person's individual land.

Holding our results against the livelihoods framework (Figure 2), it seems that the structures and processes surrounding the local residents of BSH are more important in shaping their livelihoods than changes to various capitals. These structures and processes include the overlapping land claims in BSH, NP legislation and illegitimate activities of wealthy investors. These structures and processes all contribute to the precarity of their livelihoods.

Not all processes negatively impact residents. They do receive some protection from the law, evident through lack of prosecution in the illegal sale of land, whilst newcomers were being arrested and convicted. This shows that the Land Claim was more aimed at targeting newcomers than those living permanently in BSH, even though the residents ended up facing the indirect effects.

4.3 Permanent insecurity and the lack of political resistance

It was part of our initial hypothesis (v) that the residents in Ban Suan Hom would have organized and formed kinds of resistance to cope with the changes their village have faced. However, on arrival, we were struck by the apparent lack of political organization in BSH and neither heard nor saw any signs of this. Our first meeting with a possible act of everyday resistance was the women's secret political meeting as discussed in results (section 3.5). Not all political forms of organization would fit the concept of everyday resistance in which James Scott's original view refers to subordinated people, who by different means possess agency to challenge the dominant ideology (Scott 1985). We know too little of the political candidate's position, but the women's engagement is nevertheless a response to local problems and a sign that villagers are wishing for things to change. The secrecy surrounding the meeting also gave the impression of a controversial activity, which was the first signs of political organization we witnessed.

Given the precariousness and insecurity characterizing the labor-market of the residents of BSH, we were surprised not to find more evident signs of resistance than described in the results (section 3.5). In order to understand why we couldn't confirm our initial hypothesis we turn to sociologist Pierre Bourdieu to explain how insecurity affects people's ability to engage in collective action.

"Casualization profoundly affects the person who suffers it: by making the whole future uncertain, it prevents all rational anticipation and, in particular, the basic belief and hope in the future that one needs in order to rebel, especially collectively, against present conditions" (Bourdieu, 1998).

The word *Casualization* used by Bourdieu in the quote is defined as *"The transformation of a workforce from one employed chiefly on permanent contracts to one engaged on a short-term or casual basis"* (Oxford Dictionaries, 2019). In that sense, it fits the definition of precariousness well and also accounts for the non-contract based wage laboring of BSH residents.

The residents of BSH have experienced many top-down enforcements from state and authorities throughout the years, that all have shaped their current situation, and lack of hopes for the future. As Judith Butler (2015) argues, an almost permanent situation of insecurity and precarity can be seen as *"a new form of regulation"*.

Many of the residents also articulated this insecurity, and when asked about their expectations for the future a regular answer would be *"we don't know - it depends on what 'they' decide"*.

This inherited experience of 'not being heard' and in general being excluded from decision making, combined with the precarious everchanging wage-laboring creates uncertainty and, in Bourdieu's words *prevents all rational anticipation* (Bourdieu, 1998), which might all be reasons behind the lack of collectively organized forms of resistance.

Just as *everyday resistance* was introduced by Scott to account for the lack of rebellions in rural areas (Scott, 1985), we have been drawing on the concepts of *uncertainty* and *precarity* to provide an explanation for the lack of everyday resistance in BSH.

5. Conclusion

Through an interdisciplinary approach, this case study has investigated the contemporary consequences of the implementation of a land claim in Ban Suan Hom village seven years ago. Contrary to the conventional literature on park-people conflicts, these residents did not depend directly on forest resources for their livelihoods, but rather indirectly on the tourism that the natural surroundings of the National Park have attracted. Problems for residents' stem from top-down approaches by governmental authorities that have led to overlapping land claims. This situation of legal pluralism is responsible for insecure land tenure rights and has led the residents to depend strongly on the illegal tourism sector created by newcomers.

The relationship between the residents and the government immediately following the Land Claim was hostile, and today there continues to exist conflicting narratives as to whether this relationship has improved. The residents of BSH have limited space for maneuvering between different livelihood strategies, with little land of their own, low levels of income and education, and few opportunities to make use of the forest in which they live. They live under conflicting laws and policies, that on the one hand aim to protect their livelihoods, whilst on the other hand limit their development opportunities by not giving them exclusive rights to their land, and by preventing expansion of local livelihood activities, both in agricultural work, and tourism-related wage labor. Lack of contracts in both land tenure and employment further consolidates their precarious situation. The feeling that at any moment the government could intervene and take away their land or jobs creates a general feeling of insecurity and powerlessness. Residents thereby feel unable to fight back or organize because of little legal power and resources at their disposal to resist.

References

Andam, K. S., Ferraro, P. J., Sims, K. R., Healy, A., & Holland, M. B. (2010). Protected areas reduced poverty in Costa Rica and Thailand. *Proceedings of the National Academy of Sciences*, 107(22), 9996-10001.

Asia News Monitor (2011). *Thailand: National park and forestry personnel destroy illegally located resorts*. Asia News Monitor; (Bangkok) 21 Dec 2011.

AsianLII. (2019). National Park Act 1961. Available from: http://www.asianlii.org/th/legis/consol_act/npa1961141/

Bennett, N. J., & Dearden, P. (2014). Why local people do not support conservation: Community perceptions of marine protected area livelihood impacts, governance and management in Thailand. *Marine policy*, 44, 107-116.

Birch-Thomsen, T (2019). GPS - the Global Position System, How can YOU use it in your fieldwork?

Bugna, S., & Rambaldi, G. (2001). A review of the protected area system of Thailand. *Asean Biodiversity*, 1(3), 36-41.

Butler, J. (2015). Foreward. In Lorey I. (Ed.), *State of insecurity: Government of the precarious* (pp. vii–xi). London: Verso

CIFOR. (2017). The PEN Prototype Questionnaire. Accessed 25th March 2019. Available from: <https://www.cifor.org/pen/the-pen-prototype-questionnaire/>

Dearden, P., Chettamart, S., Emphandu, D., & Tanakanjana, N. (1996). National parks and hill tribes in northern Thailand: a case study of Doi Inthanon. *Society & Natural Resources*, 9(2), 125-141.

DeWalt, Kathleen Musante, and DeWalt, Billie R. (2010). *Participant Observation: A Guide for Fieldworkers* (2nd ed.). Altamira Press.

DFID. 2000. Sustainable livelihoods guidance sheets.

Ellis, F. (2000). *Rural livelihoods and diversity in developing countries*. Oxford university press.

FAO (2008). Food & Agriculture Organisation of the United Nations. Links between national forest programmes and poverty reduction strategies. Forestry Policy and Institutions Working Paper 22. Rome: Forestry Department.

Ganjanapan, A. (1998). The politics of conservation and the complexity of local control of forests in the northern Thai highlands. *Mountain research and development*, 71-82.

Hogarth, N. J., Belcher, B., Campbell, B., & Stacey, N. (2013). The role of forest-related income in household economies and rural livelihoods in the border-region of Southern China. *World Development*, 43, 111-123.

Johnson, C. and Forsyth, T. (2008). 'In the eyes of the state : negotiating a “ rights-based approach ” to forest conservation in Thailand'. doi: 10.1016/S0305-750X(02)00057-8.

Kareiva, P., & Marvier, M. (2012). What is conservation science?. *BioScience*, 62(11), 962-969.

Kelly, A. B. (2013). Conservation practice as primitive accumulation. In *New Frontiers of Land Control* (pp. 23-42). Routledge.

Neef, A., Hager, J., Wirth, T., Schwarzmeier, R., & Heidhues, F. (2006). Land tenure and water rights in Thailand and Vietnam: Challenges for ethnic minorities in mountainous forest regions. *Geographica Helvetica*, 61(4), 255-265.

Oxford Dictionaries (2019). Available from:
<https://en.oxforddictionaries.com/definition/precarity>

Pongpattananurak, N. (2018). Impacts from tourism development and agriculture on forest degradation in Thap Lan National Park and adjacent areas. *Agriculture and Natural Resources*, 52(3), 290-297.

Rattanabirabongse, V., Eddington, R. A., Burns, A. F., & Nettle, K. G. (1998). The Thailand land titling project—thirteen years of experience. *Land Use Policy*, 15(1), 3-23.

Roth, R. (2004). On the colonial margins and in the global hotspot: Park–people conflicts in highland Thailand. *Asia Pacific Viewpoint*, 45(1), 13-32.

Scott, James C. (1987). *Everyday forms of Peasant resistance*, in James C. Scott and benedict J. Teria Kerkvliet (eds.) *Everyday Forms of peasant resistance in South-East Asia*. London: Frank Cass.

Steffen, W., Crutzen, P. J., & McNeill, J. R. (2007). The Anthropocene: are humans now overwhelming the great forces of nature. *AMBIO: A Journal of the Human Environment*, 36(8), 614-622.

Tijdschriftframe, (2017). *Frame 30.2 – Precarious Work, Precarious Life*. Available from: <http://www.tijdschriftframe.nl/portfolio/item/frame-30-2-precarious-work-precarious-life>

Treue, T. (2019). Thailand - description of field site and research themes 2019. University of Copenhagen.

Watson, J. E., Dudley, N., Segan, D. B., & Hockings, M. (2014). The performance and potential of protected areas. *Nature*, 515(7525), 67.

Wax, R. (1971). *Doing fieldwork, Warnings and advice* (Midway Reprint ed.). Chicago and London: The University of Chicago Press.

WRM (2014). Thailand's New 'Forestry Master Plan: Same old strategy dressed up in new clothes. *World Rainforest Movement*, 9 December. Available from: <https://wrm.org.uy/articles-from-the-wrm-bulletin/section1/thailands-new-forestry-master-plan-same-old-strategy-dressed-up-in-new-clothes/>

Appendix

Appendix A - Final Synopsis

Introduction:

On the backdrop of global climate change and an increasing focus on sustainability, protecting life on land (and water) has become an increasing priority on the international development agenda. Protecting biodiversity through conservation is not only for the sake of nature itself, but also for the sake of having a healthy environment for humans. A decade ago the concept of *The Anthropocene* was developed to describe this interconnectedness (Steffen et al. 2007). The concept is now being widely used in different scientific disciplines to emphasize the all-encompassing influence human activities have on our world (ibid). The knowledge of the negative impacts of our activities has created an awareness of the need to carefully manage and protect the natural environment. In an article from 2012, professor in environment and sustainability Peter Kareiva argues;

“...the fate of nature and that of people are deeply intertwined. Human health and well-being depend on clean air, clean water, and an adequate supply of natural resources for food and shelter. Many of the activities that harm biodiversity also harm human well-being” (Kareiva 2012, p.??).

In the past century, the number of protected areas, including national parks, has risen exponentially around the world, especially in developing countries (Kelly, 2013). As a result, people living within and around national parks have felt the effects of changing access to natural resources, impacting their livelihoods and ways of interacting with their surrounding environment (Roth, 2004). Although involving local communities in decision making has become more commonplace, there are still many local people who are left without a say in these conservation practices (Bugna, 2001).

Background

In Thailand, a history of colonial influence in neighboring countries has resulted in the management of forests in national and international interests, rather than as an important resource for local communities (ibid.). These management practices date back to the foundation of the Royal Forestry Department (RFP) in 1896, which aimed to control concessions over teak and other valuable timber in northern Thailand (Roth, 2004). In the past century, Thailand experienced a big reduction of its forest resources due to over-harvesting of timber and rapid growth in its economy and population (Bugna, 2001). In the 1960s, two

important pieces of legislation, the Wild Animal Preservation and Protection Act (1960) and the National Park Act (1961), laid the legal foundation for creating protected areas, such as wildlife sanctuaries and national parks (Bugna, 2001). In non-protected areas, however, encroachment and poaching continued almost undisturbed, reducing species richness, causing the extinction of several animal and plant species, and reducing the forest reserves almost exclusively to protected areas.

In the past century, conceptions of nature and conservation in Thailand have been influenced by Western ideas of separating people from nature (Roth, 2004). This approach to nature and conservation has led to several problems since a large part of the population lives within protected areas and relies on the natural environment for their survival. Local Thai communities use of the forest has only been partly tolerated throughout time, but never legitimised (Roth, 2004). Using national park policies, the RFD and the military gained the legal right to displace entire communities from protected areas (Ganjanapan, 1998). Research on park-people relations in Thailand have typically focused on political and ethnic conflicts in the northern highlands, nevertheless the impacts of national park policies affects the entire country. In 2014, the government formed a new legislation, the Forestry Master Plan of 2014, with the aim of increasing forest cover from 33%-40% within 10 years (WRM, 2014). This goal has involved the altering of protected area boundaries to reclaim land for forests that have been used without official permission.

One such area where national park boundaries have been changed is the Thap Lan National Park in central Thailand. The Thap Lan National Park was established in 1981 and covers an area of 2235.8 km². The area in and around the Thap Lan National Park has become a well-known tourist destination for Thais, due to its natural environment, agriculture and cultural activities (Pongpattananurak, 2018). The developments in the area have impacted local environmental conditions, altering the composition of the forest, including increasing the number of invasive species and a decline in native species, as well as making the forest more fragmented (ibid). About 7 years ago, the Thai government decided to expand/enforce the boundary of the park. The aim of this study is to investigate the biophysical and livelihood impacts of this border change at the local level.

Theoretical Context

Our study will position itself in the academic area of conservation science, drawing from different backgrounds relating to economics, agriculture, geography, and anthropology. According to Peter Kareiva, in his article "What is Conservation Science?" (2012), conservation science is based off a few different core postulates including that the fate of nature

and humans are deeply intertwined. Conservation science acknowledges that conservation efforts are only likely to succeed when they are done to both maximize conservation and economic objectives. We chose to approach our research with a theoretical context of conservation science because the main idea is “advocating conservation for the people rather than from the people” (Peter 2012, p.968).

Moreover, our research touches on the academic debate regarding land sharing vs. land sparing as strategies towards protecting the environment and biodiversity. Land sparing is the idea that conserving nature is most effective when humans are out of the picture and therefore agricultural land should be intensified to spare land. Land sharing is the idea that humans infiltrating natural ecosystems in mosaic landscapes (e.g. forests and agriculture) can better protect biodiversity and that conventional, intensified agriculture is harmful to the environment (Mertz & Mertens, 2017). The Thai model of conservation seems to be advocating land sparing, but at what cost, and how effective is this strategy actually in boundary areas, where human activity is already widespread?

Our research is investigating whether the people of a small village residing on the border of Thap Lan National Park are being negatively affected by the conservation efforts made by the government, and assessing the outcomes of conservation that involve the expansion of a protected area to include already inhabited areas.

Research Objective

Our study site is the Ban Suan Hom village, situated on the border of Thap Lan National Park. The border changes implemented 7 years ago affected Ban Suan Hom by including part of the village and its agricultural land. We expect this border change to have had impacts on local villager's livelihoods including their everyday activities, strategies and changes in social relations. Conservation has historically prioritized the environment over local livelihoods. We want to address the effects of conservation on the locals, and assess at what cost these changes have taken place. **Our main research question is:**

What have been the biophysical and livelihood impacts from the enforcement/expansion of the Thap Lan National Park boundaries?

Sub-questions:

1. How have villagers livelihood assets, activities and strategies changed due to the NP border expansion/enforcement?

2. To what extent has the NP border enforcement/expansion affected social relations between villagers (gender, age, inequality, ethnicity), and between villagers and rangers?
3. What are the NP regulations, to what extent are villagers aware of these regulations, and how are they being punished in case of defiance?
4. What kinds of everyday resistance are the villagers (or rangers?) pursuing in order to counteract the NP regulations?
5. How do NP regulations conflict with official land tenure certificates owned by the locals?
6. How have villagers' attitudes changed towards the Thai government and NP authorities?
7. What is the vegetation cover of the newly expanded NP area and how has it changed since the enforcement of the boundary?

2. Methodology – proposed methods and timeline

In an attempt to answer our previously mentioned research questions, we will make use of a wide variety of methods within the academic disciplines of both social and natural science. The proposed methods are all chosen in order to gather and construct data and shed light on our main research question - being an investigation of impacts on Ban Suan Hom villagers' livelihoods due to changes in the National Park boundary.

Participant Observation

Participant observation (PO) can be seen both as a way of collecting/constructing data as well as an analytical tool. It is a method in which observers can register and be part of everyday activities and events of the villagers, that are not verbally articulated (Dewalt & Dewalt (1998: 252,260).

All our interactions with the villagers will be considered as PO, and will provide us with a better understanding of what is important to people's lives, both in relation to the national boundary changes, but also unexpected fields of interest that we otherwise wouldn't have discovered.

During our first encounter with the villagers, in collaboration with our co thai-students, we expect to emphasize the *observation* part of participant observation, meaning that we will spend some time introducing ourselves and our project and engaging in conversations, getting an idea of which households and villagers are willing to talk, and observing people's daily activities. Here we also rely on the snowball-effect where informants themselves either

introduce us, or suggests who else we might talk to. Later on we expect to be invited to *participate* in some of the everyday activities of the villagers, thereby obtaining and achieving hands-on experiences in livelihood activities and villagers' use of the national park, shedding light on our research questions.

PO will be a method we will continue to practice throughout the fieldwork.

Questionnaire

We will make use of questionnaires as a tool to provide quantitative data to achieve an overview of themes of importance to the households. This is a useful method to use in an early stage of the fieldwork, in order to get large amounts of information to localise which topics we want to further analyse later on in the process (Casley & Kumar 1988:54). This could also be useful for grouping people together so we could later conduct a focus group interview on them.

The questionnaire will gather data on household compositions, livelihood activities, income sources and assets before and after the border change/enforcement.

We will do a testing of the questionnaires on our fellow Thai-students, followed by a rewriting of necessary changes they might suggest. Because the number of households in Buan San Hom is only around 70, we will attempt to achieve a full sampling, or at least as many as possible. If this turns out to be more time consuming than we thought, we will instead choose the households through a systematic sampling, getting a spatial distribution from both sides of the border boundary as well as across income groups among the households. During the response of the questionnaires one or two group members will be present alongside a translator if any misunderstandings should occur.

Interviews

Semi-structured

We will mainly make use of semi-structured interviews (SSI) throughout our fieldwork. Some of the characteristics of the SSI are the open-ended questions as well as an informal atmosphere, which we see as an advantage because our fieldwork has a limited time frame.

Even though SSI limits the control of the conversation, we, as interviewers, still have the possibility to ask specific questions and thereby ask informants to elaborate on themes that arose from analyzing the questionnaires. The SSI will therefore be conducted after we have finished and received the preferred amount of questionnaires to give us more in-depth, qualitative data. The informal form of the SSI also allow us to observe and get data from a more fluent and free conversation, thereby addressing things of importance for the villagers, that we overlooked in the questionnaire.

We will attempt to pick out households if its members have key positions that are of interest to our research, this could be gender-based or work-related such as; rangers, unskilled worker etc. We expect to conduct most SSI with people from households whom we have already established a relationship to at an earlier point.

Focus-group interviews

Since we expect some of our research questions to change a few days after arrival due to a deeper understanding of the concrete problems at hand, we will carry out focus-group interviews (FGI) with homogenous participants who presumably share similar positions in the village.

The categorization of informants for the focus-groups interviews could either be gendered, work-relation based, age-based and/or related to where households are positioned in relation to the national park boundary. We might also chose to carry out a heterogeneous FGI if we do not risk the creation of an unethical or conflicting situation.

One of the main advantages of FGI are the observation of internal reactions and dynamics between the informants, while the conservation takes place. Therefore we will have 1-2 moderators, at least one of them Thai-speaking, while the rest either records or type notes, capturing the atmosphere, mood and essence of the debate/conversation.

For all types of conducted interviews we will obtain informed consent.

Participatory Rural Appraisal

PRA can be used to involve the villagers in the data collection process. We plan to either hold a separate session for just administering these activities or including them in our semi-structured or focus group-interviews. Both options are possible. These are a few of the methods we plan on using:

- Village Mapping

- How do you see your village now?

- They will include relevant landmarks, routes, and areas. The aim is to locate the places and trajectories followed by the villagers in Ban Suan Hom and see their interactions (if there are any) within the border of Thap Lan National Park.

- How do you see your village changing in the future?

- We will investigate what sort of things the villagers want to see changed and how does this contrast with how the villagers expect the village to actually change. This will also illuminate whether or not the villager's have a mainly optimistic or pessimistic view towards the future of their village, and what power they feel they have to reach the future they aspire for.

We will ask them to draw: their home, their land, their daily routes/activities, places that are important to them, places they avoid, tourism activities etc.

We will need at least two people facilitating each session. One is going to be the **administrator**. The administrator will conduct the activities alongside an interpreter or a student that speaks the native language. There also needs to be one or two **note takers** who will act passively throughout the session, noting relevant information, collecting any interesting data, and presenting it to the rest of the group.

Vegetation Cover Analysis

National Parks are areas that are meant preserve fauna and flora inside its boundaries. With that logic in mind, the idea is that the border change has increased the preservation of the newly acquired land. The aim of the vegetation cover analysis is to map and assess the environment within the newly acquired National Park area and how it has changed. This will be assessed using GPS, satellite imagery and talking to villagers.

GPS - Global Positioning System

GPS is a satellite based navigation system that was developed by the US Department of Defense for military purposes (Birch-Thomsen, 2019). There are a few different ways we plan on using GPS as a tool:

- Village mapping
 - Ideally we will be able to utilize our GPS most days in the village and track important landmarks, agricultural land, borders, and areas of Ban Suan Hom.
- Marking the original national park border and comparing it to the current national park border
- Marking the routes of the villagers and any important resource extraction points (within the national park or not)
 - Ideally we want to be able to track a typical route of a villager that might use resources from the national park.

Data that we retrieve from the GPS device will then be imported into a computer for further spatial analysis.

TIMELINE

This is a rough outline of a schedule for our field work while in Thailand:

Activity	1/3	2/3	3/3	4/3	5/3	6/3	7/3	8/3	9/3	10/3
Participant Observation	X	X	X	X	X	X	X	X	X	X
Interviews	X				X	X	X	X	X	
Questionnaire		X	X	X						
PRA						X	X			
Vegetation assessment					X	X				
GPS		X	X	X	X	X	X	X	X	

3. References

Birch-Thomsen, T (2019). GPS - the Global Position System, How can YOU use it in your fieldwork? Retrieved from: <https://absalon.ku.dk/>

Buergin, R. (2000). " Hilltribes" and forests: minority policies and resource conflicts in Thailand. *SEFUT Working Paper-Socio-Economics of Forest Use in the Tropics and Subtropics*, (7).

Bugna, S., & Rambaldi, G. (2001). A review of the protected area system of Thailand. *Asean Biodiversity*, 1(3), 36-41.

Casley, D. J., & Kumar, K. (1988). The collection, analysis and use of monitoring and evaluation data. The World Bank, pp. 10-75.

Dewalt & Dewalt, (1998). Participant Observation in: *Handbook of Methods in Cultural Anthropology*. AltaMira Press: Walnut Creek. Pp. 259-70

Emphandhu, D., & Chettamart, S. (2003). Thailand's experience in protected area management. *Faculty of Forestry, Kasetsart University, Bangkok, Thailand*.

Ganjanapan, A. (1998). The politics of conservation and the complexity of local control of forests in the northern Thai highlands. *Mountain research and development*, 71-82.

ICEM (International Center for Environmental Management). (2003). Thailand: National Report on Protected Areas and Development: Review of Protected Areas and Development in the Lower Mekong River Region.

Kelly, A. B. (2013). Conservation practice as primitive accumulation. In *New Frontiers of Land Control* (pp. 23-42). Routledge.

Mertz O, Mertens CF. (2017): Land Sparing and Land Sharing Policies in Developing Countries – Drivers and Linkages to Scientific Debates. *World Development* 98: 523-535.

Ongsomwang, S., & Srisuwan, A. (2012). Integration of geoinformatics and landscape metrics for forest resources assessment in Thap Lan National Park. *Thai J. For*, 31(2), 29-41.

Peter Kareiva, Michelle Marvier; What Is Conservation Science?, *BioScience*, Volume 62, Issue 11, 1 November 2012, Pages 962–969

Pongpattananurak, N. (2018). Impacts from tourism development and agriculture on forest degradation in Thap Lan National Park and adjacent areas. *Agriculture and Natural Resources*, 52(3), 290-297.

Roth, R. (2004). On the colonial margins and in the global hotspot: Park–people conflicts in highland Thailand. *Asia Pacific Viewpoint*, 45(1), 13-32.

Steffen W Crutzen PJ McNeill JR. 2007. The Anthropocene: Are humans now overwhelming the great forces of nature? *Ambio* 36: 614–621.

4. Appendices

Data Matrix:

What have been the biophysical and livelihood impacts from the enforcement/expansion of the Thap Lan National Park boundaries?

Sub Questions	Data Required	Methods
How have villagers livelihood assets, activities and strategies changed due to the NP border expansion/enforcement?	Livelihood activities, income sources and numbers Demographics Agricultural practices Official NP map	Livelihood questionnaire Participant observation SSI PRA
To what extent has the NP border enforcement/expansion affected social relations between villagers (gender, age, inequality, ethnicity), and between villagers and rangers?	Qualitative data from interviews and conversations	Semi-structured interviews Focus group interviews Participant observation PRA “Deep Hanging Out”
What are the NP regulations, to what extent are villagers aware of these regulations, and how are they being punished in case of defiance?	Questionnaire Border maps NP Regulations Qualitative data from interviews and conversations	GPS Tracking, Questionnaire, SSI Participant observation
What kinds of everyday resistance are the villagers (or rangers?) pursuing in order to counteract the NP regulations?	Qualitative Data from interviews and participant observation	Focus group interviews Semi-structured interviews Participant observation
How do NP regulations conflict with official land tenure certificates owned by the locals?	Quantitative data + data from interviews	Semi-structured interviews with villagers Participant observation
How have villagers' attitudes changed towards the Thai government and NP authorities?	Transcribed data from recorded interviews Fieldnotes from PO	Semi-structured interviews with villagers Participant observation
What is the vegetation cover of the newly expanded NP area and how has it changed since the enforcement of the boundary?	Interviews Photos Map	Vegetation Cover Analysis GPS

Appendix B – Methods list

Method	Number of Conducted Units
Questionnaire	23
Semi-Structured Interviews	5
PRA	1
GPS Tracking	1
Community Tours	2
PO	4
Group Interview	1

Appendix C – Questionnaire

- *Intro about our research (short and simple)*
- *Ask if we can make a questionnaire*
- *Say how much time it will take*
- *Tell them they will be anonymous*
- *Some of this information might seem boring to her, but things are so different in our country, and we know so little about this village and are very interested to learn from you...*

Control information

Interviewer:	
Translator:	
Entering data:	

Identification

Name:	
Age:	
Gender:	
Education:	
Occupation:	
Address/GPS Reference Point:	
How long have you lived in BSH?	

Household composition

<i>Name of household member</i>	<i>Relation to person interviewed</i>	<i>Age</i>	<i>Sex</i>	<i>Formal education</i>	<i>Current occupation</i>

Land

1. How much land do you own? (In Rai)
 - a. Did you inherit it or did you buy it?
If you bought it:
 - i. How much did you pay?
 - ii. When did you buy it?
 - b. Do you rent out land?
If yes:
 - i. What is your renting arrangement?
Official contract
Informal contract
verbal arrangement
other
 - ii. For how long have you been renting out the land?
 - iii. How many Rais do you rent out?
 - iv. How much profit do you make from renting out the land?
2. Have you sold land?
If yes:
 - a. How much land have you sold?
 - b. When did you sell the land?
 - c. Who have you sold the land to?
 - d. What was the selling arrangement?
Official contract
Informal contract
Verbal arrangement
Other
3. Are you renting land?
If yes:
 1. How much land do you rent?
 2. How much do you pay for rent?
 3. For how long have you been renting the land?
 4. How long can you rent it?
 5. What are your further expenses related to the land (hired labour, water, electricity, machinery)
4. Other land arrangement (if none of the above)?

5. What are you using the land for (indicate percentages/rai)?
- a. Crop
 - b. Livestock
 - c. House
 - d. Garden use
 - e. Other

Housing

1. Do you have your own house?
2. Is your house on your own land?

Savings and credit:

1. How much money does your household have saved in the bank or somewhere else?
2. Does the household have any debts?

If yes

- a. How many baht in debt?
- b. How long has the household been in debt?
- c. What are the reasons for the indebtedness?

Current Financial income sources (mark with X)

Agriculture

Wage labour

Forest products

Own business (e.g. shop)

Other

What were your income sources before the Land Claim? (mark with X)

Agriculture

Wage labour

Forest products

Own business (e.g. shop)

Other

Were your financial income sources different 20 years ago (mark with X)

Agriculture

Wage labour

Forest products

Own business (e.g. shop)

Other

Other income sources today (mark with X)

Pension

Remittances (money from relatives)

Gifts/support from friends and relatives

Support from government, NGO or other organization

Handicrafts

Others:

Agriculture (per year)

Crops or livestock	Area of production (rai)	Unit of production	Price per unit	Total yield	Amount for own use (units)	Amount sold (units)	Own land (mark with X)	Rented land (mark with X)	Other land (Specify)

1. What is your total income from agriculture (netto)?
 - a. Where do you sell your agricultural products?
 - b. Who do you sell them to?
2. How have your agricultural activities changed since the Land Claim?
 - a. What were the reasons for the change?
3. How have your agricultural activities changed from 20 years ago?
 - b. What were the reasons for the change?

Livestock

1. Do you have livestock?

If yes...

How many livestock do you have?

What kind of livestock?

What products do you use from livestock?

Do you use it for...

- a. Own use
- b. Selling

What is your total income from livestock?

2. How have your livestock activities changed since the Land Claim?

- a. What were the reasons for the change?

3. How have your livestock activities changed since 20 years ago?

- a. What were the reasons for the change?

Wage Labour

<i>Type of Employment</i>	<i>How many Hours/week</i>	<i>Total Income (per month)</i>	<i>In Ban Suan Hom?</i>

1. How have your wage labour activities changed since the Land Claim?

a. What were the reasons for the change

2. How have your wage labour activities changed from 20 years ago?

a. What were the reasons for the change?

Forest products

1. Have you been collecting products from the forest/hunting in the past 20 years?

If yes, fill in table

<i>Collecting from forest/huting</i>	<i>Type of product</i>	<i>How many days/week</i>	<i>Own use</i>	<i>Selling</i>	<i>Total income</i>

Now					
7 years ago (Land Claim)					
20 years ago					

2. What are the reasons for the changes?

Own business

1. Do you run your own business? (non-farm activity)

If yes

- a. What kind of business?
- b. What is your income from business (per month)? ?

How has your business changed since the Land Claim?

- c. What were the reasons for the change?

3. How has your business changed from 20 years ago?

- d. What were the reasons for the change?

Wealth changes

1. How well-off is your household today compared with before the National Park Land Claim?
2. How well-off is your household today compared with 20 years ago

What have been the main reasons for these changes (rank 1-3??):

Year	Reasons	Rank 1-3???
Land Claim - until today (7 years ago)		
20 years ago		

2. If you need help (e.g. money, food...), can you get help from other village members if you need it?

If yes

- a. From who?

3. Do you ever help anyone else?

Who and how?

4. How do you think your wealth situation will change in the future?

- a. Why?

Are you afraid your land will be taken in the future?

Appendix D – Statistics from TLNP Forest

Income Statistics from Ban Suan Hom TLNP Forest, TLNP Head Office

Fiscal year	During the month	Income	Number of people	Note
2016	October 2015 - September 2016	22,270	743	
2017	October 2016 - September 2017	151,950	5,065	
2018	October 2017 - September 2018	190,570	6,353	

Appendix E – Timeline of BSH history

