

# Chapter Seven

## Seeking Spaces for Biodiversity by Improving Tenure Security for Local Communities in Sabah<sup>1</sup>

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### Introduction

With the steady degradation of the world's tropical forests and reduced confidence in the protected-area model, some attention has turned to the potential role that community-claimed forests could play in biodiversity conservation. In Sabah and elsewhere in Asia, the customary lands of upland communities — often comprising tapestries of homesteads and farms, fallowed fields, mature secondary forest and the hinterland of riverine and primary forests — could potentially serve as refuges for threatened biodiversity. With long histories of residence, active use of the forest landscape, and an apparent affinity to the forest, many local or indigenous community lifestyles have been seen to represent a more gentle and peaceable future for tropical forests. Indeed, in recent years various groups have captured international attention by their efforts to defend forest areas that have increasingly come under threat from logging and forest conversion (Hong 1987; Poffenberger and McGean 1993; Baviskar 1995; Colchester 1997) and impressive feats of collective action to restore degraded forest (Poffenberger and McGean 1996; Stevens 1997).

Often the lack of *de jure* rights of ownership to forest areas has proven to be the major stumbling block to these movements. Customary claims are frequently not adequately recognised by modern government administrations, or the same forest resources are classified under the eminent domain of the state (Brookfield et al. 1995: 128). In such instances, strengthening local tenure in collaboration with local residents has been viewed by conservation organisations as a valid endeavour to stem imminent threats to important natural areas. The move to

<sup>1</sup> I first became acquainted with the local community in Sabah's Upper Padas region in 1997 during a government consultancy to identify new protected areas. This research was subsequently conducted between January 1999 and March 2001 in the course of establishing the Ulu Padas Community-Based Conservation and Development Project, a joint initiative of WWF-Malaysia and the Ministry of Tourism and Environmental Development. The Ulu Padas experience is now being evaluated away from the field for a Ph.D. in Geographical and Environmental Studies at the University of Adelaide. Consequently, opinions expressed here are my own and may not necessarily coincide with those of WWF-Malaysia. This chapter has benefited from insights into the dynamics of community life and tenure issues provided by Alison Hoare, who conducted an independent investigation of Lundayeh land and forest resource use between September 1999 and October 2000.

lend resources and expertise to such initiatives is also underscored by the belief that this could contribute to the restoration of communal management systems and, in the process, establish spaces where biodiversity and community interests might coexist.

In March 1999, I led a project for WWF-Malaysia to advocate for the conservation of montane forest in the biologically significant Ulu Padas headwaters in Sabah's southwest. The project involved working closely with the Lundayeh community of this area. For years the uncertain status of land ownership had proven to be a significant factor in forest degradation. The intervention in the Upper Padas was intended to tap the potential for securing spaces for biodiversity by seeking greater security of tenure for local residents.

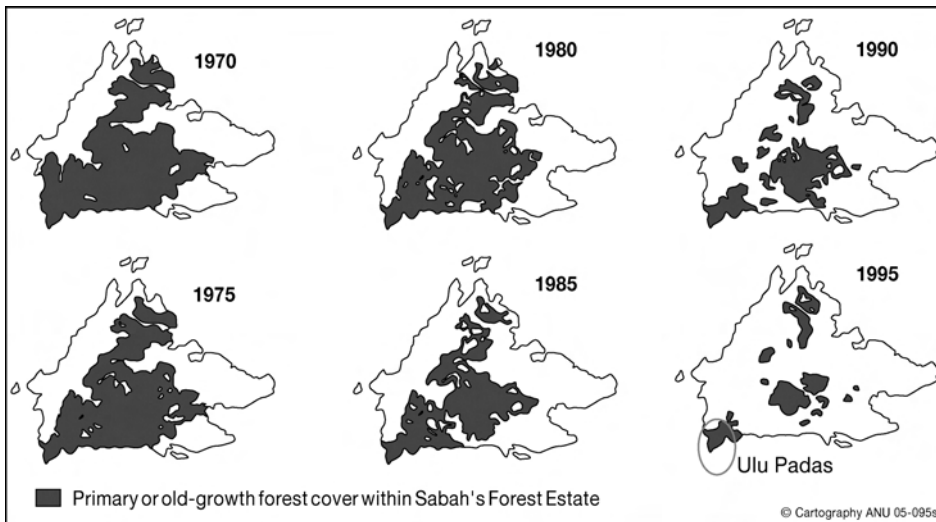
By drawing upon this experiment in building community–conservation partnerships, this case study acknowledges the potential for synergy between strengthening communal tenure and conserving biodiversity. However, field experience shows that it is necessary to modify expectations of the local community's commitment to conservation. Though local people profess a strong affection for and appreciation of the surrounding environment, this alone does not provide sufficient assurance of actions that prioritise conservation. This has probably never been more apparent than in this period of rapid social change where greater access to urban society, systems and mores has had a tremendous influence on highly mutable local aspirations. Greater care is needed in negotiating community–conservation partnerships if outcomes are to have any relevance to both environmental conservation and local people's aspiration for economic development. This chapter discusses some of the ways in which community–conservation partnerships might be based on more explicit arrangements that satisfy the specific interests of the parties involved. It also highlights the value of policy reform and collaborative efforts involving NGOs, communities and government agencies in promoting a land-tenure resolution process that safeguards the long-term wellbeing of both local communities and the environment.

## **One Landscape, Three Competing Interests**

### **Biogeographic and Conservation Significance**

Ulu Padas refers to the headwaters of the Padas River, an area of approximately 80 000 hectares at the southwestern-most tip of Sabah, Malaysian Borneo. This steep mountainous area, with elevations ranging from 915 to 2070 metres, remains among the few parts of Sabah's forest estate with extensive old-growth forest

(Figure 7.1) (Mannan and Awang 1997: 2).<sup>2</sup> Globally, Ulu Padas is of considerable conservation significance. It is believed to rival Mount Kinabalu in terms of plant endemism and species diversity, particularly within pockets of rare *kerangas* or heath forest throughout the area. This area is part of the larger Central Bornean Montane forests, a transboundary ecoregion that extends over the Kelabit Highlands of Sarawak and Indonesia's Kayan Mentarang National Park (Figure 7.2). The contiguous oak-chestnut forest is also believed to support the seasonal migration of the bearded pig (*Sus barbatus*), a major source of meat for Borneo's upland communities (Hazebroek and Kashim 2000).

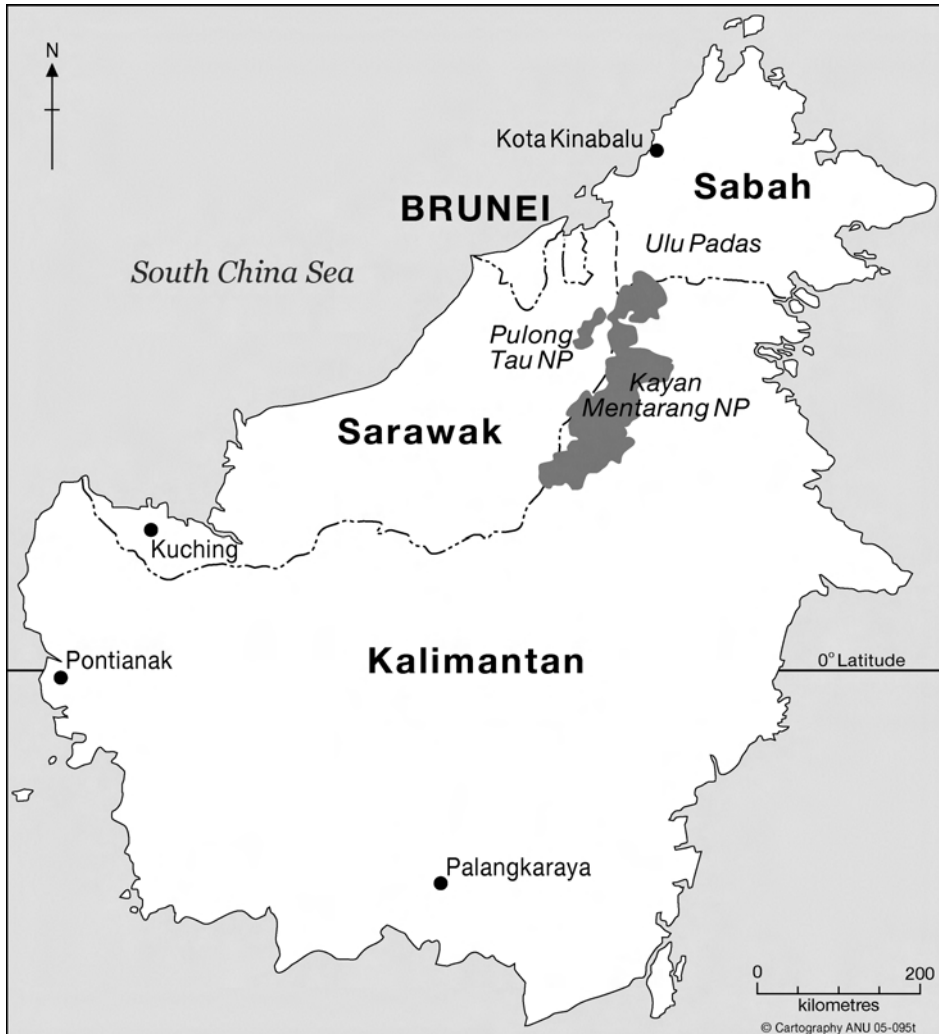


**Figure 7.1. Contraction of primary old-growth forest in Sabah's Permanent Forest Estate, 1970–95**

Source: Sabah Forestry Department 1997

As early as 1992, Ulu Padas was identified in the Sabah Conservation Strategy as a distinct biogeographic zone warranting inclusion in the state's protected area network. To pursue these recommendations further, in 1997 WWF-Malaysia in association with the Ministry of Tourism and Environmental Development, and supported by the Danish Agency for Cooperation and Development, commenced the 'Identification of Potential Protected Areas' component of the Sabah Biodiversity Conservation Project. In Ulu Padas, botanical collections confirmed early suspicions of biological significance, identifying 11 distinct

<sup>2</sup> In 1997, the then Acting Director of the Sabah Forestry Department reported that between 1975 and 1995, the overall coverage of primary forest in Sabah's forest estate 'dwindled from 2.8 million hectares to about 0.3 million hectares'. In the Commercial Forest Reserves intended for sustainable forest management, old-growth cover was estimated at only 15 per cent in 1996, compared to 98 per cent in 1970.



**Figure 7.2. Location of Ulu Padas within the Central Bornean Montane Forest ecoregion**

forest types and an impressive array of endemic species (Phillipps and Lamb 1997). The combination of high annual rainfall, high elevation and steep terrain was highlighted in recommendations for catchment management. The Padas River supplies water and generates hydroelectric power for the urban and agricultural areas of Sabah's southwestern region (Sinun and Suhaimi 1997; Paramanathan 1998). Social assessments revealed interest and support at the community level for conservation and associated development opportunities (Towell 1997). Community apprehensions that logging in the surrounding Forest Reserves would threaten their way of life also featured frequently in formal and informal discussions. At the conclusion of the 1997 study, stakeholder workshops

and discussions were held in order to share this information and seek a common vision for this area, which included recommendations to convert the Ulu Padas Commercial Forest Reserve into a Protected Area (Payne and Vaz 1998).

## Community Claims to Land and Forest

The Ulu Padas community comprises two villages with a combined population of approximately 500 people, centred at the mouths of the Pasia and Mio rivers, both tributaries of the Padas (Figure 7.3). The Lundayeh people of Long Pasia and Long Mio are mainly subsistence swidden and wet-rice farmers, although tobacco, coffee, vegetables and fruits are increasingly being planted. Wild game is the primary source of protein and hunting is an integral part of Lundayeh identity. Rivers supply fresh water and fish, and the surrounding forest is an important source of food, medicines, firewood and building materials (bamboo, rattan and wood) (Hoare 2002: 41–73). Local people regularly access forest resources far beyond existing farms and homesteads, particularly for medicines and rare plants that only occur in the pristine forest areas (Kulip et al. 2000). These are also the best hunting grounds. The remoteness of the villages (123 km by logging road from Sipitang) and seasonality of cash incomes make the forest both a lifeline and a safety net for local people.

Generally, the Lundayeh of Long Pasia and Long Mio assert customary claims to land that their forefathers cleared and farmed before them according to the traditional system. They view the area to be their ancestral heartland and see maintaining aspects of their unique way of life as essential to maintaining their ethnic identity. Through their activities, local people reaffirm their long history and connection with the area. Over generations, their agricultural cycles have shaped the environment, developing a mosaic of forest in different stages of regeneration<sup>3</sup> and altering the species composition of amenity forest (Hoare 2002: 152–6). This is also a cultural landscape dotted by burial sites, headhunting monuments, historic foot-trails to neighbouring villages in Sarawak and Kalimantan, and trees and farms planted by ancestors. A rich local folklore explains the formation of rock monuments and striking geological features (Vaz 1999) (see Figure 7.4).

<sup>3</sup> In this way, swidden farming is akin to rotational agroforestry and encompasses the management of swidden fields and fallows in multiple stages of development (Peluso 1995: 393).

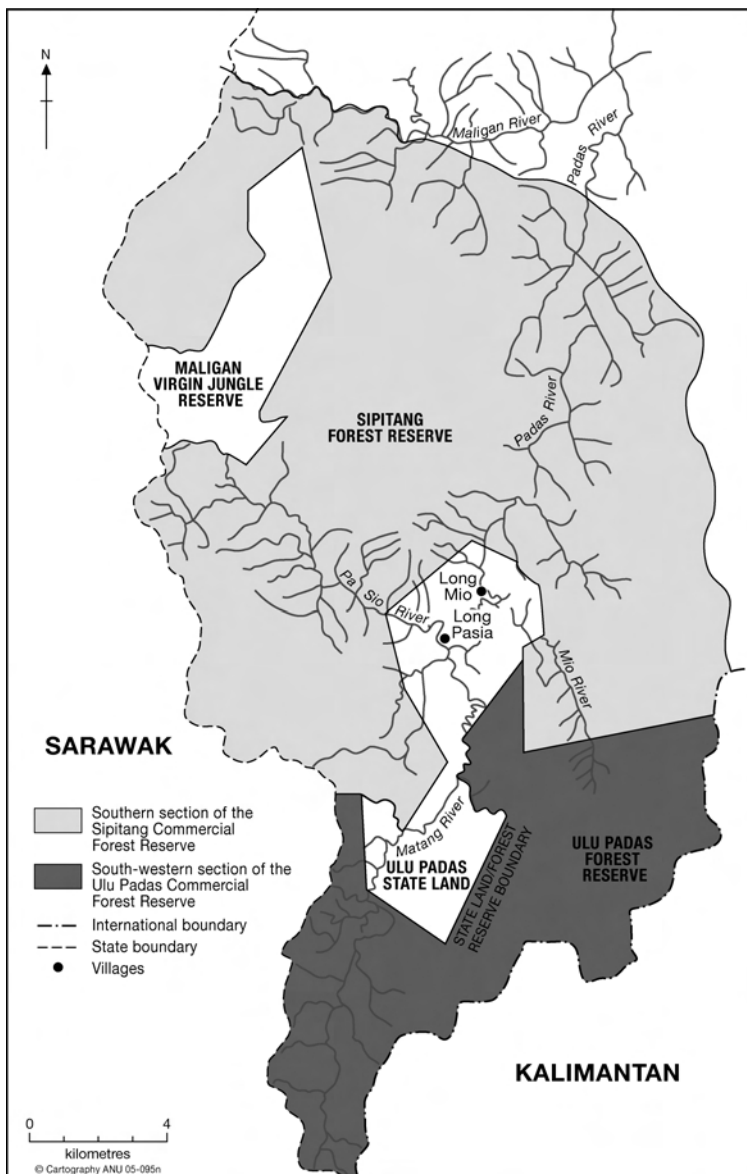
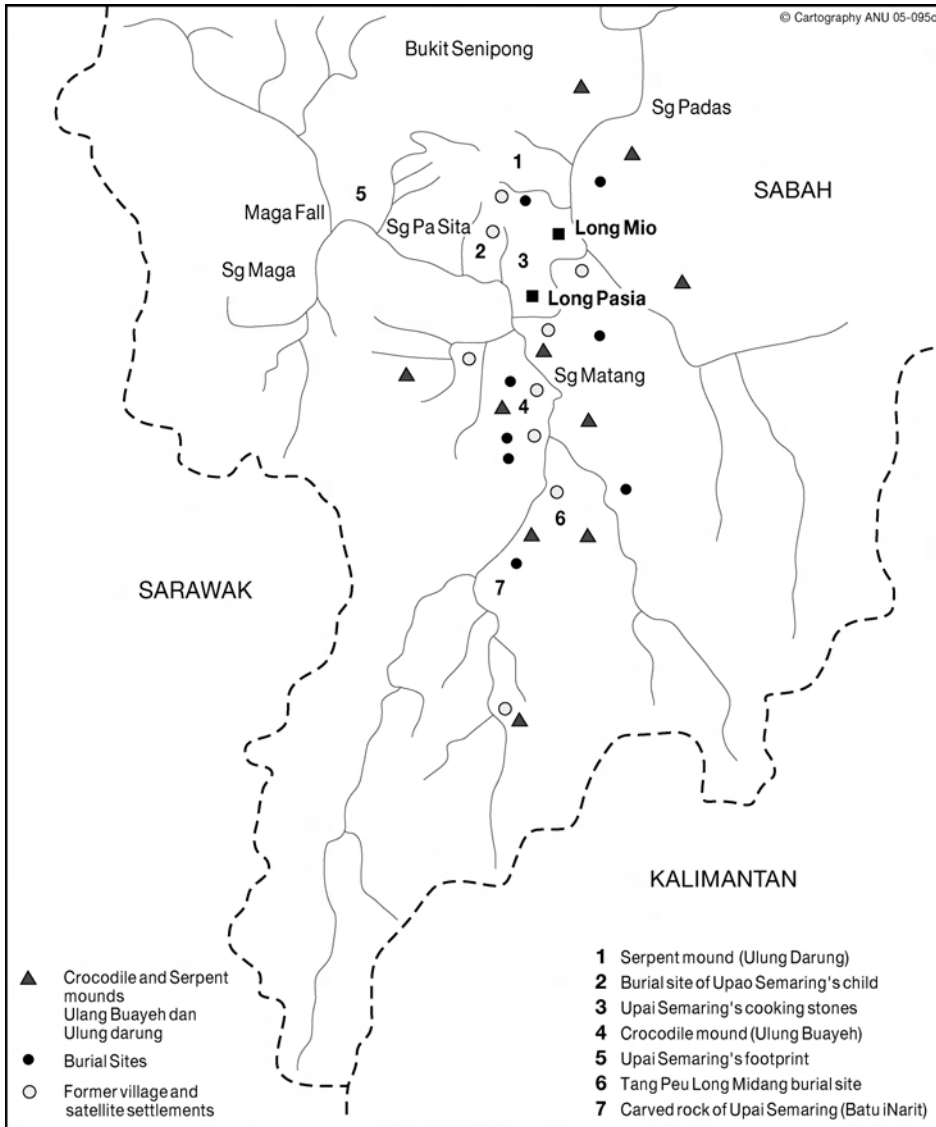


Figure 7.3. Villages and land use classification in the Ulu Padas region



**Figure 7.4. Cultural heritage sites in Ulu Padas State Land**

However, in the eyes of the government, despite local people's perceptions of customary claims, only an 'island' of State Land of approximately 12 300 hectares has been set aside for local people to make formal applications for Native Title. The remainder of the Ulu Padas area is classified as Commercial Forest Reserve and is within a Forest Management Unit of close to 290 000 hectares which has been concessioned to Sabah Forest Industries.

## Logging Interests in the Upper Padas

Sabah Forest Industries (SFI) is a former state-owned entity managed by majority equity holder Lion Group Holdings since early 1994 (*Asian Timber*, February 2000). In addition, the Ulu Padas Forest Reserve, an area of almost 30 000 hectares proposed as a new Protected Area in the Sabah Conservation Strategy, has been incorporated into a binding 99-year lease agreement (1996–2094) with SFI (see Figure 7.3). SFI's concession is divided into two categories: (1) Industrial Tree Plantation areas, where natural forest is cleared for pulp and paper and replaced with fast-growing species; and (2) areas under Natural Forest Management, which are meant to be managed for the sustainable harvest of timber according to the state's Forestry Guidelines. SFI's integrated timber complex is the major industry in the nearby town of Sipitang, employing over 2000 people and linked with numerous other contractors and businesses.

## Conflict over Forest in Ulu Padas

The imperative to secure community ownership of forests in the Ulu Padas intensified with the profound changes in the surrounding landscape between 1998 and early 1999. By this time, tropical timber was progressively being sourced further in the uplands, more than 100 km from Sipitang. As replanting with *Acacia* and *Eucalyptus* had not kept pace with the demand from the mill, logging roads were becoming more and more invasive, penetrating deeper into the forested interior of the Upper Padas. At higher elevations, logging operations targeted the giant *Agathis* trees of the old-growth montane forest. SFI had become one of Japan's main suppliers of sawn *Agathis* timber (*Asian Timber*, February 2000). Logging activities within surrounding catchments silted up the tributaries that run through the two valley settlements. Long Pasia's famous 'red river',<sup>4</sup> usually coloured a clear red by the tannins leached from leaf-littered cloud forest, had become the colour of milky tea. Flooding and declining forest resources were also experienced. Long Mio had already been contending with similar problems with the Mio River as a result of logging activity upstream around Muruk Mio, a distinctive peak in the region.

The impacts experienced by the community stimulated a period of heightened environmental awareness and protest, not only about the commercial logging activities in the Forest Reserves (*Daily Express*, 18 April 1999; *The Star*, 19 April 1999; *New Straits Times*, 21 April 1999), but also about the lack of security given to the community's customary lands. The local community argued that their way of life and livelihoods were at risk. 'Allocate an area for the Lundayeh' was the appeal from the President of the Lundayeh Cultural Association of Sabah (*Daily Express*, 11 April 1999). Similar views were expressed at a village meeting, the minutes of which were sent to the Chief Minister's Department.

<sup>4</sup> Long Pasia means 'mouth of the red river' in the Lundayeh language.



Our forefathers did not bequeath us wealth of gold and money. Our only inheritance is the land along the banks of the Lelawid and Melabid rivers which they cleared and farmed — this land has been handed from generation to generation. For this reason, we are appealing to the Natural Resources Office for this land to be removed from the Sabah Forest Industries area for us. This land will be divided among the relevant families and also given to village members who do not have land (Minutes from Long Pasia village meeting, 15 September 1998).

At the time of initial WWF-Malaysia dialogues with the community in 1997, the significant reduction in the extent of traditional resource areas and the onset of logging activities were seen to impose unprecedented threats to their environment, economic activities and quality of life. The community had made several attempts to raise their concerns with higher authorities but had little success at obtaining assurances that their customary claim to land and forest in Ulu Padas would be recognised or that logging would be controlled. Furthermore, in response to the increased accessibility created by SFI's logging roads, external parties were manoeuvring to gain access to the timber on State Land forest. Most villagers were gripped by a sense of anxiety and apprehension.

## **Customary Claims and State Lands**

The unusual shape of the Ulu Padas State Land/Forest Reserve boundary derives from the resource mapping process to define the Permanent Forest Estate in the then newly independent state of Sabah.<sup>5</sup> In this remote area, the Forestry Department relied heavily on aerial photographs to demarcate the boundary along signs of previous land clearing. The State Land boundaries delimit the area in which natives can apply for title under the *Sabah Land Ordinance* 1930 (little changed from the original legislation drafted in the days of the British North Borneo Company). Today, partly owing to the low-impact nature of traditional swidden cultivation, a substantial portion of the State Land still retains excellent forest cover, particularly on hill slopes and along the rivers. With the settlements and farms now located predominantly in the northern half of the 12 300 hectares, the southern section (about 60 per cent of the total area) has reverted to mature secondary forest. Although this area contains evidence of previous longhouse settlements, it now seems to play a more general function as a forest preserve for Long Pasia. Locals use longboats to access this area for fishing, hunting and resource gathering, and its importance has increased in light of the anticipated exploitation of the Forest Reserves. Because of its

<sup>5</sup> Sabah ceased to be a territory of the British North Borneo Company when it became part of Malaysia in 1963. The subsequent forest inventories conducted in the early 1970s and again in the late 1980s have been said to have accelerated the depletion of forest by providing a veritable 'treasure map' of the timber resource (Mannan and Awang 1997: 7).

impressive scenic and historic assets, this area is also the focus of tourism activities initiated with the assistance of WWF-Malaysia.

## Insecurity of Tenure and External Threats

Although local people generally perceive that farms, fallows, homesteads and what has been a traditional forest resource (often loosely referred to as '*kampung land*') is 'theirs', the *Land Ordinance* 1930 states that the land and forest of this area continues to be vested in the government until such time as it is administratively classified as Native Title or some other provision under the ordinance. The British North Borneo Company, which was the architect of this land legislation, clearly intended for local people to have secure tenure over their lands to facilitate its productive and commercial use (Singh 2000: 241). It enshrined the right for any individual who is a native of Sabah to apply for Native Title over a maximum area of 20 acres. Today, most people hold official Land Application receipts for the claims that they have filed with the Department of Lands and Surveys, but nothing is truly secure until the title is in their hands. The department has the formidable task of deciding on the legitimacy of claims throughout Sabah, resolving conflicts, and surveying the land. Not surprisingly, applications typically take decades to process and approve, especially in the more remote areas. This contributes to a high level of impatience and frustration at the local level.

Whenever we visit the government offices, they tell us that the forest belongs to the government, and that we have no rights to the land of our ancestors. They say that if we want land we just have to apply for titles, but we've already done that years ago. Yet we are still waiting! (Long Pasia man at community meeting, 20 April 1999).

An area the size of the Ulu Padas State Land, with substantial forest cover, inevitably becomes the target of keen interest by external parties desiring to acquire forested land. In addition, without formal recognition of Lundayeh ownership of hinterland resources, there is no mandate for local people to exercise stewardship of these resources. From the mid-1990s, logging roads had already made the area accessible to recreational hunters and logging camps, and rivers were being fished by unsustainable means such as electricity and poison. At face value and from a conservation perspective, assisting the local community in securing ownership of this area was considered one way to exclude external logging interests, place the area under some form of communal management and include some provision for conservation. In addition to containing good samples of contiguous riverine oak chestnut and *Agathis* forest, the Ulu Padas State Land also contains several patches of rare *kerangas* forest. The longer the process of securing tenure was delayed, the greater the likelihood that logging contractors

would obtain Temporary Occupation Licences to log the State Land through unscrupulous manoeuvrings of their own.

## Seeking Conservation Through Land Tenure Security

Upon cursory examination, the bureaucratic processes and rigid criteria related to land application appeared to be a significant obstacle. Land legislation had a tendency to mystify local people who have only partial understanding of the options available to them to secure both ancestral farmland and forest. In Ulu Padas, these difficulties were accentuated by the fact that the amount of land available to local people has been reduced, with sizeable areas now classified as government-owned and designated for commercial purposes. There were several other problematic aspects that required solutions, namely the strong bias towards the conversion of forest to agricultural use and the scant provision made for landholding institutions that would support traditional agriculture<sup>6</sup> and maintain communally-owned forest reserves.

WWF-Malaysia's work with the community was founded on the belief that providing advocacy and mediation between the local community and the state could bring improved security of tenure and an opportunity to defend the forest. With this objective in mind, time was devoted to obtaining a clearer understanding of customary claims to land and investigating ways to translate these collective claims into a format supported by the *Land Ordinance*. The underlying intention was to mediate the process of communicating tenure claims in ways that would be accepted by the government system.

In principle, while some would argue that the conversion of traditional rights into colonial terms oversimplifies the original fluid nature of traditional land use, in the interest of expediency it was clear that government officers could more readily work with proposals that were supported by existing legislation. With imminent threats facing this area, expediency was preferred to the pursuit of an ideological crusade for indigenous rights. In many ways this action seemed to be supported by the fact that local people themselves deferred to the authority of government, and used their understanding of the *Land Ordinance* (however rudimentary) in their interactions with government agencies. Therefore the approach was not altogether inconsistent with local people's own acceptance of the legal framework of government.

Unfortunately, the initial assumption that assisting local people in securing tenure would be a straightforward matter of compiling a clear representation of customary tenure with which to seek the indulgence of government, proved to be naïve. We were soon to learn that customary claims were in fact a hotbed of

<sup>6</sup> The *Land Ordinance* emphasises that all titled land be put immediately to productive use, leaving little provision for recognising the need for farmers to have sufficient land to accommodate swidden rotations and fallow land to ensure long-term productivity.

contention. It was actually at village level that the full spectrum of conflict and irresolution emerged. Local people's claims were notoriously contradictory, with various factions competing for land within the 'community' itself. The multiple and divergent claims to land proffered by the local population seemed to be motivated by individual advantage rather than an adherence to time-honoured land tenure orthodoxies. Defining customary claims in ways that would satisfy all members of the local community presented many problems. This quarrelsome scenario is a consequence of the historic origins of the community, now more complicated by the influences of modernity and nascent self-interest.

## The Difficulties of Defining Traditional Tenure

Traditionally, for the Lundayeh, in common with many other Borneo peoples (Appell 1986; Rousseau 1990), rights to a territory were held by a longhouse (Elmquist and Deegan 1974). Within this territory, any longhouse member could clear the forest to make a swidden. If an individual cleared a patch of forest with no known history of clearance, he and his descendants could lay claim to this land (Appell 1995). A hundred years ago, the Lundayeh settlement pattern in Ulu Padas was unlike that of the present day. The population was much larger and more widely dispersed in as many as nine longhouse hamlets (Hoare 2002: 31). Different longhouse groups had minimal interaction with each other, and clashes between them could be violent.

Prior to the arrival of Christian missionaries in the 1930s, the Lundayeh were one of Sabah's most feared headhunting societies. The advent of Christianity in the Ulu Padas uplands gradually eroded customs, traditions and beliefs, and tended to have a unifying influence. Over time, the different longhouse groups (now pacified) became more centralised, yet the apparent unity of the community was still undeniably undermined by age-old divisions carried over from the past.

In the period since then, there has also been substantial population movement to and from Ulu Padas. In the 1950s, government relocation programs encouraged the isolated population to settle in the lowland for greater access to amenities and services. In those days, the Ulu Padas villages were several days' walk from the end of the furthest dirt road. This meant great difficulty in accessing modern needs and markets for forest products. Children had to walk to their boarding schools in Sipitang. Many families opted to resettle in the new lowland villages. Nevertheless, others found it difficult to adjust and returned to re-establish the present-day villages (Hoare 2002: 35). Since then, there has been the usual population movement according to family circumstances. The relative porosity of the border has also enabled relatives or brides to come from other Lundayeh groups in Kalimantan. Many of these 'newcomers' have lived here for decades, becoming an integral part of the community.

Today's idyllic village of Long Pasia, with its central village leadership, church and school, is a relatively recent entity. Government centralisation policies to ensure more efficient administration (links to district government, agricultural schemes and subsidies), border security (army border scouts, immigration post) and provision of infrastructure and services (rural airport, clinic, primary school) have formalised the existence of the village as we know it. However, it is arguable that, despite appearances, and based on its disparate origins, the village might in spirit be more meaningfully viewed as several families cast together by history and circumstances. A superficial unity obscures the existence of enduring inter-family discord,<sup>7</sup> in addition to the usual feuds, disagreements and personality clashes that tend to colour village affairs. This has undermined the ability of the Ulu Padas 'community' to initiate collective action for common objectives and hindered the smooth resolution of tenure claims.

## Advancing Claims: Exploiting Ambiguities in Interpretation

In this transitional period opportunities arise to exploit ambiguities and confusion in translating customary claims into legal title. As Peluso observes, the 'superimposition of statutory legal systems on customary systems creates new windows of opportunity for people to take advantage of multiple systems of claiming resources' (1995: 401). In the specific case of Ulu Padas, this has been a divisive process in which some groups have sought to boost individual advantage at the expense of others. While the State Land area of 12 300 hectares might be considered sufficiently large for a population of just over 500, local people had yet to come to a consensus on how customary claims might be realigned to fit the land now allocated to them. The somewhat arbitrary boundaries drawn to differentiate Forest Reserve from State Land excluded large areas (more than 3000 hectares) encompassing the customary land of some of the family groups of the Ulu Padas community. Most of the land in the vicinity of the present village centre is claimed by a handful of families under the traditional system of ancestral land clearance. A narrow interpretation of customary rights would advantage those with claims within the State Land while disadvantaging those without.

The Department of Lands and Surveys' Ulu Padas files comprise a tangle of separate land application approaches spanning many years. Multiple individual and joint Land Applications of various sizes have been filed, many overlapping with each other several times over. In order to plump up the size of the claim, a common strategy has been to produce a long list of joint claimants. In addition, a great many claims are being made by urban Lundayeh who may have had an ancestor from this area but have no real connection with the area at the present time. Other claims are being made for land by non-Lundayeh, utilising the

<sup>7</sup> Local people seldom discuss previous warfare as it is considered part of a 'shameful' past.

provision that allows Sabah citizens to apply for Country Leases for land development (or speculative) purposes.

There are contrasting points of view amongst the Lundayeh themselves over who has the right to claim land. For example, descendants of Lundayeh who resettled in other villages and towns maintain that they have legitimate ancestral claims to land. The 'founding families' that form the nucleus of the revived Ulu Padas villages believe that they have a greater claim as they returned and rebuilt the settlements through considerable hardship. They perceive the previous groups that left the village as having no claim under native customary law. People who leave their lands technically relinquish ancestral claims following a usufructuary principle in which land reverts to the community if its owners abandon the area. This is meant to optimise the allocation of land and resources to contemporary needs and current residents. Some dominant families are not prepared to reduce their claims to State Land to accommodate other families whose customary land does not fall within the designated State Land area. Finally, 'newcomers' (those that have either come from Indonesia or have returned to Ulu Padas from elsewhere over the past 25 years) are viewed by some as having no valid claim to land at all. For these families, the only option is to rent, borrow or buy land.

Although some applicants are clearly making excessive claims, without a clear and widely accepted understanding from the community of what a legitimate claim is, who legitimate claimants might be, or at least criteria to prioritise claims, it is not clear how a government land officer should begin. Instead of undertaking a joint initiative, different households or family groups were each pursuing applications separately. For some, this was a deliberate manoeuvre to exploit the lack of clarity regarding native customary rights to advantage their claims.

The jostling for advantage in the race to secure land tenure in this case calls instead for a combination of wealth, stature, and useful connections. Finding ways to lubricate the process and establish links with people in positions of influence has become a particular focus of people's efforts. Regrettably, the bureaucratic government system in Sabah can be, and has been, subverted on occasion. Lacking confidence in the fairness of the system, local people have become convinced of the need to assure outcomes through more deliberate means.

## Divided They Fall

External parties interested in logging forest on State land are only too willing to offer their assistance. A common strategy has involved 'outside investors' using their connections to speed up processing of their local partner's Land Application in exchange for permission to apply for a Temporary Occupation Licence needed to conduct logging operations on State Land. Once the expensive

surveys are carried out and the timber is removed, the land reverts to the Native Title holder. This procedure is potentially attractive to someone frustrated by the slow legal application process and eager to obtain a personal share of the proceeds from the sale of timber.

Participatory problem-analysis sessions conducted during the project inception phase in 1999 found the community to be chronically divided on tenure issues. Although there was genuine support for conserving forest resources and preserving the Lundayeh lifestyle, it was clear that certain parties were impatient to profit more directly from timber. It was common knowledge who the 'dealmakers' were and yet, to maintain appearances, the same individuals often railed openly against the evils of logging at public discussions. Adopting the emotive rhetoric of ancestral rights and dependence on the forest, they were concurrently pursuing their own projects such as securing road extensions to their farms, expanding cash-cropping orchards, and arranging for logging companies to operate on their land. To counter this, others claimed to be trying to secure large land areas through similar means, mainly to defend the communal forests from the destructive agenda of their neighbours.

Without a strong central leadership, there seemed to be an inability to mobilise a progressive course of collective action. It was becoming increasingly apparent that not everyone was being upfront about their plans and motivations. As 'deal-making' was perceived as being widespread and uncontrolled, more local people became convinced that they too needed to strive to get what they could while they could. Faced with this troubling scenario, many villagers conveyed their hopes that WWF-Malaysia, as an external entity, would take on the complex and uncomfortable task of ensuring the equitable distribution of land and conservation of communal forest. It was clear that a far more elaborate tenure solution was called for. Simply advocating the wholesale adoption of 'traditional' claims, even if such a thing could be defined, would likely lead to outcomes that neither supported wise resource management nor assured long-term community welfare.

## **The Community–Conservation Link**

### **Misplaced Confidence**

In the course of working with the villages, several unfortunate events illustrated the problem of too easily drawing a causal link between strengthening local claims and safeguarding natural resources. Initially, the advocacy strategy of defending local welfare and rights to resources proved surprisingly successful, albeit on a small scale. In mid-1999, community appeals to stop a logging contractor from logging an area of communal forest near the village of Long Mio garnered unprecedented media attention. The multi-agency taskforce appointed by the Forestry Department to seek a solution to this conflict (*The Star*, 9 May

1999; *Daily Express*, 10 May 1999) deemed that since the community objected to logging in this area, it would be left to them to negotiate terms with the contractor.

This was a tentative victory for the village: tentative because less than a year after the community had historically turned the contractor away, logging in this area resumed. Evidently, suitable terms for logging to resume *had* been negotiated by the headman without consulting with other community members. He argued that it was within his power to make the deal since the land involved was under his customary claim. Ironically, in 1997 the same individual had implored WWF-Malaysia to help prevent logging in this area. Now he was challenging us to make an attractive offer to conserve this forest 'since we were so keen on it'.<sup>8</sup> We had nothing to offer, except perhaps the wry reiteration that we had been assisting under the impression that it was the desire of the community to conserve this forest because it was of value to them, and not because of the prospect of inducements from us.

A similar event happened in Long Pasia shortly afterwards. We were told that the same logging contractor had *mistakenly* crossed over an area of privately owned land and logged part of a forested hill inside the catchment area of the village's gravity-feed system.<sup>9</sup> The logging company paid some compensation to the landowner and the village and was given permission to remove the felled logs. What made this incident suspicious was the swiftness with which compensation for this incursion was organised. It seemed as though this scenario had been devised to shield local counterparts from appearing complicit in an *arrangement*. The incident was not reported to the Forestry Department. It was qualified that: 'If the Forestry Department comes, they only fine the contractor or the logs are confiscated. This way at least we get something.'

These two events suggest that the effectiveness of the community-conservation NGO partnership at raising awareness and sympathy for biodiversity conservation can be highly effective, but it can backfire quite easily. While it is possible for advocacy strategies to 'protect' local people's interests from outside threats, it cannot easily protect local people from themselves. Indeed, such strategies may quite inadvertently raise the rates of compensation and enhance the temptation to cash in for short-term gains.

## Communal Resource Management: Ideals Versus Reality

It has often been argued that communal management of natural resources engenders greater social justice and preservation of the environment. Communal

<sup>8</sup> Other Long Mio residents attribute the headman's change of heart to his advanced age and inability to understand the long-term purpose of conserving these resources, as well as the attractive inducements from the logging contractor which provided more tangible benefits in the short term.

<sup>9</sup> For most rural villages in Sabah, such gravity-feed systems provide piped water from dammed streams to village households and farms. It is the only source of water other than the river and rainwater.



management has been portrayed as contributing to the sustainable use of natural resources and providing for local needs by ensuring the equitable distribution of land and resources. Further to these requirements, a functioning communal management system should be supported by a strong community organisation to arbitrate norms and regulations involved in managing resources held in common. On close examination, I have found that none of these three elements can be said to be truly functioning in the Ulu Padas villages at this time. Some may argue that this situation has arisen because local authority over customary lands and resources has been undermined in recent decades. It is also possible that in the right policy environment, all three of these prerequisites for strong communal management could be revived. However, the present situation does not engender confidence in the capacity of local communities to assume ultimate management of these resources. A very significant factor in this observation is the degree to which village life has been impacted by the pervasive influence of modernity. This is most apparent from some of the specific changes affecting common resources shared by the village community.

In Ulu Padas, traditional guidelines exist to govern access to resources that are held in common. A civil contract allows community members to access resources for domestic use both from each other's fallow fields and in the village's wider 'territory' according to stipulated regulations. Today, many common property regulations are not being effectively enforced and are openly flouted by some. When outsiders come into an area, they are customarily expected to ask the village headman for permission to enter the forest to harvest plant resources, go hunting or fishing. However, today this is often ignored. Consequently, it has become increasingly difficult to control the unsustainable exploitation of resources. In the rivers and streams, forbidden poisons and electric current have been used. Recreational hunters from urban areas are now using logging roads to access hunting areas (reports of six or seven deer and wild boar taken in a night are common).

Although the 'enemy' is frequently characterised as the evil outsider, often entry is facilitated from within. It is common for local people to serve as paid guides on these fishing and hunting excursions, and some even use unsustainable fishing practices themselves. Logging camps in the uplands create a steady demand for wild meat and this is a prime source of income for village hunters. This commercialisation of wild game already represents a form of open access use as it is contrary to conventions that restrict use of the resource to domestic needs (Berkes et al. 1989). With money now an important motivation, detractors who have psychologically crossed out of the traditional paradigm are unconcerned by social sanctions against such practices. While the removal of local people's authority to exclude outsiders is a consequence of state laws, it is inconclusive whether this is the sole cause of the erosion of local management systems.

Local response systems for ensuring the smooth working of commons management were also not actively functioning. In community consultations, the women's and young people's discussion groups complained that irresponsible cutting of timber in nearby amenity forests was reducing the supply of accessible firewood, thereby burdening them with the need to travel further to replenish the hearth. Indiscriminate clearing of land along upstream riverbanks was also silting up patches of wild vegetables that are collected for daily meals. Traditional systems were not actively addressing resource use conflicts or regulating the activities of fellow community members. In addition, there seemed to be no framework for women to raise their specific concerns (Vaz 1999: 5).

A further development has been the strong trend towards privatisation of all resources, despite there being a long tradition of community access to certain resources such as bamboo shoots, fruits and others. Although this is the cause of considerable ill feeling, such behaviour being seen as mean and not customary for the Lundayeh, it has not been openly objected to. Rather, it has led to other people following suit in cordoning off other resource areas (Hoare 2002: 35). Increasingly, there is also a trend towards asserting exclusive use of all land. In the past, fallowed swidden land would traditionally be loaned to kin or neighbours for farming if needed. There is a new emphasis on the need to use land commercially for permanent crops and to secure this land with heavy emphasis on the principle of inheritance based on descent. In this context social obligations are being downplayed. Commercial crops are being emphasised in order to generate cash incomes (ibid.: 172). This can also be said to reflect a strategy to strengthen the perceived legitimacy of land claims with the investment of labour on developing permanent crops, which would be viewed as being 'more progressive' by government authorities.

### **Moving Beyond the Impasse: Teasing Out a Tenure Solution**

In Ulu Padas, it was clear that in a leave-alone scenario, the villagers would be unlikely to *automatically* assert forms of management that would necessarily uphold environmental conservation and equitable access to land and communal resources. If land in Ulu Padas were to be awarded on the basis of ancestral claims alone, certain individuals or families would lay claim to vast tracts of land, more than they could feasibly use for agriculture, while others would have no such claims despite their having lived in this area for 20 years or more. With the prevailing trend towards privatisation, there was no guarantee that the former customary system of loaning land to fellow community members would be honoured. And with so many large claims focused on the forested area in the southern half of the State Land, applicants hoping to make their fortune through timber deals could deprive the larger community of vital shared resources while precipitating serious environmental degradation.

From a conservation perspective, any large claim to land awarded to individuals or select groups without provisos for accountability to the total community would expose it to unsustainable exploitation and negative environmental impact. This is true regardless of whether the applicants are *bona fide* community members residing in the village, Lundayeh people who have moved away from the area, or well-connected Sabahans seeking to obtain land for development. If anyone were to be given ownership of a large forested area, the individual would be able act independently of community interests. The lure of selling rights of access to timber *taukeh* (tycoons) would be too difficult to resist.

As far as WWF-Malaysia's objectives were concerned, in identifying a common standpoint from which to evaluate resource tenure solutions, it was necessary to outline a clear set of principles with which to uphold requests to protect local livelihoods, cultural heritage and the living environment that had been voiced by the community in earlier discussions. Bearing in mind the organisation's core business, the tenure solution would also have to support biodiversity and environmental conservation. In addition, ways would have to be found to support local access to communal resources and to restrict external interests. Ultimately, any intervention would have to promote the equitable division of land to all Ulu Padas residents and ensure that the activities of a few do not have the propensity to disadvantage the larger community.

Playing the initial role of a go-between, the WWF-Malaysia project officers consulted with the district officers of the Lands and Surveys Department and other government agencies to better understand the official process by which native land claims could be resolved, the specific provisions for native tenure (both individual and collective) within the *Land Ordinance*, and the legislative procedures by which local communities might formalise claims for land. The community's confusion over the complicated and confusing process was communicated, while the government officer clarified some of the obstacles and limitations hindering the smooth and speedy resolution of tenure from the Department's perspective. These difficulties were a common concern of both parties; after all, it is technically in the Department's interest to find expedient means to complete the statewide land-registration process.

Relevant legislation was translated or explained in Bahasa Malaysia in order to familiarise community leaders and organisers with the land application process and supporting legislation. Local people became quite proficient at interpreting laws and policies governing environmental protection, sustainable forest management and native land tenure. With an ongoing dialogue established with the District Surveyor, in a matter of weeks what first appeared to be an intimidating and impenetrable bureaucracy evolved into a joint strategy. The District Surveyor was exemplary in upholding the spirit of the *Land Ordinance*

and the government's original intention that the Ulu Padas State Land should be entrusted to the Lundayeh people, suggesting the most effective routes towards this objective.

Many members of the community still believed that it was possible to lay claim to the entire Ulu Padas region, including the Forest Reserves. Hearing directly from a government officer that this was highly improbable helped local people to abandon unrealistic expectations and reorient them towards more achievable aims sufficient for their needs that could be endorsed by government agencies in accordance with current laws.

## Individual Titles

In order to assure that local residents were given top priority in receiving individual land titles, the Department of Lands and Surveys first began a process of filtering the volumes of applications on file to prioritise families with a recognised claim and need. Village leaders and committees provided a vetted list of names to facilitate this. Second, in order to avoid the obstacles of overlapping claims, plans were made for all Native Titles in the Ulu Padas State Land to be processed in one block. At a future date, Lands and Surveys officers would base themselves in the village for a time to consult with the community to demarcate the location of household plots to be awarded Native Titles close to the main village centre and most active agricultural areas. Similar approaches have already been used with considerable success in the adjacent Beaufort district. In this way, the processing time and survey costs would be greatly reduced.

The Sabah Biodiversity Conservation Project soil and slope studies were consulted in determining the distribution of fertile land suitable for permanent crops and less fertile land for mixed cultivation. The Lands and Survey Department had already earmarked slopes and catchments that would automatically be reserved as amenity forests for domestic use. With invalid or less valid claims removed or reduced in size, the potential threat of alienating large areas of forest to external parties was mitigated.

## Safeguarding Communal Forest

Care was taken to ensure that the move to proprietary rights would not undermine the importance of shared forest resources (Li 1996; Stevens 1997). Without access to the Forest Reserves that had served as a wider resource hinterland, it was imperative that a reserve be established within the State Land to safeguard resources for domestic access. Since the Native Title provision applies only to smaller parcels of land intended for productive use, a Native Reserve was the best means by which a large contiguous area of forest could be

protected while still enabling local use by the village as a whole.<sup>10</sup> Use rights would only be extended to villagers and guidelines for harvesting resources would be determined so that each community member would have an equal role in ensuring the appropriate use and management of the area. Here then was the possibility to re-establish a secure resource from which common property regulations could be negotiated anew.

An application for a Native Reserve of 4500 hectares in the forested southern section of the State Land was submitted by Long Pasia in October 1999. This area incorporates the former settlements, burial sites, rock and earth monuments and historical routes, including numerous sites of value for biodiversity and tourism development. As the face of Ulu Padas begins to change, the proposed reserve is intended to protect at least some of the most cherished elements of the Lundayeh lifestyle and identity before they are lost.

However, the process of obtaining the endorsement of all members of the community for the Native Reserve was often frustrating for the community members striving to put the proposal together. Certain segments of the community were antagonistic as this form of shared tenure would upset private timber deals. At times it seemed that the signed endorsement required for the Native Reserve proposal would never be secured. The application languished uncompleted for two months until, in September 1999, information had filtered in from several sources that a logging company with an influential former politician as its director was close to being awarded this area for logging. This confirmed earlier warnings of the imminent threats from external interests. A collective application for a Native Reserve was swiftly formalised and submitted to the government by villagers of Long Pasia. Local people were certainly not going to let an outsider's claim usurp theirs. Long Mio followed suit, proposing another area of several hundred hectares as Native Reserve.

The Native Reserve applications have now been prioritised on the merits of the communal claim, causing other land applications for the same area to be rejected. The Native Reserve application has already been approved at several levels and is now in the final stages of processing. If it makes it through the final stages, the Ulu Padas Native Reserve could be one of the largest areas of communal forest to be established in Sabah in recent history.<sup>11</sup> However, the hesitant steps taken towards its establishment suggest that aside from its ability to neutralise outside threats, gazetting a Native Reserve will not in itself guarantee conservation outcomes.

<sup>10</sup> All other 'protected area' legislation such as those used for the establishment of Sabah Parks or Wildlife Sanctuaries explicitly forbids access and use of the area concerned by local people. This has understandably nurtured a natural opposition to protected area proposals.

<sup>11</sup> An 'if' still applies as policies and leadership tend to change frequently in Sabah. The conservation quest is littered with premature stories of victory, followed by bitter disappointment.

## **Strengthening Communal Resource Management**

With the initial obstacle of tenure insecurity overcome, the Ulu Padas community still faces the important challenge of re-establishing its communal resource management systems and institutions. The task has barely begun and will need a commitment of resources and external support if it is to be successful in the long term. Government agencies and NGOs have a role to play in guiding catchment protection, biodiversity conservation, and the management of tourism and recreational areas. Discussions need to be held to elaborate management and use guidelines for the Native Reserves as well as provisions to ensure the necessary levels of accountability and transparency in the management of this important area. Bearing in mind the stratified nature of most communities, care must be taken to ensure that decision making in the name of the community is not usurped by more powerful elements within it. If such intra-community equity in decision making is not assured, even participatory modes of resource management would fail to deliver equitability (Singh et al. 2000).

## **The Importance of Collaboration**

### **The Role of Policy Reform in Reversing Destructive Trends**

In Ulu Padas we observed how community institutions have become weakened by the absence of tenure security and the impacts of monetisation and opportunism. Anecdotal evidence suggests that similar scenarios are being replayed in rural communities throughout Sabah. The uncertainty surrounding land alienation, and the potential profitability of making claim to and selling timber rights, manifests in actions that are deleterious to the welfare of local communities, to the environment and to long-term development. As communal forest areas continue to come under threat, divisions within communities are precipitated by outside interests to undermine their defence of shared resources. At this crucial juncture, the state government has the potential to intervene to reverse these trends.

There are some immediate steps that can be taken to improve current policies and practices governing the management of forests and land use change in Sabah, in particular those that are inadvertently encouraging resource degradation such as the policy of handling land applications on a piecemeal basis. To support the social integrity of these communities, the land registration process should be conducted by engaging village communities as a whole. Village land use and future development plans should be mapped out, and designated sensitive areas and common property resource areas identified with the mediation and supervision of officers of the Department of Lands and Surveys, the Native Court and other observers. In addition, the integrity of these plans should be upheld by all government agencies that have the authority to issue logging or occupation

licences so as to restrict activities that threaten resource management in the community area.

## Working with the State

The experience in Ulu Padas also demonstrated the value of collaboration in conserving communal forests. Government officers, conservation practitioners, researchers and scientists, and, of course, local people have the potential to complement and reinforce each other's contributions. Accounts that portray the contest over resources as lopsided battles between state élites and marginalised communities have an obvious emotional appeal, yet they can dangerously polarise issues. I have found that the state government includes people who are receptive and committed to conservation and community interests, and who try, within their limited mandates, to seek favourable outcomes.

Working with local people has given me an appreciation for their resourcefulness and eagerness to be engaged more actively in developing their economic potential and building stronger futures for their families, while retaining links with their land, identity and heritage. Most perceive these aspirations as being achieved through opportunities arising from inclusion in state development programs, such as support for agriculture and, more recently, nature tourism. These impressions resonate strongly with Li's observation that, 'supporters of peasant struggles who assume that "traditional" communities are inclined to oppose "the state" in order to preserve "their own" institutions and practices may overlook the extent to which uplanders seek the benefits of a fuller citizenship' (Li 1999: 21). There is no question that the residents of Long Pasia and Long Mio see development in terms of fuller integration in the state system and through government-funded infrastructure and services.

Using a 'practical political economy' mindset (Chambers 1983), working more closely within and through the system in Sabah has enabled conservation NGOs to have continued access to relevant spaces, be they actual physical locations or the opportunity to provide input on important issues. Non-governmental organisations that 'act responsibly' are in a better position to increase the credibility of local-level conservation initiatives and maintain an opportunity for continued advocacy. Accordingly, the bid to secure communal ownership of forest resources and Native Title received a favourable response as the strategy adopted was consistent with the land legislation and was pursued through the official channels.

## Discussion: Conservation on Community Lands

### Communal Lands as Spaces for Biodiversity

Across the globe, the spaces reserved for biodiversity conservation are decreasing dramatically (Cox and Elmquist 1991: 317), and as Stevens (1997) points out,

very few wilderness areas can be considered uninhabited. Thus it is inevitable that there is a convergence of interest in community-claimed lands for conservation. In Sabah, local communities that occupy the last spaces where Borneo's biologically rich rainforests persist can be important agents in the quest to ensure its continued existence. Native communities have customary claim to some of the state's fragmented natural areas, and many are deeply concerned about the environmental impact of logging and land clearing. Politically, those whose next meal or glass of water will come directly from threatened environments are naturally perceived as having a greater moral right to defend their livelihoods and living environments. Indirectly they stand to be a voice for forest conservation.

In the case of Ulu Padas, the attention garnered by the community's campaign to defend communal forest areas also cast a spotlight on logging operations in the surrounding Forest Reserves. With mounting criticism of logging in highland areas from the public, there was increased pressure on government agencies to control environmental damage and conserve important areas. The Forestry Department was able to extract a greater commitment to Sustainable Forest Management principles from the concessionaire — including setting aside areas with steep slopes, important biodiversity areas, wildlife corridors and areas important to the community, including identified tourism development sites. In addition, a large area designated for Industrial Tree Plantations has now been reassigned to Natural Forest Management. The Department of Environmental Conservation was empowered to play a stronger role in enforcing environmental regulations. The interest in the area for tourism also generated discussions of collaboration to develop alternative economic activities in the Upper Padas. In addition, there has also been gradual progress in discussions to establish a transboundary conservation area with Indonesia and Sarawak. Arguably, many of these developments would not have taken place had the community not played a role in calling attention to the threats to the environment in this remote corner of the state.

Although resolving tenure in community-claimed lands can be an exceedingly complicated undertaking, there is immediate value in arresting the divisive competition for land and forests in which conservation, communities and resource management are all losers. Concluding the period of ambiguous transitional tenure has the potential to provide an improved foundation for the future, and an impetus for the community to heal and come to terms with a new set of circumstances. Restoring stewardship of forested land to local communities may yet be a promising means of achieving conservation goals. As Sabah's forest heritage continues to be whittled away by a combination of both human and natural agents, in years to come such preserves could become exceedingly important as refuges for what remains of wild Borneo.



## Making Community–Conservation Partnerships Work

The Ulu Padas case study was an experimental partnership between a conservation NGO and a rural indigenous community with a focus on strengthening local tenure arrangements. A generally symbiotic relationship was struck between the two parties — each motivated by a specific payoff. Local communities marginalised by the complicated legal procedures for land ownership leaned on the influence and expertise of an established organisation to assist in securing property rights and stimulating tourism initiatives. By providing the Ulu Padas community with information, legal advice and access to government channels, strategies for obtaining tenure security were expedited, the alienation of land and resources from local people was challenged, and the loss of biodiversity was mitigated.

However, in such partnerships, conservation NGOs are potentially at the mercy of communities. Non-government organisations do not have the authority to *impose* their will since it is local people that have claim to the land. The conventional methods are to inform, persuade, and sometimes develop livelihood alternatives or provide monetary incentives. Inevitably, it is the community that has to make the final decision and this implies a fairly high risk of failure. The experience in Ulu Padas has illustrated that, the close similarity of goals notwithstanding, collaborations between communities and conservation NGOs, however cordial, would be better treated as business partnerships built on compromise, not assumptions of mutual goodwill and shared objectives. In reality, each party gives up an ideal in order to achieve a reduced benefit. Not quite a win–win scenario, but perhaps the next best option.

In the case of the community, people must be reconciled with the sacrifice of short-term gains in order to achieve long-term resource security and some development assistance. In the case of the conservation organisation, domestic use of forest is supported (or tolerated) in order to achieve specific biodiversity-conservation objectives. The two parties are thrown together by mutual need because external threats would be impossible to repel independently. However, should the terms of this agreement be contravened in any way, the partnership becomes meaningless.

Although I believe that it is still important to be open to the possible contribution of local communities and communal areas to biodiversity conservation, it is necessary to concede that this should not be equated with ‘absolute, unmediated and entirely unregulated control over biodiversity resources’ (Singh et al. 2000: 72). The strategy of safeguarding customary tenure does not automatically beget conservation outcomes. For this reason, conservation practitioners have advocated that conservation objectives be explicitly spelled out through the use of Negotiated Contractual Agreements. ‘Essentially this involves the state or the official conservation agency negotiating with the local

communities and coming to an agreement on their rights and obligations regarding the conservation of bio-diversity or natural resources in their area' (ibid.: 74). Such a process requires the clear articulation of each other's commitments and responsibilities.

Conservation NGOs need to be upfront about their own agenda, and recognise the fact that they cannot operate out of altruism alone. They have to answer to donors and justify how project activities will contribute to a specific 'global mission'. They also have limitations: most notably in terms of funds, staff, economic expertise, and of course decision-making power. These aspects should be made clear to local people at the earliest possible stage, lest incorrect assumptions lead to disillusionment and misunderstanding.

In seeking to conserve biodiversity on communal lands, it is important to acknowledge that local people are being asked to bear the bulk of the burden of conservation in terms of social and economic impact (Wilshusen et al. 2002; Wells 1995). This may be understood in terms of restricted access to land and resources, or the opportunity costs of forgoing their exploitation. Local people are compelled to conserve and manage resources by an obvious hierarchy of motivations. Although religious or ethical imperatives, the availability of natural resources, the provision of ecological services, and fulfilment of aesthetic and recreational needs are important factors, direct and immediate financial returns are the most prominent motivation for most people (Singh et al. 2000).

Although there is a clear relationship between sustaining communal forest and the quality of the living environment, local people's aspirations usually extend beyond mere settlement and subsistence. It is imperative that program developers and policy makers accept from an early stage that '[u]pland populations have different degrees of attachment to their current locales and different degrees of commitment to an agrarian future' (Li 1999: 34). It remains an important question to ask whether conservation is a choice local people can afford to make.

In Ulu Padas, without sufficient financial backing for development alternatives, most local people saw WWF-Malaysia's assistance as well-intentioned but not pragmatic enough to address immediate economic concerns. At this stage there is still an opportunity to create a framework by which community development and biodiversity-conservation efforts might be mutually supportive. Economic incentives and support for income diversification strategies will need to be considered as part of any effort to conserve biodiversity. Fundamentally, unless conserving forest resources is *immediately and directly relevant* to supporting the livelihoods of local people, and is included in plans for development, the impetus for biodiversity-conservation outcomes may not be sustained.

## Conclusion

In examining the contest for the Upper Padas forests, a series of philosophical questions emerges. Should any one party automatically be privileged over the other in the claim to forest? Do local people's rights to exhaust their own resources, to achieve their own priorities and short-term goals, supersede the role of government in marshalling the use of state resources for development? Are conservationists justified in valuing threatened biodiversity over either of these aims? These are questions without any easy answers, but they will need to be addressed as different interests increasingly contend for the scattered forest refuges that now remain. The most agreeable solution is for each party to acknowledge the interests of the others in order to come to a synergistic solution. The danger for conservation organisations is that it is often too easy to over-extend assistance and to take on the concerns of communities without assuring that biodiversity conservation retains its primacy.

I believe that communities should assume some responsibility for biodiversity which is in their care. However, governments with whom nations vest this important duty have the most prominent role to play in protecting important areas and supporting compatible economic activities in such areas. The economic opportunity cost to communities will need to be considered. Using the concept of negotiated agreements, economic assistance could be developed and incorporated by governments and NGOs into agreement packages, with the understanding that the benefits will be withdrawn if the substance of the agreement is violated. Ultimately, as long as communal lands continue to act as *de facto* refuges for threatened biodiversity, there is a role for conservation NGOs to bring together the parties concerned to creatively secure the protection of these areas and improve development prospects for local communities. Policy reform, addressing tenure in collaboration with government partners, and tackling economic issues are some of the key elements to such a strategy.

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