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Nobody really knows how many people depend on the form of land use called shifting cultivation for their livelihoods. It has been estimated that globally it could be up to one billion. They live in tropical and subtropical countries and belong to at least 3,000 different ethnic groups. In Asia, around 400 million people live in and with the forest, and most of them practice some form of shifting cultivation.¹ The majority of these people belong to what governments usually call “ethnic minorities” or “tribal people”. Today, however, many of these peoples prefer to be called indigenous peoples.

The concrete manifestations of what is commonly called shifting cultivation are as diverse as the people who practice it, and it is therefore a difficult concept to define. Other terms are also used, such as swidden or slash-and-burn agriculture. The former derives from the Old English term “swidden”, meaning “burnt clearing”.² It is a far more neutral term than the latter which, while originally rather descriptive, has now become value-laden, reflecting the widespread prejudicial view that it is a destructive and wasteful form of agriculture. Throughout this text and the other articles in this journal, this term is therefore avoided, while the other two – shifting cultivation and swidden agriculture – are used interchangeably.

As a minimum definition, shifting cultivation can be described as a form of agricultural which is characterised by:

1. an alternation between a short span of cultivation and a comparatively long span of fallow, and therefore:
2. the regular, in most cases cyclical shifting of fields, and
3. the removal of the natural vegetation, normally (though not exclusively) by use of fire.

Shifting cultivation – a way of life

It is often overlooked that shifting cultivation for most people, and definitely for all indigenous peoples who practice it, is not simply a farming technique but a way of life. Having realized this, the anthropologist Harold Conklin therefore distinguishes between two fundamentally different types of swidden farming: partial systems that

“... reflect predominantly only the economic interests of its participants (as some kinds of cash crop, resettlement, and squatter agriculture)”, and integral systems which “stem from a more traditional, year-round, community-wide, largely self-contained, and ritually-sanctioned way of life”.³ Most of the people who practice such integral systems also combine it with hunting, fishing and gathering, and a complex interrelationship has evolved between the forest environment, its wild plant and animal species, and the people and their land use and management system. Two of the articles in this publication deal with two aspects of this complexity: the creation and maintenance of agro-biodiversity through shifting cultivation (Maruja Salas), and the interrelationship between wildlife and shifting cultivation (Lies Kerkhoff and Christian Erni).

State policies – prevailing prejudices

However, precisely because shifting cultivation is so closely interlinked with indigenous peoples’ lives and cultures, state policies aimed at regulating it – if not banning it outright – have an impact on indigenous peoples that goes far beyond mere economic intervention. In all countries in South and Southeast Asia, government policies on shifting cultivation are basically informed by environmentalist and developmentalist rhetoric. With the official aim of protecting forests from what is seen as an ecologically harmful practice, of modernizing what is considered a backward form of agriculture, and of controlling and integrating into the nation a population that is viewed with suspicion due to its “nomadic” way of life, all of these policies seek to reduce or eradicate shifting cultivation in one way or another.

What the German anthropologist Weber wrote more than 30 years ago on Thailand is still valid for the country and all its neighbours in South and Southeast Asia today:

“Here swidden farming has proved to be one of the preferred phenomena for the fixation of social prejudices. From the perspective of Bangkok, the centre of social, economic and political life in Thailand, situated in the middle of a cultural landscape with wet rice fields, gardens, plantations, canals, roads



Photos from the Philippines, Malaysia and Thailand: Christian Erni

and railway tracks, the swidden farming in faraway parts of the country is dismissed as primitive, irrational, bad and harmful. The reason, advantage and benefit of this form of agriculture remains unknown. On the contrary, stereotypes are reasserted by pointing at the 'enormous destruction' to the country's ecosystem caused by swidden farming. Damage to forests, erosion, threat to water resources are given as the immediate results. Such qualitative statements however lack quantitative confirmation; qualitative conjectures correspond to a remarkable lack of quantitative information".⁴

Decades of research on virtually every aspect of shifting cultivation have generated sufficient evidence to prove that its sweeping condemnation by government bureaucrats, politicians or professionals is based on insufficient and erroneous information, or quite simply myth (see Pinkaew Laungamsri's article). As the articles in this issue show, in spite of all the evidence produced over the decades, little has changed. Deep-rooted prejudices continue to prevail and, with them, the discriminatory policies and programs that have enormously negative consequences for indigenous peoples. Sometimes the policies are subtle, such as the promotion of "modern" farming methods. Their impact can nevertheless be profound, as Kyrham Nongkynrih's article shows. In the Northeast-Indian state of Meghalaya, government-sponsored cash cropping is leading to increasing privatization of communal land and concomitant changes in social relations within communities. In other cases, state policies are much less subtle and do not shy away from committing even severe human rights violations in pursuit of the goals of "modernization" and "national integration". The eradication of shifting cultivation is often seen as part of this process. As the article by Mi Dze

on Laos shows, the eradication of shifting cultivation is given as one of the reasons for relocating over 200,000 people from their mountain villages to the lowlands. This happens despite studies that have clearly demonstrated that forced relocations have in this country led to increased poverty, malnutrition, a general deterioration in health and a higher mortality rate among the villagers affected.

We can cover only a few cases of such ill-informed policies on shifting cultivation in Asia in this journal. In countries not dealt with here, such as Malaysia, the Philippines or Indonesia, policies on shifting cultivation reflect the same approaches and the same underlying prejudices and misunderstandings and attitudes. As the nation-states in South and Southeast Asia grow stronger, the implementation of existing restrictive and repressive state policies against shifting cultivation has become more effective. For the indigenous peoples in these countries, it has become yet another battle front for survival. □

Notes

- 1 IFAD, IDRC, ICRAF and IIRR 2001. *Shifting Cultivation: Towards Sustainability and Resource Conservation in Asia*. International Institute of Rural Reconstruction, Cavite, Philippines; p. 24f
- 2 Ibid.
- 3 Conklin, Harold C. 1957. *Hanunoo Agriculture. A Report on an Integral System of Shifting Cultivation in the Philippines*. Rome: FAO, page 2
- 4 Weber, Karl Erich 1969. "Biedermänner und Brandstifter". *Soziologischer Versuch über den Schwendbau der Thai*; in: H. Reimann, E.W. Müller: *Entwicklung und Fortschritt*. Tübingen (Translation C.E.)

SWIDDEN AGRICULTURE IN THAILAND: MYTHS, REALITIES AND CHALLENGES

Pinkaew Laungaramsri





Proud owner of a rice swidden: Lua swidden farmer from Mae Hong Son province. Photo: Christian Erni

Swidden agriculture is commonly held to be the primary cause of forest destruction in Asia. In Indonesia, swidden agriculture was seen by the Dutch colonizers as “the robber economy” since it competed with the colonial state for the use of forest resources.¹ In India, the traditional practice of swidden farming was perceived as the most “destructive” form of agriculture by the British foresters, particularly during the period of British expansion of forest exploitation into mountainous areas.² In Thailand, the term “*rai luan loy*”, literally “drifting field”, is used in official discourse to refer to what they see as a “slash-and-burn” farming method practiced by the hill tribe people³ in mountainous areas. Such a term carries the ethnocentric pejorative connotation of swidden agriculture as being “nomadic” and “temporary”⁴ as opposed to the assumed “permanent” agriculture of the lowland communities. As a result, since 1985, Thailand’s national forestry laws and policies have been hostile to swidden agriculture. With little understanding of their traditional land use systems, many government programs have combined the resettlement of hill tribe villages with forced conversion of swidden cultivation into permanent agriculture. The implementation of these programs reflects the state’s pejorative view of tribal people by associating local practices of mobility and swidden agriculture with a presumed “threat” to national security and “deforestation”.

It should be noted that, over the past few decades, a volume of research has pointed to the misconceptions around swidden agriculture held by the state and public in general.⁵ Such academic debate has, however, never resulted in policy reconsiderations. In the case of Thailand, the state’s failure to understand the swidden agricultural system, especially the role of secondary successional vegetation, has often led to foresters’ attempting to take over the fallow lands used by swidden farmers. As a result, confrontations between foresters and villagers have escalated over the past few decades.

This article draws on recent research into swidden agriculture in 11 upland villages (ten are Karen and one is Lahu) in northern Thailand, carried out by the Chiang Mai University’s Faculty of Social Sciences⁶, in order to assess the current state of swidden farming and the complex ways in which it is changing. By focusing on local people’s perceptions and practices, this article seeks to understand the different forms of swidden farming developed in response to different degrees of state pressure on local land use. It will also present the research findings that challenge several conventional myths regarding swidden agriculture, including the assumption of a causal relationship between population growth and deforestation, swidden agriculture and soil erosion, and communal rights as an open-access regime and forest destruction.

Swidden fields of Sedosa village in Mae Chaem district. They are still able to practice the full system. Photo: Pinkaew Laungaramsri

Transforming Swidden Agriculture in Northern Thailand

In Thailand's uplands, territorial control and the state's attempt to regulate the relationship between people and resources has historically been an integral part of modern state formation. An early goal was to legitimize the right of the state to control natural resources for commercial purposes. The Forestry Law in 1941 and the Forest Reserve Law in 1964 declared all unoccupied forest lands as private asset state land and criminalized the agricultural activities practiced by local people in forest areas. After the 1960s, functional territorialization for the purpose of conservation was implemented through the National Park Law (1961) and Wildlife Sanctuary Law (1964) and this has increased restrictions on forest use by local people. Since the 1990s, the expansion of protected areas, particularly in the northern part of Thailand, has led to the enclosure of hundreds of tribal communities in the upland areas.

However, law enforcement, along with the implementation of park expansion and reforestation, has been uneven, depending on how remote the villages are and the ability of foresters to access the villages. This has resulted in different degrees of impact on the communities and different forms of local responses. In the 11 villages of the research area it was found that, over the past three decades of state enclosure, upland swidden communities had altered their systems of agriculture in three directions: transformation with sustainability, transformation with a combination of livelihood alternatives, and transformation with dependence on the market economy.

The first group of swidden communities have experienced a moderate impact from the state's forestry policy and have been able to maintain a suitable rotational process of swidden agriculture with cycles of between 5 and 7 years. Local institutions of resource tenure remain strong and customary laws are still practiced. At the same time, cash crop production plays a minor role and is considered only as a supplementary source of income.

In Sedosa village, a Karen community of Mae Chaem district, Chiang Mai province, swidden agriculture constitutes the most important livelihood basis. Every household in this village practices swidden agriculture with a rotation cycle of 6 to 7 years. In addition to this, they have wet rice fields and orchards. Even though the village has lost much fallow land to the Royal Forest Department's (RFD) Watershed Conservation Unit, villagers are still able to maintain the rotational period at a feasible level. However, rice productivity has neverthe-

less decreased, since they have been forced to shorten the fallow period. In 2002, only 36.5% of all households could cover their rice needs with swidden cultivation. Contrary to the outsider's view that swidden agriculture takes up a large amount of land, land use for actual swidden cultivation comprises only 3.7% of the total land area used in the village, or 38.5% if fallow land is included. At the same time, local subsistence relies on a rich biodiversity in the swidden fields. There are 122 edible plant varieties grown in the village's swidden fields, of which rice constitutes 18 varieties.

The second group of swidden communities have been forced to reduce the area of fallow land and therefore significantly shorten the rotational period. In response to state pressure, local villagers have turned to other sources of income, such as ethnic tourism, traditional tea farming and the sale of non-timber forest products in order to compensate for the reduction in rice production. Although land disputes have increased due to insecurity of land rights, traditional institutions are still intact and able to ensure sustainable use of resources and livelihood security.

The ability to mitigate economic pressure and increased risks due to swidden land reduction of course relies on the availability of suitable resources. In the Karen village of Huay Hoy in Chiang Mai province, ethnic tourism has become an option only because the village is located in a unique landscape with spectacular waterfalls and forests. The Karen villagers in Hin Lad Nai in Chiang Rai province are able to compensate for the loss of swidden fields with traditional tea plantations and bamboo harvesting, which provide sufficient income for rice purchase. But as local villagers there remarked, this possibility is closely related to the type of ecosystem, i.e. the mixed deciduous forest rich with bamboo, in which the village is located. If the village were located in an evergreen forest, adaptation to land loss would be more difficult.

The last group comprises swidden communities that have suffered severe loss of land to RFD's reforestation projects and who have been forced to abandon swidden cultivation. As a result, villagers now have to rely entirely on the market economy for their living. Intensive cash cropping with extensive use of chemicals, and wage labor, have replaced subsistence rice production. At the same time, individualization of land tenure has become common as traditional local institutions managing communal land have been weakened.

Most of the villages under this category have lost more than 50% of their swidden land to RFD's reforestation projects. In the case of Pang Eka, a Karen village in Doi Suthep-Pui National Park, Chiang Mai

province, a series of pressures on local land use developed between 1957 and 1998. Three consecutive logging concessions operating from 1957 to 1978 drastically deteriorated the forest ecosystem. Between 1969 and 1996, teak plantations by the RFD encroached into the village's fallow land. In 1981, Doi Suthep-Pui National Park was established and expanded its area into the village's cultivation area in the following year.

All these state projects have taken away a total of 288 ha, almost 80 % of the total swidden and fallow land of Pang Eka. Following the park's establishment, forest patrol, surveillance and arrests by foresters have become common. In 1987, eight Karen villagers were arrested while planting rice in the swidden field. All were women. One Karen victim recounts the story:

"The head of the regional office (who came from Bangkok) wouldn't listen to our explanation that it was the Karen traditional practice of communal labor exchange in rice planting. He insisted that all of us worked for a businessman to clear the land. Until the head of the reforestation project came to the forest station and saw that we were all women with small children. It was such a pathetic scene that he ordered each of us pay 250 baht before releasing us".

After 1987, the Karen at Pang Eka had to stop practicing swidden agriculture completely. The majority of the villagers have now turned to wage labor while some villagers have continued to cultivate rice in the limited fields using a more intensive method. As a result, the soil has been rapidly exhausted and rice yields have dropped drastically. In 2003, only 14.28% of total households were able to maintain rice productivity to cover the entire year, while all others had to purchase rice on the market.

Over the past few decades, state enclosure in these three groups of swidden communities has resulted in changes in the features, stages and lengths of cycles of swidden agriculture. The severest impact has been the



Vegetable cash crops need heavy inputs of agrochemicals: young Lua farmer returning from spraying his field. Photo: Christian Erni

forced shortening of fallow periods due to land loss to the RFD and protected areas. Fallow periods have fallen from 7-10 years to 3-6 years in the first and second group, and to 0-3 years in the third group. In many cases, swidden farmers cope with this situation by intensifying their land use practices and by applying chemical fertilizers and pesticides. This tendency has not only resulted in soil degradation

but also a deterioration of biodiversity in the field. In Pang Eka village alone, more than 10 rice varieties and 100 other plants formerly cultivated in swidden fields have been lost. In traditional swidden farming communities like Mae Lan Kham village in Chiang Mai province, a record total of 235 different plant varieties were found in their swidden fields.

Coping strategies

In response to constant pressures on the land, swiddeners in the 11 villages undertake various strategies by which to sustain their livelihood. Their aims are three-fold: to maintain rice productivity, to increase the level of household income and to ensure the security of land tenure. The ability to achieve these aims among the three groups of villages depends on the degree of state enclosure and the availability of forest resources.

In maintaining rice productivity, villagers employ two major strategies: the expansion of paddy fields and an intensification of labor and land use. The expansion of paddy fields is considered by villagers to be the most effective but is not feasible in those villages that are located in the highland area.

The second strategy of intensifying labor and land use is done basically in four ways: by either shortening the period of fallow as long as sufficient land for a sustainable rotation cycle is still available; by consolidating the swidden fields of several families and pooling

their labour when fallow has become short and weeds a big problem; by dividing up the remaining land into individual plots within which swidden fields are made when land is even scarcer; or, when swidden farming has had to be completely stopped, by permanent land use with cash crops and crop succession.

It was found that, in every village, people have been pushed to rely on off-farm income generation and cash cropping as they have been forced to reduce or abandon swidden cultivation. However, the options available and chosen vary. Where land reduction is not so severe, villagers tend to combine the selling of non-timber products and traditional agro-forestry to increase the level of income. In the second group, which is mostly located in the mixed deciduous forest, a number of alternatives have been incorporated, including selling non-timber forest products and cattle, eco-tourism, tea farming and cash cropping. This combination of various sources of income helps reduce the risks caused by fluctuating crop prices. In the third group, villagers rely heavily on cash cropping and wage labor as the major source of income. Compared to the other two groups, the level of income of the third group is generally higher. However, the level of debt is also higher. As villagers have no control over the market price and employment is often temporary, most income is used to pay off debts. With limited alternatives and a high dependence on the market, the livelihood of this group of villages is more at risk than that of the others.

One of the significant impacts of state enclosure on swidden farming is the insecurity of land rights. As many scholars have pointed out, the state's failure to recognise land rights may form a discouragement or disincentive for local people to use their resources in a sustainable manner (Kundstadter et al 1978, Suthawan 2000). In the case of the swidden communities of northern Thailand, constant arrests and threats from foresters have resulted in uncertainty among swiddeners as to their customary rights and the system of local control and resource management. However, local responses to the insecurity of land tenure vary, depending on the strength and weakness of local institutions. In the first and second groups of villages, where local institutions remain strong, it was found that villages have attempted to create mechanisms by which to prevent further land loss, such as issuing regulations to prohibit the sale of land to outsiders. Some villages have also agreed to rearrange and reclassify their land use, giving up certain swidden areas so that they can revert to forest and become part of their community forest. In contrast, in the third group of villages where local institutions are relatively weak there is a tendency towards the individualization of land rights, and conflicts over re-

source access between rich and poor households have been increasing and escalating.

Demystifying the Myths of Swidden Agriculture

Three decades of state intervention have led not only to an abrupt transformation of swidden communities, with drastic consequences for the tribal communities, but also to that of the upland ecosystem, as forced intensification has led to decreased soil fertility along with the massive application of agro-chemicals and concomitant water pollution and health hazards. All this has happened as a consequence of the state's attempt to "regulate" the relationship between upland communities and resources, and in the interests of "nature conservation".

Underlying these policies are a number of assumptions which, unfortunately, have no scientific basis. Many policies to stop swidden agriculture in northern Thailand proceed without adequate study or understanding of the nature and dynamics of this system of land and forest use and its relationship with the upland ecosystems. The recently conducted study of swidden agriculture in 11 villages revealed that these assumptions are but myths and misconceptions among policy makers and government officials.

The Question of Population Growth

Population growth is one of the most controversial subjects in relation to natural resource management and upland swidden agriculture in Thailand. The rhetoric of population has been commonly used by government agencies and the public in general to characterize upland cultivation practices and their impact on the environment. It is often believed that swidden agriculture is destructive when population has increased beyond the carrying capacity of the land and leads to an inability to cope with population pressure.

The major problem with such a view lies in the tendency to see the relationship between people and the land use system in a linear and static way. The findings from the research in 11 villages, however, points to the opposite. Between 1992 and 2002, the average rate of population growth in the 11 villages was 1.5 %. But the average rate of land use per person declined to 1% as a result of state intervention. To understand this inverse correlation between population growth and areas of forest use under swidden agriculture, one needs to perceive of adaptation to changes in a dynamic way. Most



Intensive upland cash-crop farming has been introduced to replace shifting cultivation. Photo: Christian Erni

Cabbage harvest to be sold on the lowland market. Photo: Christian Erni



villagers recognize that population pressure is an internal factor that could affect the sustainability of rotational systems of upland agriculture, but that it is manageable. From local experiences, it is not overpopulation that has led to land pressure but the RFD's conservation policy. Over the past two decades, constant land loss to forestry schemes has resulted in increasing labor input per unit of farmland and an intensification of land use. At the same time, it was also found that many villages have attempted to convert swidden areas into community forest and paddy fields. The first is in order to conform with state policy on conservation and the second aims at enhancing rice productivity.

The Myth of Open Access

Swidden agriculture has often been perceived as operating in a context of open access to forests without any clear rights or control. It is thus assumed that forests are the object of competition among swidden agriculturalists, which leads to overexploitation. This myth is derived from the misconception that equates communal property regimes with open access. This is primarily because the state's perception of the property system is very limited — it is either state or private property. In reality, swidden agriculture usually goes hand in hand with a variety of tenure regimes that mediate access, use and transfer of resources. The customary practice of swidden agriculture is based on community property rights which are usually differentiated along individual, gender, family, lineage and community lines.

In the 11 villages studied, swidden land was owned by a household and lineage but managed and controlled by the community. Household rights to swidden fields are therefore circumscribed by community rules and opinions. Paddy fields and cash crop plots are, however, owned and managed by individuals. Rights to swidden land are flexible and based on a combination of usufruct and ownership rights. For example, an individual household that is not a member of a certain lineage but in need of land can request the household in charge to allow it to use the land. Usually, the discussion of whether such a request is reasonable takes place at both household and community level. The basis of the concept of land rights as household-owned but community-managed is communal sharing and the moral economy. The aim is to ensure equity and sustainability of land use among households.

The study thus revealed that a situation of open access did not arise from the communal right system but from the state's enclosure and denial of community

rights to swidden land. As the case of the third group of villages suggests, the individual farmers' uncontrolled conversion of fallow land into permanent cash-cropping plots has been the direct result of the state's rejection of fallow as part of the agricultural system.

Swidden Farming and Soil Erosion

Swidden agriculture is often held as the major cause of soil erosion since it is usually practiced on steep slopes and implies the removal of forest cover. Over the past decades, the depositing of soil in the lowlands, rivers and rice fields has been perceived as a direct result of upland swidden agriculture.

However, the study of changes in soil fertility which scientifically measured the erosion deposition in swiddens and fallow in four villages selected from the first and second groups showed very different results. It was found that the level of deposit is not only minimal but decreasing in swidden plots with longer fallow periods. The average rate of soil erosion in swidden fields was below 0.1 ton per hectare per year, which is very low compared to the average rate of natural soil erosion of 3.1 tons per hectare per year, a rate measured even in undisturbed forest. In all four sites studied, soil fertility remains high and is closely linked with the length of time the fields have been left fallow to regenerate.

According to the villagers, several factors contribute to the minimal rate of soil erosion in swidden fields: the method of tilling and planting, which does not disturb the soil surface much, the planting of diverse species of plants with different depths of roots, and the practice of leaving many trees in the fields. In some swidden plots, the numbers of trees left in the field can be as high as 200 per rai (0.16 ha). Villagers explain that this is to provide shade and to help shorten the regeneration period.

Conclusion

This article has used the results of a recent study on swidden agriculture in northern Thailand to challenge common beliefs about this land use system held by government agencies. Contrary to the perception that swidden agriculture is an inherent cause of environmental degradation, the article points to the political economy of upland resource control and the state policy of exclusion as the main force bringing about radical transformations among swidden cultivation communities. Their ability to maintain livelihood security depends on the degree of impact of state intervention, the

rate and extent of land loss and the availability of other resources. Despite the state's determined attempts to stabilize swidden agriculture, for many tribal communities it continues to be a major source of food. Various new livelihood systems have been developed in which the loss of swidden land is compensated by an intensification of labor investment, and by combining swidden cultivation with income-generating activities such as agroforestry, the collection of non-timber forest products, or the growing of cash crops.

Life has in general become more difficult for these tribal communities as self-sufficiency in rice cannot be achieved any more and people have become more dependent on the market economy. It usually brings more uncertainties and the risk of falling into debt. At the same time, in some communities conflicts over land are occurring more frequently since land is becoming scarce, communal land rights and management systems are undermined and traditional institutions weakened. However, in response to the state expansion of the conservation paradigm, some communities are also attempting to strengthen the common property regime in the form of community forests as a means of maintaining a safety net and a strategy to counter the state claim to resources. More research is therefore needed to understand the complexities of the people's responses to state policies, market forces and other influences. And most crucial is a need to look into the legal recognition of land rights for tribal communities, also in order to create a context and local incentives for the sustainable management of resources. Since the research on which this article is based has proved that many of the prevailing prejudices about swidden agriculture are myths and misconceptions, new perspectives need to be developed based on a true understanding of the swidden agriculture practiced by the tribal communities in Thailand's uplands. Swidden agriculture could well be incorporated into an overall forest management and biodiversity conservation strategy on the ground. The challenge, however, remains for government agencies, local people and other relevant stakeholders to enter into a meaningful policy dialogue and find solutions that ensure both local livelihoods and the forest ecosystem. □

Notes

- 1 Colchester 1990
- 2 Gadgil and Guha 1992
- 3 In Thailand, nine ethnic groups are officially recognized as "hill tribes": the Hmong, Karen, Lisu, Mien, Akha, Lahu, Lua, Thin and Khamu. An official survey in 2002 found 923,257 "hill tribe people" living in 20 provinces of the country. The "hill tribes" and the *chao thale*, the so-

called "sea-gypsies", are usually considered Thailand's indigenous peoples.

- 4 The Royal Forest Department used to refer to swidden agriculture as "*thang pa tham rai chua khrao*" or temporarily clearing forest for swidden before using the term "*rai luan loy*".
- 5 See, for example, Spencer 1966, Fox et al 2000, Dove 1983, Colchester 1990, Gadgil and Guha 1992, Granstaff 1980, Forsyth 1999, O'Brian 2002, Schmidt-Vogt 1998, Kunstadter et al 1978.
- 6 The research project entitled Swidden Agriculture: the Current State and Changes was funded by the Ministry of Agriculture and Cooperatives and carried out by the Faculty of Social Sciences, Chiang Mai University, in collaboration with the Faculty of Forestry, Kasetsart University, Northern Development Foundation, Hill Tribes Institute, and local villagers. The period of the research was between November 2002-February 2004.

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SHIFTING CULTIVATION AND WILDLIFE CONSERVATION: A DEBATE

edited by
Elisabeth Kerkhoff and Christian Erni



Living with wildlife: Field hut built on a tree to be safe from elephants. West Garo Hills, Meghalaya. Photo: Christian Erni



Elephants feeding in a fallowed swidden field. West Garo Hills, Meghalaya
Photo: Vincent Darlong



Shifting cultivation (known in Northeast India as “jhum”) is still perceived by many so-called experts – from agronomists and foresters to development planners and conservationists - as irrational, wasteful and destructive to the environment. Wherever protected areas have been established in Asia, attempts have therefore been made to discourage or to ban outright shifting cultivation inside or near these areas, since it is considered a threat to endangered species. For the – in most cases indigenous – people affected, the consequences of such measures are severe. Only a few biologists and conservationists have actually tried to understand what impact shifting cultivation has on the habitat of wildlife and, to our knowledge, there has been no comprehensive study of the problem. Taking a fresh, unbiased look at the issue is not only of the utmost importance for those indigenous communities whose lands have been declared protected areas but, as this article suggests, is equally relevant for conservation practitioners and policy makers.

Between April and June 2004, the members of the Jhumia Network had a lively debate on the interrelationship between wildlife and shifting cultivation. This is an internet-based network of researchers, development professionals and other experts on shifting cultivation working mainly in or on the Eastern Himalayan region.¹ The debate is reproduced below in an abridged and edited version, with the names of the contributors in brackets. The results of the discussion were passed

on to policy makers during the shifting cultivation policy dialogue workshop for the Eastern Himalayas, which was organised by the International Centre for Integrated Mountain Development (ICIMOD) and its partners. Some of the policy issues and recommendations resulting from this workshop specifically address the role of shifting cultivation in biodiversity conservation.

The issue

(Chris Erni:) Karen communities in Thailand are under threat of being relocated due to alleged forest destruction. In response to that threat, the communities have organized themselves into a network and started their own community-based resource management. They have succeeded in gaining sufficient recognition to be allowed to stay. Their conservation efforts have been quite successful in terms of “forest regeneration”.

Certain wildlife species have benefited from the communities’ ban on hunting in community conservation forests (usually old-growth forests that they had already been conserving in the past). People, however, pointed out that other wildlife species had become fewer since they preferred fallow (secondary forest), especially for feeding. The reduction in shifting cultivation has also resulted in some plant species becoming scarce (people mentioned above all useful plants such as wood

mushrooms and wild vegetables), and there is now a threat of losing the many domesticated plants they used to grow in swidden fields.

Farmers are convinced that wildlife (and people, of course) will only benefit if they are allowed to continue with swidden farming. I have come across such an argument on other occasions, such as in the literature about wild cattle – Banteng, Gaur etc. – who benefit from openings in forests created by swidden farmers. The close relationship between wild cattle and shifting cultivation is also acknowledged in Karen mythology. A deeper knowledge of such relationships, especially based on research and concrete experiences from conservation practitioners, could help the communities greatly in their negotiations with the government. I would appreciate anything you could share with me.

Good for some, bad for others...

(Elisabeth Kerkhoff:) Shifting cultivation is good for elephants. Dr. Eric Wikramanayake from WWF-US has found that in Sri Lanka shifting cultivation is beneficial for the conservation of elephants since they prefer large open spaces. The rotational aspect of shifting cultivation enables people and elephants to use the same resources at different times. Elephants are comfortable in open landscapes such as the vegetation of the first fallow phases that occur after the people have left but before the forest becomes too dense. If there were no shifting cultivation there would be only dense forest left, and permanent fields, most probably. The elephants might prefer the crop fields for feeding, which would create great risks for farmers. Since the plot pattern in this particular situation was greatly dispersed, the recommendation was that shifting cultivators should manage their plot allocation in such a way that bigger congregated areas were cropped and fallowed, as is traditionally done in Nagaland (Northeast India). This would be even more to the elephants' preference. Rotation is a fundamental aspect of shifting cultivation and is, a good practice for combining conservation with agriculture.

"The rotational aspect of shifting cultivation enables people and elephants to use the same resources at different times."

(Vincent Darlong:) Shifting cultivation is especially good for large mammals and crop biodiversity. Shifting cultivation transforms natural landscapes into cultural landscapes with their own unique biodiversity. Spencer

argues that: "Historically, shifting cultivation has been one of the processes of transforming wild, forested landscapes into developed cultural landscapes. Such transformed landscapes ensured development and distribution of its own unique wealth of biodiversity as it exists today." Wildlife species, especially large mammals, highly depend on shifting cultivation. It also conserves many varieties of edible food crops *in situ*.²

"Shifting cultivation is especially good for large mammals and crop biodiversity."

(Arpan Sharma:) There are some general principles on the relation between wildlife conservation and human use: 1) What are the conservation objectives?, 2) What are the specific needs of the species or ecosystems in question?, 3) How can shifting cultivation help to fulfil those needs and how will other species lose out? For instance, if the focus were on elephants, then some degree of shifting cultivation would actually be beneficial. However, if cycles became too short, elephants would actually end up losing out if the cultivator returned to the same plot before palatable plants for elephants had reappeared. Large mammals like elephants also require forest patches for a variety of needs other than feeding. The social organisation of elephants is extremely complex and herds require the privacy that forests afford. Therefore, a shifting cultivation landscape is certainly beneficial to elephants (compared to a situation, for instance, where there are extensive monoculture commercial crop plantations across the landscape), but extensive research is required to establish its exact role.

"The needs of each species need to be clear before compatible land use can be recommended."

The needs of each species need to be clear before compatible land use can be recommended. There have been some studies in India on species preferences, but wildlife dynamics in jhum landscapes have been very poorly studied. A large number of specialised and endangered rainforest plants and animals, such as Hoolock gibbons, occur only in undisturbed primary forest. For them, shifting cultivation may be very detrimental.

"The 'other side' of the story... are the increasing man-animal conflicts."

(Vincent Darlong) I would also like to add comments on the "other side" of the story of the relationship between jhum and wildlife, i.e. the increasing man-animal conflicts. A classical example from India's North-

east Region is the increasing man-elephant conflict, notably in the Garo Hills (Meghalaya). Various expanding human infringements (encroachments in the forms of clearings of habitats for agriculture/jhum, cash crop plantations, human settlements, concrete fencings, etc.) into the natural habitats and movement-corridors of the elephants are attributed to be the main contributing factors to these conflicts. At least in the Garo Hills, the Samrakshan Trust (a wildlife NGO) is making commendable efforts in trying to understand through community participation the underlying causes of these conflicts and find the probable ways and means of allowing both the wildlife and human to co-exist and prosper.

Does shifting cultivation increase biodiversity?

(Elisabeth Kerkhoff:) Since shifting cultivation creates a diverse landscape (as compared to just primary forest), more habitats are created and therefore it is likely that species and ecological richness is higher.

(Arpan Sharma): This is an empirically observed fact. However, greater species richness (or diversity) does not necessarily result in a situation that is better from the conservation point of view.

(Dhrupad Choudhury): Shifting cultivation promotes a series of landscape successions which, left undisturbed, would “climax” to conditions very close to the primary forests that you talk about. At landscape level, this results in a mosaic of secondary forests with predominantly native species. This matches wildlife needs and increases diversity. This point should be made clear to policy makers and conservationists.

“Shifting cultivation has become destructive because of ill-conceived policies.”

The counter argument, that of the destructive nature of shifting cultivation, is age-old. My answer is that shifting cultivation has become destructive because of ill-conceived policies and inappropriate interventions in

In a Garo village. Photo: Christian Erni



favour of sedentarisation, which reflect a complete ignorance of traditional land management.

What do conservationists want?

(Arpan Sharma:) The objective of wildlife conservation is to preserve ecosystems and landscapes in as close to their natural state as is possible. Therefore, if a particular habitat patch has a certain diversity and density of floral and faunal species in its natural state, and if we can increase that through intervention, this still does not result in a more desirable situation from a conservation point of view.

(Dhrupad Choudhury:) I agree that conservation does not mean increasing diversity through exotic and external introductions or interventions. However, there is a basic flaw to Sharma's assumption that we should preserve the natural state of landscapes: any effort at conservation is about proper resource management, in which livelihoods are managed without damaging the resource base.

(C.N. Anil:) Horticulture and agriculture policies in the North East aim to introduce exotic species for both conservation and livelihoods, ranging from subsistence to market oriented. These have never worked for very many reasons. They have left farmers in a dismal condition and the introduction of exotic varieties has added to the loss of a gene pool of indigenous crops, including upland rice.

What do swidden farmers want?

(Pelzang Wangchuk:) Why do we focus on biodiversity when farmers clearly have other priorities and needs? Jhumias do not need wildlife or wildlife habitat as their daily meal. It is not the primary requirement of the jhum farmers. So why do we consider it as a jhum issue? We are struggling for, and concerned with, the very survival of jhum culture and jhum farmers, right? Jhum areas are the food bowl of the poor farmers. Have the wildlife conservationists run out of space so that they are now forced to encroach on jhum? Or are jhum areas easily accessible because they belong to the poor who have no voice, no political alignment or backing? Make sure wildlife conservationists don't take too much from the farmers!

"The primary function of the fallowed land is to serve as a source of livelihood, not as a playground for elephants."

Wildlife is welcome, but it should not become a nuisance. We in Bhutan compensate for livestock killed by tigers. The plan is to start compensating farmers for the crops damaged by wildlife. Although this is an expensive and administratively challenging task, we don't want farmers and their families to spend whole nights guarding their crops. The primary function of the fallowed land is to serve as a source of livelihood, not as a playground for elephants. The focus of the biodiversity discussion should be on the benefit to jhum farmers of crop diversity.

"The challenge is to strike a balance between conservation and farmers' rights, and to help policy makers see the totality of the system."

(C.N. Anil:) I agree that conservation is important, provided it adds or compliments the jhumias' efforts to exist and adds value to their right to live. The fact that farmers are marginalised and are treated as primitive and backward by the conservation movement is often forgotten. Our aim is to see that they are heard, and to keep the focus on them and their practices. The challenge is to strike a balance between conservation and farmers' rights, and to help policy makers see the totality of the system, rather than appearing to be in favour of certain aspects.

(Madhu Sarin:) Biodiversity and wildlife conservation are critically important and meeting human needs should not be prioritised to the extent of justifying the annihilation of other life forms. The Earth belongs to all life forms. It is the decision-making processes by which areas in need of protection are prioritised that need to be questioned. This is currently often done irrespective of the costs for those dependent on them. At present, this decision making has been predominantly monopolised by conservationists.

Pristine nature or a human landscape?

(Elisabeth Kerkhoff:) Does nature conservation mean we have to conserve landscapes in their "natural" state? This means only "primary" vegetation will be conserved. But other vegetation may also have aesthetic and other values for people. It is sometimes difficult to assess what the "natural" state would be of landscapes

that have had long-term human influence. In the Eastern Himalayas, where people have lived for ages, it would be very difficult to say which forests are “natural” or “pristine” and which are not. On the other hand, it would be easy to assume that since these areas have been cropped and fallowed and managed by people for such a long time, people are partly responsible for the wealth of biodiversity that is now present there. In other words, if you keep the people out, it is likely that biodiversity will be lost.

“Where did this idea of “pristine forests” come from in the first place?”

Where did this idea of “pristine forests” (untouched by humans) come from in the first place? In the current debate, it is classified under the “archaic view of nature”, and the untouched forests thus depicted have been confined to myths. Yet, this notion still continues to blur people’s views.

(Dhrupad Choudhury:) Different perceptions of the value of resources are fundamental. Perceptions can be utilitarian, ecological or aesthetic. Aesthetics who want to “preserve” nature tend to over-romanticise. They forget that evolution is at work, and that nature is dynamic.

(Sunder Subramanian): Today, many people realise that investing in “conservation” makes sound business sense, and not just charity. If conservation in the holistic sense is required, it also makes sound sense for the administrators to develop regimes whereby the jhumias themselves manage the effort in every sense of the term, including control. This is the way in which a win-win situation is likely to come about.

(Madhu Sarin): As already mentioned, pristine nature is a mythical natural condition as most landscapes have already been transformed and changed by human beings over centuries. Let’s not forget that valuable agro-biodiversity has also been created through centuries of human interaction with pristine nature. According to my understanding, one of the major gifts of jhum over

the centuries has been this contribution of agro-biodiversity and the indigenous knowledge that produced it. Who is to decide that these species are less important than the mythical pristine nature that is sought by placing curbs on jhum? Surely jhumias should have a say in determining what biodiversity needs to be conserved, and how?

Policy issues

(Madhu Sarin:) In both settled and shifting cultivation, people face conflicts with wildlife and destroy the natural vegetation to grow their food crops. The problem is that conservationists consider only jhum cultivators as intruders into nature because they still have forests, whereas they do not expect settled farmers to conserve wildlife or natural biodiversity, because they do not have any. In actual fact, the opposite is true: settled cultivation has been responsible for the permanent destruction of forests, wildlife habitats and biodiversity.

(Dhrupad Choudhury): True, shifting cultivation causes changes in forest cover, but it does not cause defor-



*Garó boys, West Garó Hills, Meghalaya.
Photo: Christian Erni*

estation to the same extent as conversion to settled agriculture; it allows forest fallows to regenerate. This makes shifting cultivation a forest management practice at the landscape level, rather than *just* agriculture.

"Shifting Cultivation is a Forest Management Practice at the Landscape Level!"

Land use categorisation in India is based on private (or settled) land-holding regimes, that is the problem. As categories are based on settled agriculture, jhum fallows are categorised under forests, never under arable, currently unused, land. In practice, many of these fallows have been converted to permanent plantations or afforestation programmes. The result is a shrinkage of the land available for shifting cultivation, and reduced fallow cycles, thereby marginalising farmers and decreasing food security. I strongly feel that fallows should be categorised as arable (currently unused) land, and not as forest land!

"Our dominant legal framework is centred on protecting private property rights, leaving communal property rights extremely vulnerable to encroachment."

(Madhu Sarin:) The issue of communal (CPR) versus private property rights (PPR) is a related one. Our dominant legal framework is centred on protecting private property rights, leaving CPRs extremely vulnerable to encroachment by both the state and commercial interests. It is because of this that most of the CPRs are declared state property and used for revenue, either as "forestland" or "wasteland". Ambiguously defined individual rights over jhum lands have enabled forest departments to classify them as "forest lands". This brings into play the whole plethora of laws related to forests, wildlife and biodiversity conservation, progressively diluting local management control over jhum land resources.

Concluding remarks

In the above discussion, ideas have been suggested as to how shifting cultivation can be managed and improved in order to conserve wildlife and other biodiversity, provided that there are incentives for farmers and that policy obstacles are removed. For this, the conservation objective has to be realistically set (i.e. excluding "pristine" nature), and more in-depth research is required in each case. Incentives for farmers can include more control over conservation activities in their area,

income from conservation-related activities (i.e. tourism or employment in wildlife management) or more control over their forest resources. The conclusions from this discussion, presented above, have contributed to the policy dialogue on shifting cultivation in the Eastern Himalayas, which agreed on a set of policy issues and recommendations.³ Excerpts from the resulting document, where related to jhum and wildlife conservation, are presented below.

"Biodiversity conservation is benefited by the farmers' practices, indigenous knowledge, and customs that are associated with shifting cultivation. In other words, the strength of shifting cultivation to contribute to conservation lies in the diversity it creates. Shifting cultivation benefits biodiversity conservation through: a high level of livelihood dependency that creates incentives for conservation; abundant skill in mixed cropping, seed development, and in situ gene pool conservation; the creation of different successional stages through rotation; and richness of indigenous knowledge (and particularly traditional ecological knowledge) and cultural practices. Shifting cultivation can provide a less intensive land use system to complement conservation activities in protected areas in buffer zones and biodiversity corridors between protected areas. Shifting cultivators have the knowledge and skills to provide many environmental services such as conservation of soil and water, biodiversity and gene pools, and also carbon sequestration. This potential could be harnessed in to provide permanent forms of income and employment."

"Given the negative perceptions about shifting cultivation, the underlying premise of all policies is to replace the practice with permanent, settled agriculture or other settled land-based activities. Such an approach is insensitive to the tenets and strengths of shifting cultivation." As a principle, "shifting cultivators should be rewarded for their role in biodiversity conservation, and should have more control over biodiversity conservation efforts in their areas."

Of the seven recommendations, the following four relate to shifting cultivation and biodiversity conservation:

1. Remove explicit policies and policy instruments that discourage shifting cultivation and strengthen the implementation of existing beneficial policies.
2. Increase security of land tenure for shifting cultivators for both the agricultural and fallow phases through country specific measures, by reconsidering the classification of shifting cultivation areas

- and categorizing them as agricultural land with adaptive forest management in the fallow period.
3. Invest in research and extension to document and scientifically validate traditional shifting cultivation practices, and increase their productivity and profitability, and enhance ecological and social benefits, providing formal recognition of the innovations practiced by farmers.
 4. Strengthen and capacitate customary institutions for improved local level governance, management of community-based natural resources, and tenurial access and control.

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Notes

1 Jhumia Network, <http://in.groups.yahoo.com/group/jhumias/>

2 Darlong, V.T. (2004) To Jhum or Not To Jhum: policy perspectives on shifting cultivation. *The Missing Link (TML)*. Society for Environment & Communication, India, 143 p.

3 Shifting Cultivation Regional Policy Dialogue Workshop for the Eastern Himalayas, Shillong, 6-8 October 2004, Policy Issues and Recommendations.

*Diverse forest landscape maintained by shifting cultivation:
Karen swidden field in Mae Hongson province, Thailand.
Photo: Christian Erni*

SEEDS-SONGS — REFLECTIONS ON SWIDDEN AGRICULTURE, AGRO-BIODIVERSITY AND FOOD SOVEREIGNTY

Maruja Salas



Growing plants from seed is a major achievement in the world history of agriculture. It involves not only indigenous domestication and evolution of crops but also the diffusion of cultigens in a geographical area. This process started in many regions of the planet some 10,000 years ago and continues today in every agrarian society. Since the beginning of food crop production, farmers have imprinted their knowledge, skills, preferences and values on the selection, conservation and exchange of diverse seeds.

There are between 3000 and 7000 plant species that sustain the daily life of human beings worldwide. However, only 20 to 100 species account for 90 percent of the world's food crops, and just three crops – wheat, rice and maize – account for 60%. The consumption of flowers, mushrooms, roots, tubers, nuts, so-called wild vegetables and other edibles collected from the forest and cultivated in the swidden fields is a more important and diverse source of food for indigenous peoples but is often looked down on or ignored as nutritious, palatable and enjoyable.

Historically in rural societies, women have often been engaged in nurturing indigenous seeds due to the social division of labour. Their capacity to observe, classify and experiment with plants in their immediate environment gave rise to a frequent analogy. Seeds contain life, germinate, become plants, grow like living beings. Similarly women conceive, give birth and “grow” children. This perception creates the symbolic association between women and seeds, representing fertility, the energy that vitalises the ongoing cycle of life.

Shifting cultivation, a source of agro-biodiversity

In the tropical mountains of Northern Thailand, indigenous farmers who rely on swidden cultivation as a way of life conserve a rich diversity of food resources from locally adapted cultivars as a result of indigenous seed conservation. Rice varieties in particular are the



Photo: Christian Erni

focus of selection, collection and exchange within and between local communities and are a source of well-being and food sovereignty. For example, the Karen are known to nurture at least 25 to 30 local varieties of rice and to gather more than 110 kinds of vegetables from the forest and the rotational fields.

The preference to include diverse foods in the daily diet is ensured by the process of keeping seeds in the households. Nowadays this is called “in situ conservation” of genetic resources as opposed to “ex situ”, which takes place in laboratories and research centres under the umbrella of scientific modern agriculture.

The village of Baan Hin Lard Nai in Chiang Rai Province is located in a valley in the Khun Jae National Park mountainous forest. Like most Karen villages, the settlement is close to a source of water, the upper stream of the Mae Lao River. One hundred and five people live in the village in 24 households. Apart from five, all houses are built with local materials, wood and bamboo, which will last three to five years. After that, the houses are torn down and replaced with new ones.

The village is surrounded by mountains, covered once by a mixed forest but now increasingly taken



Sharing the elders' knowledge. Photo: Maruja Salas

over by black pine. We walked to the south-west of the village, an area reserved for rotational farming. A group of three generations of farmers guided us to their swidden fields. During the walk, they showed and explained to us the diverse uses and meaning of trees, plants, animals, insects, streams and farming areas.

Young men pointed out the commercial value of trees whereas the older men stressed their function as natural indicators: *"This tree growing near the creek we always observe to know how is the weather going to be like in the next days and what will be the influence on the crops."* Continuing our walk, the villagers identified a plant that women know better: they have a more specialised knowledge about healing. *"We benefit from their skills about the medicinal values of trees, plants. For example, the leaves of this same tree are collected by the mothers to alleviate earaches of the children, specially during the cold days of the dry season, it is a pity they are not here to tell you more."*

In our biodiversity itinerary we stopped at meaningful landmarks. For example, at a junction where two paths cross, or two streams join, or for instance at spirit houses that demarcate the spiritual and territorial boundaries in the use of forest resources. Our guides also showed us a special variety of bamboo that is used to make a box in which the umbilical cord of a new born child is deposited and then tied to a tree. Not far away, one of the elders pointed with respect to such an "umbilical cord tree", where a bamboo box was hanging. He explained: *"When a person dies his or her spirit re-unites with the umbilical cord and a new cycle of life is initiated."*

Whether bamboo, the umbilical cord tree, other trees, medicinal or food plants or certain places, for our guides their practical value is inseparable from their spiritual value. In their eyes, the plant world has multiple attributes and meanings.



Recalling and using all senses is part of biodiversity conservation. Photo: Mariuja Salas

The mother-of-rice site and food sovereignty

We came closer to the hill rice fields where various rice varieties grow together in the same plot as the innumerable vegetables, herbs, tubers and medicinal plants that are seasonally collected.

A middle-aged woman has now joined our biodiversity tour and tells us:

“When the day starts I don’t stay at home. I begin to move towards the hill rice fields to the mother-of-rice site (it is a very personal place each woman has in the rice fields, M.S.). On my way there I encounter many joyful moments, vegetables that I can cook for my family, fragrant flowers for the rituals, herbs that I pick thinking if someone has a pain or discomfort that I can heal. I stop to hear the songs of the birds sitting on tree branches. They know about how the rice is growing because they are watching over the

rice paddies. They announce many things: the days continue to be dry, the rice is doing well... When I arrive to the mother-of-rice site. I recall one by one the seeds who have gone and pray to mother of rice to give me strength to bring back the seeds to our lives.”

This knowledge of seeds includes the ability to design several production cycles in order to obtain a broad range of plants that will sustain a family on a day-to-day basis. Knowing seeds implies having the skill to classify them, paying attention to multiple purposes – food, medicine, rituals, ceremonies. The classification, selection, conservation and reproduction of seeds relies on senses: touching and smelling to see whether seeds are healthy, distinguishing the colours of varieties, spotting the particular temperature and quality of the soils where the seed will grow, interpreting signs in the behaviour of the birds or the weather. Knowledge grows when a person perceives signs about the quality

of seeds and plants, and interprets and communicates this to others during work or leisure time. Conversations about such perceptions enrich the community's knowledge and help to preserve plant varieties.

Memory is another cognitive way of keeping track of seeds. Many villagers, men and women, have knowledge that dates back some 100 years. They can quite easily recall 50 to 100 plant and seed varieties that their fathers and grandfathers showed them and told them about. Some elders have an even deeper knowledge. Going back far in time, the list of known plant varieties increases. Each one's memory is a treasure of knowledge passed down for many generations and enriched with personal experiences.

Arriving at another swidden field, everyone disperses to look for useful plants. In a very short time we have a basket full of chillies, medicinal herbs, ceremonial flowers, tubers, gourds, vegetables, a rich crop diversity even though it was long after the rice harvest.

In the middle of the rice field there is a tall bamboo stick pointing towards heaven.

"We put seeds of rice in seven holes inviting the Elephant star (Pleiades) to fertilize the fields after they have been burned, because this star is the soul of rice, the generous mother of rice."

Looking at the full basket, our guides describe the qualities of each plant, explaining with reason and enthusiasm that the seeds mean much more to them than just their material and visible uses, including the spiritual dimension of their interrelationships.

The preservation of indigenous seeds is driven by a cultural preference for having a variety of food in the daily diet. Cooking three times a day what the swidden fields provide - spices, vegetables, herbs, tubers are combined in different preparations with different varieties of plain and sticky rice from the wet-rice and swidden fields - is a source of gratification. In addition, the forest provides a wealth of flavours: mushrooms, ferns, tree leaves, herbs, flowers, fruits, bamboo shoots, insects and game. By far the most are gathered or caught in secondary forest growing on former swidden fields. Since most of the side dishes, spices and herbs come either from new swidden fields or from fallow forest, Karen communities practicing traditional shifting cultivation have a much more varied diet than those who were forced to abandon this and rely on products from the market.

Seeds and songs for life

After the walk in the swidden fields, we return to the settlement, where we are invited by a woman to talk about seeds and their culinary values. Sitting in her kitchen, she tells us why she regards eggplant seeds so highly:

"In culinary terms, there are many different ways of cooking eggplants and all are very tasty, good to eat. In economic terms, it is a permanent plant with long life and good yields. No need to invest money to increase productivity. In agronomic terms, there is no need to use chemicals, it is integrated with other plants, easy to grow, does not have diseases."

This short statement reveals to us that, beyond the culinary value, there is an attitude towards setting limits on investment and an awareness that technology may harm their organic way of producing quality crops. She is making a plea for enough to eat, the enjoyment of diverse foods through the right to practice rotational farming as a sustainable and healthy production method. It is an approach that is very different to cash crop production and the ever increasing consumerism inherent to mainstream development. What she is suggesting is more than food security, it is food sovereignty. Food sovereignty implies the legitimate right of a farming community to determine for itself where, how and what it will grow in the swidden fields in order to sustain the community, the environment and to conserve local seeds for many future generations.

The kitchen is the place to find seeds. We find them in a special basket, near the fire. Each variety is wrapped in cloth and classified with singular care by the mother. Women's observational skills are crucial in the selection of seeds. They make sure not to lose track of plants with special qualities; they collect the seeds and dry them in the kitchen, near the fireplace.

The kitchen is also the meeting point for all generations. It is where they recall the attributes of the seeds by singing a rich repertoire of songs about cucumber, eggplants, rice, sesame, taro gourds and other food plants. The taste, the love stories, the places where the seeds have come from, where they have gone and feelings towards the life of seeds form the lyrics of these songs. Singing knowledge about seeds is another way of transmitting the value of biodiversity conservation across the generations.

Seed places

As we observed before, during our biodiversity itinerary, every plant, every swidden field, the mother-of-rice sites, are meaningful in the conservation of seeds. Sitting in a kitchen, the “in situ” conservation place par excellence, now sitting together with several women, men and children, we learn that:

- The kitchen: is the place where most of the 80 different seeds selected from the swidden fields are kept;
- The rice granary: has at least 9 varieties of rice seeds from the wet rice and swidden fields;
- The swidden fields: at least 14 different varieties of tuber and roots are kept underground as a conservation method.
- The forest: is perceived as the greatest natural reserve of seeds and plants in the long term. They know the importance of the forest for their food diversity. At present more than 40 different varieties of seeds are known and used for experimenting with fruit trees for the orchards, or vegetables for the home gardens as well as for collecting seeds to embroider the women’s blouses.

Why seed diversity?

Villagers explain that swidden farming and indigenous seeds are inherent to the lifestyle and cultural identity they wish to maintain. The reasons for nurturing agricultural diversity by maintaining a wide range of seeds are manifold:

- to be self reliant, not to depend on the market;
- to always have something to collect from the fields since plants grow at different times;
- to prevent soil erosion and maintain many plants and trees where birds can control insect pests;
- diverse plants help to protect the rice from being eaten by rats;
- to have the plants adapted to specific ecological niches;
- to have all the plants needed for ceremonies, medicine, for embroidery on women’s blouses etc.
- to have a reserve of seeds that can be used at other times in the long term;
- to be able to use all community spaces as a living reservoir for plant conservation;



Each place has an economic and symbolic meaning: Ritual site at the junction of two streams.
Photo: Maruja Salas



Food sovereignty – to decide what to eat: swidden rice and vegetables from garden, field and forest. Photo: Maruja Salas



Many kinds of vegetables, spices, herbs, tubers and flowers are gathered from the swidden field even long after the main harvest. Photo: Maruja Salas



In the kitchen: three generations get together, singing songs for the cucumber, the eggplant, sesame... Photo: Maruja Salas

- to have seeds for exchange within the community and with other ethnic groups;
- so that women can continue their role as protector of rice varieties.

These arguments invite us to think about the interconnections between crucial issues. The preference for diverse foods and the active creation and preservation of this diversity is not just a continuation of a rich cultural heritage, it is also an expression of self-reliance. Dependence on cultivated or collected plants and animals is one aspect of self-reliance that is achieved in a community space consisting of different types of fields and forests. The territory in which rotational farming is practiced is at the same time the place where plants, animals, humans and spirits coexist. So territory and this indigenous practice are inextricably linked. This is what the Karen mean when they say that swidden agriculture is a way of life. They are vindicating ways of guaranteeing their territorial integrity.

Government policies and the loss of food sovereignty

Since 1970, the Thai government has been heavily involved in reducing opium production and in a policy to reduce shifting cultivation through crop substitution and integrated highland development programs. The main targets of these activities have been the tribal people in the mountains who, for many centuries, have conserved biodiversity by practicing swidden agriculture.

To replace opium and stop swidden agriculture, the government has reshaped the indigenous forms of land use, introducing cash crops that require chemical inputs and high-yielding varieties of seeds generated "ex situ". With the aim of achieving an industrial, "scientific" monocropping of food crops, government programs have thoroughly transformed highland farming. Extension services (government agencies, NGOs and the agro-industry) have introduced agricultural innovations (monocropping, cash crops, agro-chemicals,

high-yielding varieties) everywhere in rural areas. These agricultural development policies are based on the Transfer of Technology model (TOT). The rationale behind the TOT model is a conviction that science produces knowledge that is applicable everywhere, independent of place, time or culture. In order to provide the farmers with the means to produce for the market, science generates agricultural knowledge in international research centres, universities or multinational companies, which is handed over to the National Extension Service (NES). The NES assists the farmers with technological solutions that fit the current trends of agricultural policies.

In this model, the farmers are simply users of agrotechnologies developed elsewhere. They just follow the instructions that the extension services prescribe under the assumption that farmers do not have the capacity to produce appropriate agricultural knowledge or technology by themselves.

As a consequence, many local varieties of plants, and above all rice, are now being replaced by so-called "high-yielding varieties" (HYV), including unauthorised genetically modified seeds. Furthermore, in the wake of the forced transformations of upland development programs, education and increased exposure to modern lowland society, local values shaping food consumption patterns have been severely dislocated from their agricultural context. Urban consumption habits have been adopted, creating a feeling of being part of the global society. Cash crops are increasingly invading indigenous fields and people now tend to produce food that is not for their own consumption. Instead, they buy industrially produced food.

The erosion and loss of local seed diversity through the ban on shifting cultivation and the introduction of new agricultural technologies has a direct impact on food sovereignty, the farmers' ability to control and maintain the great diversity of domesticated plants they have created. With the loss of food and seed diversity, indigenous farmers become dependent on the transnational agro-industry. This leads to malnourishment, soil degradation and contamination, which affect the health of the people. But in addition, people are now facing situations for which their own knowledge does not provide answers. It erodes their capacity for self-determination, thus creating great uncertainty and vulnerability.

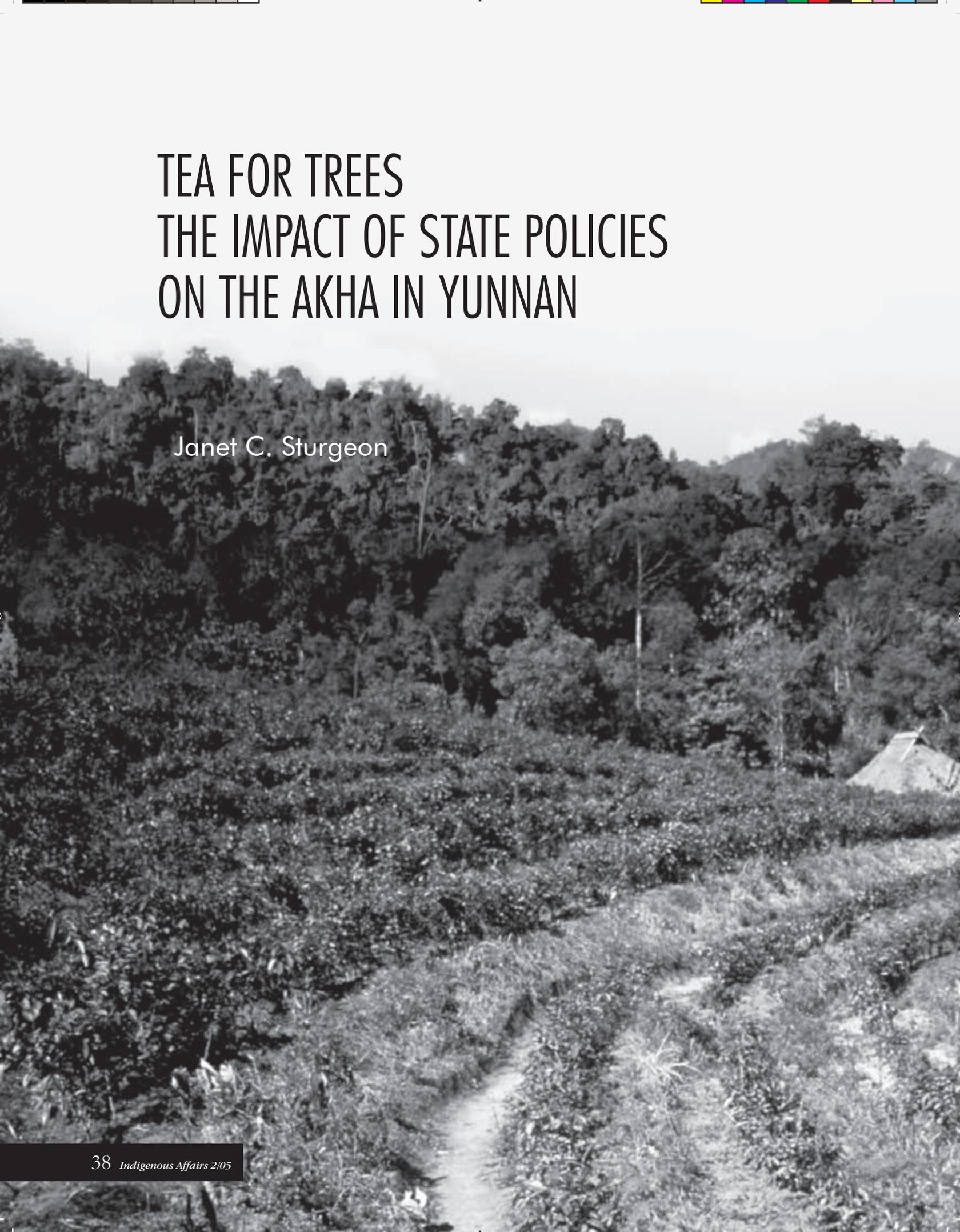
Indigenous organisations and support networks at national and international level have realized that the preservation of indigenous knowledge, as expressed in traditional swidden agriculture and seed diversity, is one way of asserting food sovereignty, and with it self-determination. What is needed is to match the expres-

sion of these values with legal recognition, and a reconsideration of current policies on swidden agriculture. Rather than intrusive, nameless, manipulated global seeds, indigenous seed will perpetuate the heritage of a culturally diverse humankind: a world in which many life styles can coexist, a new era of identities. □

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TEA FOR TREES THE IMPACT OF STATE POLICIES ON THE AKHA IN YUNNAN

Janet C. Sturgeon



The Akha village Mengsong in Yunnan. Photo: Janet Sturgeon

New tea plantation in 2005. Photo: Janet Sturgeon



In February and March 2005, I visited Xishuangbanna, a prefecture in southern Yunnan, China, to assess the effect of the new road from Kunming to Bangkok on the people I had worked with over the past decade. I could never have imagined, during my previous visit three years earlier, how much the uplands of Xishuangbanna would have changed. In place of the extensive shifting cultivation fields once visible from major roadways, row upon row of terraced tea fields now covered the slopes above 1000 meters.¹ Although the Chinese government has, in principle, been trying to end shifting cultivation since the early 1980s, the outcomes have so far been uneven. As I quickly discovered, the new Kunming-Bangkok road had little to do with the expanding tea. So what has caused this rapid transformation of the landscape over the past three years? And what does it imply for the people?

An expansive and nuanced answer to these questions requires a brief glimpse into three kinds of history in Xishuangbanna, all interrelated: 1) The general history of Xishuangbanna, formerly Sipsongpanna, a Southeast Asian principality up to 1950; 2) The history of Chinese land use policies from the 1950s onward; and 3) The history of Chinese policies for and attitudes toward upland minority nationalities.²

Xishuangbanna: The “principality of the twelve districts”

Xishuangbanna is a Chinese transliteration of the original Tai name, Sipsongpanna, which means “twelve districts”. Historically, Sipsongpanna was a tiny prin-

cipality ruled by Tai people who are socio-culturally closely related to other Tai groups in neighboring countries of mainland Southeast Asia.³ An array of other ethnic groups inhabit the uplands, such as Akha,⁴ Lahu, Yao, Jinuo⁵ and Bulang. All of these peoples were considered “barbarians” on the frontiers of the Chinese empire. Most of them originated in what is now China and later spread into contiguous hilly parts of Burma, Laos, Thailand and Vietnam. For centuries, upland farmers in Sipsongpanna practised shifting cultivation. Even many of the lowland Tai planted both wet rice fields and shifting cultivation lands until the 1980s. Before 1950, primary tropical and subtropical forests carpeted both the valley and surrounding mountains in Sipsongpanna.



Akha couple returning from the field. Photo: Janet Sturgeon

The Government's Land Use Policies

Sipsongpanna principality was incorporated into China as Xishuangbanna prefecture following the 1949 revolution. There was no land reform among shifting cultivators, who continued to plant upland rice in swiddens even when they were organized into communes during the collective period (1958 to 1982 in this area). During these years, state policy makers were not concerned about the effect of shifting cultivation on forests because, in Maoist ideology, woods were an inefficient land use that should be moved aside for grain (Shapiro 2001). State policies for agriculture, together with the establishment of state rubber farms in the valley, removed most of the primary subtropical and tropical forest. During the economic reform period, which began here in the early 1980s, the state devolved responsibility for agriculture and most forest land to the local level. As communes were dismantled, upland farmers received both wet rice and shifting cultivation lands for household management. Commune forests were similarly allocated to hamlets and households for subsistence use. Within strict state regulations, the overall policy transferred responsibility regarding land use decisions from the state to hamlets and households.

Beginning in the early 1980s, in line with advice from the United Nations' Food and Agriculture Organisation (FAO) and other international development ex-

perts, the government of China decided to end shifting cultivation, but to do so gradually. In Xishuangbanna, state extension agents gave farmers free seeds and fertilizer for wet rice as an incentive to construct permanent terraces in place of upland swidden fields. In the 1990s, new state forest policies sought to protect and extend forest cover. These efforts amounted to mere tinkering with the overall land use policies for forestry and agriculture established during the early 1980s.

The massive flooding along the Yangtze River and in Heilongjiang province in

1998 motivated a series of national government policies that seriously curtailed shifting cultivation. Central leaders judged that deforestation along the upper reaches of the Yangtze River had caused the devastating floods. Accordingly, the Natural Forest Protection Plan of 1998, otherwise known as “the logging ban”, prohibited tree cutting in natural forests. Although initially targeted at commercial logging operations, the logging ban was gradually expanded to include household and hamlet community forests. Upland farmers were forbidden from cutting trees larger than a certain diameter on fallowed swidden fields because the state protected them from “logging”. The other policy, targeted at all of Western China, was the “Grain for Green” program whereby forestry department staff encouraged farmers to allow agricultural fields with a slope of 25 degrees or over to revert to forest. Farmers who thus lost agricultural land were to receive grain and cash for each *mu*⁶ of land that became forested. Shifting cultivators, many of whose fields were steeply sloping, were under serious pressure to give those lands back to the state for reforestation.

In Xishuangbanna, these policies were supplemented by the poverty alleviation bureau's promotion of tea in the uplands. These three state initiatives combined coercion with subsidies to get farmers to abandon shifting cultivation and to plant tea instead. The prospect of a reasonable income from tea has persuaded farmers to choose this crop over other cash crops. The result is evident in the massive expansion of tea in the area since the poverty alleviation initiative started in 2003.

*Swidden landscape in Yunnan in 1997
Photo: Janet Sturgeon*

The State's Policy on Minority Nationalities

Policies for and attitudes toward upland minority nationalities have been closely tied to policies for land use. In the early 1950s, all non-Han⁷ residents in Xishuangbanna were classified into minority nationalities with cultures and land use practices that, in the state's eyes, indicated varying degrees of "backwardness" behind those of the dominant Han. Incorporation of these groups into communes was supposed to lift ethnic minority farmers up to socialist modernity. In the various campaigns and policy changes of the past 50 years, however, shifting cultivators have always been judged "backward," even when significant changes occurred towards what was considered to be "advanced". The devolution of land and land management to upland farmers in the 1980s signaled that shifting cultivators, under the guidance of state agents, were to increase agricultural productivity and manage their own forests. While varying in emphasis over time, this basic policy framework continued for upland cultivators until 1998.

National government leaders responded to the severe floods in 1998 as a national environmental crisis. The image of denuded watersheds captured the policy

makers' imagination. Interviews with forestry, agriculture and government administration staff since that time have revealed a hardening of attitudes toward shifting cultivators who, in recent years, have been blamed for destroying forests and not knowing how to develop.⁸ Ethnic minority peoples, who have been considered "backward" for 50 years, are now a convenient scapegoat for environmental problems and a renewed target of government control.

Mengsong: an Akha community's struggle to respond

A description of Mengsong, an Akha settlement at 1600 meters on the ridge separating China from Burma, offers a more detailed exploration of the effects of these policies and government programs on shifting cultivation. In 1996-97, extended research in Mengsong showed that - in response to state pressure and growing markets - many households had switched from upland rice to wet rice. Grain production however remained mixed, as some older women opened swiddens on new sites. The overall landscape in Mengsong at



that time was diverse and changing, with farmers managing wet rice, upland rice, vegetable plots, livestock and forest lands, and collecting a wide array of products from surrounding fields and forests.⁹ This was a landscape characterized by biodiversity and a multitude of livelihood schemes that shifted to accommodate new market opportunities and government policies. Areas under forest in Mengsong, some of which Akha farmers had protected for around 250 years, were in good condition and likely to improve.¹⁰

By 2002, following the environmental crisis precipitated by the Yangtze River floods, township administrators¹¹ had introduced both the logging ban and Grain for Green program in Mengsong. Through both policies, the state was not only reclaiming the forest earlier allocated to villages and households but also extending the area under forest cover and under state control. In this instance, township officials demanded that sloping pastures as well as agricultural lands be left fallow to produce trees. Farmers in Mengsong quickly discovered that they would be fined for cutting mature trees for a new swidden. In response, many decided to participate in the Grain for Green program, and allowed trees to regenerate on pastures and household shifting cultivation lands. They were anticipating government payments of 150 kilos of grain and 20 *yuan*¹² per *mu* per year for a total of eight years. As a result of the loss of pastures, however, farmers could no longer raise livestock. The loss of income from livestock sales, together with a decline in other income-earning opportunities, caused a 25 percent drop in household income between 1997 and 2002. In February 2002, the state declared Mengsong a “poor village” and a site for poverty alleviation activities. Although most of the income loss was caused by the state’s reclaiming pastures and agricultural fields, government agents in 2002 stated that Mengsong farmers were poor because they belonged to a backward minority group that had not yet learned to “develop”. In the eyes of state agents, Akha farmers did not know how to develop or how to protect trees.

By 2005, government policies and development projects had brought about a simplification of cropping systems throughout Xishuangbanna and had almost brought shifting cultivation to an end. As we will see, the campaign to promote tea cultivation was a complicated story in Mengsong, but the policy and land use history presented above help to explain the paradoxical outcomes observed there.

Tea: the carrot and the stick

In Mengsong, farmers had begun to respond to the logging ban and the Grain for Green program as early as 1998. In anticipation of the promised subsidies in grain and cash under the Grain for Green program, many farmers had allowed their lands to revert to forest. The two policies had brought about a significant expansion of the forest area in Mengsong, which for the farmers however meant a considerable loss of land for agriculture and livestock herding. In 2003, the prefecture poverty alleviation office launched a new cash crop initiative, deciding that the ideal cash crop for upland farmers was tea. By February 2005, virtually all remaining shifting cultivation lands in Mengsong had been planted with tea. In addition to raising household incomes, the new tea planting was intended to help end shifting cultivation and to protect the forest. Government officials thought that if farmers had a good income from tea, they could buy grain and would stop cutting trees.

Farmers in Mengsong did indeed plant tea, but for a mix of the following three reasons. First, the state poverty alleviation program gave farmers free tea seedlings and a 150 kilo annual grain subsidy for two years for each *mu* planted in tea. Second, if left fallow, shifting cultivation lands would regenerate into mature forests, which the forestry department would then reclaim for the state. To avoid this, and keep the land for the household, farmers planted tea. Third, in 2004 the price of tea was high. It ranged from 12 to 16 *yuan* per kilo, compared to the 5 to 9 *yuan* per kilo it had fetched in previous years. In other words, a government program for poverty alleviation plus a favorable market encouraged farmers to plant tea (the carrot), and the state’s policy of reclaiming regenerating fallow land forced farmers to plant tea to keep the land for the household (the stick). The combination of these three factors almost eliminated shifting cultivation in Mengsong, except for those few households that had no wet rice land. In that case, the state allowed them to continue opening swidden fields.

Further exploration of the tea issue revealed confusion among farmers as to which policies had actually been implemented. Most people thought they were participating in the Grain for Green program. By 2005, some households had already left land fallow for seven years, expecting grain and cash payments for each year of participation. These farmers complained that, to date, they had received no compensation for the loss of agricultural land. In the township and prefecture forestry offices, however, government staff explained that the Grain for Green program had not yet started in Mengsong. The prefecture had a limited number of

Grain for Green certificates, and was distributing them sequentially across the prefecture. Mengsong farmers would get no grain or funds for the seven years they had left the fields fallow, thus returning household lands to state control. Township officials, whether unwittingly or not, had tricked farmers into increasing the area under forest cover in Mengsong. Township and prefecture foresters had responded to the “forest crisis” generated by the 1998 floods. But, in interviews, they showed little awareness of the questionable legality of their way of reclaiming forest land, or of the fact that this loss of land to farmers had actually caused much of the poverty that the prefecture’s poverty alleviation program was now addressing.

Relocations

In addition to promoting tea, government poverty alleviation activities included a plan to move highland hamlets down to mid-slope elevations, and to move hamlets closer together. In 2003, three hamlets in Mengsong were relocated from 1600 meters to 1200 meters, close to an existing hamlet. In this new site, there was limited space for wet rice fields. Many households from all four hamlets could no longer produce enough grain to feed themselves. To bring in enough grain, some farmers had planted tea not only on household land but had also cut areas of village forest to plant tea. They were hoping to receive the grain subsidy of 150 kilos per *mu* from the poverty alleviation program, in addition to increasing their household incomes from the sale of tea. Since one of the main reasons for moving hamlets down-slope was to protect upland forests, the tea planting had a paradoxical outcome. Villagers were reducing the size of the hamlet forest instead of protecting it, since they did not have enough land to produce grain.

Results and impacts

In sum, the overall outcome of the timber ban, the Grain for Green program and the poverty alleviation program has been a simplification of the cropping system by replacing biodiverse shifting cultivation lands and pastures with monoculture tea. How this came about involves a murky story of township administrators convincing farmers to give up their land to regenerate into forest, even though the Grain for Green program had not yet started in their township. Township administrators also claimed any fallowed swidden lands with ma-



*New tea garden in Mengsong
Photo: Janet Sturgeon*

ture trees as state forest. To prevent this, villagers cut the trees to plant tea. Additionally, the poverty alleviation drive to move hamlets downhill had the unintended outcome of reducing forest cover in the new site so that villagers could plant tea. The tea planting was successful partly because the price of tea has been high. The related goal of protecting forests by planting tea, however, has not been achieved. Farmers are cutting trees on regenerating swiddens as well as in village forests to expand the areas where they can plant tea, especially since they have lost their other sources of income.

If we look back at the time before the Yangtze floods, an era that this catastrophic event has obscured, the state zeal for forest protection, extension of forest cover and expansion of tea all seem off kilter. In 1997 the forests in Mengsong were in good shape and likely to improve. Farmers there knew the value of protecting forests. Additionally, most household incomes were at that time gradually increasing as farmers engaged in various forms of wage labor and sold an increasing number of crops in expanding markets.

The subsequent changes were baffling. In the wake of the logging ban and the Grain for Green program – which in some areas such as Mengsong was not even properly implemented – farmers lost most of their pastures and swidden fields, and household income dropped on average by 25 percent. Yet state agents claim that Akha farmers did not know how to develop or how to manage forests.

By 2005, the “poverty alleviation tea” promoted by the prefecture government seemed like a promising cash crop that might restore some of the income lost as a result of the other programs. However, working in a landscape of terraced tea fields and a few plots of wet rice and vegetables is a far cry from managing the expansive, malleable landscapes of the mid-1990s. In many ways, state agents are taking over the lands, as well as the land use decisions, that had earlier been devolved to households. Mengsong Akha farmers have not only lost the biodiverse landscapes of shifting cultivation but also the scope for making land use choices. The cash crop campaign, a boon for state administrators, represents dispossession and disempowerment for upland farmers who, as “backward” minority nationalities, are blamed for environmental problems that were actually caused primarily by natural disasters and policy mistakes. □

Notes

- 1 Pu'er tea has been grown in Xishuangbanna for centuries in the understory of the forest. The new tea is planted in terraces in full sunlight.
- 2 The Chinese government rejects the term indigenous peoples and uses “minority nationalities” instead.
- 3 See Coward (n.d.) for a discussion of Tai relations with upland groups across mainland Southeast Asia. On upland/lowland relations in this region, see also Leach (1954, 1960).
- 4 Akha are subsumed under the official Hani minority nationality in China. In Xishuangbanna they are called Hani or Aini.
- 5 Jinuo are found only in China.
- 6 15 *mu* equals 1 hectare.
- 7 The majority Chinese are called Han.
- 8 Sturgeon field notes, 2002, 2005
- 9 Sturgeon, 1997
- 10 Sturgeon, 2000; Sturgeon forthcoming; Xu 1990.
- 11 The township is the lowest level of state administration in China.
- 12 8.28 *yuan* = US\$1.00

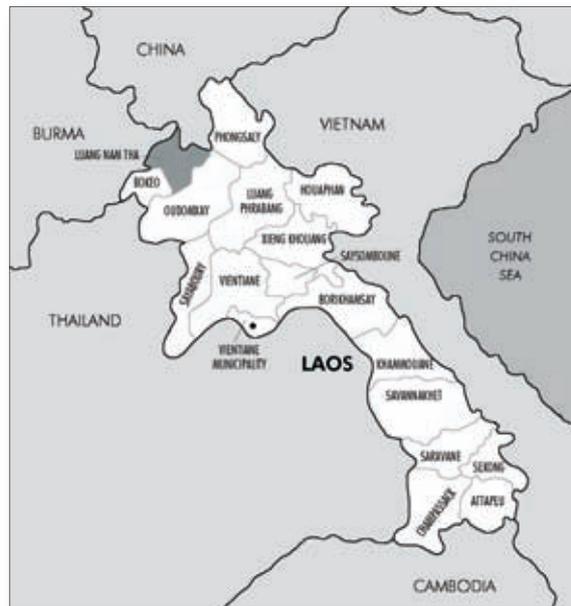
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STATE POLICIES, SHIFTING CULTIVATION AND INDIGENOUS PEOPLES IN LAOS

Mi Dze



*Resettled Akha village. Luang Nam Tha province, Laos.
Photo: Mi Dze*



The Lao People's Democratic Republic (Lao PDR) is a landlocked country surrounded by China, Vietnam, Cambodia, Thailand and Burma. It is one of the few remaining socialist countries and, following the communist takeover in 1975, opened up to the world only at the beginning of the 1990s.

According to the UN, the Lao PDR is one of the Least Developed Countries. With its 5.6 million people and a density of 24 people per sq. km it is by Asian standards only thinly populated. But in spite of its small population Laos has the most ethnically diverse population in mainland Southeast Asia. More than 230 different ethnolinguistic groups have been identified (ILO 2000:7). Around 70% of the total population belong to ethnic minorities, most of whom live in the rugged mountains that cover around 79 percent of the country. The other 30% of the population are ethnic Lao, who dominate the country both politically and economically. They and other Tai-Kadai-speaking smaller ethnic groups live mostly in the plains. The concept of "indigenous peoples" is not used in Laos. The government uses the term "multi-ethnic people"¹ and speaks of Laos as a "multi-ethnic society". It is the so-called ethnic minorities, however, that are usually referred to as Laos' indigenous peoples.

Indigenous peoples, forests and shifting cultivation

The Lao PDR is highly dependent upon forest products, with few other sources of industrial development. Because of the extensive usage, forest cover has declined significantly from 70 percent in the 1970s to about 47 percent in 2002². The causes are manifold: expanding industrial agriculture, new settlements, road infrastructure development, hydropower plant construction, shifting cultivation and logging for export in the absence of a sound forest management system. After agriculture, forestry is the second largest economic sector, employing more than 10 percent of the population.³

Forest products are of vital importance for all people in Laos, serving a wide range of subsistence needs and opportunities for income generation. The indigenous peoples in the highlands subsist on shifting cultivation supplemented by animal husbandry, gathering of forest products, hunting and fishing. Since population densities in the mountains are even lower than the national average, in most areas long-fallow shifting cultivation of 5 to 9 or even more years is still possible. This subsistence economy, based on communal owner-



ship of land, strongly influences the rhythm of life and the particular culture of each ethnic group.

Although traditional shifting cultivation with long fallow periods appears to be a fairly sustainable form of land use, it is accused of being the main cause of forest destruction in Laos. This argument is usually supported with reference to a high average population growth rate of 2.5 percent. It is, however, doubtful as to whether the mountain dwellers' population is really able to grow so fast, considering the harsh living conditions and the lack of health services in these remote areas.

Indigenous Peoples' rights in the Lao PDR

Article 8 of the Lao Constitution of 1991 states:

"The State will carry out a policy of unity and equality between the various ethnic groups. All ethnic groups have the right to preserve and improve their own traditions and culture and those of the nation. Discrimination between ethnic groups is forbidden. The State will carry out every means in order to continue to improve and raise the economic and social level of all ethnic groups."⁴

While officially all ethnic groups have equal status in Laos, the reality is different. The ethnic Lao and other lowlanders dominate the country both politically and economically, due to their access to trade and fertile land in the plains. Their relative wealth is the source of widespread disrespect among the Lao for the indigenous peoples of the mountains. The government considers ethnic minority lifestyles to be backward, and shifting cultivation, as its central element, to be the major source of deforestation.

Two main objectives dominate the Lao government's policies for ethnic minorities: development/modernization and national security. The implementation of these policies is based on two strategic paradigms: *resettlement*, i.e. relocation from the remote mountain regions to the lowlands, and *acculturation* into the lifestyle of the lowlands.

Policies influencing the practise of shifting cultivation

Currently, five policies and programs have a direct or indirect impact on the lives of shifting cultivators:

1. Shifting cultivation stabilization/eradication and the eradication of pioneering shifting cultivation
2. Opium eradication by 2005
3. Land and forest allocation
4. Aquatic and wildlife management regulation
5. Village consolidation

Shifting cultivation eradication policy

Different versions and translations of the government position towards, and policies on, shifting cultivation exist and cause considerable confusion: the official documents in English, e.g. the English version of the Background Document on the National Poverty Eradication Programme (NPEP) of September 2003 says that, "the main objectives of the Lao PDR's long-term development strategy are: ...*To put an end to pioneering shifting cultivation by 2010*" and "*to stabilise shifting cultivation, particularly in the mountainous areas of the northern region by 2005*"⁵ (emphasis added).

In contrast, Alton and Rattanavong (2004:32) wrote that, "the 7th Party Congress 2001 set the targets for the *complete elimination of pioneering shifting cultivation* and overall reduction of all shifting cultivation by 50 percent (to 29 400ha) by 2005 and *complete eradication of all shifting cultivation by 2010*", as shifting cultivation was perceived by the Congress to be a major cause of deforestation, soil degradation and erosion⁶ (emphasis added). They clearly point out that the intent of the policy is to *eliminate* shifting cultivation, while the official English translations of government plans seem to use the misleading term "stabilise".

The motivation behind this policy is the government's intention to protect the forests and to spur on rural development⁷. The desired effects are a transformation of subsistence agriculture (shifting cultivation) to more market-oriented, sedentary productive activities (wet rice cultivation) combined with new occupations in order to increase food production and stabilise food security.⁸ The resettlement of upland villages to the lowlands has been established as adequate to achieve these objectives.

Opium eradication policy

Opium is produced in remote mountain regions where local farmers face structural disadvantages. It is often found in close combination with shifting cultivation. Opium is a two-edged sword: its drawbacks are addiction, affiliated with impoverishment. On the other hand, opium has become an important cash crop over the last 150 years. It has a very favourable bulk-value ratio and can be easily stored, which makes it an ideal cash crop for remote areas. It fits into the agricultural

cycle well and is widely used as a multi-purpose medicine when health services are not available.⁹

The present opium eradication policy aims at eradicating opium completely by 2005. It is an integral part of the international *war on drugs* and has been launched in response to international pressure from the United Nations Office on Drugs and Crime (UNODC), which is heavily funded by the United States. It has been adopted by the Lao government largely because of the country's dependence on development assistance and its hope of being recognized as a cooperating member of the international community.

Land and forest allocation program

In contrast to its socialist neighbour, Vietnam, land rights in Laos are not yet clearly defined. The land decree of 18th December 1998 stated that *land in Laos is without exception state property* (emphasis added). The allocation of use right certificates that has been taking place since 1997 therefore does not represent a recognition of individual private property but is only a formal registration of use rights that includes the right of disposal, i.e. exploitation, leasing and heritability.¹⁰

For forest land, there is a separate program: the forest has been classified into five types: (i) Protection forest, (ii) Conservation forest, (iii) Production forest, (iv) Regeneration forest and (v) Degraded forest. For each forest type there is a set of regulations restricting its use to various extents. The main objective of the land and forest allocation program is the conservation and sustainable use of forestry resources, the distribution of land to the landless poor for agricultural production and the enhancement of extension activities (i.e. fruit and industrial tree plantations, livestock breeding etc.).¹¹

Aquatic and wildlife management regulations

In order to protect wildlife, the Ministry of Agriculture strongly regulates and partly prohibits local hunting and fishing.¹² The food security of indigenous villagers, who are highly dependent upon natural food sources in rivers, streams and forests, is thereby seriously put at risk.

Village consolidation

Village consolidation means that two or more villages are resettled to one location. Remote and small mountain villages are usually resettled to the lowlands, close to a road or a market. "Village consolidation is officially phrased as a necessary means of reducing the adverse environmental impacts of shifting cultivation in remote areas"¹³ and is considered to be a cost-effective way of making development services available to scattered



Akha girl. Luang Nam Tha province, Laos.
Photo: Mi Dze



Akha village in the mountains of Luang Nam Tha province, Laos. Photo: Mi Dze

and remote communities that would otherwise not be reached with the limited resources available.

According to the state's policy, a village unit must have a minimum of 30 families or 150 people, an access road or river, a school and enough land for wet rice fields (paddy) if it is to avoid consolidation. All villages not fulfilling these criteria are supposed to be relocated. Massive resettlements have already taken place: according to a recent study, approximately 211,125 people have been included in the national level government resettlement plan for 2001 to 2005. 59,947 people have already been resettled, another 151,178 people still have to be resettled in 2005 and between 2006 and 2010.¹⁴ Most of those resettled are indigenous swidden cultivators.¹⁵

The impact of state policies on shifting cultivators: the case of the Akha in Luang Namtha

The impact of the government policies was studied by means of field research among seven Akha villages in the northern province of Luang Namtha. Of the seven villages, two have been resettled and three were targeted for resettlement but were able to negotiate a postponement for the time being. Two villages are to remain where they are for the time being. The impact of all of the five policies and programs mentioned above have been felt in these villages.

Shifting cultivation eradication policy

In Luang Namtha province, in the district of Long alone, district authorities decided that 65 out of 122 villages would have to be resettled to the lower regions of the district by 2005 in order to comply with national policies.

Three of the villages surveyed in Long district had sufficient land for paddy fields and were thus able to negotiate a suspension of the resettlement for the time being. But they had to commence their transition from shifting cultivation to wet rice farming.

All villages in forced transition struggled due to a lack of knowledge. Wet rice cultivation is very different from shifting cultivation, requiring years of additional hard work until newly created paddy fields are fully productive. One of the villages was promised support from the local government during the transitional period, such as irrigation systems, seeds and food aid, but no assistance was ever forthcoming. Another village was forced to reduce shifting cultivation to an unsustainable three-year rotation on smaller plots during the transition period to wet rice cultivation. Villagers in transition are desperate: workloads have doubled as they have had to maintain swidden fields and at the same time prepare wet rice fields. They are not familiar with wet rice technology; and the allocated land is not even considered sufficient to ensure food security.

The shifting cultivation and opium eradication policies have triggered massive and uncontrolled additional migration. Being deprived of their major sources of



Akha man cutting bamboo to prepare a new field. Photo: Mi Dze

livelihood, resettled shifting cultivators try to find government-compliant livelihoods. Villagers having the means either buy paddy land in the plains or join relatives in other villages (if they are accepted by the village council). In one village, the poorer part of the village was left behind. Some looked desperately for another place to go, others did not want to leave but, with the exodus, the minimum number of people fell below 150, making the village a future target for relocation. And many of those with enough money had to realize that there was not enough paddy land available.

Community leaders interviewed stated that the implementation of the shifting cultivation policy:

- is enforced, and against the will of the affected communities
- deprives the communities of their subsistence
- worsens food security and causes poverty.

Government-promoted socio-economic programs such as rubber tree cultivation or cattle breeding have either been a failure or are considered unsuitable, ineffective or short-sighted. The villagers reported that they had been informed that shifting cultivation would become an illegal practice in the near future.

Opium eradication

In the villages surveyed, opium eradication had been announced in letters approximately three to five years

prior to actual implementation. Three villages were not concerned, as their location was on an elevation unsuitable for poppy cultivation. Two affected villages were resettled to lower locations in order to eradicate opium cultivation. In the three most remote villages, located at higher altitudes, no measures were taken until 2002. Then government officials forced villagers to destroy their own opium fields shortly before harvest time. This meant a loss of one year's cash income for them.

The subsistence of these people mainly rests on rice. Traditionally, opium is a major source of cash income, providing people with rice in years of bad rice harvest, and in good years with other necessities such as salt, oil, clothes and tools. Due to the remoteness of their villages, it is difficult to replace opium with another adequate cash crop. The elimination of opium production jeopardizes the already critical financial situation and the subsistence of these people. Women in particular are desperate in the face of this situation, as it is often up to them to compensate for the loss of cash income from opium with even more work.

The land and forest allocation program

The process of the forest allocation program could be witnessed in one village: the people were informed of the procedure and were asked to specify the village territory. The territory was then divided into different forest zones, a forest map was set up and the local officials explained the rules and regulations for each forest type.

The approach was top-down and the villagers had no say in the process. The impact of the program could be witnessed in all villages. It causes a variety of problems:

- To compensate for the reduction in land for cultivation, the local government planned to introduce socio-economic programs such as cattle breeding, fish farming, rubber tree or maize cultivation. These programs have either failed or not been started at all.
- Consequently, the land allocated is not sufficient for the subsistence of a family.
- Often, inadequate (unfertile) land has been allocated since the local government officials are unfamiliar with the area.
- The land allocation program does not take population dynamics into account. Whereas the traditional communal land right system can easily cope with the fluctuating number of members and individual household sizes, use-right certificates given by the state introduce individual holdings and freeze their size. It is an inflexible system that does not allow for changes in population and strongly restricts the mobility of families and individuals.
- The rigid land allocation caused land disputes as many resettled villages were given a part of the territory of other, partly resettled, communities.
- Land allocation led to increased hunting and gathering activities to compensate for the lack of food from swidden fields and loss of income from opium. It clashes sharply with wildlife preservation policies. In the long run, the insufficient allocation of agricultural land leads to even more intensive use of forest areas.

The restriction on forest use is another serious constraint for the villagers, whose livelihood is already challenged by all the other government policies affecting them. The forest classification has led to a reduction in the hunting and gathering area. Areas allocated as consumption forests are often inadequate. They are either too small and not suitable for the foreseen usage or too far from the village. As a result, the workload for women has become even greater as they have to walk further and collect in smaller areas where resources become rapidly depleted. At the same time, commercial logging is increasing. The villagers have a duty to protect their allocated forests from illegal loggers but they have to tolerate companies with logging certificates on their territories. To access and remove giant trees, vast areas are destroyed for logging roads. No compensation is given to the villagers. When they asked for compensation, they were told by the local government that they were being compensated with government serv-

ices such as the construction of schools, roads etc. None of these have, however, been thus far provided.

Aquatic and wildlife management regulations

Traditionally, hunting is men's work. By making most of the hunting and fishing activities illegal, the villagers have been deprived of their traditional way of life and it has led to a substantial lack of animal protein and a significant imbalance in the work load between men and women. To compensate for the loss of food, women have to collect more in the forests and have to take up more wage labour in the lowlands. In Akha tradition, wage labour is mainly women's work, with the exception of very poor men. It is considered shameful for men to work for others.

Village consolidation

The forced consolidation of two villages to a newly established location in the lowlands was observed in one case. By the time of the survey, seven years after the relocation of the first village, people were still not being allowed to take up residence in another village without the permission of the local government.

The first village was resettled in 1997, three years prior to the second village. They were promised enough paddy land, an irrigation system and food aid. When they arrived, there was not enough land for them all, the irrigation system came only three years later, and rice distribution was suspended after only two years.

In Akha tradition, first comers have more rights than latecomers, so when the second village arrived, the internal hierarchy was already firmly established, excluding the second village from the decision-making bodies. Water, agricultural land and forest resources had become scarce due to the higher population density and there was almost no animal husbandry due to the lack of pasture land. Unlike in the mountain village, the majority of the people became an impoverished labour force, exploited by politically and economically dominant lowlanders. Today, the village is well known among the Akha as being highly dysfunctional. So it comes as no surprise that many villagers state that they have tried to avoid village consolidation.

Conclusions

Current government policies, and above all the resettlement program, in Laos are systematically depriving ethnic minorities of the means of continuing their traditional way of life. Programs aimed at eradicating shifting cultivation and opium production, insufficient land

allocation, restrictive forest and wildlife policies all lead to a breakdown of formerly self-sufficient local economies and to an unsustainable use of resources. In addition to the forced resettlement, they cause more migration to the lowlands, where prospects for a decent life are very meagre. While these programs achieve the primary aim of eradicating opium and shifting cultivation, they fail to provide their official claim: to improve the standard of living, health, food productivity and food security. On the contrary, studies have shown that resettlement and related programs have led to increased poverty, malnutrition, a higher mortality rate and a general deterioration in the health of affected villagers. Furthermore, they often have a negative impact on the environment, running counter to some of the very objectives these programs are supposed to pursue and undermining other conservation efforts.

Only villagers that are better off in terms of health, land resources and financial means can absorb the shock of the rapid forced transformation of their livelihood systems. If these policies continue to be carried out, it will be not only the well-being of an innumerable number of people but the survival of whole cultures that is at stake. The disruption is often so radical that communities disintegrate, and with them the cultural heritage and identity of the people.

Behind this tragedy is the blind belief in a modernization ideology at the service of the state's nation building project that not only ignores local realities, people's needs and desires and basic human rights but also the constitution on which this state is supposed to be founded. In order to please foreign donors, on whom Laos is so dependent, the state engages in programs such as opium eradication. With regard to shifting cultivation, the original Lao text speaks of "shifting cultivation eradication", while the English translation uses the term "stabilization". At best it may be a translation mistake, at worst it can be seen as an intentional attempt to deceive the donor community.

However, with the exception of a few, the donor community seems to have turned a blind eye to the systematic human right violations being perpetrated in the name of modernization and national integration. They continue to provide direct aid and support for these programs instead of using their influence to seek alternatives. For alternatives that are based on careful, participatory processes and on respect for the culture, needs and aspirations of the people are possible. With its still rich land and forest resources that continue to allow most indigenous peoples a self-sufficient and self-determined life, Laos - maybe like no other country in mainland Southeast Asia - has the unique conditions

for achieving what the official ethnic minority policy enshrined in article 8 of the Constitution declares: that of making Laos a multi-ethnic state in which "[a]ll ethnic groups have the right to preserve and improve their own traditions and culture". □

Notes

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- 12 Alton and Rattanavong op.cit:34
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- 14 The study was carried out in 16 districts and 150 villages in 8 provinces. For security reasons, the source of this information cannot be revealed.
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THE PRIVATISATION OF INDIGENOUS COMMUNITY LANDS IN MEGHALAYA

A. Kyrham Nongkynrih



Khasi homestead in Ri Bhoi District. Photo: Christian Erni

Meghalaya is one of seven states in Northeast India. Covering 22,429 sq. km, it is one of the smallest of India's states. It is a strip of land bounded by Bangladesh to the south and partly to the west. Assam state surrounds it on the other sides.

The state is divided into seven districts with a total of 5,780 villages. The majority of the people in Meghalaya are indigenous, in India officially called "Scheduled Tribes". The largest indigenous peoples residing in the state are the Khasi-Jaintia and the Garo. There are also a number of smaller indigenous peoples such as the Biata, Hajong, Lalung, Koch, etc.

Meghalaya falls under the provisions of the Sixth Schedule of the Constitution of India. It grants a certain amount of autonomy through a three-tier system for political administration. These are: the State Legislative Assembly, the Autonomous District Councils (ADCs) and the Traditional Institutions. Meghalaya has three Autonomous District Councils: Khasi Hills, Jaintia Hills and the Garo Hills. The ADCs have been given authority over the traditional institutions, as well as over all matters concerning forests, agriculture and land use, veterinary care, primary education, land taxes, non-tribal trading licenses, town committees and law-making related to customs and traditions, as well as administration of justice (including customary law).

Meghalaya mostly comprises steep hills and deep gorges, with very few valleys and plains. Shifting cultivation - in Northeast India known as *jhum* - remains the primary means of livelihood for the indigenous communities of these areas. As Darlong points out, it is a method of cultivation that has evolved in response to a most difficult terrain and topography, and inhospitable environment.¹ He also highlights the fact that shifting cultivation is an integral part of the socio-economic system and culture of the people.

Ri Bhoi District

Ri Bhoi is one of the state's seven districts. It is located in the north of East Khasi Hills District, on the slope leading down towards the plains of Assam. Ri Bhoi is inhabited mostly by Khasi. But there are also other indigenous groups such as the Garos, Karbis, Marngars, Mikirs, Bodos and Lalungs. According to local sources, the non-Khasi indigenous communities were later settlers in different parts of Ri Bhoi.



Young Khasi woman. Photo: Christian Erni

Ri Bhoi district is predominantly agricultural and the majority of the people depend on this for their livelihood. 75% of the work force are engaged in agriculture. According to the district's Department of Agriculture and Horticulture, the cultivated area covers 22,833 ha of a total geographical area of 237,800 ha. The major crops grown in the district are rice, paddy, maize, ginger, pineapple, banana, tea, areca nut (betel nut), broomgrass and vegetables.

There is no major industry and the educational level is still low. Around 46% of men and 52% of women are illiterate. According to the Department of Community and Rural Development, 44.18% of households live below the official poverty line. The people's quality of life is low because the government's development programmes do not seem to have really benefited the people.

Raid: communal land and local self-governance

One remarkable characteristic of Ri Bhoi district is its closely interlinked land tenure and local self-governance system. Traditionally, the entire Ri Bhoi district is divided into more than twenty *Raid*. A *Raid* is a political unit and comprises more than one village. The political administration of the *Raid* is in the hands of two traditional institutions: on the lower level we find the village, which is administered politically by the village council, whose representative is the headman. A cluster of villages forms the *Raid*, which is administered politically by a council known as the *Dorbar Raid*. Each *Raid* is represented by a chief known either as *Syiem Raid*, *Lyngdoh Raid* or *Sordar Raid*.

Traditionally, all land within a *Raid* is communal land, called *Bri Raid* or *Ri Raid* (used interchangeably). The *Bri Raid* is controlled and managed by the Council of the *Raid*, with the Chief as the representative head.



*Khasi women selling betel nut and tobacco, Ri Bhoi District, Meghalaya.
Photo: Christian Erni*



*A cash-crop field with pineapples in Ri Bhoi District, Meghalaya.
Photo: Christian Erni*

The Land Reforms Commission Report of the Government of Meghalaya described the rights to land as follows: "If a person vacates or does not make use of the land under his/her actual occupation for three consecutive years, the land reverts to the community --- village, Raid or Elaka (administrative unit) as the case may be. There is no proprietary, heritable or transferable right on the Ri Raid land".² It further states that the right to use the Bri Raid is based on that person's membership. A person belonging to Khasi society does not enjoy the right to use the above said land if that person is not a member of the village, *Raid* or *Elaka*. Non-Khasi are not allowed to use the *Ri Raid*. The village headman or the head of the *Raid* does not have the authority to grant such permission.

In 1965, the heads and elders of the Raid of Ri Bhoi convened a special *Dorbar* (council), and the council took a most crucial decision: to record and document the oral beliefs and practices related to land. It is one of the most important land documents of the Khasi people. The document, in very simple and clear terms, explains and defines the right to use, occupy, control and manage community land.

The most important aspects of the 1965 land document are:³

1. The Raid belongs to its members.
2. Any member of the Raid can cultivate and occupy any vacant plot of land.
3. As long as the member uses the land, the land is his or hers.
4. If the occupant of the land leaves it fallow for three consecutive years, the allocated plot of land reverts back to the Raid.
5. If a plot of land has been requested by a member for cultivation, and some parts are however kept fallow for three consecutive years, the unused area reverts back to the community.

6. Bri Raid cannot be sold off or owned privately.
7. If a plot of land has been occupied and developed over generations by a household but has been left fallow for seven years, it reverts back to the Raid;
8. If a paddy (wet rice) field has been inherited over generations within a family but the family remains without an heir, it will automatically revert back to the community and come under the control of the chief (called Syiem, Lyngdoh, Pator, Sordar or Basan Raid). However, the chief cannot claim it as private property.
9. A village in a Raid has the right to keep some plots of land under its direct control, to be used only by its members. Members of other villages within the same Raid do not enjoy this right.
10. The document also clearly describes the role, rights and duties of the heads of the Raid:
 - a. The Syiem Raid, Lyngdoh Raid, Pator or Basan or Sordar Raid is not the owner of the Raid. He only controls and manages it on behalf of the members of the Raid.
 - b. He cannot take any independent decisions or take any actions on their own on matters related to land, forest, paddy fields, markets or any common property of the Raid.
 - c. He cannot sell or transfer the common property resources of the Raid.

The majority of the Raid in Ri Bhoi follows and abides by the beliefs and practices stated in the land document of 1965. By and large, community lands in most of the Raid still remain intact but, in some Raids, there are fundamental changes taking place.

As early as 1965, Lyngdoh referred to the process of privatisation of community lands, and he predicted that, "The introduction of registration of land will bring and enhance poverty in Ri Bhoi. Only the rich and well-off persons can register. It is happening now where rich

persons are registering hillocks without cultivating it. The poor will be left without anything and with no more right on their own Raid. This goes against the customary belief and practices inherited over generations."⁴

Since then, the privatization of communal land has continued. In 1990, 25 years after Lyngdoh's research, Xaxa concluded that the main reason for the increasing privatization was nation-state policies and programs that emphasize industrialization, the exploitation of mineral and forest-based resources, the tapping of natural resources for energy production and the promotion of new agricultural methods that imply a shift from subsistence to commercial crops.

"This has contributed to the growth of 'a class of contractors, merchants, traders and businessmen in the region over the past few years and their assets have multiplied manifold. The path of development is thus accentuating social inequality. In villages, communal ownership of land has been steadily eroding and the land and assets are being more privatized by those who wield power and authority over them. The result has been increasing numbers of agricultural labourers and growing disparities in land holding and ownership of other assets."⁵

And, recently, the Khasi researcher Tiplut Nongbri came to the conclusion that:

"While the State (which includes both the central and the federal units) remains the largest agency that infringes on the rights of the indigenous/tribal peoples, it is aided in its tasks by profit-seeking individuals, some of whom are tribes themselves. The Meghalaya Transfer of Land (Regulation) Act, 1971 can have no effect as the exploitative class can circumvent these provisions through benami transactions."⁶

The *Meghalaya Transfer of Land (Regulation) Act, 1971* (subsequently amended) is the only land policy that was promulgated by the state government. The Act protects the wider interests of the Khasi, Jaintia, Garo and other Scheduled Tribes of Meghalaya from non-tribals in terms of acquiring or selling lands. The Act does not go against the customary beliefs and practices of land ownership and management.

In a report on Rural Poverty in Meghalaya, Saxena writes that although theoretically land belongs to the community, there are several ways to have it privatised. Performing labour or, rather organising labour, to cut a terrace or plant trees in an orchard, is recognised as

conferring exclusive and permanent rights, although not recorded. With the growing importance of the market, there has been a shift in the relative importance of wet rice terraces and uplands and a reduction in shifting cultivation. The absence of any legal regulation works to the advantage of those with economic and political power. In Ri Bhoi, he observed, privatisation has resulted in landlessness as the wealthier have taken land on mortgage, which they have subsequently bought.⁷

All these reports document a process of gradual privatization of communal land, traditionally used mostly for shifting cultivation, which has been going on for 30 years. A recent study conducted by the author in Ri Bhoi district provides insight into the processes, causes and impact of privatization of communal land.

Raid Mawbuh: large-scale conversion of community lands

According to the elders of Raid Mawbuh, in Ri Bhoi district there is only one type of land, and that is Bri Raid. But the situation today is that most of the Bri Raid has been converted to privately owned land. Elders and villagers of the Raid tell that the conversion of community land in the Raid is because the earlier leaders of the Raid did not anticipate this and did not protect the community land. Another reason is the personal interests of the community land users. Some have managed to take advantage by registering the land with the Land Revenue Department of the government of Meghalaya. This has been possible because the previous Syiem Raid allegedly misused his authority and role by granting ownership rights to users of community lands. Once traditional legal sanction had been obtained, the plots were registered, and thus converted into privately owned land. Some then sold off their plots to government institutions such as the line departments of the Government of Meghalaya, the Indian Council of Agricultural Research, the Airport Authority of India or the Ministry of Defence. At the time of the sale, the Syiem Raid did nothing to stop, and indeed readily consented and ratified, such transfer of lands.

Religious organisations are another category of new landowners. They have acquired lands either by way of sale, with the consent of the head of the Raid, or through donations for setting-up educational institutions. Other land is owned by individuals or families, the majority living in the city of Shillong. The owners of such lands are using them to set up commercial farms or plantations. As described above, they were given ownership

status by the traditional heads and subsequently registered the land with the Revenue Department of the Government.

Immigration has further aggravated the situation. Over the generations, there has been considerable migration of people from neighbouring villages, and from outside the Raid. The settlers were given plots of land for *jhum* cultivation. Initially, the settlers used the land on a rotational shifting cultivation basis. But when the government introduced new methods of cultivation and new crops, they adopted permanent cultivation methods. This has resulted in more permanent control and privatization of land.

Privatization of communal land: the factors at play

If we accept the data provided by the Department of Water and Soil Conservation, the proportion of shifting cultivators in the total rural population is 12.11% (21,755 out of a total rural population of 179,630), and the annual area under *jhum* is 27.40 sq. km, or 0.88% of the total geographical area of Ri Bhoi. The main causes of this drastic reduction are the development programs implemented by government departments and the ready acceptance of these changes by farmers who were expecting economic benefits. Some of the programs introduced by the government through the Department of Agriculture and Horticulture and the Department of Water and Soil Conservation are:

- The *Jhum* control program: the government has actively tried to reduce shifting cultivation through the promotion of permanent cultivation, by providing support for irrigation and terracing, free seeds, cash crops (such as tea, areca nut, vegetable), water sheds and village roads.
- The promotion and subsidizing of high-yielding, hybrid and improved seeds, chemical fertilizers and pesticides.
- Training program.
- Multiple Cropping Scheme, Tea Package Scheme, Liming Scheme etc.

The entry of cash cropping led to the permanent use and de facto privatization of the land. It is important to note that these changes were accepted voluntarily by the farmers, encouraged by the benefits provided through the government schemes. It does not mean that the people of Ri Bhoi are not allowed to continue to practice shifting cultivation.

The data from field research in Ri Bhoi has shown that the process of conversion of community lands into private lands is caused by both endogenous and exogenous factors. In the first case, the domestic groups considered permanent residents of the village enjoy the right to use the community lands. As we have seen, customary law provides for the right to land as long as it is cultivated. The adoption of new cultivation methods, however, resulted in the permanent occupation of the land, and those with sufficient means and connections had these lands registered as private property. Currently, under certain conditions, customary law also recognizes permanent use rights. If land is used successively for ten generations, it acquires the status of *Nongmei-Nongpa* (inherited land). Such land becomes transferable, and can thus be sold off. The only exception is if such plots are left fallow for seven years, when they revert back to the community. The status of inherited land is almost equivalent to the status of private property. There are instances where occupants of such land have also had their land registered with the Land Revenue Department.

Secondly, there has been a lack of political will and foresight on the part of the chief of the Raid, along with the elders of the council, to control the privatization of community land. The selling of land to various agencies such as the government, military, religious-based organisations and individuals was carried out with the consent of the leaders of the Raid. This is not happening in every Raid of Ri Bhoi. There are Raids that have not permitted such processes to take place because they still follow and abide by customary beliefs and practices.

The main exogenous factor causing the change has been the linking of the traditional subsistence economy with the modern market economy. This has been partly brought about through government programs aimed at promoting cash crops and permanent cultivation methods. Some of these programs were part of the state government's policy to reduce shifting cultivation. Aside from these development programs, private sector initiatives in services and trade have further stimulated the adoption of cash cropping and the concomitant privatization of community lands. One important factor has been that, in order to be able to avail themselves of some of these development programs, applicants have had to fulfill the criterion of having land registration documents as proof of ownership. This has encouraged more people to register land as private property.

A second external factor is the acquisition of land by government agencies or religious and other private organizations. For the Barapani (Umiam) Hydroelectric

Power Project Stage II alone, 3,749.70 acres of land were acquired and 4 square miles of land were submerged.

Finally, a crucial exogenous factor has been the lack of genuine recognition of customary practices in state government legislation, and a lack of control over the privatization process on the part of the Autonomous District Council of Khasi Hills. At the same time, however, state law clashes with and subverts customary law and traditional authority when land documents are issued by the Land Revenue Department to an individual, group, organisation or institutions, which receives legitimacy of ownership by merely registering with the relevant government department. It also seems that the state of Meghalaya is not bothered or keen to take into account the fact that much of the land in the district is community land, and that it should therefore not permit the legal registration of the land under its authority. The impact of registration is the emergence of absentee landowners, and a strengthening of privatisation as a matter of right.

Local response and the need for intervention

Without cadastral data, it is impossible to properly assess the extent of privatization in Ri Bhoi. It is also difficult to judge what impact it has had on those who continue shifting cultivation. As mentioned earlier, today only 12.5% of all households in Ri Bhoi practice shifting cultivation. This is an indicator of the extent of the transformations that have taken place over the past few decades.

The increasing privatization of community land in the Raid Mawbuh has led to the formulation of a strategy to control and prevent the conversion of the remaining Bri Raid. The decision to formulate a new strategy was made by the elders of the Raid council. This response has come rather late, however, because the remaining community land is now small. The new strategy also has the intention of regulating the privately owned lands. And yet the strategy is actually nothing new because it draws on and re-affirms the customary beliefs and practices related to land use, rights, control and management. But one of the major problems facing the traditional institutions administering the Bri Raid is that it is not legally recognized in a Court of Law, while the land registered with the government's Land Revenue Department is recognized through legal documents of ownership.

In other Raids in Khasi-Jaintia Autonomous District, privatization has not yet gone as far as in Ri Bhoi. Thus lessons can be learned from the experience of these communities. There are a few urgent measures that must be taken in order to create a context within which customary law and communal control over land and resources

can be ensured in the future. Village-based mapping of land holdings would provide a basis on which to assess the extent of privatization, for zoning and land-use planning. The state government, the Autonomous District Councils and the traditional institutions must address the problem by introducing land reforms. □

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- 1 Darlong 2004: 2-21
- 2 Rymbai 19: 4-25
- 3 Lyngdoh 1965: 4-25
- 4 Lyngdoh 1965: 20-23
- 5 Xaxa 1990: 27-30
- 6 Nongbri 2003: 121-159. "Benami" is a legal term common in India. It refers to a dishonest business deal in which one person keeps her or his identity secret and operates through a third party.
- 7 Saxena 2000: 31.

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