

Decentralisation and Accountability in Forest Management: A Case from Yunnan, Southwest China

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I. INTRODUCTION

China literally means 'The Central Kingdom'. As it is a vast country, China's state administration struggles continuously to maintain the delicate power balance between the political centre and the periphery and between central and local governments.¹ Extension of state control over peripheral areas and resources has long dominated the administration's political agenda [*Harrell, 1995; Menzies, 1992*]. Like Chinese emperors of the past, the Communist Party today remains preoccupied with the issue of stabilising strategic border or peripheral areas.

Today, China has joined the global move towards liberalisation and decentralisation. Economic reforms in recent decades have produced high and sustained economic growth rates and lifted millions of people out of poverty. Concurrent political reforms have decentralised many decision-making processes and created new democratic institutions, especially in rural areas.² This process has ceded new political powers and established new economic incentives; it has also transferred some natural-resource management powers to local entities. This decentralisation and power transfer first occurred in the agriculture sector with the introduction of the 'Household Responsibility System' in 1978, which allowed each household or farmer to decide what crops to cultivate, where to cultivate them and how much to cultivate.

These changes have placed additional stress on natural resources and on the livelihoods of indigenous communities in politically and economically

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peripheral areas. In 1981, the central government responded to poor forest management and to the economic potential of forest resources by decentralising forest management to local communities and individual households under a forestland allocation policy called 'Forestry Three Fixes'.³ Increasing public awareness of deforestation and its links to soil erosion, loss of biodiversity, floods and other forms of environmental degradation have made the protection of forest ecosystems a central government priority. Conflicts emerged between decentralisation for enhancing local forest management and livelihoods and protecting environmental services that affect larger-scale populations [*Yin, 1998*].

If there is a careful allocation of powers between different levels of authority, decentralisation policies should be able to address any problems therein. However, this has not been the case. Some powers are being transferred to entities such as townships and counties, which are not democratically elected and are too far from the local populations. Meanwhile, inadequate powers are being transferred to the lowest-level elected authorities. Moreover, communities are poorly represented in the decision-making processes concerning these powers, financial and human resources for exercising power at the community level are limited, and performance-monitoring systems are generally absent. Furthermore, in the name of decentralisation, much privatisation is taking place, and a lack of coherence among policies is slowing the reform process.

These problems raise a number of questions. What is the role of decentralisation in empowering local populations and relieving or intensifying pressures on forest resources? Is decentralisation equally appropriate for production forests and for those whose main role is conservation? To what level should forest management functions be decentralised? This essay explores some of these issues by examining the impact of decentralisation on forests in Yunnan Province. It considers how the reform is unfolding, who is receiving which new powers, whether any effects of the reform can yet be measured, and what opportunities and limitations for decentralisation are emerging in the forest sector. It looks first at the cultural and economic environment of Yunnan and the history of forest management in the region. It then examines in more detail the nature of the decentralisation reforms and their impact on forest management and local livelihoods in ethnic minority areas.

II. YUNNAN: AN AREA OF CULTURAL AND ECONOMIC DIVERSITY

Yunnan, word that means 'South of Clouds', is a mountainous, ethnically diverse and relatively poor province. It is located in the south-west of the country, and has borders with Myanmar, Laos and Vietnam. Cross-border trade and marriages have flourished since ancient times.

Yunnan is home to more than 42 million people. Ethnic minorities comprise 31 per cent of the population. They reside in the mountainous areas, which account for 94 per cent of the total area. There are more than 25 distinctly different ethnic groups, 13 of which are also found in neighbouring countries. They have varied agro-ecosystems, including the terraced rice and vegetables cultivation of the Hani and Yi peoples, the paddy agriculture of the Dai and Bai, and the shifting cultivation of the Miao (Hmong), Lisu and Jingpo.⁴ The rest of the population is Han Chinese, and is concentrated in lowland valleys and urban areas.

The Chinese government is concerned both about political security in this mountainous area and about the region's environmental impact on the economies of Yunnan and surrounding provinces within the catchments of the Yangtze and Pearl rivers. In Yunnan Province, forests are essential to the livelihoods of marginal groups, including the poor, women and ethnic minorities. While many indigenous people in Yunnan are benefiting from new economic opportunities created by expanding markets and infrastructure development, it is often at the cost of the depletion of forests, forest products and other natural resources such as soil and water. Yunnan's forestlands also play an important conservation role, including the provision of water and nutrients, erosion control and climate regulation, for the lowland areas downstream.

China's transition from a centrally planned economy to a market-based one has triggered many economic and sociocultural changes among Yunnan's various ethnic groups. The reforms have reintroduced the household as the key unit of production and have placed market demand rather than subsistence concerns at the centre of production decisions. Furthermore, they have introduced more-decentralised decision-making systems that should increase local empowerment. Village-level elections are a key part of this change.

Most of Yunnan's natural resources are found on territorial land governed by a range of customary institutions and rules that are monitored and enforced by the village chiefs and elders, and higher-level governors. These institutions structured villagers' attitudes, social relationships and even technology in such a way as to ensure the sustainability of the natural resources and to secure collaboration in managing those resources. The effectiveness of customary institutions depends on cultural identity and local resilience to external influences. Although some cultural practices (such as religious rituals) have changed, especially since the Cultural Revolution (1966–76), most of the earlier rules and norms for forest resource management are still adhered to in some indigenous communities.

However, the ecological health of Yunnan, which is often described as the 'water tower' of Southeast Asia, is at risk due to the construction of major communication and transportation infrastructure in the area as part of

the planned development of the Great Mekong subregion. Already several new dams, roads, railways, waterways and airports have been constructed. The problem is that, in planning these developments, insufficient attention has been given to the relationship between the present use of resources and their future sustainability.

III. ETHNIC MINORITIES AND THE PRINCIPLE OF 'LOCAL AUTONOMY'

Historically, Chinese authorities used a variety of measures to bring ethnic minorities and people living on the geographical periphery of the country under central control. These included settlement programmes, which converted wild forestland into agricultural paddies, reducing taxation levels and, during the Yuan Dynasty (1280–1368), marrying members of the royal family to the political elite of these outlying areas.

Since the founding of the People's Republic of China in 1949, there have been many state policies specifically addressing peripheral areas and ethnic minorities in areas bordering international frontiers, such as Yunnan Province. Policies developed for the integration of ethnic minorities have always been closely linked to national development efforts. After 'ethnic classification' in the early 1950s,⁵ the State established 'ethnic autonomous' regions and implemented distinct education and development plans. The principle of 'local autonomy', which is defined legally, applies to these regions, and includes political, economic and cultural autonomy. 'Political autonomy' includes provisions such as self-administration and appointment of members of the minority population to leadership positions and offices; it also permits the official use of the local language and writing system. 'Economic autonomy' is defined as self-determination in local economic development within the framework of national development programmes; it includes the prioritisation of local needs and the formulation of policies oriented towards local material improvements. 'Cultural autonomy' consists of the freedom to decide how or if customs are reformed, and the provision of education and health services to meet the specific needs of local minorities [*Xu and Salas, 2003*].

The Minorities Regional Autonomy Law of 1984 elaborates the rights of autonomous administration. Under this law, autonomous administrations are empowered to formulate autonomous and specific regulations regarding the political, economic and cultural features of their respective areas. Based on the situations in each area, they are authorised to make special policies and take flexible measures, provided they are in line with the national Constitution and laws. Also, upon approval from higher authorities, national resolutions, decisions, decrees and instructions may be adjusted or their implementation ceased if they are deemed out of step with local situations. Autonomous administrations are

required to independently plan and implement regional economic development under the guidance of the national plan and to manage their own financial affairs and local resources. Furthermore, upon approval by the central State Council, they may take responsibility for law enforcement, in line with the national military system and the practical demands of the local areas. Finally, the law requires that the administrative head of an autonomous region, prefecture, or county shall be a member of the majority ethnic group [*Tan Leshan, 2000*].

IV. FOREST MANAGEMENT IN YUNNAN

Forest management in Yunnan has a long history of political struggle and shifting power between the state and local communities. Three main phases can be distinguished: the period preceding the 1949 Revolution; the era of 'collectivisation', extending from 1950 to 1978; and the post-1978 period of economic reform and decentralisation.

The Period Preceding the 1949 Revolution

In the nineteenth century, during the latter part of the Qing Dynasty, the central government was less interested in natural resources *per se* than in exerting sovereignty over peripheral territories and benefiting financially from the exploitation of their resources [*Menzies, 1992*]. Therefore, rather than controlling the timber industry by regulating its growth, logging, marketing and production, as it does today, it reaped the benefits through taxation. Thus, in the early twentieth century, at the beginning of the Republican period, only 11 per cent of registered forests were in state hands; 55 per cent were under private ownership and 34 per cent were owned collectively [*Yuan, 1924*]. Moreover, large areas of forest in peripheral areas were not registered at all and were managed through customary institutions.

The first survey and reallocation of forestland in Yunnan was undertaken in 1920, during the Republican period. In this survey, the Yunnan Agrarian Association authorised village heads to survey degraded forestlands, which were then divided into plots – each measuring ten *mu*,⁶ which were then allocated to individual farmers. For each *mu* of already owned farmland, the farmer received a plot of degraded forestland for reforestation, which they legally owned after reforestation. This ownership, however, was often in name only. Forest laws enacted in 1932 stipulated that 'there is state forest, common forest and private forest', but 'forest is in principle state-owned'. By the 1940s, the state had acquired 60 per cent of forestlands, while 40 per cent were privately owned. In Yunnan, private forests, like other resources, were largely in the hands of landlords or *tusi* (local chiefs) and entrepreneurs.

In practice, however, the government never had effective control over the large state-owned forestlands in the peripheral areas of Yunnan. Rather,

indigenous people administered these lands through their own methods [*Gao, 1998*]. The customary institutions that were developed dealt effectively with the diversity of cultural communities and the dynamic nature of the environmental and forest resources. Recent field investigations have revealed the different types of customary institutions that operated in the past and have shown that some are still functioning today. One example is the written Customary Forest Laws and Mountain Protection Monument at Ana Village in Chuxiong Prefecture, Central Yunnan, which was established in 1714 during the Qing Dynasty (1644–1912). In translation, it reads as follows:

A man with a beard is respected (indicative of his seasoned age and rich experience). The same idea applies to mountains too. A person with a beard and hair is like a mountain covered with forest and grass. In the same vein, a mountain sheltered in forest and grass is like a person well clothed. A barren mountain is no different from a naked person, exposing its flesh and bone. An unsheltered mountain with poor soil painfully bears great resemblance to a penniless and rugged man. Even a pine tree or single bamboo grows thousands of leaves and branches, how can a mountain tolerate a treeless state? Yes, indeed, no one does not enjoy being amongst clean streams and green mountains. Everyone understands that only healthy green forest and fertile soil can nurture ever-flowing springs. None doubts the significance of those fundamental elements of nature, such as soil, water and fire. Yet, do we know it is the root of trees and forest that bring us water? It is for our benefit and fortune. Meanwhile, upon the order of the officials, our village has established a tradition of electing a village forest guard since the time of Ch'ien-lung emperor [Qing Dynasty]. Alas, there have been so many generations of the old who have conscientiously protected our village's forest till today. Let us dare not to discontinue this tradition ... With this said, we want to reiterate the following: Our elected forest guard should be fair, straight, honest and moral. We have no tolerance for violation, but will elect another. Our villager-rangers should patrol our mountains every day; no slackness should be tolerated, otherwise their salary should be deducted. Felling of trees for timber use should be paid for ... Within the Daqin area east to Shangjie road, west to Doupo, north to the peak is to be enclosed for natural forest regeneration and no logging is allowed. Five years later, five trees can be harvested for building one tile-roofed house, and three for grass-thatched houses. Those who want to take the risk to extract more should be fined for five Bi [Qing currency] in addition to community labour at the following locations ...

Not only do the indigenous peoples of Yunnan possess profound ecological knowledge, they also already have an established system for local governance and forest resource management.

The Collectivisation Era, 1950–78

The Land Reform Laws enacted in June 1950 provided the legal basis for forest resource management over the next three decades. Between 1950 and 1952, all farmlands and forestlands were nationalised. The state maintained the large forestlands, but allocated farmlands and traditionally managed forestlands to individuals – particularly the poor. In areas thus allocated, customary institutions were largely respected. However, in Yunnan, forestlands were not properly registered and so ownership and access rights to forestland were not legally recognised or respected.

The ‘collectivisation’ process was initiated between 1952 and 1956. Most farmlands and forestlands were collectivised, although private ownership was still recognised in principle. This was followed in 1958 by the establishment of the ‘People’s Commune’, which had a profound impact on forest ownership and customary institutions. State and collective ownership replaced private ownership and customary public ownership, particularly in mountainous peripheral areas.

The collectivisation policies, particularly those enacted during the ‘Great Leap Forward’ launched in 1958, resulted in large-scale deforestation. In order to cope with this, the Yunnan provincial government introduced regulations in 1961 to ‘ensure forest tenure, protect and develop forests’. These regulations stated that ‘the fragmented forest, which is difficult for the state to manage, can be allocated to a nearby village or commune for management’. They further stipulated that ‘forest tenure should pay more attention to customary institutions in ethnic areas and take note of the views of ethnic minorities regarding “holy hills” and “sacred forests”’. In order to win the confidence of local villagers, the government emphasised that the village or commune would have security of tenure after the allocation of forestland.

Since then, China has implemented numerous, and sometimes conflicting, policies related to agricultural and forestland ownership [Liu, 2001]. After collectivisation came the Cultural Revolution, when campaigns such as that designed to ‘eliminate superstitions’ eroded traditional cultural practices related to the conservation of forest resources. In addition, the state demanded that local people increase grain production in order to be self-sufficient in food. In Yunnan, this policy resulted in a significant expansion of shifting cultivation and further rapid deforestation during the late 1960s and early 1970s.

Post-1978 Economic Reforms and Decentralisation

The economic liberalisation reforms began in 1978, with the establishment of the ‘Household Responsibility System’. Between 1978 and 1981, agricultural lands, such as paddy fields, were contracted out to individual farmers, but forests remained under state control. Since the boundaries between state forests and private agricultural lands were often unclear, there were conflicts between

government agencies and local collectives or individuals. In order to stake their claim to contested forestlands, the latter sometimes resorted to clearing the land for agricultural purposes, thereby causing further loss of forest cover.

The reforms in the forestry sector began in March 1981, when the state issued its ‘decision on some issues concerning forest protection and forestry development’, otherwise known as the ‘Forestry Three Fixes’, which affected the administration, marketing, investment and management of the forestry sector as well as the tenure of its collective forests [*Yin and Newman, 1997*]. They authorised the decentralisation of authority from central to local government, thereby enabling counties, townships and administrative villages to make an increasing number of decisions [*Liu and Edmunds, 2003*]. The local forest authority together with local communities determined where forestlands were reallocated, how long the contract was to last, and who would benefit from the sharing scheme. The stated objective of this reform was to shift forest management from the state to local communities and individuals. It provided for both private and collectively held plots to be leased to individual households. This was the first time in Yunnan’s history that local communities received certificates of forestland ownership and participated in decision-making.

As a result of the implementation of this policy, 13.97 million hectares of land have been transferred from state to local management. This includes 4.84 million hectares of individually held forest (mostly degraded), 6.33 million hectares of contracted (that is, leased) forestlands, 0.86 million hectares of fallow fields previously used for shifting cultivation and 1.94 million hectares of rangelands [*Yunnan Forest Department, 1984: 270–71*].

However, the simplified system of forestland allocation, which was based on the successful ‘Household Responsibility System’ of farmland allocation, did not work well due to lack of participation by local villagers. This lack of participation can be attributed mainly to demarcation problems, unclear rules over responsibility and benefit sharing, and uncertainty regarding conditions of tenure. In some cases, this resulted in a new wave of deforestation.

The provincial government realised that in Yunnan the rural economy and livelihoods of mountain people were based on forestry. It therefore decided to lease all degraded forestlands – known as ‘wastelands’ (*huangdi*) – to private individuals or institutions for reforestation. The lessees could be local people or outsiders, but they were required to have the necessary financial and management capacity. The land was leased for periods of between 30 and 70 years at competitive prices and was implemented through ‘wasteland auctions’. A pilot auction was held in Yiliang County in 1993, at which 12,000 hectares of wasteland were leased. Over the next four years, 728,725 hectares of wasteland forest, most of which had been owned collectively, were auctioned to individuals [*Zheng, 2001*], thus further ‘decentralising’ forest tenure and management.

These attempts to decentralise forest management and improve security of tenure over forestlands did not solve the problem of forest degradation, however. The transfer of forest use rights and management responsibility to local farmers was not enough to regenerate the forests, and environmental degradation, soil erosion and flooding continued. On 1 October 1998, after the most extensive flooding ever in the Yangtze basin, the Yunnan provincial government, in response to a state ban on logging, introduced a natural forest protection policy officially called the 'Natural Forest Protection Programme' policy. The logging ban affected 8,480,000 hectares of forestland – almost one-third of the total forested area in Yunnan, and extended across 13 prefectures, most of them in north-western Yunnan. It has had a major impact on the state timber industry, loggers and local-government revenue, as well as on the livelihoods of indigenous communities. Dramatic declines in income from the logging and forest products industry have forced local farmers to look for alternative sources of livelihood, such as livestock production and grazing, and harvesting non-timber forestry products in the forested areas.

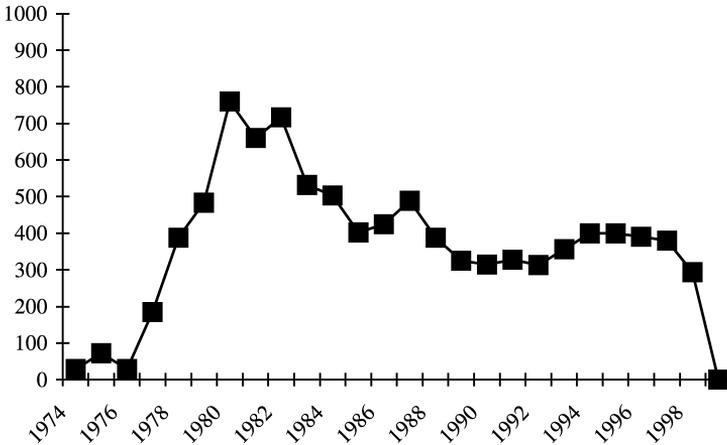
The ban on logging was immediately followed by the Sloping Farmland Conversion Programme. This programme was designed to address the problem of cultivation on hill slopes, which was another factor contributing to soil erosion and flooding. According to this policy, any farmland with a gradient of more than 25 degrees must be converted to forest or grassland. To facilitate the conversions, farmers receive seedlings and government subsidies for grain, education and healthcare fees. Combined with the effects of the logging ban, this policy has put indigenous communities in a dire situation.

The two policies imply that the reforms that took place in the name of decentralisation – many of which were in fact privatisation – have failed to achieve their objective of a stable transition of the forest sector. The logging ban demonstrates that the decision-makers failed to understand the dynamics of forest resource management. Field evidence suggests that most over-harvesting and poor logging practices are being carried out by large-scale, state-owned timber enterprises, not individuals, and that forest resources had been depleted before the logging ban in the most accessible parts of the region [*Xu and Wilkes, forthcoming*]. This is indicated in Figure 1, which shows the timber output from Diqing prefecture in northwest Yunnan – one of the areas where large-scale, state-owned logging operations were particularly prevalent. Thus, the main impact of the state's blanket ban on forest harvesting was to undercut the livelihoods of communities that could benefit from sustainable forest management.

V. DECENTRALISATION AND FORESTRY MANAGEMENT

In order to determine the relationship between decentralisation and forest management, this section begins by looking in more detail at the various actors

FIGURE 1
 LOGGING IN DIQING PREFECTURE, NW YUNNAN, 1974–99 (1,000m³)



Source: Statistical reports of Diqing Prefecture Forest Bureau 1974–2000, quoted in *Xu and Wilkes, 2004*.

involved in forest management under decentralisation, the nature and scope of the powers that have been decentralised, and accountability in forest management. It then examines the impact of decentralisation on forest management and the livelihoods of those dependent on forestlands.

Actors in Decentralisation

Before the 1950s, most forestlands were governed and controlled by local chiefs (*tusi*). Some of these chiefs inherited their position, while others were either elected by local communities or nominated by higher authorities. Their roles varied from place to place, depending on the complexity of the environment, cultural beliefs and customary institutions [*Xu et al., 1999*]. In the ethnically diverse mountain regions, there were major variations in customary institutions between upland and lowland areas. The centralised planning and decision-making system established during the collectivisation period eroded customary institutions and marginalised traditional actors. However, the state either failed or did not want to address the problem of the delicate social relations among the different customary institutions in the mountain regions. Forest reform in the early 1980s, as outlined above with reference to Yunnan, subsequently transferred ownership and management of some forestlands to local villages and to individuals.

There are six levels of government jurisdiction in China: national, provincial, prefecture, county, township and administrative village. The administrative villages supervise a number of 'natural villages'. The main provincial government departments maintain representative offices at the prefecture level, and often also within the county and township government structures. Townships are the lowest level of government in the official administration. The leaders of administrative and natural villages receive nominal compensation from the government for their services, whereas employees at township and higher levels receive full salaries.

The state forest agencies, along with others such as the environmental protection agencies, have major responsibilities for forest management and conservation of biodiversity. The Ministry of Forestry, which was established in 1951, is responsible for managing the largest territory in China, with mandates for the 'overall protection of forest, forestation of key areas, and rational use and exploitation of forests'. In 1956, a separate Ministry of Forest Industry was set up to meet increasing demands for lumber and wood products and, after two years, the two ministries were merged into what would later become the Ministry of Agriculture and Forestry. In 1979, the Ministries of Forestry and Agriculture were again split, but in 1998 the Ministry of Forestry was integrated into a new Ministry of Land and Resources in order to co-ordinate land administration.

The state forest industry was expanded rapidly in the late 1970s and early 1980s. The state forest agency performed many functions: it served the interests of forest protectors, logging workers and tree planters, as well as providing forestland certification and logging permits. These multiple interests pitted the forest agencies against local communities.

The lowest level of forestry official is the forest guard, who is recruited directly from local villages to keep a look-out for illegal activities and forest fires in state and collective forestlands as well as to report timber permits for township forestry stations. These guards often do very little, either because of the low level of remuneration they receive from the villages or because of conflicts between their accountability downwards to the local communities and upwards to the forest authorities.

The Nature of the Powers Transferred

The 1984 Forest Law, which was revised in 1998, provides for trees and other plants, individually or collectively, to be allocated by contract either to village communities as a whole or to individual villagers. Moreover, Article 9 recognises the special status of indigenous people, giving 'more autonomous rights for forestry development, timber distribution and forestry funds in ethnic autonomy regions' [Liu and Edmunds, 2003]. This is in recognition of the fact, acknowledged by lower-level government officials, that local

villagers are dependent on forest resources for their livelihoods and for generating cash income.

However, this is not the only objective of the Law. As Article 1 states, it is intended to protect, cultivate and rationally utilise forest resources; speed up the process of 'greening' national territory, thus promoting soil and water conservation, climatic adjustment and other forms of environmental improvement; and meet the needs of socialist construction and people's livelihood. In other words, it emphasises both the ecological and economic functions of forests and recognises the interests of different stakeholders, including both local people and those based elsewhere. The challenge of forest management in contemporary China is to resolve the contradictions between these diverse functions of forest ecosystems and the multiple needs of the various stakeholders.

As the Law has conservation objectives, it exercises rigid control over logging and timber marketing. Thus, Article 29 specifies that a 'limited quota for logging should be made annually (less than the growth volume)', while Article 32 states that 'permission is necessary for logging', and Article 33 specifies that such permission 'should not exceed the annual logging quota'. Logging quotas and timber permits are the main instruments of state control. The forestry bureau usually submits a proposal to the province and a final decision is made by the central government, taking into account national economic demand and the volume of stock in the forestlands.

Under the 1784 forestry law, the main owners of forestland, both local communities and contracted individuals, have little voice in the decision-making process. Many communities are allocated permits without forests or have forests but no permits. Therefore, permits are frequently traded illegally at the county level and below, resulting in several known cases of corruption in Yunnan's county forestry bureaus. In addition, there is no monitoring system under this law to oversee forestland allocation. Forestland certification is another instrument for control of forest resources. However, certification is always linked to short-term campaigns associated with specific policies, such as the 'Three Fixes'.

County forestry bureaus, which provide a direct interface between national government and local communities, have the power to interpret state policies and plans and implement them in a manner relevant to local biophysical and socio-economic environments. For example, township forestry stations may allocate logging permits for less than the prescribed limit in terms of cubic meters, mainly for local subsistence use, and may issue 500 yuan (US\$6) fines to those who break regulations. However, lack of transparency in the allocation of timber permits at the county level in the past has reduced the credibility of state forest policies. Moreover, the attitudes and capacity of forestry officials hamper the participation of local people in forest management.

Under these and other new laws, institutions are emerging at the local-community level. These institutions are based on customary institutions but are formed in response to the emerging market economy. Villages are officially encouraged to make their own regulations for community resource management. Such regulations are in line with new trends towards village autonomy, which are reflected in the Village Organic Law.⁷ As evidence of the impact of this law, there appear to be increasing struggles between local governments (at both the county and township levels) and emerging community entities over decision-making powers.

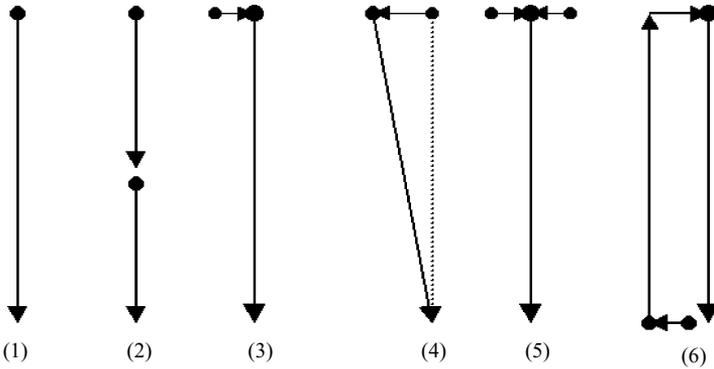
The community regulation of non-timber forest products in Lijiashi Village, Xizhang watershed, Baoshan, is a good example of village autonomy and local adaptation of land allocation systems. The Xizhuang watershed, located 20 kilometres northwest of Baoshan City, in western Yunnan Province, covers an area of 3,456 hectares. The watershed supports two administrative villages – Lijiashi and Qingshui. These two village communities have different resources and capacities and have thus developed very different patterns of customary regulation. In Qingshui, village regulation exists in name only, but in Lijiashi it is strong and effective.

Lijiashi Village has a unique land-allocation system. Agricultural land, including land for tea cultivation, is allocated based on need, using the *cheng* system.⁸ Each villager under 16 years of age is allocated 0.5 *cheng*, those between 16 and 18 get 0.8 *cheng*, those between 18 and 60 (55 for females) get 1 *cheng*, and those over 60 (55 for females) 0.6 *cheng*. Lijiashi also has a customary forest-tenure policy. Rights to cut timber and gather firewood are allocated to individual households. However, grazing and non-timber forest products (such as pine nuts and mushrooms) are available for the general public – even outsiders. Additionally, the irrigation system in Lijiashi village, which is well managed and maintained by the village community, is a good example of successful community autonomy.

The Lijiashi system is only one of many different types of administrative structures found in Baoshan. Six are listed below, while Figure 2 shows six main models in diagrammatic form [*Zuo and Xu, 2001*]:

1. The traditional centralised model, in which the lower level only has the power to implement central mandates;
2. Administrative powers are transferred to lower levels, such as from county to township, and the lower level not only implements mandates from above but also exercises some discretionary power;
3. The public is involved in the governing process, through research institutions, public hearings and media for monitoring;
4. Administration is entrusted to technical sectors or projects;
5. Administration is shared with other authorities and involves multi-agency co-operation; and

FIGURE 2
POWER RELATIONS BETWEEN UPPER AND LOWER LEVELS
OF POLITICAL-ADMINISTRATION



Source: Adapted from Zuo and Xu, 2001.

6. There is ample local participation through community self-organisation and/or representation.

Accountability and Forest Management

High levels of ethnic diversity, cultural identity and socio-economic marginalisation result in two distinct local institutional features that are particularly relevant to forest management. First, there is a comparatively strong sense of community at the village level. Farmers' groups, parent groups, churches, Buddhist monasteries, local language schools and various kinship institutions are active and influential. In addition, long-standing community rules governing resource access are still in effect in many villages; examples include *matsutake* mushroom (*Tricholoma matsutake*) collection, yak grazing and fuel wood collection. Second, local government agencies in these villages tend to be more autonomous, since most officials are from the local area and thus are more closely linked to the members of the local communities than to their provincial government counterparts.

In terms of accountability, there are two dimensions: between villagers and local governments and between resource owners and users and local governments. With respect to the first dimension, recent democratisation and decentralisation reforms are dramatically changing the institutional landscape at the local level. For example, following the introduction and implementation of the Village Organic Law, village heads and village committees are receiving new

responsibilities and rights related to local natural-resource management. The local people democratically elect village heads, although the head of the administrative village has to be officially endorsed by township and county government officials. Following the election, a set of officials from various natural villages within an administrative village form an administrative village committee. This committee is the highest level of people's self-governance and the highest level at which the Organic Law has promoted village democracy so far.

However, a number of problems are associated with these processes. Firstly, evidence suggests that there is inadequate external monitoring and evaluation of the village head's performance. Village assembly meetings, which provide internal monitoring, are ineffective for this purpose because the village heads easily manipulate the assembly. Secondly, the election process is often poorly executed due to illiteracy and/or cultural barriers: the processes of candidate selection, voting and vote counting are often riddled with errors. Thirdly, a major task of the administrative village committee is to collect taxes from villagers, but since the villagers receive no services and cannot influence decision-making in higher levels of government, such taxation has created mistrust between the local government and the village and has undermined the creditability of elected village leaders. Furthermore, the elected village leaders have few financial or political incentives to assist villagers. For example, the elected natural-village head receives only US\$40 per year. Consequently, nobody wants to be elected since the time required to perform the daily administrative work would limit availability for off-farm work. Most male farmers spend two thirds of their time doing off-farm jobs, which can generate an income of over US\$400 per year.

Nobody expects villagers' awareness and capacity for self-government to develop overnight. It takes time to empower the administrative village government and enhance the capacity of natural-village leadership to serve and monitor. However, with the present constraints, electoral accountability becomes essentially a wasted opportunity. Furthermore, it is essential to extend the democratic process to the township level in order to increase accountability and bring material resources and greater decision-making powers to local communities.

The second dimension of accountability concerns the relationship between resource owners and users and the local government authorities. The owners and users of forestland are expected to follow local norms and rules, as determined by the village committee. The state encourages local governing bodies to create new institutions and forms of monitoring. The resulting hybrid of customary institutions and government regulations can be observed in the case of the management of *matsutake* mushrooms among communities in Zhongdian county, in the mountainous Tibetan region of Yunnan [Yeh, 2000]. Accountability, in this case, has resulted in flexibility and diversity of social arrangements to adapt to the local sociocultural and biophysical environments.

Zhongdian, recently renamed Shangri-la, is a Tibetan autonomous county in northwestern Yunnan whose economy depended on timber in the past but is now based on *matsutake* mushroom collection. In 1993, approximately 80 per cent of the county's income came from logging. However, the 1998 logging ban has had a tremendous impact on this timber-driven economy. The search for alternative livelihoods has become an urgent priority of the local government. Under these circumstances, *matsutake* mushroom export has begun to provide an alternative income base and thus plays a significant role in local development. At present, the *matsutake* trade generates between 50 and 80 per cent of household cash income, while taxes levied on the trade account for 30 per cent of county revenues.

Recently, however, a lack of clarity regarding *matsutake* property rights, combined with mass commercialisation, was increasingly threatening the sustainability of the mushroom resources. Thus, the production of *matsutake* declined from 530 tons in 1995 to 272 tons in 2000. Such rapid resource degradation called for the attention of both the government and the local community. The government launched a number of regulations and strategies (for example, privatisation) to control the collection and marketing process, but these strategies have proved ineffective due to poor enforcement and excessive transaction costs. Meanwhile, the local community initiated its own collective actions for controlling the *matsutake* collecting groups. These initiatives became the starting point for improved resource management (He Jun, Center for Biodiversity and Indigenous Knowledge (CBIK), Kunming, China, personal communication).

These local arrangements for managing *matsutake* resources exhibit the following characteristics:

- *Well-defined boundaries.* Neighbouring communities negotiate with each other to define the boundaries of the areas where mushroom collection can take place. This also effectively excludes non-community members from access to the resource.
- *Simple rules.* Rules for mushroom collection are generally simple and easy to understand, such as no use of iron tools, three days for collection and one day for closing of the mountain, no gathering of immature or over-mature mushrooms, and so forth. In most cases, there are only five or six terms and conditions.
- *Locally devised rules.* The community devised the rules through collective choice. Moreover, community members gather once a year to hold a village meeting to review the rules implemented over the past year and amend them where necessary.
- *Easy enforcement of rules.* Since the rules are devised through collective choice, enforcement of the rules is easy. These collective actions also build the social capital for institutional durability.

- *Enforceable sanctions.* If a rule is broken the person is subject to a fine; the amount is defined at the village meeting and spelled out in the local rules.
- *Low transaction costs.* Because of the collective action process, the costs of administering the system are low, including the adjudication cost in case of conflicts. This low cost contributes not only to good rule-enforcement but also to institutional development.
- *Accountability of monitors.* Mushroom collection monitors are themselves members of collection groups, usually consisting of two or three people. Moreover, because of the shared norms and rules, the village leader is also accountable to users [*He Jun, 2003*].

In short, rather than privatising resources, these local initiatives have turned an open-access system into one of collective management based on sound institutional arrangements.

The Impact of Decentralisation

There is evidence to suggest that, despite unstable state forestry policies and increasing consumption of forest resources, the overall decentralisation of forest management has contributed to better forest governance and reforestation over the past two decades. According to recent forestry surveys in Yunnan, the forest cover increased from 25.66 per cent to 33.64 per cent during the period 1978–97 (*State Forestry Administration, 2000*). This increase is due partly to the planting of both timber trees (such as pine) and other commercial trees (such as rubber and fruit trees) and partly to natural regeneration. Thus, despite the continued concern about the impact of deforestation that prompted the 1978 ban on logging, the trend of net deforestation has eventually given way to one of net reforestation [*Xu et al., 2003*].

However, while decentralisation in general has been beneficial for forest management, individual policies have had mixed results. For example, in many instances the ‘Three Fixes’ have increased neither tenure security nor forest cover. The 1998 logging ban, which affected 69 per cent of the natural forests of Yunnan, has also had many adverse effects. Moreover, the monoculture of trees for timber and other commercial forest products has had a negative impact on biodiversity. Increasing forest cover does not necessarily result in a corresponding increase in a region’s diversity of plant and wildlife species. Although biodiversity is a property of the natural ecosystem, it is a product of the interaction between the biophysical environment and cultural practices [*Sajise, 1995*]. Therefore, functions and values related to biodiversity and ecosystems should be understood in a much broader context.

China’s previous forestry policies and strategies focused only on timber production and the monitoring of forest cover, and thus failed to meet

the increasing diversity of demands from local villages. The rural poor depend on common and collectively owned forestlands for their livelihoods, particularly in peripheral areas like Yunnan. Economic reform has had both positive and negative effects on the people in peripheral areas. It has increased productivity and efficiency at the level of household resource management but has not increased the efficiency of the collective. Moreover, it has significantly increased inequalities in household income. Only recently has the Chinese government begun to pay attention to poor groups. For instance, poverty-alleviation policies remain small in significance and are confined to local-level initiatives and, although positive steps are being undertaken, there is still a lack of representation of the poor in decision-making processes.

Various factors, including government policy, market stimuli and development interventions, have already dramatically affected minority societies. Ethnic minorities, particularly those who have lived in the uplands of Yunnan for many generations, are being economically marginalised as a result of China's economic reforms. This is due, in part, to the incompatibility of local vernacular institutions and the difficulties that local communities have in adapting to external institutional change. Some forestry policies have increased the plight of the poor in these areas. For example, the 'wasteland auctions' policy implemented in Yunnan in 1994 deprived the poor of access to forest resources. The term 'wasteland' is actually a misnomer, as such land may be used to meet a critical need for grazing or for gathering fuel and other non-timber forest products. The Yunnan Provincial Government eventually accepted this fact and abandoned the policy.

In general, opportunities for local people to influence forestry policy remain limited. For example, the logging ban was initiated primarily because of concern about the effect of deforestation on other areas, such as watershed areas and those downstream. Planning processes have since been implemented in the downstream areas, but the people living in the forested areas upstream have yet to be involved. Similarly, monitoring and evaluation are still done by forest agencies and remain largely ineffective. There is no channel for farmers to complain. Moreover, individual foresters interpret policies differently. For instance, under the 'sloping land conversion programme' in the county of Lanping, foresters do not allow farmers to plant annual crops even in the first year of conversion, while in some other areas agroforestry practices are permitted.

VI. CONCLUSIONS

Decentralisation in China remains incomplete. Many examples show that there is insufficient transfer of power and decision-making to local institutions, and that the powers they are given can easily be taken away. Although elections are held, the local representatives, supposedly accountable to local communities,

remain accountable and subject to higher-level government authorities. This is particularly true among the minority groups in mountainous areas like Yunnan, where communities remain embedded in paternalistic administrative relations. The elected leaders have little political power or voice in the higher governmental decision-making processes. The current decentralisation process in China has only transferred meaningful powers to the township governments, which are still accountable to the central government. Moreover, the local community does not yet enjoy the potential benefits of decentralisation due to limited financial resources and inefficient transfer of powers.

Mechanisms for monitoring the implementation and impact of democratic decentralisation are also lacking. Furthermore, the local community has neither the power nor the access to an independent judiciary system to challenge higher decisions. In many cases, the higher-level government agencies, such as those at the township or county levels, make decisions for local communities due to the lack of local-community representation at higher levels of government.

Unstable policy and frequently shifting property rights in forestlands have destroyed the trust between local communities and the government. Rebuilding this trust would require the establishment of responsible local governments that are accountable and responsive to farmers. There is a need to empower the administrative village governments and enhance their capacity to provide services and monitor the performance of the leaders of natural villages. This will take time, especially in diverse socio-economic and biophysical environments like Yunnan.

Decentralisation, in areas like Yunnan, needs innovative approaches and a flexible political environment. It is essential that decentralisation take place so that decisions can be influenced by existing indigenous knowledge, practices and institutions. The case of Yunnan demonstrates that, in decentralising power from the political centre to the periphery, there is a need to level the playing field by creating a balance of powers in which local authorities can demand higher levels to be downwardly accountable and where indigenous people and local communities have access to and can influence a meaningful decision-making process. Such influence will enfranchise indigenous people and bring their knowledge and practices, as well as aspirations and needs, into the governing process.

NOTES

1. Steven Harrell [1995] emphasised that periphery is not only the geographic periphery but is also politically, institutionally and economically far from the power centre. The peripheral people, often named 'minorities', have been subjected over the last few centuries to a series of attempts by the dominant powers to transform them, to make them more like themselves, or to 'civilise'

- them. People may be peripheral due to origins, gender, languages, ecological adaptation and livelihood practices, as well as culture.
2. See Ribot [2002] and Larson and Ribot [*this issue*] for an elaborated definition of ‘decentralisation’ as used in this essay – that is, the transfer of powers from central government to lower levels in the political–administrative hierarchy.
 3. Under the policy of Forestry Three Fixes (*liangshanyidi*), it determined the ownership of mountains and forests, designated mountain slopes for household use, i.e. shifting cultivation fields (*lunxiedi*), and defined a forest responsibility system, including freehold forestlands (*ziliushan*) and contracted forestlands (*zerenshan*), which were transferred to individual ownership with the objective of stabilising forestlands and fields under shifting cultivation in response to central government policy on decentralisation.
 4. Mountain farmers often manage a range of habitats or ecosystems for their livelihoods: hunting, gathering and cultivating in the forest, domesticating species in the upland field and home gardens, selective weeding for favourable species, converting forestland into multiple cropping, etc.
 5. In the 1950s, after the foundation of the new Communist-led China, the Chinese government and scholars conducted a systematic scientific classification of the diverse people (*minzu*) within the country. Over 400 potential groups identified, based on local distinctions, were reduced to the officially recognised 56 nationalities (*minzu*) [Keyes, 2002].
 6. A *mu* is the Chinese measure of land area. There are 15 *mu* in a hectare.
 7. The Act of Village Committee Organization of the People’s Republic of China was enacted in 1988 and reinforced in 1998 as the Act of Village Democratic Construction, formally called the Village Organic Law. It represents a fundamental policy change in that it allows local villagers to elect their own leaders and village committees. The Law says that the village committee shall support and organise villagers in developing all legal forms of collective economy, coordinate village production, and promote the development of rural socialist production and a socialist market economy; that the village committee should respect the autonomy of collective economic units in conducting economic activities; that it should maintain the dual management system, which is based on the Household Responsibility System and the combination of centralisation and decentralisation; and that it is the village committee’s responsibility to protect legal property rights, and other legal rights and benefits of collective economies, individual villagers, contract households, combined households and partners.
 8. *Cheng* is a local unit of percentage; one *cheng* = 100%; 0.8 *cheng* = 80%; 0.5 *cheng* = 50%.

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