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as a Solution to the Conflict between Highlands and Lowlands.

by
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Introduction

Current forest management practices in the highlands of northern Thailand have failed in two ways. First, the state is unable to maintain the health of the forest. Second, the state cannot ensure equitable resource distribution. As a result, forests have become a battlefield where access and control over resources is determined by power. If the power differences between competing groups were great, the weaker groups may be defeated unnoticed. But when the strengths are on par, the battle is heighten, or more often, the struggle is at a deadlock. The purpose of this paper is to examine the case of conflict over forest resources between the highlanders and the lowlanders in northern Thailand. The author proposes a way to mitigate the conflict through the use of communal property management. The paper first reviews the existing resource management systems of the three main groups living in the northern watersheds: the Karen, Hmong and Northern Thai (Khon Muang). It then looks at a particular case of conflict and explores how a communal property approach may be used to alleviate the competition.

Background of the Area

^{*} The field work of this study was done in 1992 when the author was a student at the Asian Institute of Technology, Bangkok, Thailand.

Northern Thailand is an area inhabited by diverse ethnic groups. The river valleys are dominated by the Khon Muang or northern Thais. The hills are home to over 600,000 highlanders who are members of nine ethnic groups, predominantly Karen, Hmong, Lisu, Lahu, Mien and Akha. The Thai government uses the term "hill tribes" to refer to the highlanders collectively. The definition of "tribes" in the context of Thailand is akin to segmentary tribes termed by Sahlins (1968). There is no chiefdom or centralized unit of political organization such as those common in North America. Each community is a separate, relatively autonomous unit. The Thai government has tried to incorporate hill tribe communities within the central administrative structure. Community heads are appointed or elected to act as liasons between communities and the state.

The Upper Northern region encompasses approximately 105,000 square kilometres, of which, less than ten percent is lowland valley (Leepreecha et al. 1991). Over 47 percent of the country's forest is located in this region (Royal Forestry Department in Nutalai et al. 1992). Four main tributaries of the Chao Phraya river, the main artery of central Thailand, originate in the northern highlands. It is a region endowed with numerous amenitiespleasant climate, cultural diversity, aesthetic landscape, as well as a growing economy. These factors lead to an increasing population both permanently and temporarily through tourism. Urban development accompanied by land alienation are racing to acquire the most recently accessible areas. In 1988 the total population of the Upper North was 5,437,793; the majority of which was concentrated in valley areas. As the lowlanders pushed towards the uplands, the highlanders filled all available areas in the hills. This influx of people has

resulted in intense competition and conflict over the use of natural resources in the "common land"-the forest.

The highlands are the periphery of national economic and political realms. Any generalization beyond this first statement must be done with caution since the hill tribes are far from being homogenous. They differs in language, culture and economic systems. The largest group is the Karen who constitute approximately half of the highlander population. The Hmong, the Lahu and the Mien make up 15, 10, and 5 percent respectively. Historically, the major division among the hill tribe groups was that between the traditional pioneer swiddeners whose agricultural system involved clearing "new" land after the the cultivated land was exhausted and rotational swiddeners who cultivated different plots of land in rotation. The Hmong, Mien, Akha, Lahu and Lisu were considered pioneered swiddeners while the Karen were rotational swiddeners. In many locations, however, these traditional forms of swidden is diminishing. Robert and Renard (1989) state in their report that there is virtually no village movement in the last decade. In addition to differences between tribes, there is evidence of significant economic variation between villages of the same ethnic groups (Radley 1986, Cooper 1984).

The three major groups that I will concentrate on are the Hmong, the Karen and the northern Thais. The Hmong represent the traditional pioneer, opium growing group. The Karen is a sedentary, subsistence-based group. The lowland Khon Muang is a permanent agriculturist/labour-based group who make up a majority of the valley population. Most

ethnic conflict over natural resources in the northern highlands occurs between the Karen or the Thai and the pioneer groups. This is partly a result of the opium growing groups heavier involvement in intensive cash crop cultivation. Opium replacement programs are believed to escalate deforestation problems (Dearden 1993). The roots of the conflict however go back before development intervention in the highlands. It lies in the differences in property right regimes of all groups and the state.

Property Right Systems in the Highlands

The Karen System. Two types of land tenure exist among the Karen: private and communal land. Individual households manage terraced land as private property and may sell their terraced fields without seeking consent of the community. However, if the terraced fields are left to deteriorate the lands will be reclaimed by the village and become communal property (Rashid and Walker 1975). Swidden lands, on the other hand, are properties of the village. Traditionally, this land cannot be sold. The village leader (sjae cheng khu) has the authority to distribute the swidden lands to members of the community. The decision to allow outsiders to join the community depends on the availability of agricultural land as well as other social factors (Rashid and Walker 1975). Today there is a tendency for individuals to claim permanent rights over their swidden land by growing fruit trees or putting up fences around the fields (Ganjanaphan and Pitakwong 1991).

The Hmong System. The Hmong do not have obvious forms of community resource management. The household is the unit of decision making in most aspects (Radley 1986).

The clan is the largest cooperative group. It provides an information network, particularly of available good lands crucial to the mobile shifting cultivators. The clan also functions as a medium for technological diffusion. Farmers visiting their "brothers" in the highland development project areas often bring new crops promoted by the projects to try out in their fields. Unlike the Karen, the Hmong have no formal regulations to limit the number of households in a community. Geddes (1976) suggests that the Hmong's desire for big communities is counter-productive to the sustainability of the community itself. The Hmong economy has long been a dual economy producing rice for subsistence and opium for cash. Today, various other cash crops increasingly replace opium due to the government's crop replacement programs and opium suppression policies. The Hmong today are not resistant to the idea of village cooperation. Radley (1986) observed that there are exchanges of labour in the rice fields beyond the clan lines. Personal observations at Mae Soi suggest that they have several communal cooperations such as the maintenance of water pipes for domestic used (Mountain Tap Water), maintenance of roads, and village co-operatives. However, as far as land resources are concerned the Hmong seem to treat forest and grasslands as open-access resources. Geddes (1976) attributes this attitude to their culturaleconomic system. The nature of their shifting cultivation which depends on "using the resource up" and moving to new areas is conducive to exploitation.

The Lowland System. The northern Thais or Khon Muang were incorporated into the state's administration and the market economy much earlier than the Hill Tribes. The property rights systems among the lowlanders are complex and must be understood along with the

change in land tenure structure during the dawn of the Green Revolution and the period of rapid population growth in the North (see Ganjanaphan 1989). Land tenancy and landlessness is symptomatic of the lowland since the early 1960s. The majority of rural lowlanders, therefore, practice swidden agriculture on the uplands supplementary to their permanent wet-rice cultivation (Kunstadter 1978). Land alienation has caused the lowlanders to push further towards the upland forest.

The most notable feature of the Khon Muang's communal institution is the *Muang Fai* traditional irrigation. Many rice-growing communities build irrigation canals which they manage communally. Muang Fai is the product of an agricultural evolution based on wetrice in the hilly environment of northern Thailand. Farmers utilize the slope of the terrain to "send out" water to areas further away from water sources. The meticulous regulations reflect centuries of development (Tan-Kim-Yong 1983). The irrigation group was a basis for communal activities before the arrival of the state administration. Today, some of these groups have loosened their grip on the management of local resources but some have expanded their role to manage other resources especially community forestry (Wittayapak 1994).

The State Property System. According to Thai law, forest refers to "land and includes mountain, creek, swamp, canal, marsh, basin, waterway, lake, island and seashore not acquired by a person under the law" (The Forest Act 1964). All forest lands are properties of the state. However, in practice, there are over 12 million people residing in the national

reserve forests (Chankaew 1992). The discrepancy between reality and law has resulted in ambiguous situations where government personnel interprete the law to various degrees of stringency according to the political climate in Bangkok. The Thai government solves this problem by giving land use permits (STK) to people who have settled in the forest between 1967-1975. This allows the farmers to cultivate the land but not to sell or rent the land. Those settling in the forest between 1975-1985 must pay rent to the government at the rate 10 baht/year for an area of less than 25 rai, 20 baht/yr for 25-50 rai, and 100 baht/yr for area exceeding 50 rai. Each household can rent up to 250 rai. If the land is not used for agriculture the fee is doubled. The policy serves influential landlords by encouraging the development and encroachment into the national forests.

While some lowlanders may benefit from receiving a certain degree of land security, this policy generally is not consistently applied to the hill tribes. STK permits ownership of lands only if they are continuously cultivated. Thus, swidden fields of the hill tribes are not recognized (Vandergeest 1994). Many of the highland minorities also have not gained full citizenship therefore they can not have legal rights over lands. Because of their tenure status, hill tribes are in a vulnerable position when engaging in disputes over resources. Often, influential Thai people were able to work around the law to extract resources while local people bear the responsibility to conserve the forest. The concern of the government about deforestation is understandable. However, the state property management regime is ineffective as the state does not have the resources to enforce the law. The *de facto* property

^{*} Twenty-five baht is equivalent to \$US 1. One rai equals to 0.16 hectares.

regime of the forest is thus open-access.

The Discrepancies of the Property Right Regimes in the Highland

Land scarcity has resulted in antagonism and disputes between members of different ethnic groups. Numerous authors have documented conflict between the highlanders and the lowlanders (Leepreecha et al. 1991, Tungittiplakorn in press), between Karen and Hmong (Radley 1986, Hinton 1978) and Karen and Lisu (Ganjanaphan and Pitakwong 1991). The conflict between the property rights regime of the Karen and the Hmong was one of the causes of constant tension between the two groups (Geddes 1976). The Karen, considered fallow land as reserve for future use and communally owned while the Hmong consider the uncultivated land open-access. The lowlanders view the forest as an area where people can extract some resources but the forest as a whole should be protected as a source of water for their agriculture. The conceptual differences in the property right regimes of the Hmong, Karen, Lowland Thai and the Royal Forestry Department (RFD) are illustrated in Table 1.

The Hmong I talked to said they avoided cultivating the headwaters area unless there are no other available lands. The Karen and the Thais normally will not clear forest near headwaters. Their dependency on water for wet-rice has made them more concerned about available stream-water than the Hmong who grow largely rain-fed crops. Although the Karen and the Lowlanders would like to see the headwater forest being protected they do not see the forest as a whole belonging to the state; both groups exploit forest resources in

Table 1 The different property right regimes in the Thai Highlands

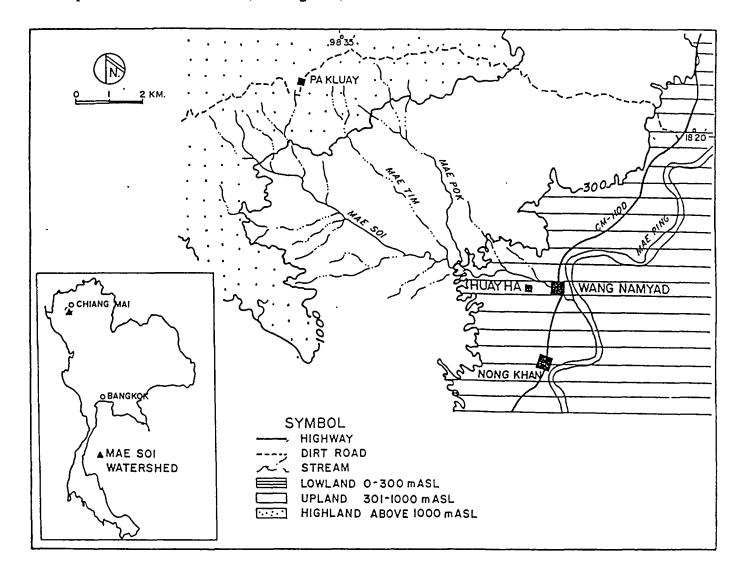
Areas ¹	Property right regimes of various actors			
	Hmong	Karen	Lowland	RFD
Headwaters	Open	Restricted	Restricted	State
Hill cultivated	Private	Private	Restricted	State
fallow	Open	Communal	Restricted	State
Lowland swidden	Private	Private	Private	State

their daily life. The RFD officials in the field are quite flexible to subsistence exploitation. Nevertheless, there are distrustful feelings between the Royal Forestry Officials and local people (Tan-Kim-Yong 1991).

The Conflict in Mae Soi

Mae Soi is a subdistrict of Jomthong, approximately 80 Km. southwest of Chiang Mai. The lowland areas are occupied by wet-rice and cash crop farmers. Approximately 30 years ago a group of Hmong farmers settled on a ridge of the adjacent mountain (see map 1). The *Pakluay* Hmong villagers were engaging in swidden cultivation growing rice, corn and opium. In 1981, a United-Nations sponsored highland development project came to Pakluay to initiate an opium crop replacement program. The project was later carried on by the Thai-

Map 1 Mae Soi Watershed, Chiang Mai, Thailand



Norwegian Church Aid Highland Development Project (TN-HDP). By the mid-1980s Pakluay had switched to cash crops dominated by cabbages.

The Mae Soi dispute began during the beginning of the 1980s. A conservationist monk, Phra Ajahn Pongsak Techadhammo, was travelling in the area and teaching the lowlanders the sin of destroying the forest. His teaching was well received in the lowland and Ajahn Pongsak was able to raise awareness about forest conservation among the Mae Soi people. It was not clear how the conflict between Mae Soi and Pakluay originated but by 1986 it had reached a crisis. The lowlanders claimed that the Hmong cleared the forest in their headwater areas. The Mae Soi people staged protests and marched up the mountain to put up fences at the ridge of the mountain thereby prohibiting the Hmong from cultivating in the area. The fenced-off area was mainly swidden rice land. The Hmong responded by intensifying their cash crops and abandoned their subsistence swidden rice. They did not confront the lowlanders but they continued their cultivation in the highlands. The lowlanders supported by an influential conservationist NGO lobbied for the Hmong to be moved down from the mountain. In 1989, the Cabinet announced the plan to relocate the Hmong. Pakluay people felt that they were unjustly blamed and did not want to move as the resettlement land was poor. They argued that they are mountain people and did not want to live in the valleys. The Hmong mobilized support from highland development agencies, especially the Royal Northern Project under the King's patronage. The conflict lasted over a decade in a grid-lock. Each group claims the other is destructive to the forest while both greatly depend on the resource.

The Peoples' Perception of the Conflict

I interviewed 150 people in three lowland villages in Mae Soi and in Pakluay. The interviewees were randomly picked from the district voter's list. Open-ended questions were asked about the nature of the conflict and what they think might be done to resolve it. The result of the interviews are shown in Table 2.

Table 2 The Nature of the Conflict

Causes	Highland (n=41)		Lowland (n=81)	
	number	%	number	%
Deforestation	12	28.6	60	81.4
Pesticides used by Hmong	1	2.4	12	16.0
Local incidents	22	54.8	0	0.0
Racial discrimination	10	23.8	1	1.2
Economic competition	13	30.9	0	0.0
Conservationist monk	8	19.0	5	6.2
Others	4	9.5	5	6.2

Both groups perceived the root of conflict differently. The lowlanders had a more uniform understanding of the conflict pointing to environmental issues as causes. The Hmong's understanding of the conflict varies. The majority of them believe the conflict originated from a local incident when a lowlander cattle thief was killed by a Hmong in 1984, but also

mentioned economic competition, racial discrimination, the activities of Ajahn Pongsak and deforestation as causes. It seems the source of the dispute lies in a combination of all these factors.

Although the majority of lowlanders reported concern over deforestation as the cause of the conflict, the reasons they gave for taking action reveals a more complicated picture as shown in Table 3.

Table 3 Reasons for Fencing the Forest

Reasons	Numbers of Lowlanders	% (n=65)
Protect the forest	25	39.7
Gain land (promised from NGO&RFD)	20	31.7
Compeled by leaders	14	22.2
Others	6	6.4

Deforestation may not be the most important motivation for the lowlanders to participate in the dispute. Instead, landlessness plays a major role in this seemingly environmental conflict. Landlessness is acute in Mae Soi with 53% of the 97 respondents having less than 2 rai (0.32 ha) of land. This amount of land is far below 11 rai suggested by Turton (1978) as a minimal requirement for subsistence. The conservation organization and the Forestry Department had launched a Forest Village program where degraded forest land were to be

distributed to villagers. The village leaders have used this land as an incentive to mobilize people to participate in conservation activities.

Most people felt powerless in solving the problem (Table 4). The majority of the people could not provide solutions to the conflict. Of a few that offered some suggestions, two solutions to resolve the conflict came forward. The first solution was to relocate the Hmong. None of the Hmong, thought this was viable alternative. In my opinion, unless the Hmong voluntarily move from the mountain, relocation will not produce positive results for several reasons. Firstly, previous relocation projects have failed to halt the deforestation because the areas left are eventually filled by the surrounding population. Secondly, the promised new settlements are often of such poor quality that people can not make a living from it. This results in the highlanders eventually moving back to the hills. Thirdly, the Hmong are not the only ones who brought about the problem of deforestation so they should not be solely responsible for environmental problems. The better way to solve the problem is to invest in conservation measures with the hill tribes instead of without them. The Hmong have a high stake to lose, and if given appropriate resources and efforts, they will likely cooperate. The main obstacle is for the state to eliminate the view that the Hmong are forest destroyers, opium growers, and insurgents, who are not Thais.

The second solution suggested by the villagers was associated with defining boundaries.

Some Mae Soi people felt that after they fenced the forest the conflict had actually been resolved. A few villagers from both groups mentioned that defining the boundary would

Table 4 Solution to the conflict.

Solutions	Highland (n=46) percent	Lowland (n=83) percent
Do not know	45.6	24.1
Relocate the Hmong	0.0	24.1
Fence the forest	2.2	16.9
Define Boundary	15.2	6.0
Negotiate	10.9	6.9
Up to leaders	13.0	8.1
No solutions	8.7	2.3
Others	4.3	11.6

enable them to protect the forest. It is not the physical presence of the fence that is essential to managing the forest but the ability of the community to exclude outsiders from exploiting the areas. Even though the Hmong's traditional property right regime is open-access, the current conflict has changed their perception about the efficiency of this type of arrangement. Both groups point fingers to the other for cutting down trees and causing forest fires. There are probably elements of truth in both groups' accusations.

When asked directly, ninety-five percent of the Hmong and seventy-five percent of the lowlanders agree with the idea of dividing forest areas. Excludability is seen as a key to

managing the forest and the way to facilitate this is through clear demarcation of the forest boundaries. This is why many lowlanders feel fencing the forest is an effective solution to the conflict.

Proposed framework

Given such different ethnicity, cultures, and property rights' systems in the Thai highlands, a successful framework must take into account these differences, the communication between the groups and the clear demarcation of the forest. A single management system would probably not be appropriate. For the case of Mae Soi the lowland and the highlands should develop their own system of community management. These systems have to be compatible with the Royal Forestry Department's priorities-such as protecting the headwaters, preventing logging and limiting expansion of agricultural land, protecting important wildlife habitats, etc. Because the RFD's relation to local people is not always smooth, a third party is needed to coordinate this management forum. This can be a nongovernmental organization or semi-governmental institution that is experienced with grassroot organizations (Meechai's Population Community Development Agency (PCDA), for example). The lowland communal management should rest on the existing communal irrigation group. As for the Hmong, a new communal group has to be created (Figure 1). It is common in a Hmong village to have two major clans that are often rivals for leadership. Setting up a communal institution in a Hmong village must take into account this common feature of clan division. A headman who belongs to one clan will not be able to gain sufficient cooperation from the other clan members. The new institution must ensure

representation of all major clans. It is a challenging task but not impossible considering how innovative and practical the people are.

A clear boundary of forest area has to be marked. Where to draw the boundaries depends on negotiations between all parties. Generally, a community should monitor the area near their village and cover the crucial foraging range. It is an expensive and laborious undertaking but more effective and equitable than the current situation. Areas of extreme fragility may be monitored directly by the RFD. This way the Forestry Department with limited resources will have more chance to successfully protect the forest by engaging local people in the general forest surveillance. The neighbouring communal institutions, the RFD and the coordinating agency should meet regularly to discuss potential areas of conflict. This encourages peaceful communication between different groups which prevents disruption such as seen in Mae Soi. It also creates channels for information sharing. Ecological knowledge from both the professionals and the local people can add to the understanding of the human and natural ecosystem of the highlands. The communities should have authority to oversee "their" forest; that is their institution fully recognized by the neighbouring communities and the government. An attempt to bring different ethnic groups together to manage the forest has been proven by Uraivan Tan-Kim-Yong and colleagues of the Social Science Faculty, Chiang Mai university to reduce the level of conflict between the RFD and local people (See figure 2).

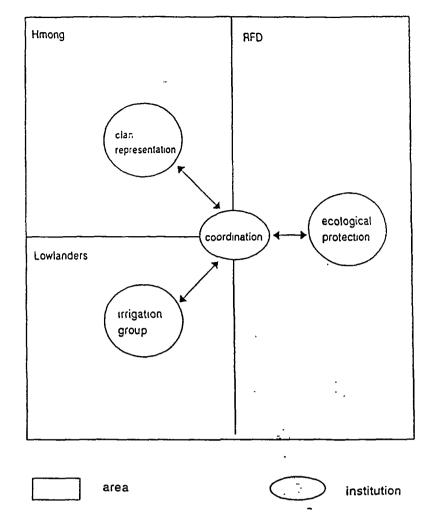


Figure 1 Proposed framework for forest management in Mae Soi

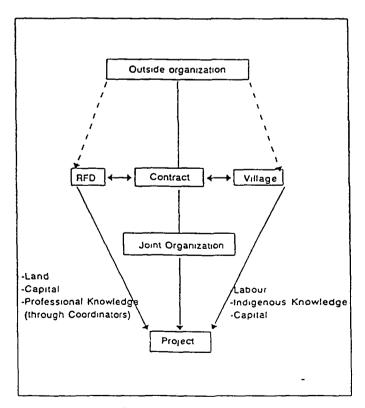


Figure 2 Community Forestry Project with Assistance of Intermediaries used at Mae Khan Basin (Tan-Kim-Yong et al. 1988-181)

Areas of potential problems will be the legal status of the community institutions. Currently, the attempt to bring legal recognition to community forestry has not been successful in the cabinet. Many forestry, agriculture, district officials I interviewed expressed ambivalence regarding the hill tribes. On the one hand these people are illegally occupying the forest and have been targeted to relocate. Therefore, the officials are reluctant to invest their effort in establishing any kind of institution in the areas. On the other hand, they know that moving the hill tribes out of the forest is virtually an impossible job. Letting the people control the forest is a big leap for the Royal Forestry Department. How can the RFD be assured that people will not abuse the resources? Looking at the proposed scheme closely, the RFD remains an important actor in monitoring and controlling the use of the forest. Communal management suggested will actually allow better communication between the RFD and the forest communities, narrowing the rifts created over the years.

Conclusion

This paper focuses on the conflict over resources in the highlands of northern Thailand. It illuminates the difficulties of forest management among populations with diverse cultures and land tenure systems. In this situation a single management regime will not be suitable. Several community management schemes which are coordinated by a neutral party is suggested. Bringing neighbouring institutions and the Royal Forestry Department together allows negotiation between local and national interest. The most arduous task lies in defining a boundary between neighbouring communities. The community can better protect the forest if they can prevent outsiders (as well as insiders) from abusing their resources.

It is suggested that critical foraging areas are taken into account. Areas of high ecological sensitivity should be protected under the supervision of the RFD. The attractiveness of communal property management is the opportunity for each community as well as the government to voice their concern. The conflict between communities in the highland can be resolved before escalating into an unmanageable crisis.

Acknowledgement

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Note

1. These areas are qualitatively defined as follows:

Headwaters are areas where tributaries originate; generally the areas are higher than 800 metre above sea level. To my knowledge, there has not been a scientifically determined figure of the extent of the forest that is needed for the headwaters to function as water sources, at least in the northern highland ecosystem.

Hill cultivated areas refers to all areas currently under cultivation. This includes both wetrice paddy and swidden or permanent fields in the highlands.

Fallows are areas which have been cultivated and are left to regenerate. These areas can be *imperata* grasslands or secondary forest.

Lowland swidden are areas near the foot of the mountains. These lands are used mainly by lowlanders for cash crop cultivation.

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