

# Laws Concerned with Forest Management: A Case Study of Kho Hong Hill in south Thailand

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**Abstract.** Thailand's Forest area continues to lose from 53.3% of the total area in 1961 to 30.9% in 2009. There are many factors contributing to this loss such as economic pressure as a result of population increase, government's policies causing land use changes, and problem with laws concerning forest management. This paper looks at the latter cause in detail analysis, using document research. It reviewed related laws and regulations to analyse gaps and problems of the laws concerning with forest management. The results show that the problems of forest laws are, for example, unclear definitions, duplicate definitions of words in different laws which do not conform to one another, unclear institutional structure responsible for forest resource management, too many government offices responsible for forest management, and lack of participation of local people or community.

**Keywords:** Laws, Forest, Management, Kho Hong Hill

## 1. Introduction

Forest area reduction is one of the greatest problems in Thailand. The total forest area in Thailand reduced from 43.21 % in 1973 to 33.44 in 2008 (planning and information Bureau, 2010). There are many factors contributing to this loss such as economic and social factors as a result of population increase, government's policies that support industry and tourism growth thus causing land use changes, and laws and regulations which are unclear on issues such as boundary of established protect area or responsibilities and functions of authorised state agencies (Chouibumroong, 2006; Gaveau. *et al*; 2007; Torugsa, 2009; Asawakanjanakij, 2010).

The results of those causes can be seen all over the country. For example, in northern part of Thailand, there are a lot of reserved forests which have been cut down such as Maeta –Maemai, Mae Mo, Masuk, Pa Namyao, and Pa Suad National Reserved Forests in Lampang province. The north east area records similar incidence at Phukhaokaew National Reserved Forest in Loei province. This similarity is also found in the central part of Thailand. The southern part also experienced the encroachment similar to the other parts of the country, for example, Lumleang National Reserved Forest in Ranong province, Khao Pu-Khao Ya National Park in Phattalung provinve, forest area in Krabi province, and Ton Nga Chang Wildlife Sanctuary in Songkhla province. Particularly where the authors work in Songkhla province, there have been many records of deforestation such as Mae Pru National Forest, Khao Fai Mai mountain range, Klong Kua forest in Kao Wang Pha National Reserved Forest and Kho Hong Hill forest.( Office of Natural Resource and Environmental Policy and Planning, 2012).

## 2. Case study

Kho Hong Hill (KHH) is located in Hat Yai district in Songkhla province. The length of the ridge in the north – south is 6.75 km, with the width of 3.5 km and the height of 375 m. The area is approximately 13 km<sup>2</sup>. The forest area in 2002 was 67.34% of total area of KHH, rubber plantation 28.13 %, open area 3.15% and building 1.38 %. But in the year 2009, forest area reduced to 57.71% and rubber plantation area increased to 36.39% (Ployninpet, 2012). KHH is rich with biodiversity such as *Alstonia rostrata* Fisch, *Aquilaria malaccensis* Lam, and *Dipterocarpus grandiflorus*. There are several species of insects including

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ants, butterflies, and Amphibians and reptiles such as *Hylarana glandulosa*, *Hylarana raniceps*, *Ingerophrynus divergens* and *Calliophis gracilis* (Sawangchote *et al*, 2010).

Not only KHH is home to many plants and animals, it also is an important source of ecosystem services for people in and around Hat Yai City. Among many, some of these services are soil loss prevention, land slide prevention, water supply sources, local climate regulation and reduction of flood risk. (Sawangchote *et al*, 2010).

Despite its valuable services, the rate of deforestation is continuing. As a result of an increase in populations, demands on commercial crop land like rubber, residential area, and other human activities, KHH continues to lose its forest area. One of the reasons for such an occurrence can be pinpointed to the problem of laws and regulations. This study is therefore aimed to tackle what went wrong with laws and orders concerning KHH management, which in fact can be a representative of forests elsewhere in the country.

### **3. Methodology**

This study is to conduct a document research. Literatures were collected and reviewed particularly those related to laws, regulations, and measure for forest management, for example, Forest Act, National Park Act, National Forest Act. In this paper we analysed the gaps or weaknesses of laws that can become obstacles to forest management, using KHH as a case study.

### **4. Results and Discussion**

According to the National Land Code Act, KHH can be categorized as mountainous area. Following its definition, individual land right ownership is not possible in mountainous area. However, the practice is different from what is written in the Act as some parts of KHH appear to have private ownership with land title. The following is some explanations of such mentioned phenomena:

#### **4.1. Unclear Definition and Boundary of Forest**

The National Forest Act of 1941 defines forest as a land that has not been legally obtained by a person. This definition is in practical unclear in term of defining the boundary. Since the definition does not provide a specific forest boundary and for how much, it is most difficult to determine the ownership of the land: whether the area belongs to the government or private owner. This has caused a lot of conflicts and tension between local people and state officials (Torugsa, 2009). According to the definition, those who own the forest land who do not have land title are considered illegal even though the land may be barren, whereas those who have land title are not considered illegal although such land is fertile forest. This definition therefore does not promote forest conservation. Moreover, the Law itself was issued 70 years ago, which is not quite up-to-date with changing situations as in the present time. This is different from the National Park Act of 1961, the National Reserved Forest Act of 1964 and the Wildlife Act of 1992 which state clearly that the declared protected area, national parks, national reserved forests and wildlife sanctuaries must attach the maps of such area in order to show its boundary.

According to the above-mentioned laws, KHH is not considered a protected area but a forest as interpreted in the Forest Act of 1941. However, as already mentioned, this Act does not define where the boundary of the forest should exactly be. As a result, parts of the land on KHH are publicly and privately owned with legal rights.

Therefore, there should be a clarification of KHH boundary, in particular the border line of forest and how much the area is. Besides, the physical characteristics of KHH such as the height and the slope should be taken into account when classifying the area. This will make it easier for governmental agencies to protect and prevent deforestation, as well as to enforce the laws more efficiently.

#### **4.2. Too Many Governmental Offices Responsible for Forest Management**

Governmental offices of Thailand which are authorised for forest management include (Torugsa, 2009; Asawakanjanakij, 2010).

Royal Forest Department. There are 15 institutes under this Department responsible for forest management, for example, Community Forest Management Bureau, Forest Land Management Bureau, Forest Resource Management Bureau, etc.

Department of National Parks. Under this Department there are 12 institutes, for example, Watershed Conservation and Management Office, Rehabilitation and Conservation Areas Bureau, etc.

Office of Natural Resource and Environmental Policy and Planning. Ten institutes under this Office are involved, for example, Natural Resource and Environment Management Division, Urban Environment and Area Planning Division, Land Administration Division, etc.

Local authorities. Local authorities such as Songkhla Province Administration Organization, Municipalities, Tambon Administrative Organization, also have responsibility for natural resources management.

KHH is under the Forest Act of 1941, the key law for forest management. Thus, the Royal Forest Department is responsible for it via the Office of Forest Resource Management Zone 13, Songkhla province, who acts as a regional authority. The functions of this office include:

- Protect, control and plan a strategy to prevent deforestation and illegal practice in forest area according to forest laws.

- Support community to participate in reforestation, community forest management and commercial forest plantation.

- Conserve, protect and manage forest area in such a way that is efficiently used and consider application to use wood, industry, forest land and forest product.

Under the Decentralization to Local Government Organization Plan and Procedures Act of 1999, local agencies should also take responsible for local natural resources. Thus according to where KHH is located, the local authorities that are involved are Songkhla Province Administrative Organization, Hat Yai City Municipality, Kho Hong Sub-District Municipality and Thungyai Tambon Administrative Organization. All of these offices are local state agencies. Due to the Decentralization to Local Government Organization Plan and Procedures Act of 1999, local agencies have the following functions:

- For Provincial administration organization: to protect and maintain forest land, natural resource and environment.

- For Municipality and Tambon Administrative Organization: to manage, maintain and take care of forest, land, natural resource and environment.

Thus we have seen that there are at least 5 local agencies responsible for KHH forest management. Since there are many offices to function for KHH forest management, there are obviously difficult to define their roles equally. This makes it hard for each office to really play a role in protecting KHH because their responsibilities are overlapped and unclear. It also raises the problem of counter purpose. This explains why there are in practicality no main agencies who take charge of protecting and managing KHH. This problem can be seen in other natural resources and environment as well. There are also conflicts between these agencies on how to manage KHH, for example:

- Some offices would like to use it for tourism. They built facilities such as cable car, stores etc.

- Some offices allow people to use it for agriculture.

- Some offices prohibit its uses totally.

Furthermore, some of these offices may not see that it is their responsibility to take care of KHH because they themselves are not clear of their roles and functions because they are not certain that KHH is under their authority.

### **4.3. Lack of People Participation in Laws Formulation**

Most laws are formulated by Member House of Representatives. Quite often these laws, especially laws concerning forest management, did not consider participation of local people, for example Forest Act of 1941, National Park Act of 1961 and National Forest Act of 1964. These are key laws in dealing with forest management. However, they lack participation of local people and community (Yodprom, 2005; Barli *et al*, 2006; Chouibumroong, 2006; Salam, 2006; Hares, 2009; Torugsa, 2009 ). The whole process was done by the government including establishment of protected area such as national parks, national reserved forests, and

wildlife sanctuaries. The establishment was done by governmental officers where local people did not have an opportunity to say otherwise. This has caused tremendous conflicts between the government and local people living in the areas where the establishment of protected areas were. Newer laws such as National Environmental Quality Act of 1992 may state that participation of local people is a requirement in establishing a protected area. However, in reality it depends on situation from case to case and not all areas would have an actual participation of local people. In fact, very little evidence is seen to support such participation.

At present, KHH management also lack participation of local people in formulating laws and measures to protect and manage forest area. Most of participating activities are done by particular groups of academic persons and those who are interested. The activities are done locally and occasionally from time to time. Even though the activities are aimed to be continuous, for example, environmental education, and public hearing on KHH policies, at a macro level, there is still no participation strategy from the governmental offices to protect and manage KHH.

## 5. Conclusion

There are three factors that contribute to unsuccessful management of KHH in terms of laws and orders. First, there is a problem with unclear definition and boundary of KHH forest. In real practice, KHH is both publicly and privately owned. There is also an uncertainty whether KHH should be conserved as forest or should be used for other activities because the laws are unclear. Second, there is a great overlapping on functions and roles of governmental offices. There are Forest Resource Management Bureau Zone 13 Songkhla province, Songkhla Province Administrative Organization, Hatyai City Municipality, Kho Hong Sub-District Municipality and Thungyai Tambon Administrative Organization. There are too many offices to recognize which one should play which role in managing KHH. Third, laws concerned with forest management often lack participation of local people and community. All of these factors result in KHH being left unprotected, unmanaged, and changed to other uses as it is in current situation.

In order to help protect KHH, these problems must be tackled. For example, there should be a clarification of KHH area such as its boundary or where exactly is the area that considered KHH forest. Once this is cleared, the allocation of roles and functions among governmental offices should be discussed. Finally, strategic plans for managing KHH should involve participation from local people and community, particularly true stakeholders of KHH.

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