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# 12 Identifying conservation issues in Kachin State

**Tint Lwin Thaug**

Kachin State in northern Myanmar is home to many biological hotspots, including subtropical moist forests, hill forests, alpine meadows and broadleaf and conifer forests (Olson and Dinerstein 1998). Global Witness (2005) recently reported considerable unease about the scale of illegal forest activities in Kachin State. Kahrl et al. (2004) analysed the China–Myanmar timber trade and its implications for forests and livelihoods in Myanmar’s Kachin State and the Yunnan Province of China. They found that China’s demand for timber was an underlying cause for the unsustainable harvest of valuable forests in Kachin State. Unsustainable logging was discussed comprehensively in the above-mentioned studies, but the views of local stakeholders from Kachin State were not thoroughly considered. This chapter seeks to understand the views of local stakeholders in regard to natural resource conservation issues.

This chapter discusses data resulting from a study complementary to an earlier one by Webb et al. (2004). Findings and analysis in this previous study were based on a literature review, remote-sensing data and stakeholder interviews in Yangon and Mandalay. They revealed a wide

scope of conservation issues reflected at the national level. This present chapter seeks to verify the results of the 2004 study with reference to real situations occurring on the ‘front line’ or at local levels.

## Methodology

Participatory rural appraisal (PRA), one of the methodologies of farmer participatory research, was used to generate data for the present study. This study employed semi-structured interviews with local stakeholders and direct observation. Working closely with local stakeholders helped to determine local conditions, perceptions and preferences in conserving natural resources in Kachin State. A semi-structured interview schedule was prepared with the list of ‘incompatibilities’ used by Rao et al. (2002) in evaluating the protected area system in Myanmar. These incompatibilities were renamed as threats or issues in this study, and stakeholders were welcome to freely raise other, unlisted issues.

The stakeholders who participated in the previous SWISSAID Myanmar program participated actively in the interviews. Local stakeholders who lived or worked in Kachin State were categorised as academics, non-governmental organisation (NGO) workers, businesspeople and those from peace groups or State Peace and Development Council (SPDC)-designated ‘national races groups’ and

Table 12.1 Categories of stakeholders interviewed

NGOs SWISSAID	Local businesspeople Jade-mining	Academics Institute of Forestry	Ethnic armed groups Kachin Independence Organisation (KIO)
World Concern YMCA	Photography Traditional medicine	Zoology Botany	
Shalom			

Source: Author's compilation

government agencies. Thirteen stakeholders from those categories were requested to identify important conservation issues (Table 12.1).

Conservation issues were separated into large-scale (Table 12.2) and small-scale (Table 12.3) issues. The issues were then ranked by the stakeholders in a way that was reflective of their individual perceptions of constraints to conservation in Kachin State. Impacts of threats and the prevalence of such threats were also ranked.

Table 12.2 Large-scale issues arising from official projects with institutional support and driven by larger commercial interests

Stakeholder	Hunting			Firewood			NTFP			Grazing			Fishing			Shifting cultivation		
	T	I	P	T	I	P	T	I	P	T	I	P	T	I	P	T	I	P
1	2	3	2	3	3	3	3	2	3				2	3	3	3	3	3
2	2	2	2	3	3	3	2	2	2	1	1	1	2	2	2	2	3	2
3	2	2	3	3	2	3	3	1	3	2	2		3	3	3	3	3	3
4	3	3	2	3	2	3	3	3	3				2	3	2	2	3	3
5	2	3	2	1	1	2	1	1	2	1	1	2				3	3	3
6	3	3	3	3	3	3	1	2	3				3	3	3	3	3	3
7	3	2	3	3	1	3	1	3	3				1	1	2	2	3	3
8	2	2	3	1	3	3	3	3	3				1	1	3	3	3	3
9	3	3	3	2	3	2	2	2	2				2	2	2	3	3	3
10	3	3	3	2	2	2	2	2	2				1	1	1	3	3	3
11	3	3	3	3	3	3	3	3	3				3	3	3	3	3	3
12	2	2	2	1	1	1	2	2	2				2	2	2	3	3	3
13	3	3	3	2	2	2	2	2	2				2	2	2	2	2	2
Rank sum	33	34	34	30	29	33	28	28	33	4	2	5	24	26	28	35	38	37

Notes: T threats (3: the most serious; 2: very serious; 1: serious)

I impact (3: high impact; 2: moderate impact; 1: low impact)

P prevalence (3: mostly occurred; 2: sometimes occurred; 1: never occurred)

Source: Author's calculations

Table 12.3 Small-scale issues, often driven by financial hardship

Stakeholder	Mining	Human settlement	Infra-structure	Plantation	Armed conflict	Cultivation	Tourism	Breeding centre	Logging																
T	I	P	T	I	P	T	I	P	T	I	P														
1	3	3	2	3	1	1	3	3	1	1	1	2	3	3											
2	2	2	3	3	2	2	2	2	1	1	1	1	1	3	3										
3	3	3	2	2	2	3	2	3	3	2	2	2	2	3	3										
4	3	3	1	2	2	4	2	1	2	3	3	3	3	3	3										
5	3	3	1	2	2	1	2	2	3	3	3	1	1	2	3	3									
6	3	3	2	1	1	3	3	2	3	3	1	2	3	1	2	3	3								
7	2	3	3	2	3	2	3	3	1	2	2	1	1	2	1	2	2	3	3						
8	1	3	3	2	3	2	1	2	2	3	1	3	1	2	3	1	2	3	3	3					
9	3	3	3	1	2	1	2	1	3	3	3	3	3	3	3	3	3	3	3	3					
10	3	3	3	1	1	2	2	2	3	3	3	1	1	1	1	1	1	3	3	3					
11	3	3	3	1	1	3	3	3	1	1	1	1	1	1	1	1	1	3	3	3					
12	3	3	3	1	1	1	1	1	3	3	3	1	1	1	1	1	1	3	3	3					
13	3	3	3	2	2	2	2	2	3	3	3	1	1	1	1	1	1	3	3	3					
Rank	35	38	38	12	15	22	23	29	9	10	11	34	32	37	9	11	15	7	12	4	2	5	37	39	
sum																									

Notes: T threats (3: the most serious; 2: very serious; 1: serious)  
 I impact (3: high impact; 2: moderate impact; 1: low impact)  
 P prevalence (3: mostly occurred; 2: sometimes occurred; 1: never occurred)  
 Source: Authors calculations

## Local conservation concerns

The most serious large-scale conservation issues as ranked by stakeholders were logging, mining, the presence of armed groups and infrastructure development (such as road construction). These issues are believed to have a major impact on conservation in Kachin State. Permanent human settlement, industrial plantations and permanent cultivation were ranked as very serious issues with moderate impact, and as occurring occasionally in Kachin State. Tourism was ranked as a low-impact threat, although there was great potential for the development of a tourist industry in Kachin State because of its natural beauty. The stakeholders ranked shifting cultivation, hunting and wood collection as the most serious and widely distributed small-scale conservation issues in Kachin State (Table 12.4). Many small-scale activities (for example, gold-mining) can cause impacts on a scale similar to those of large-scale activities. Fishing and the collection of non-timber forest products are also very serious, though their impact is still low. Grazing is not a common conservation concern in Kachin State.

Some stakeholders raised other relevant factors in efforts to protect the rapid depletion of natural resources in Kachin State. One was the low morale or disempowerment of much of the population, stemming from local and broader issues including corruption and abuse of power. Many people exploit natural resources for reasons of financial survival and are not concerned primarily about long-term livelihoods or sustainable development.

A second issue concerns the complicated governance situation among the different armed groups. Currently, there are four main groups controlling resource exploitation in Kachin State: the government (SPDC or northern military command); Kachin Independence Organisation (KIO), which manages Special Region 2; New Democratic Army—Kachin (NDAK), which manages Special Region 1; and another group recently split from the KIO. In addition, the Pa-O Peace Group plays a major role in resource exploitation, particularly in jade-mining. This complicated and overlapping governance system inevitably causes conflicts over resource exploitation.

Table 12.4 Threats ranked by stakeholders, regardless of scale

Issues	Sum
Timber extraction	37
Shifting cultivation	35
Mining	35
Military/ethnic armed groups	34
Hunting	33
Firewood collection	30
NTFP	28
Fishing	24
Infrastructure development	23
Permanent human settlement	15
Permanent cultivation	9
Tourism	6
Industrial plantations	5
Grazing	4
Breeding centres	4

Notes: 30 or >30 = the most serious threats; 21–9 = very serious threats; 0–19 = serious threats.

Source: Author's calculations

High unemployment rates and associated social welfare issues are expressed as a third important issue relevant to conservation. There are many underlying causes for high unemployment among the local people. The more control is held by influential people with large-scale business activities, the fewer opportunities there are for local people with small-scale ones. For example, jade was a common resource exploited by local Kachin people until jade-mining was recently monopolised by 'peace groups' from other regions. Chinese contractors are using their own labourers even for low-paid jobs in road construction, which they justify by stating that local people are not skilled. Authorities who deal with Chinese contractors have little bargaining power for local employment.

A fourth issue pointed to by stakeholders was China's high market demand. Economic development in China relies to a substantial degree

on imported resources. Fuelled by the political influence of the Chinese government and an attractive short-term market, natural resources, especially forest resources in Kachin State, are rapidly disappearing. It has been estimated that because of excessive timber demands from China, the natural forests of Myanmar will be gone in 10–15 years if the current cutting rate continues (Ktsigris et al. 2005).

A final issue raised by stakeholders was the expansion of opium plantations across Kachin State in recent years (Khun Sam 2006). According to a 2005 opium survey by the United Nations Office on Drugs and Crime (UNODC), opium-poppy cultivation in Kachin State had increased in recent years while it decreased in other regions of Burma. Despite recent eradication measures by Burmese authorities, production increased in Kachin State by 900 per cent in 2005, according to the UNODC. The evidence shows that raw opium and other drugs are carried to China concealed among logs.

In our first study (Webb et al. 2004), various stakeholders in Yangon and Mandalay were interviewed using semi-structured forms and open discussion. We listed threats, opportunities and suggestions for research based on the data obtained from interviews, a review of the literature and remote-sensing data (Webb et al. 2004). Some issues investigated in this earlier study proved not to be relevant to Kachin State, and there were significant differences between the tested issues. The serious conservation issues in Kachin State—such as the impact of logging, mining, infrastructure development, shifting cultivation, the presence of armed groups, hunting and wood collection—are, however, common to both studies.

## Logging in Kachin State

Unsurprisingly, logging is the most common issue raised by all stakeholders and supported by many reports. There were no opportunities to observe the magnitude of logging in Kachin State while we were there since the newly posted northern military commander had temporarily banned logging. Recently, corrupt officials have been charged and



penalised. This has not stopped influential businesspeople and peace group leaders approaching the authorities in order to gain permission to resume logging—permission that has recently been granted.

The underlying causes of logging are complicated, since many powerful stakeholders are involved in illegal practices. Powerful stakeholders include ethnic armed groups, regional military leaders, Chinese business tycoons, drug smugglers and corrupt officials from China and Myanmar. Minority group leaders and the SPDC's northern military command grant logging contracts to Chinese companies as turnkey projects. In return, Chinese companies are the ones building the roads, bridges, power stations, schools and clinics in Kachin State. The only stakeholders who have no voice are local people. They have not seen any tangible benefits from the turnkey projects, and project outcomes are sporadic and fragmentary. In addition, local people have the most to lose from unsustainable or illegal logging practices. Recent flooding in Myitkyina, the capital of Kachin State, is an example of the consequences of unregulated logging and consequent deforestation, and it has devastated the livelihoods of local people. Weak policy, institutions, legislation and infrastructure contribute to illegal logging practices.

In this study group's last trip to the China–Myanmar border in July 2006, the transport of illegal logs across the border at Laiza was observed. At that time, illegal logging was continuing, but less intensively than previously. For example, about 30 trucks of timber were still crossing the border at Laiza daily, compared with more than 100 timber trucks before. This reduction could have been due to unfavourable weather conditions as well as a temporary response to recent crack-downs by Yunnan officials on illegal timber transportation. On Myanmar's side, a northern military commander has been credited for his effort to control illegal logging activities in Kachin State and to provide more freedom in trade by removing many unnecessary check-points. It is difficult to know, however, how long this situation can be maintained, as there are many internal pressures within the military and from their business élites. No conservation issue is harder to solve than the logging of Kachin State's dwindling forests.

## Secondary conservation issues

Shifting cultivation has been practised in Kachin State for many years as a form of traditional farming. That shifting cultivation causes deforestation is not new, but due to a growing population and scarce land resources, the practice has passed beyond its traditional scale, encroaching on protected forests. Lack of land ownership and appropriate alternative technologies, as well as general economic hardship make the practice of shifting cultivation an important conservation issue. It appears, however, that the rate of deforestation caused by uncontrolled logging is a much greater problem in Kachin State than that caused by shifting cultivation.

Uncontrolled mining for gold, jade and iron is another major conservation issue pointed to by stakeholders.<sup>1</sup> The jade from Phakant, in Kachin State, is known for its high quality. Before the cease-fire agreement between the SPDC and armed minority groups in 1994, most of the jade mines were controlled by minority group armed forces. After the cease-fire agreement, the SPDC had more control over jade-mining than the KIO and the NDAK. These groups receive financial and technical backing from tycoons in Hong Kong, Taiwan and China, and monopolise jade-mining, excluding small-scale business activities run by local people.

Chinese businesspeople are also turning an eye towards iron deposits in Kachin State. A previous research trip revealed evidence of piles of unprocessed iron ore stored in Customs warehouses in Yunnan Province. This mineral resource is a new item becoming popular in China's market, as it is a useful raw material for heavy industry development. It is anticipated that the impacts of extracting iron from Kachin State will be no less significant than those caused by gold and jade-mining.

A local NGO worker revealed that he hardly saw any significant economic gains from the above-mentioned mining activities for local people. The rapidly changing landscape of jade mines and the obvious impacts to the environment (such as the blockade of waterways, permanent human settlement and exploitation of forest resources) have

been recorded. Although no environmental information or scientific reports about the impact of small-scale gold-mining are available locally, all local stakeholders realise it is a critical issue that they do not have the means to solve alone.

After the cease-fire agreements with armed groups in Kachin, the government extended its army bases throughout the state. Consequently, land confiscation and land clearing became common practice. Exploitation of forest resources to financially support the extension of these military units has caused great confusion and conflict over resource management. Apart from the government army units, other armed groups are also present in Kachin State, including the KIO, NDAK and splinter groups. These groups have substantial business interests in their demarcated territories; their presence and active involvement in resource exploitation pose significant additional threats to conservation and development.

Senior military officers are involved in timber and mining businesses. It is difficult to understand the current political boundary between military officers and armed minority groups, most of whom focus on businesses that make large short-term profits. It is unknown how much money they are making from the exploitation of natural resources and what proportion, if any, is being channelled into development projects for Kachin people.

Traditionally, hunting was a valued occupation for the Kachin, with animal trophies garnering respect for male hunters among their local communities. This traditional practice has become a conservation problem, as killing wildlife has been made easier due to readily available arms supplied by armed groups, and because there are highly attractive market prices for such products at the Myanmar–China border.

The largely illegal trade occurs mainly with China and Thailand and is a major cause of the depletion of wildlife populations within and outside existing Protected Areas (Rabinowitz et al. 1995; Martin 1997; Martin and Redford 2000). Rao et al. (2002) reported that hunting was the most serious threat to the long-term survival of wildlife in Myanmar's Protected Areas. They concluded that hunting beyond

subsistence levels occurred throughout Kachin State, and seriously affected the whole wildlife population.

Local stakeholders reported that wood was still available but was becoming scarce in Kachin State. Charcoal use is traditional and continues widely. Apart from charcoal and wood, no alternative energy sources are conveniently available, especially in rural areas. Even in the large cities of Myitkyina and Bamaw, wood and charcoal are used predominantly for cooking as the electricity supply is unreliable. As long as the country's energy supply is inadequate, dependence on naturally available resources such as wood will remain high. Kachin State is no exception.

Non-timber forest products, including orchids and medicinal plants, are being collected in Kachin State to supply markets in neighbouring countries. Although there are strict regulations on their collection, enforcement is too weak to stop the illegal collection, transportation and marketing of these products. Most of the border markets in Yunnan Province are trading grounds for tremendous amounts of wild animal and plant products, collected mainly in Kachin State.

Infrastructure development in Kachin State is another potentially serious issue if these activities are not well regulated and monitored. It is apparent that road construction works implemented by Chinese contractors are not accompanied by environmental impact assessments (EIAs) and are not required to follow any environmental regulations. For example, part of the famous Ledo Road is now being upgraded in Kachin State to reconnect the road system between India and China. The previous road alignment was on high terrain with steep slopes, but the contractors chose a cheaper alignment along the waterways. Instead of constructing a proper drainage system for the removal of earth, they dumped it into creeks. Such negligence is common in all construction works.<sup>2</sup>

Fishing along waterways is a typical livelihood practice in Kachin State but has consequences for conservation because of the increasing use of environmentally unfriendly methods of catching fish. People involved in logging, mining and road construction works rely on fish

as a major food source and often use dynamite and chemicals to catch a maximum amount of fish with minimal effort and in a short time (Pan Kachin 2004). These practices have serious environmental and social consequences for people living downstream. The traditional subsistence-fishing livelihoods of local people have been placed in jeopardy (Images Asia and Pan Kachin Development Society 2004).

## Possible solutions and policy implementation

The current study involved discussion with various major donors in Myanmar about conservation issues in Kachin State. A priority for the donors was humanitarian assistance, but they were agreed that natural resource exploitation was a serious issue. Not taking timely action will result in irreplaceable losses for future generations. There is a window of opportunity at present if donors integrate an environmental component into their mainstream humanitarian programs. A meeting with senior officials from relevant ministries was organised, and they agreed that the current issues were significant and they expressed a willingness to tackle them. Commitment from the government is critical to Myanmar's conservation issues.

Ultimately, major political reform is essential to address conservation issues in Myanmar. Successive military councils have ruled the country for more than 40 years. The current regime has been in power as the State Law and Order Restoration Council (SLORC) since 1988 and the SPDC since 1997, and has granted many concessions to foreign investors for the purposes of extracting natural resources. Due to a lack of transparency and accountability, illegal practices have occurred across every level of resource exploitation. Unless transparency is improved enormously, reckless resource exploitation will continue.

Opposition groups inside and outside the country must unite in their preparation of effective strategies and alternative plans. The successive military governments of Myanmar have shown no inclination to bow to sanctions or other forms of international pressure. All indications suggest that the SPDC will maintain its grip on power in Myanmar

by forging closer ties with China and India through natural resource deals such as those for natural gas and timber. The SPDC earns large amounts of revenue from these deals, which prop up the regime and provide all-important hard currency.

A Burmese academic who wants to remain anonymous has proposed that the regime's reluctance to engage in genuine political reform is due to fear of its own people. After intentionally creating entire systems—particularly in education, health and the economy—to favour the armed forces, the SPDC is concerned that there will be a revolution driven by its people and/or even by the army. Only by genuinely reforming the entire political system will attempts to address conservation issues be effective. The presence of many armed ethnic groups, causing complex governance in Kachin State, further demonstrates the urgent need for true political reform.

The State is the sole owner of Myanmar's natural resources, and so state institutions at various levels have the power to manage them. During the colonial days and for a short period after independence, natural resource institutions were well equipped with professionally trained staff and proper policies, regulations, manuals and instructions. At that time, professional staff had a certain degree of independence to implement their duties and take due responsibility.

The institutions responsible for natural resource management have, however, been more or less militarised in Myanmar. The militarisation of civilian and professional institutions has caused a major 'brain drain' of trained staff. The natural resource management institutions based in Kachin State are no exception. The situation is even worse in remote areas, where it is difficult to monitor institutional activities. An upgrading of the capacity of institutions through reform is urgently required.

As sole owner of the country's natural resources, the government even declares its ownership of areas not under its control. After the peace agreements with armed Kachin groups, the first permission granted to those groups was to exploit natural resources, particularly forests and mines. The rights of indigenous people to access natural resources and the small-scale business opportunities of local people

have been largely ignored in this process. This lack of true ownership has compounded livelihood issues such as inequitable distribution of benefits within the country and the transfer of livelihood benefits outside the country. The obvious examples in Kachin State are the funds gained from natural resources that have been used largely for military spending by insurgent groups to fight the SPDC. Élites tend to be the main beneficiaries, while local communities continue to lack electricity, roads and other basic infrastructure. Roads built by logging companies are often fragmented and/or do not meet local needs, and logging companies are staffed by Chinese workers only, offering no employment opportunities for locals.

There is low customs compliance due to the regime's lack of control over areas serving China, and rampant corruption among staff. Revenue loss from illegal forest activities close to the Chinese border will continue to be high unless customs management is improved and coordinated with other agencies.

Addressing conservation issues usually transcends the political boundaries of individual countries and demands strong cooperation between governments. In November 2005, a joint committee between the governments of Myanmar and Yunnan Province was formed to combat illegal logging along the China–Myanmar border. Besides law enforcement, a range of opportunities should be opened up to include local people in wood-based industries, nature tourism and academic research.

Non-compliance of concessionaires and issues of concession management are among the driving forces of illegal forest activities occurring along the border area. Short logging contracts (some are less than one year) with Chinese companies promote poor management and reckless, shortsighted actions to tap whatever resources possible within a limited time. Reasonable long-term concessions with attached conditions to protect the environment, natural forest management and reforestation will be useful—unless a total logging ban is feasible.

Overseas development assistance to Myanmar has declined in the past 20 years. Less than 1 per cent of total overseas development assistance is used in general environmental protection and, compared

with her five neighbouring countries (China, India, Laos, Thailand and Bangladesh), Myanmar receives the smallest amount of such assistance. Without substantial funding from external sources and rapid, genuine political reform, the natural resources of Kachin State will continue to be exploited in the name of development. The fact that environmental assistance is equally important to humanitarian assistance in Myanmar has been discussed in a number of online articles (Thaung 2003, 2004, 2005). It is time for donors to review their current policies and integrate environmental components into mainstream programs.

A first step to address illegal forest activities in Kachin State has been to organise a meeting among stakeholders. In November 2004, the Wildlife Conservation Society (WCS) held a workshop to identify the issues involved in establishing the world's largest tiger reserve in northern Myanmar. It drew a gathering of senior government officials, minority group organisations, the United Nations Development Programme (UNDP) and several international NGOs working in Kachin State. This kind of model would be useful in addressing conservation issues at a smaller level (Kachin State or northern Myanmar). The joint committee between forestry officials of Myanmar and China formed to monitor logging activities at the border, as mentioned above, should further develop strategic frameworks to tackle conservation issues in the state and should encourage the participation of stakeholders from all walks of life.

Because Kachin State is vast and ecologically diverse, the intended conservation models should cover landscape scale with the concept of integrated development. There is an urgent need for assistance from international conservation and development agencies. The WCS is the most prominent conservation NGO; it has already helped to establish five Protected Areas, three of them in Kachin State. With limited funding, the WCS alone is struggling to address the complex conservation issues in the state.

It is important to consider the traditional practices, values and rights of local people when addressing shifting cultivation, hunting, wood collection and production of non-timber forest products. The



Table 12.5 Official logging companies in northern Myanmar

Name	Teak	Other	State	Township
Dagon Timber	10,000	35,000	Kachin	Bhamaw
Shwe Mote That	2,000	7,000	"	Myitkyina
Century Dragon	3,000	20,000	"	Bhamaw
Glory Trading Co.	50,000		"	Bhamaw
Jade Land Co.		10,000	"	Bhamaw
Myat Noe Thu	3,000	15,000	"	Myitkyina
Lucre Wood Co.		8,000	Shan	Lashio
Lucre Wood Co.		15,000	Shan	Shwe Li
U Saw Paw		2,000	Kachin	Bhamaw
One Star Co.	3,500	20,000	Shan	Moemeik
Mo Min Tan		25,000	Shan	Moemeik
Ten Ways Co.		8,000	Shan	Lashio
Htoo	15,000		Kachin	Bhamaw
Htoo	5,000	15,000	Shan	Shwe Li
MTE	4,000		Kachin	Myitkyina
MTE	2,000		Kachin	Bhamaw
MTE		2,000	Shan	Lashio
MTE	10,000		Shan	Moemeik
MTE	3,000		Shan	Shwe Li
Total allowed timber in Hoppus Ton	110,500	182,000		

Source: Myanmar Forestry Department

relationship of local people to their natural environment and the ways they can participate actively in managing it should be better understood. In our previous report, the critical need for more research in this area was stated. Only through the active participation of all stakeholders will this great conservation task be accomplished.

The private sector is an important player in natural resource extraction, but can be a useful source of partners for conservation and development. The private sector in Myanmar and China is taking an important role through the gravitation of small-scale producers toward niche markets, where they can find comparative advantage by taking

advantage of new and growing markets, new partnerships to supply capital, new technologies to lower the cost of sustainable production, and better organisation and empowerment of local producers. Table 12.5 lists national private timber concessionaires that are extracting timber in Kachin State. Together with their Chinese counterparts, their investment role in conservation and the community is great.

## Conclusion

Kachin State is rich in natural resources. Its location near resource-hungry China and its rule by people in need of hard currency has resulted in the unsustainable exploitation of its natural resources. In addition, the complex governance system makes management of these resources difficult. This research has attempted to reflect the situation of the many voiceless people in Kachin State. A pragmatic approach is required to work together with all stakeholders. An opportunity should be opened for the active participation of local stakeholders in managing their resources not only for current but future generations. Regardless of the country's political situation, international assistance for conservation in Myanmar is needed urgently. Such aid is required not for the support of undemocratic practices, but to help the people of Myanmar, who deserve to manage their environment through the country's democratisation process.

## Notes

- 1 Pan Kachin, a Kachin Development Association, prepared a comprehensive report about gold-mining activities in Kachin State. It included key players, types of mining and impact on the environment and livelihoods (Images Asia and PKDS 2004).
- 2 Personal observation through visits to Kachin State in March 2005 and January and July 2006.

## References

- Global Witness, 2005. *A Choice For China: ending the destruction of Burma's northern frontier forests*, Global Witness, London.
- Images Asia and Pan Kachin Development Society, 2004. *At What Price: gold mining in Kachin State, Burma*. Nopburee Press, Chiang Mai. Available from <http://www.ibiblio.org/obl/docs/gold%20pdf1.pdf>.
- Kahrl, F., Weyerhaeuser, H. and Yufang, S., 2004. *Implications for forests and livelihoods: navigating the border: an analysis of the China–Myanmar timber trade*, report prepared for Forest Trends and World Agroforestry Center, Washington, DC. Available from [http://www.forest-trends.org/documents/publications/Kahrl\\_Navigating%20the%20Border\\_final.pdf](http://www.forest-trends.org/documents/publications/Kahrl_Navigating%20the%20Border_final.pdf).
- Katsigris, E., Bull, G., White, A., Barr, C., Barney, K., Bun, Y., Kahrl, F., King, T., Lankin, A., Lebedev, A., Shearman, P., Sheingauz, A., Su, Y. and Weyerhaeuser, H., 2005. 'The China forest products trade: overview of Asia-Pacific supplying countries, impacts, and implications', *Forest Trends*. Available from <http://www.forest-trends.org> (accessed 15 April 2006).
- Khun Sam (2006) 'Opium crops on the rise in Kachin State'. Available from <http://www.irrawaddy.org> (accessed 1 September 2006).
- Martin, E. B., 1997. 'Wildlife products for sale in Myanmar', *Traffic Bulletin*, 17:33–44
- , and Redford, T., 2000. 'Wildlife for sale', *Biologist*, 47:27–30.
- Olson, D. and Dinerstein, E., 1998. 'The global 200: a representation approach to conserving the earth's most biologically valuable ecoregions', *Conservation Biology*, 13(2):502–15.
- Rabinowitz, A. Schaller, G. B. and Uga, U., 1995. 'A survey to assess the status of Sumatran rhinoceros and other large mammal species in Tamanthi Wildlife Sanctuary, Myanmar', *Oryx* 29(2):123–28.
- Rao, M., Rabinowitz, A. and Khaing, S.T., 2002. 'Status review of the Protected-Area system in Myanmar, with recommendations for conservation planning', *Conservation Biology*, 16(2):360–7.
- Thaung, T., 2003. 'A personal view: community forestry in Myanmar', *Community Forestry E-News*, No.16 (October), Regional Community Forestry Training Center for Asia and the Pacific, Bangkok. Available from <http://www.recoftc.org> (accessed 31 October 2003).

- , 2004. 'Protecting Burma's biodiversity in the long term', *Irrawaddy online commentary*, 30 March. Available from <http://www.irrawaddy.org> (accessed 30 March 2004).
- , 2005. 'Ten years on community forestry in Myanmar', *Community Forestry E-News*, No.10 (October), Regional Community Forestry Training Center for Asia and the Pacific. Available from <http://www.recoftc.org> (accessed 15 November 2005).
- Webb, E., Thiha and Thaug, T., 2004. *Conservation issues of Kachin State, Myanmar*, phase 1, Report to MacArthur Foundation, May–July.

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