



Land Use Movement of Villagers in Ban Baw Kaew, Khon San District, Chaiyaphum Province

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Abstract— *Land Management has a major impact on natural resources. Since 1750, the major effect has been deforestation of temperate regions. In Northeastern Thailand, to identify land-use expectations to secure the maintenance of ecosystem and the villagers' traditional way of life is important including the understanding of its conditions. Ban Baw Kaew, situated in the northern most districts, Amphoe Khon San of Chaiyaphum Province has been chosen as the study area due to its enormous range of land use purposes. In 1973, the Royal Forestry Department (RFD) designated 290,000 rai of land in Tambon Thung Pra as reserve forest and gave a concession of 20,000 rai to the Forest Industry Organization (FIO) in 1978 despite the fact that more than 100 households claimed to have been living and working on the land for decades. As a consequence, Community Land Title has been considered a self-defined issue to manage land and resources. Becoming the legal reference of land use matters most taken into account most, the Community Land Title or Chanod Chumchun has been the target of the villagers' movement so as to define ownership. The current process of Baw Kaew community to reach their ultimate goal is in action regardless of the trouble they have engaged for years.*

Keywords— **Ban Baw Kaew, community forest, community land title (Chanod Chumchun), land use movement, Royal Forestry Department.**

1. INTRODUCTION

Land management practices have a major impact on natural resources including water, soil, nutrients, plants and animals. Land use information can be used to develop solutions for natural resource management issues such as salinity and water quality. For instance, water bodies in a region that has been deforested or having erosion will have different water quality than those in areas that are forested. The major effect of land use on land cover since 1970 has been deforestation of temperate regions. More recent significant effects of land use include urban sprawl, soil erosion, soil degradation, and desertification.

Land-use changes, together with the use of fossil fuels, are major anthropogenic sources of carbon dioxide, a dominant greenhouse gas.

According to a report by the United Nations' Food and Agriculture Organization, land degradation has been exacerbated where there has been an absence of any land use planning, or of its orderly execution, or the existence of financial or legal incentives that have led to wrong land use decisions, or one-sided central planning leading to over-utilization of the land resources - for instance for

immediate production at all costs. As a consequence the result has often been misery for large segments of the local population and destruction of valuable ecosystems. Such narrow approaches should be replaced by a technique for the planning and management of land resources that is integrated and holistic and where land users are central. This will ensure the long-term quality of the land for human use, the prevention or resolution of social conflicts related to land use, and the conservation of ecosystems of high biodiversity value.

The conversion of land from natural vegetation forest in many cases to agricultural land uses is often perceived as environmentally degrading, especially in terms of rapidly declining soil quality. Claims are being made that intensively used agricultural areas cannot buffer the adverse effects of agriculture on the environment (Islam and Weil, 2000). However, the need to secure and increase land productivity in order to survive is crucial for many people in rural areas, especially in the developing world, which therefore need to expand — and subsequently develop — agricultural areas in order to secure their livelihoods (Brookfield, 2001). Pressure on the land inevitably leads to changes in land use, basically triggered by the need to achieve higher agricultural production (Nielsen and Zoebisch, 2001; Zoebisch and de Pauw, 2002). Land-use changes are typically characterized in terms of changes of crops, land husbandry practices, and inputs used, such as capital, labour, fertilizers, and pesticides (Pulleman et al., 2000). Such conversion of natural landscapes to agricultural land is particularly evident in the tropics where the farmers usually practice low-external-input agriculture. Estimates of the global extent of conversion of natural to agricultural ecosystems over three centuries (1700-2000) showed that the study of land use is one of the most important factors for planning and managing activities

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concerning the use of land surface where almost all countries, the state and the regional/local authorities are engaged in long term broad land use planning. Detailed local planning procedures also exist in order to promote balanced changes in land use and then to appropriately guide the spatial organization of different activities. However, very seldom has spatial planning helped in maintaining forest cover and usually caused biodiversity or other ecological losses.

In Southeast Asia, land use (e.g. swidden cultivation) and land cover (e.g. secondary vegetation) have remained stable and the minor amount of land-use change that has occurred has been a change from swidden to monocultural cash crops. In this region, two forces will increasingly determine land-use systems. First, national land tenure policies: the nationalization of forest lands and efforts to increase control over upland resources by central governments that will provide a push factor making it increasingly difficult for farmers to maintain their traditional swidden land-use practices. Second, market pressures: the commercialization of subsistence resources and the substitution of commercial crops for subsistence crops that will provide a pull factor encouraging farmers to engage in new and different forms of commercial agriculture (Fox & Vogler, 2005).

Land use of Thailand can be classified into 6 major classes; forest area, agriculture area, built-up/urban areas, grass land/old clearing area, open land/bare land, and water bodies. Roughly two-fifths of Thailand is covered by mountains and hills, the steepness of which generally precludes cultivation. Nevertheless, perhaps as much as a tenth of this area might also be converted to agricultural purposes in the near future as Thailand became more active in world trade and the international community. As it made the transition from less developed country to industrialized state, the traditional practice of measuring status by the extent of landholdings became less meaningful. Although the royal family remained the largest landholders, their wealth was often surpassed by that of members of the business community and the bureaucracy (including the military), who derived their growing affluence from diverse sources.

Nineteenth-century legislation set a four-hectare limit on freely acquirable agricultural land and acted as a major deterrent to the accumulation of land into large estates. But statistical data on tenancy in the mid-twentieth century varied considerably. A problem of classification concerning whether the fairly numerous part owner-part tenant arrangements should be included with owners or tenants also led to different conclusions. The part owner-part tenant group consisted largely of farmers who owned small plots but also worked as tenants on other larger farms. The Thai farmer's ability to adapt to changing market conditions contributed to the country's agricultural success, but even more important was the availability of large areas of virgin land for cultivation.

Agriculture was dominated by smallholders, most of whom had either outright title to the land or effective possession of it; tenancy was significant only in parts of the central plain. In the Northeast, the generally infertile soil required larger holdings to meet subsistence needs.

Over half the farms had between 2.4 and 7.2 hectares, and the typical farm had an area of about 4 hectares. In the early 1980s, about 40 percent of the country's agricultural households lived in this region whereas commercial rice farms outside the cities averaged over ten hectares.

For many years, Northeastern Thailand has had the largest rural population growth and is known to have the greatest agricultural development potential for Thailand. The optimizing of land use for agriculture systems, which have been developed on marginal sandy soils within an undulating landscape, and for other purposes has been identified as a very important requirement for the achievement of economic and social benefits. As a result, the extent of forest clearing for cropland has increased significantly since 1950 (Myers, 1996).

It has commonly been observed that clearing and cultivation of forest land leads to a deterioration of the physical, chemical, and biological properties of soils and that reforestation measures gradually restore soil quality (Islam and Weil, 2000). However, with appropriate land-use technologies that are suited to the location-specific needs of an area, even under continued permanent agricultural land use, soil quality can be maintained and improved (Kotto-Same *et al.*, 1997). In Northeastern Thailand as mentioned previously, the intercropping of maize with legumes, such as spineless mimosa (*Mimosa invisa*) or pigeon pea (*Cajanus cajan*) resulted in higher grain yields than the conventional continuous monocropping of maize and led to a better protection of the soil against erosion and an overall improvement of the soil quality (Suwanarit *et al.*, 1999). Similar positive effects on soil quality have been found with sequential cropping systems, contour tillage, and contour-strip and hedgerow cultivation methods (Poudel *et al.*, 2000; Thapa *et al.*, 2001).

With increasing pressure on the land, changes in land use that lead to higher land productivity appear to be unavoidable. The rain-fed farming areas of northeastern Thailand are typical examples of rapid land-use changes prompted by the rapid increases in productivity needs and expectations of the land users. In order to identify land-use technologies that match productivity expectations with environmental concerns and to secure the maintenance of soil quality, it is important to understand the conditions that lead to changes in land use.

2. OBJECTIVE

The research aims to find out the land use movement of the villagers in Ban Baw Kaew and its phenomena on both the physical environment and people's way of practice. The Study covers June 2011 – December 2012.

3. STUDY AREA AND ITS BACKGROUND

Ban Baw Kaew, Tambon Thung Pra is focused as the study area due to its enormous diversity of land use purposes, for instance; rice growing, non-chemical plantation, mono-crop agriculture and residential area. This paper is a primary review of such a study of which

the full report will be completed by end of December, 2012.

Situated in the Northeast region of Thailand known as Isaan, Chaiyaphum Province is divided into 16 districts, of which Khon San is the northernmost. In the early part of the Rattanakosin era at the end of the 18th century, Mr. Phumi led the people from Mueang Nakhon Thai, a subordinate of Phitsanulok, to establish their new town in the area. He was the town leader who sent tribute to King Rama 1 and he was later promoted to be the first governor position of Khon San later. The town was downgraded to be a tambon of Phu Khiao district and it was official upgraded to a full district on December 10, 1959.

Neighboring districts of Khon San are Phu Pha Man and Chum Pae of Khon Kaen Province, Phu Khiao, Kaset Sombun and Nong Bua Daeng of Chaiyaphum Province and Mueang Phetchabun, Lom Sak and Nam Nao of Phetchabun Province. The Southern area connects to Phu Khiao Wildlife Sanctuary. Tambon Thung Pra, Khon San district occupies 82 Square kilometers with 9 villages and locates 500 meters above sea level. There are 5,451 people residing in 1,088 households whose major occupations are farmers.



Fig. 1. Amphoe Khon San location in Chaiyaphum province
 Coordinate: 16°36'48"N 101°55'11"E

4. FINDINGS

In 1973, the Royal Forestry Department (RFD) designated 290,000 rai of land in the Thung Phra Sub-District as Reserve Forest land. From this 290,000 rai, the RFD gave a concession of 20,000 rai to the Forest Industry Organization (FIO) in 1978. Despite the fact that more than 100 households claim to have been living

and working on the land for decades, the FIO designated 4,401 rai of this concession as the Kon San Forest Project. The 4,401 rai that make up the Kon San Forest Project borders the Pha Phung Wildlife Reserve, which covers an area of almost 120,000 rai. (Lohmann, 1991).

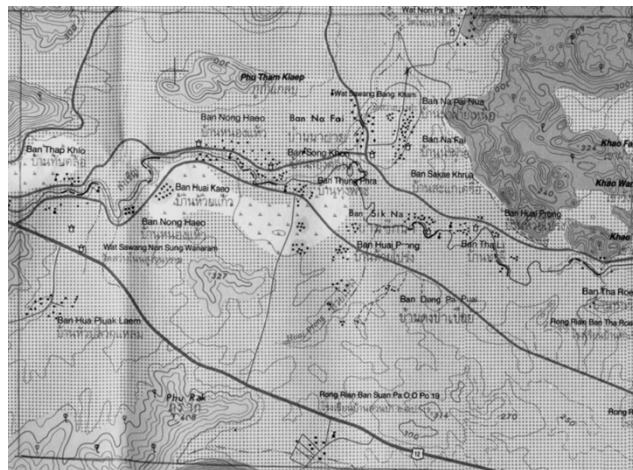


Fig. 2. Map of Tambon Thung Pra, Khon San
 (http://en.wikipedia.org/wiki/Khon_San_District)

At the time of the evictions, the villagers lived and worked on the land as farmers. Most of the villagers grew rice, corn, and red beans to sell. They also hunted small game and gathered mushrooms, bamboo shoots, and medicinal herbs in the forest. Depending on the family, they grew and collected between 70 and 100 percent of the food they consumed (ESCR Mobilization Project, 2010).

In order to protest their evictions and spread awareness, 169 villagers representing the nine villages moved into Baw Kaew Village (unofficially named by the villagers), Saun Pah subdistrict, on July 17, 2009. The village has been built amongst the FIO's rows of eucalyptus trees. The village consists of one main dirt road lined with wooden huts on both sides. It sits less than 500 meters from a pond that supplies the villagers with water for bathing and cooking, but resources are limited and villagers must buy their own drinking water. After more than four months of residing in the village, the villagers are still investing in its infrastructure. They have planted banana trees, herbs, and corn between rows of eucalyptus trees, but the limited space to grow crops cannot supply adequate food for the villagers within the area.

Although the eucalyptus pulp industry in Thailand was first established by private farmers and commercial businesses, the FIO began taking control of the land concessions soon after the tree's introduction to Thailand. Because Isaan is dominated by agriculture, little untouched land exists on which to cultivate eucalyptus. Consequently, the State adopted land re-appropriation strategies to create space for this new industry. Legislation such as the 1964 Forest Reserve Act was drafted to enable the State's annexation of land for economic exploitation. In order to guarantee State control over the new industry, private companies were

allowed to operate only through State-granted concessions (Pye, 2005).

The social impacts of eucalyptus expansion are highly contested. Redistribution of land for State enterprises displaced many villagers from their land. By using a rights based approach, the communities gained national recognition leading to a Cabinet resolution that required the FIO to remove the plantations and return the land to the villagers. (Pye, 2005) As such the Baw Kaew Community in Khon San District has adopted similar grassroots strategies to challenge their marginalization and demand their rights on land use.

Even though the villagers are currently living on the land illegally, they hope that through the legal process they will receive a Community Land Title in the future. The community has rallied behind the 31 members who are facing a lawsuit brought by the FIO. If the villagers are acquitted, their right to the land will be affirmed and they will reclaim their property. Legal references regarding land use in this study is referring to *Land Titles* or *Chanod* when the Forest Reserve Act was passed in 1964, legal titles existed for less than 20 percent of land across the country.

The rights provided by different types of land titles in Thailand vary in strength. *Chanod*, the most secure, entitles the holder to legal ownership and the right to apply for mortgages and loans. Land held with *Naw Saw 3* demonstrates legal ownership but may lack explicitly defined borders. A less secure classification, *Saw Kaw 1* is an official record of possession and use. *Paw Baw Taw 5* and *Paw Baw Taw 6* are not recognized as proof of legal ownership; rather they are proof of tax payment on a plot of land.

Community Forest

The National Legislative Assembly passed the Community Forest Bill in November 2007. The bill aims to promote sustainable resource use by giving communities the legal right to manage nearby forests. To receive approval for forest administration, a community must have been living in the area for more than ten years. Additionally, community forests must be situated outside of protected zones. Resources collected from the forest area must be used for the domestic purposes of the community only. (Christopher, 2008)

Community Land Title or Chanod Chumchon

A Community Land Title allows a self-defined community to manage and control community land. By embodying tenets of the 2007 Thai constitution which stipulate that a people should maintain control of their resources, the title recognizes these truths and provides a vehicle for their realization. The legislation aims to protect the land and its natural resources in a sustainable fashion and places the power in the hands of those directly invested in the lands' continued fertility and viability. Rules and regulations are expected to vary across communities based on the traditions and culture of each community. In its current form, there is a 30-year cap on the tenure of the land title. (National Economic and Social Advisory Council, 2009). In April 2009, the Sub-Committee on Land and Reserved Forests

recommended the Khon San Reserve Forest as a test project area for Community Land Title implementation.

Of 103 households evicted from their land in the Thung Phra Sub-District, 38 held *Paw Baw Taw 6*, 18 held *Paw Baw Taw 5*, and one held a *Saw Kaw 1* title. The remaining 46 have only illegal land occupation by the Thailand Department of Lands' definition. The villagers' movement for their community land title or *Chanod Chumchon* is still on track to accomplish the ultimate goal that demonstrates their rights to cultivate plants and legally use of the disputed Community Forest land. As a consequence, villagers who have legal title of the land will feel more secure and be more likely to earn their living successfully by the reduction of disputes and benefit from the highest land utilization.

5. CONCLUSION

The movement of villagers for land use is dynamic and complex owing to the fact that the land management scheme itself has played an important role as it impacted natural resources relevant to consumption by people. The major effect has been deforestation of temperate regions since 1750 while more recent crucial effects of land use are urban sprawl, soil erosion, soil degradation and finally desertification. There are many disputes about land use in the Northeastern part of Thailand saying the most found of all regions across the country.

The designation by the Royal Forestry Department of 290,000 rai in Tambon Thung Pra as Reserve Forest Land and giving 20,000 rai to Forest Industry Organization to invest in Eucalyptus tree growing caused enormous conflict of interest between villagers and state. In legal reference regarding land use rights, the villagers urge the government to seriously take into account the Community Land Title or *Chanod Chumchon* in Thai. Improving access to land and enhancing the security of land rights by the government's appropriate titling land project will put everything in place. It also will provide effective land management through the active involvement of the stakeholders particularly the government officials. It is obvious that land administration is highly influenced by the bureaucratic system, the community, which includes society and culture.

Finally, the author would conclude that it is necessary for the government to review the titling of Community Forest *Chanod Chumchon* for Ban Baw Kaew villagers by formulating a policy that benefits all concerned parties. An appropriate taxation policy implementation might be one of the alternatives with relevance to this.

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APPENDIX

Land measurements (Rai, Ngan, Wah)

Approx.

- 1 Rai 4 Ngan = 1600 square meters
- 1 Ngan 100 Wah = 400 Square meters
- 1 Acre = 2.15 rai
- 1 Wah = 4 square meters or .0025 rai
- 1 Hectare = 6.25 Rai or 10,000 square meters

