

# Forests for People

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## Community Rights and Forest Tenure Reform

*Edited by*

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## Regulations as Barriers to Community Benefits in Tenure Reform

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*Juan M. Pulhin, Anne M. Larson and Pablo Pacheco<sup>1</sup>*

Research increasingly indicates that strengthened forest tenure for communities and individuals can improve well-being, enable exclusion of outside claimants and improve forest management and conservation (Sunderlin et al, 2008). Despite such potential however, forest tenure reform remains tenuous and its impact limited. One reason is that even where substantial, secure rights have been granted, government regulations hinder community access to forest products and related markets. This chapter looks at the question of regulation; Chapter 8 addresses community engagement with markets more specifically.

Regulation refers to ‘controlling human or societal behaviour by rules or restriction’ (Koops et al, 2006, p81). Regulation can take many forms, ranging from formal legal restrictions promulgated by the government to less formal social regulation, such as norms that govern social behaviour in a given cultural context; this chapter refers primarily to the former. In forestry, ‘regulations are rules prescribed to control the use of forest resources and to assure that the management of these resources conforms to government-defined standards’ (Fay and Michon, 2003, p11). These rules are contained in state laws and their subordinate instruments – decrees, sub-decrees, policies, orders or circulars that constitute the ‘regulatory framework’ (Gilmour et al, 2005). Forestry rules are often enforced through the imposition of legal sanctions like imprisonment or fines as well as compliance with certain requirements, such as permits, leases, fees, management plans, monitoring and evaluation and other forms of regulatory instruments. With few exceptions, forestry regulation in the tropics is the responsibility of centralized government bureaucracies. Its stated objective may be maintaining the forest’s economic and environmental services,

though actual objectives may include less noble goals, such as maintaining government control of forestlands and forest resources. 'Permanent forest estates' in many tropical countries are often the legacy of colonial or European-inspired management approaches based on the exclusion of people (Fay and Michon, 2003) and 'double standards' in forest policy often prioritize logging companies over communities (Larson and Ribot, 2007).

Notwithstanding the recent efforts of governments and other institutions towards advancing forest tenure reform, accompanying regulatory frameworks have often limited the benefits for communities and individuals. Government rules, in terms of access, use and management of forestland and its resources, remain very strict (see Chapter 3) and their implementation overly bureaucratic. Such rules often limit the forests available for communities, restrict forest access and use and establish high transaction costs<sup>2</sup> that serve as barriers to the market, all of which limit the flow of forest benefits to local communities. They also promote regulatory capture<sup>3</sup> by powerful groups with strong economic interests and tend to breed corrupt practices in the forest bureaucracy. There is no evidence that regulatory frameworks as currently designed are the only or the best way to promote forest conservation.

Few researchers have systematically and comprehensively analysed regulations and transaction costs in the context of community forestry or communities living in forests.<sup>4</sup> Even more limited is literature directly related to forest regulations in the emerging forest tenure transition in many developing countries. This chapter seeks to answer several questions. What is the philosophical basis of strict government regulation in forestry, and how valid are its assumptions in the context of the emerging forest tenure transition? What types of forest regulations relate to forest tenure reform, and how do they promote the persistence of government control over management and use rights of community forests? How do the different regulations and transaction costs serve as barriers to markets and the flow of benefits to local communities? What theoretical insights and practical lessons can be distilled from the case studies, and what strategic actions can communities and other stakeholders take to promote a more responsive forest regulatory framework that will achieve the potential of tenure reforms?

The next section of this chapter traces the origin and philosophical basis of government regulations in forestry through a brief examination of the European tradition of 'scientific' forest management which persists in many tropical countries today. Drawing on the CIFOR-RRI case studies from Asia, Africa and Latin America, with supplements from relevant cases elsewhere, the third section explores different forms of forest regulations and how they undermine forest tenure reform efforts. Next, the discussion section synthesizes the findings and recommends strategies to contribute to a more effective and appropriate regulatory framework. This is followed by a short conclusion.

## Origin and philosophical basis of government forestry regulations

The establishment of ‘permanent forest estates’ in many tropical countries and the strict regulations governing these areas are often the legacy of colonial or European forest management approaches that may be linked to the concept of ‘territorialization’. Vandergeest and Peluso (1995, pp387–388) explain:

*All modern states divide their territories into complex and overlapping political and economic zones, rearrange people and resources within these units, and create regulations delineating how and by whom these areas can be used...Territorialization is about excluding or including people within particular geographic boundaries and about controlling what people do and their access to natural resources within this boundary. [authors’ emphasis]*

Territorialization as applied to forest estates has an ancient origin. The first clear record may come from Assyria, where in 700 BCE game reserves were set aside by decree for royal hunts (Dixon and Sherman, 1991). In medieval Europe, forests were demarcated as a particular domain in the *silva* (literally, a place for growing trees), reserved for the hunting pleasure of the dominant classes of landlords, namely the vassals of the sovereign (the nobles) and the monasteries (the clergy) (Fay and Michon, 2003). Most of the *silva* was owned by the monarch and the two dominant classes; the common people (the villeins and the serfs) were usually bound to a landlord and granted only restricted usufruct rights on the *silva* lands. As the population grew, tension increased between the common people, who needed farmland and forest resources, and the landlords, who wanted full and exclusive control of their forest domain.

Enforcement of forest regulations became the task of forest administrators with the specific mission of protecting the forest domain from encroachment. In Europe, the first royal corps of forest administrators (later called foresters) was created in 1290 to ‘defend the royal rights of hunting and justice’ and later to restrict the usufruct rights of peasants (Fay and Michon, 2003). This corps served the elite’s economic interests. The increasing population, enclosure of land through privatization and loss of forestlands and their associated products, such as timber, fuel wood, fodder and game, caused the value of forests to soar. The kings and the nobles therefore used forest regulations not only to protect their exclusive hunting grounds but also to secure economic opportunities (Peluso, 1992). The establishment of forest estates was probably also based on calculations regarding the need for forest products and services over the long term.

Thus, forest regulations became the tool of the elite to restrict the exercise of usufruct rights, while a growing peasant population struggled to convert more lands for agriculture, expand grazing areas for livestock and acquire more firewood. Foresters and gamekeepers were employed to protect the political and economic interests of the royalty, nobility and clergy and exclude the common

people from these areas. The tendency of foresters to exclude local people from the forests thus has a long history, dating back to the involvement of the forestry profession with landowning authorities. This attitude carried over easily into their involvement in the privatization of the commons in Europe, especially in the 18th and 19th centuries, and fit well with the undemocratic and hierarchical style of colonial authorities as well.

After a long period of repressive approaches, the administration of the forest domain became more constructive. Developing and harmonizing silvicultural practices to ensure sustained production became a major concern (Fay and Michon, 2003). In England, the application of a scientific revolution in forest conservation led to tree planting for economic purposes in the late 16th and early 17th centuries. Similarly, in 1661, Louis XIV of France and his minister of finance, Colbert, instituted revisions of forest administration and laws with the intent of reversing the reduction of forest cover caused by overexploitation (Elliott, 1996). From this time on, forestry embraced a more complex mission of regulating, administering, conserving and managing the forest domain.

The development of 'scientific forestry' from about 1765 to 1800, largely in Prussia and Saxony, provided legitimacy for territorialization and hence the enforcement of forest regulations to 'rationalize' forest management. Its emergence is best understood within the context of centralized state-making initiatives of the period (Scott, 1995). The early concept of scientific forestry was best captured by Le Roy, the warden of the park of Versailles, in Diderot's *Encyclopédie* of 1766:

*In all ages, one has sensed the importance of preserving forests; they have always been regarded as the property of the state and administered in its name: religion itself had consecrated forests, doubtless to protect, through veneration, that which had to be conserved for public interests...Our oaks no longer proffer oracles...we must replace this cult by care, and whatever advantage one may previously have found in the respect that one had for forests, one can expect even more success from vigilance and economy...If one exploits wood for the present needs, one must also conserve them and plan for the future generations...It is therefore necessary that those who are charged with overseeing the maintenance of forests by the state be very experienced...they must know the workings of nature. (Le Roy, cited in Harrison, 1992)*

The above quote suggests the philosophical bases for designing and enforcing forest regulations by the state. First, forests are the property of the state and have to be administered in its name for the public interest. Therefore, a state forestry agency needs to be established to control forestlands and forest resources for the public good through regulations. Second, forests may be exploited to satisfy present needs but also have to be conserved for future generations. Thus, as the landlord, the state forest agency is both a forest

enterprise and a conservation institution, roles that may be in conflict with each other (Peluso, 1992). Hence, forest regulations are needed to balance the economic and conservation objectives of state forest management. Third, those who are charged with overseeing the maintenance of forests by the state must be experienced and know the 'workings of nature'. This legitimized the mission of foresters and established the exclusivity of professional foresters in forest administration and management (Fay and Michon, 2003). As professional foresters discharge their functions, their actions, conducted in the name of the 'public interest', are guided and legitimated by forest regulations.

The first university training programme to promote scientific forest management was established at the University of Freiburg, followed by other universities in the German states in the 19th century. In 1824, a national school of forestry was founded in Nancy, France (Mantel, 1964) and it attracted students from all over Europe and the United States (Peluso, 1992). Forest science was based on technical calculations to achieve 'sustained yield' by applying silvicultural principles developed through experimental trials. When they returned home or travelled to colonies in Asia and Africa, or to Latin America, foresters carried with them the philosophy of state-controlled and technocratic forest management (Fernow, 1911).

The United States also played a role in influencing global forest management by shaping the forest conservation paradigm that continues to legitimize state management today, largely through Gifford Pinchot, who studied at Nancy and founded the US Forest Service. Considered the first proponent of 'modern resource conservation' (Eckersley, 1992), Pinchot believed in the complementarity of conservation and development: forests, he said, should be managed to 'provide the greatest good for the greatest number of people for the longest time' (Dana and Fairfax, 1980, p72). As a result, 'today, the term forest conservation can mean anything from intensive timber production to total preservation' (Elliott, 1996).

Both the utilitarian view of forests as a source of government revenue (forest use to provide the 'greatest good for the greatest number') and the more preservationist stance advocated by some conservationists have justified absolute state control of the forest resource base and the strict regulation of its use (see also Chapter 2). The ongoing delineation of large tracts of forestlands into production and protection areas by governments in many developing countries reflects the persistence of Pinchot's resource conservation paradigm. The same paradigm allows foresters to conduct their science according to the state's interests, even though they rarely view their policies or implementation as political acts. Today, scientific forestry refers to both the German tradition – regimented plantations with minimal diversity, and the foresters-know-best management for sustained yield – as well as the more modern concept of planned, sustainable, conservation-oriented professional management.<sup>5</sup>

Tribal peoples and other local communities gain little from state territorialization or nationalization of forest control except temporary employment as skilled or unskilled labourers on lands they probably once controlled (Peluso, 1992). Notwithstanding the promise that forest

bureaucracies will manage forest resources wisely, their performance in many developing countries has been dismal, perpetuating or even exacerbating land degradation and rural poverty in many countries (Blaikie, 1985).

Despite recent efforts to provide new and secure rights to indigenous and other local communities through forest tenure reform, government regulations are still founded on the Euro-American scientific forest management tradition and the bureaucratic culture that has persisted in state forest agencies. As will be revealed in the following discussions of case studies from Asia, Latin America and Africa, forest regulations perpetuate state control over lands and forest resources, undermining the potential benefits of the reform.

### **Forestry regulations and tenure transition: Selected cases**

Under new tenure arrangements in community forestry, forest regulations may be enforced through:

- 1 leases or classification systems that limit access to forestland, as in India;
- 2 conservation-inspired rules that limit activities in protected areas, as in Brazil; and
- 3 permits, agreements, taxes, management plans and similar requirements that limit access to timber and other valuable forest products, as in the Philippines, Guatemala and Nepal.

#### ***Regulations that limit access to land<sup>6</sup>***

Despite the recent trend to devolve ownership and/or control of forests to communities, access to high-value forests may be restricted by zoning, classification systems and other land allocation regulations. Such regulations may be viewed as the state's first line of defence in securing valuable forestlands and limiting the area to be handed back to communities.<sup>7</sup> Such regulations may overlay all subsequent decisions, severely limiting community rights.

India is one example. As is typical of many Asian countries, India's forest management has a European legacy, in this case British colonial rule. India was one of the first nations to establish a professional forest service: it nationalized its forest domain under the Forest Act of 1865. Demarcation of uncultivated land under the management of the Indian Forest Service continued over the next century and throughout this period forests were valued mainly for their timber and contribution to the country's economic development. Tribal communities and other forest dwellers' resource rights were eroded as the state agencies and the private sector established greater control. Even after independence, much of the British colonial forest policy and administrative system continued to direct the governance of forestland and its resources (Poffenberger, 1996; Poffenberger et al, 1997).

To date, most of India's 77.47 million ha of forestland remains under state control. The country is endowed with rich forest resources containing about 8 per cent of global biodiversity, making it one of the 12 'mega-biodiversity' countries in the world. Yet more than a sixth of the country's geographical



area (55.27 million ha) is considered 'wasteland'. This area has been the target of recent community-based forest management programmes, such as the Tree Growers' Cooperative Society (TGCS) programme, described in Chapter 3 and summarized briefly here.

The TGCS programme was a response to the growing concern in the 1980s over fuel wood and fodder scarcity and increasing land degradation. Its proponent, the National Wastelands Development Board, viewed the project as a more effective and sustainable institutional alternative for forestation than the existing Forest Department-led social forestry programme. A 'revenue village' is selected and formally registered as a cooperative.<sup>8</sup> The cooperative applies for a government lease in part of the 'revenue wasteland' (located in the village) that belongs to the Revenue Department of the state government. Such leases are usually for 25 years and can be renewed for the same term; they are one of the clearest cases of tenure transfer under community-based forest management in India. A study of TGCSs in the villages of Khoda Ganesh, Nathoothala and Kumhariya in Ajmer district of Rajasthan, however, demonstrates that forestry regulations actually perpetuate government control over forestland by limiting access to the more productive areas. Moreover, the Revenue Department retains the right to use the land for other purposes.

Although the villages' property rights have been temporarily secured under the new tenure arrangement, the livelihood benefits have been rather modest. Because of poor productivity of the plantations, the TGCSs have not been able to generate cash income, which was one of the goals. Even improvements in fuel wood and fodder availability – major goals of the programme – were not large. Only 28 per cent of 382 households surveyed reported increases in fuel wood availability, and 43 per cent reported increases in fodder. Also, the tree survival rate (43 per cent) was rather low, limiting the project's potential ecological benefits.

The reasons for the programme's limited impacts are multiple, but the state regulation that limits community access to productive forestland is a major factor. Each lease involves less than 40ha of land, irrespective of the population. Such small parcels are not enough to generate livelihood benefits for every household. Most leased lands are of poor quality and were highly degraded when they were handed over, necessitating difficult and costly development and requiring a long time to become productive. Indeed, about 59 per cent of the households surveyed in all three villages considered TGCSs 'unimportant' to their livelihoods.

In contrast, the government appears to gain from the new tenure arrangement in at least two ways. First, the TGCSs largely prevented encroachments on the leased sites and hence these areas have been protected. The TGCSs were therefore instrumental in preserving the village common lands, which legally belong to the Revenue Department. Indeed, encroachments and resource destruction have been noted in nearby areas not covered by lease arrangements. Second, the TGCSs helped improve the biophysical condition of the sites. Both these accomplishments further the conservation objectives of the state.

Limiting access to valuable forestland through forest regulations is of course not unique to India. For instance, Nepal, despite being among the pioneers of community forestry in Asia, has its own share of challenges in making productive forestland available to groups of forest users. In the *terai* region, where most of the productive forests are located, the Department of Forests retains greater control of high-value forests and has only rarely, and after grassroots demand, handed them over to community forest user groups (CFUGs) (Bhattarai, 2006; Ojha et al, 2008). As of 2005, only about 2 per cent of the *terai* forests had been handed over to CFUGs, compared with almost 24 per cent of the lower-quality hill forests. The government contends that products from these forests need to be distributed throughout the country, including to urban populations, and it should therefore be responsible for these areas. Indeed, the Forest Policy of 2000 imposed a 40 per cent tax on revenues generated from the sale of timber on the CFUGs in the *terai* and stipulated additional restrictions on forest devolution in this area (Bhattarai, 2006).

Similarly, in the Philippines, another country noted for its 'radical' and 'progressive' community forestry policy (Utting, 2000; Pulhin et al, 2007), communities continue to struggle to gain control over productive forest areas. Earlier government initiatives under the Integrated Social Forestry Program had leased to communities only lands already denuded of trees, then extracted cheap labour for reforestation and protection (McDermott, 2001). In addition, the government, through the Department of Environment and Natural Resources, has expected these communities to stabilize upland encroachment, increase the productivity of upland agriculture and control potential dissent. At the same time, the department retains the power to allocate timber concessions<sup>9</sup> (now called industrial forest management agreements) on residual forestlands when it is profitable and politically expedient to do so (Li, 2002). Although the transfer of forest management from the department to local communities over the past 25 years has been significant, with close to 4.7 million ha under various forms of land tenure instruments, the more productive areas in general are still under the remaining private timber concessions and agreements or under the government-controlled National Integrated Protected Area System.

As in India, the state-controlled forest management approaches of both Nepal and the Philippines are of colonial origin. Nepal's forest policies were directly influenced by the British, when its experts helped the Rana rulers establish the Department of Forests in 1942 (Paudel et al, 2008a). The department started the nationalization of forestland and perpetuated the colonial notion of scientific forestry in the country. The Philippines' forest management was a legacy of the Spanish and the American systems. The Spanish colonial government established the first forestry bureau, the *Inspección General de Montes*, in 1863, and introduced the European tradition of centralized forest management. The American colonizers who took over in 1898 then established a forestry school, in 1910, with the help of none other than Pinchot himself. The concepts of scientific forestry remain the basis for the country's forest resources management.

The use of forest regulations to limit communities' access to forestland is of course not solely an Asian phenomenon. In Cameroon, in Africa, the recent tenure arrangement that entitles communities to new bundles of rights to access, use and manage forest lands is not applied in the entire forest estate (Oyono et al, 2008; Diaw et al, 2008). A 1993 zoning plan classified the forestland into permanent and non-permanent forest estate. The permanent forest estate includes national parks, faunal reserves, game ranches, botanical gardens, zoological gardens, production forests (intended for timber extraction), protection forests and research forests – the richest, largest and most strategic forest areas. The non-permanent forest estate comprises less productive forests and agricultural lands adjacent to villages, and it is here that (at present) about 56 village communities have 25-year management agreements that entitle them to access, use and manage the land for livelihood purposes (Oyono et al, 2008). Hence, local communities have been legally excluded from high-value forests, which are largely reserved for commercial logging and for protected areas. Some community members argue that they have been given greater rights but to smaller areas, since they have customarily claimed access to a much larger area of forest (Oyono et al, 2008). The state's capacity to implement its regulations throughout the large forest areas it claims is also in question. As in Asia, the state's tendency to retain valuable forestlands in Cameroon is rooted in its colonial tradition (Oyono, 2004a).

### *Conservation and protection-oriented regulations*

Conservation-inspired regulations – whether implemented by a forest management agency or a separate environmental agency – can also be used to limit the activities of communities that have been given legal rights in forest reserves and protected areas but have lost customary rights. Such regulations can limit use rights or require development and management plans that attempt to regulate the activities of local communities to achieve the state's conservation objectives. Porto de Moz, Brazil, is a case in point.

The first regulations seeking to control and monitor timber extraction and forest conversion in Brazil were issued in 1968 with the approval of the Forestry Code, the implementation of which was delegated to a federal environmental agency. In 1994, a decree for regulating forest management established mechanisms for ensuring reforestation and introduced forest management planning. Timber extractors already had to comply with similar procedures. In the late 1990s, environmental concerns prompted actions to demarcate conservation areas, which influenced the establishment of a national system of conservation units (*Sistema Nacional de Unidades de Conservação*) in 2000. To protect the rights of agro-extractive and traditional populations, 'extractive reserves' (RESEX) were created. Though previous land projects were under the jurisdiction of the National Institute for Colonization and Agrarian Reform, a RESEX was included as a specific type of conservation land use under Law No. 9.985, falling under environment agency jurisdiction.

In the Brazilian municipality of Porto de Moz, in the state of Pará, local communities have a history of struggles with timber and fishing companies. These companies used local resources, but communities reaped little benefits (Moreira and Hébert, 2003; Salgado and Kaimowitz, 2003). To protect their land and natural resources, communities demanded a RESEX. The resulting 'Verde para Sempre',<sup>10</sup> covering some 1.3 million ha and including about 58 communities, was created in 2004 by presidential decree. Although the reserve secured the property rights of residents and allowed the communities to exclude timber companies from their lands, it also imposed new constraints on forest use for smallholders living in the reserve.

The RESEX recognized the territorial rights of a mix of local communities and medium-scale landholders on the west bank of the Xingu River. Local people – influenced by NGOs and conservation organizations – adopted the RESEX model to formalize their land tenure rights as an expedient way to gain rights to an extensive area. The limiting factor is that the RESEX is a conservation unit. Landholders living inside it receive not full ownership rights but an indefinite usufruct right (*concessão de direito real de uso*), bounded by a variety of land-use constraints. In the RESEX, according to the law, the use of species at risk of extinction, practices that erode these species' habitats and practices that could harm the regeneration of natural ecosystems are prohibited. Timber extraction is allowed only when practiced in a sustainable way and only under special circumstances (e.g. when it is complementary to other extractive activities). Forest conversion is limited to 10 per cent of the total area, according to the rules established in the RESEX management plan. Also, the rules constrain the movement of water buffalos.

A RESEX is intended as an area where landholders develop extractive activities and small-scale agriculture. Hence there are no limits on the collection of non-timber forest products (NTFPs), but other consumptive uses, such as logging (when allowed at all), require a forest management plan. Any activity to be developed in the RESEX must be part of a RESEX development plan. The communities cannot use timber resources, for example, until they have completed such a plan, which can be undertaken only after the definitive development plan for the whole RESEX has been written and approved – which has still not occurred.

Hence four communities that demarcated their lands with the assistance of a forestry project have not been able to develop forest management plans. Exceptions were made, however, for two such communities because they were supported before the creation of the RESEX by the ProManejo programme, a federal project that supports community forestry through the development of low-intensity harvesting and artisanal wood transformation projects.

A distinction is made between high- and low-intensity plans, but both are subject to the same bureaucratic steps. The low-intensity plans are somewhat simpler, but all plans must be signed by a professional forester and in community areas plans also have to be signed by leaders representing the community or territory. The professional forester, who helps write the plan, is at the same time responsible for the forestry operations in the area. In theory, this system

should ensure relative transparency in the formulation and implementation of forest management plans, facilitating central agency supervision of the plan's implementation.

Sometimes timber is harvested even if a community does not yet have a formal management plan. Networks of sawyers, local loggers, traders and truckers who were employed by the timber companies prior to the creation of the RESEX have been taken over by local politicians, who use their influence and connections to extract timber and supply timber industries in the city, in contravention of the regulations. The volume of these informal transactions cannot be estimated, though there is said to be less logging in the reserve than before.

The Porto de Moz case demonstrates that despite grassroots mobilization to create a reserve, the government's environmental and conservation objectives tend to dominate the interests of the local population. The formal institutions are highly bureaucratic and ineffective in implementing their own regulations. The lack of a management plan prevented some local communities from pursuing commercial logging operations, even though the system of extractive reserves was intended to protect the interests of agro-extractivist communities and people whose traditional livelihoods depend on timber and non-timber forest products. The conservation-oriented regulations leave local people little flexibility to use the resources to fulfil their material needs – at least not legally. Neighbouring communities are now seeking other models for their land claims.

### *Regulations that limit commercial use of valuable resources*

State forest agencies sometimes act as forest enterprise organizations that regulate the commercial use of valuable forest resources, such as timber, in the name of the public interest. Even where valuable forest resources have been handed over to communities by the state under the new tenure arrangements, strict government regulations still constrain the flow of benefits to local communities. Three cases illustrate this issue.

*Ngan Panansalan Pagsabangan Forest Resources Development Cooperative, the Philippines* This cooperative is one of 1781 People's Organizations in the Philippines involved in the government's community-based forest management (CBFM) programme. Located in the Compostela Valley Province on the island of Mindanao, it manages 14,800ha under a 25-year tenure instrument that entitles the cooperative to manage and utilize the timber resources in accordance with the principles of sustainable forest management (see also Chapter 3).

The cooperative was one of the earliest government experiments in facilitating a transition from a corporate timber enterprise to a community-based approach to achieve the goals of sustainable forestry and social justice. Although the timber enterprise is managed by technically competent professionals (mostly former employees of the logging company that operated in the area from 1969 to 1994), major policy decisions rest with the cooperative's general assembly

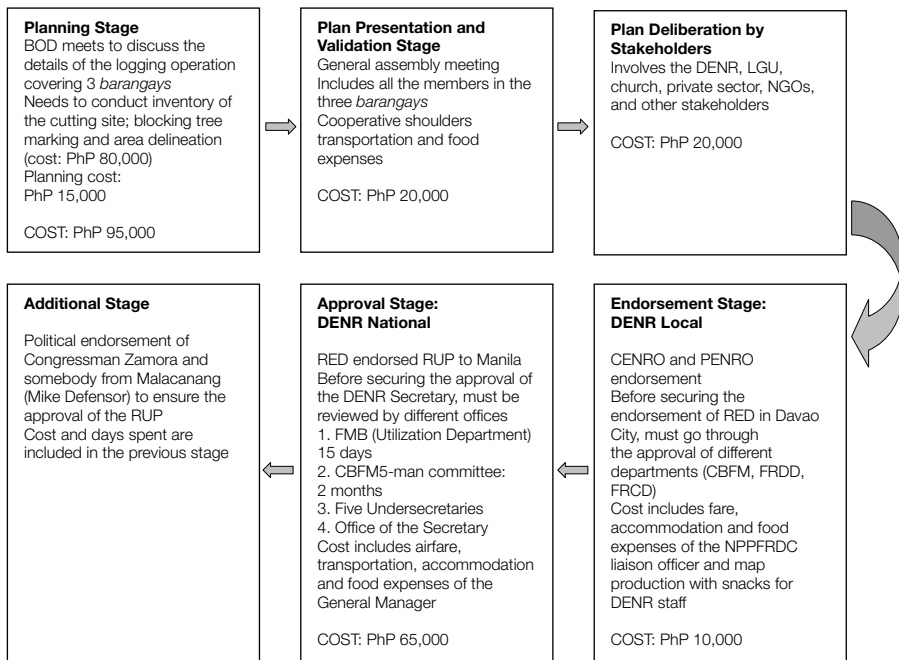
and board of directors, with representation from the Mandaya-Mansaka tribal group. This organizational setup allows the cooperative to function as a business entity. It is the only community forest in the country and the first in Southeast Asia to be certified by SmartWood, having met the criteria for a sustainably managed forest in 2000.

The cooperative was established in 1996 and given the rights and responsibilities to manage and protect the assigned forestland in the towns of Compostela and New Bataan in Compostela Valley Province. The overall management of the area is governed by the 'community resource management framework'. Produced by the cooperative with the support of the Department of Environment and Natural Resources, this document serves as the basis for forest management activities and strategies for 25 years. The cooperative also had to prepare a five-year work plan to guide its operations. The resulting work plan indicates how much of the production forest will be subject to harvesting during the first five years and how much timber will be extracted from the forest plantation (Pulhin and Ramírez, 2006). The earnings will fund forest development and protection projects, such as reforestation, agroforestry, timber stand improvement, assisted natural regeneration, foot patrols and the establishment of checkpoints to ensure continuous forest protection. It will also generate livelihood initiatives for the cooperative. The development of additional tree plantations and agroforestry areas is expected to reduce the pressure on natural forests as a main source of timber and improve forest cover, minimize erosion and the occurrence of flash floods.

In the Philippines, the preparation of comprehensive management plans, such as the management framework and the five-year work plan, is often beyond the capabilities of People's Organizations. Professional foresters must often be hired – something they typically cannot afford, or that at least increases their costs. Although this particular cooperative can prepare its own plans, thanks to the extensive technical experience of some members, the process nonetheless involves a lot of time, effort, negotiation skills and transaction costs, from timber inventory to approval.

Although the approved work plan specifies the target volume to be harvested annually, the actual volume harvested depends on approval from the Department of Environment and Natural Resources, which issues an annual permit. The real volume harvested is usually lower than the one proposed in the work plan. Without the permit, the cooperative cannot proceed with its timber harvesting operations, but approval can easily take more than six months, in part because it is issued by the department's central office in Metro Manila, leaving the cooperative with only six months to operate. Total costs can be as high as US\$4,700 (see Figure 7.1).

Even after the permit has been issued and the timber has been cut, regulations to control the transport of harvested timber create additional problems (Dugan and Pulhin, 2006). Communities must obtain a permit for moving timber to the roadside and another to transport the timber to buyers. Further delays and additional transaction costs ensue because the department staff who issue the permit are usually many kilometres away. In the Philippines, tree farmers who



RUP, resource use permit; NPPFRDC, Ngan Panansalan Pagsabangan Forest Resources Development Cooperative; exchange rate, US\$1  $\approx$  PhP44

Source: Puhlin et al (2008)

**Figure 7.1** Application process and transaction costs for Ngan Panansalan Pagsabangan Forest Resources Development Cooperative, 2006–2007

develop plantations on their own private lands have also complained bitterly about these transport permits, which were originally intended to monitor and control the removal of timber from natural forests. The complexity of regulations and procedures has fuelled corruption, since each step creates the opportunity to extract money from communities (Dugan and Pulhin, 2006).

*Community forest concessions, Petén, Guatemala*<sup>11</sup> The community forest concessions in the Petén are located in the multiple-use zone of the Maya Biosphere Reserve. The reserve, consisting of 2.1 million ha, was established in 1990 as a conservation area to protect natural and cultural resources and the associated goods and services. Faced with pressure from community organizations and conservationists, the Guatemalan National Council for Protected Areas (*Consejo Nacional de Areas Protegidas*) saw the communities already living in the reserve as a potential ally to facilitate their work and there are currently 12 community concessions inside the reserve covering a

total area of 426,000ha (see also Chapter 3). All but one had achieved Forest Stewardship Council (FSC) certification by 2006.

The contracts grant the community concession holders an exclusive use right over the defined area and its resources for 25 years. Unlike the extractive reserve in Porto de Moz, Brazil, which limits the commercial use of timber in the name of forest conservation, the Petén community concessions allow the use of valuable timber and non-timber forest products, although under strict regulations. The communities applying for concessions were required to incorporate as legal entities with formal bylaws and internal regulations to take legal responsibility for their concession. The organizations were initially required to sign technical assistance contracts with local NGOs, although this is no longer the case.

To regulate resource extraction, all concessionaires are required to develop sustainable management plans for each product harvested, including NTFPs, to be approved by the Council for Protected Areas. Timber management plans include full inventories of resources, environmental impact assessments and detailed plans for harvesting operations. Annual operation plans must also be developed and approved. Concessionaires are required to file operational reports every semester, pay various taxes and fees and acquire FSC certification. Failure to meet these rules and responsibilities could mean cancellation of the concession contract.

Those regulations are a substantial burden. The startup costs are difficult to calculate but are probably high, considering that NGOs and projects usually make substantial investments in training and equipment. Somewhere near US\$10 million was directed at creating the startup conditions for community forest enterprises and introducing and subsidizing the certification scheme. The direct costs of creating the initial organizations are estimated at US\$2,000 each. Preparation and approval of annual operating plans account for 5 per cent to 8 per cent of operating costs.

The regulations seen in the Petén concessions appear fairly typical of community forestry and of forestry permits in general. For instance, a study by Navarro et al (2007) in Honduras found that obtaining a logging permit involved 20 actors, 53 procedures and 71 steps and took an average of three to four months. Similarly, in Costa Rica, the process involved 11 actors, 31 procedures and 34 steps, and could take up to 18 months. A related study in Nicaragua's autonomous regions identified around 30 steps for areas over 500 ha (Navarro et al, 2008). In the Bolivian site Cururú, it took longer than two years from the initiation of the management plan to its final approval.

In Nicaragua, the costs of the general management plan and the environmental impact assessment for the management area were about US\$2 and US\$1 per hectare, respectively (Argüello, 2008). Annual operating plans covering the annual extraction area range from US\$9–12 per hectare for broadleaf forests. The initial investment for these studies at Layasiksa, one of the CIFOR-RRI study sites, was more than US\$50,000 because the area covered extended beyond the parcels managed for logging. The process for establishing community forests is so complicated in Cameroon that no



community has been able to establish a community forest without extensive external assistance (Oyono, 2002, 2004b); the required management plan can cost as much as US\$55,000 and take up to two years to complete (Smith, 2006). In addition, logging must be undertaken using low-impact procedures. In contrast, short-term concessions to the private sector, known as *ventes de coupe*, are less regulated, entailing no management plan and no restrictions on logging methods (Oyono et al, 2006).<sup>12</sup>

The combination of complex bureaucracies, high upfront costs in time and money, the lack of credit and the risk associated with demanding formal markets present major disincentives for community investment in formal management plans. Under such conditions it is very unlikely that communities will undertake community-based operations without significant outside support or other incentives. Indeed, the Petén community forest enterprise model is unlikely to have been successful without the infusion of high external support during its initiation period.

It should be mentioned, however, that some governments have also provided technical and financial assistance, grants and subsidies to communities, although these are usually quite inadequate. In Mexico, for instance, the state requires that communities have forest management plans but also provides funds for this.<sup>13</sup> By and large, however, as demonstrated in many countries, government support is usually inadequate if not absent, and thus significant external support is needed in the formulation of formal management plans and other bureaucratic requirements.

*Nepal community forest user groups (CFUGs)*<sup>14</sup> Nepal's regulations for community forests leave ample room for government foresters to interfere with the rights of user groups. Even after communities have satisfied the regulatory requirements, additional burdens hinder the marketing of these products and thus the flow of economic benefits to local communities.

Nepal's Forest Act of 1993, Forest Regulations of 1995 and community forestry guidelines of 1999 provide the legal basis for handing over patches of national forests to CFUGs and identify the roles and authority of the district forest officer and the CFUGs to ensure sustainable management. The main contractual document that guides forest management practice is an operational plan, prepared and agreed upon by the district forest officer and the CFUG.

Along with changing livelihood strategies, new market opportunities for forest products and services have been emerging recently. There is a well-established market for timber and the market value for some NTFPs has increased in recent years. Despite this, market opportunities associated with high-value timber and NTFPs have not been fully utilized. Excessive regulations and associated transaction costs are major barriers preventing the flow of economic benefits.

Although the transfer of national forests to CFUGs involves the right to manage and sell valuable forest products, the actual benefits of this reform are constrained by a complicated system of approval for operational plans, annual harvests, sale of forest products outside the group and any necessary

amendments in the user group's rules. District forest officers often use their administrative and technical influence to add provisions beyond what is legally required. For example, the operational plan of Sundari CFUG includes a provision stating that when harvesting timber from the community forest, the CFUG should get permission from the district forest officer and record the harvested amounts by species. A government circular of 1996 instructs CFUGs first to satisfy internal demand, then that of neighbouring CFUGs and adjacent districts before finally being permitted to sell their products in the open market (see Chapter 8). Bureaucratic hassles involved in timber trade are discouraging. In one case, a CFUG member who wanted to sell 300 cubic feet of excess timber in the market had to visit the range post more than 12 times over a four-month period before getting the final approval.

Such regulation also discourages outside buyers, who prefer to purchase timber from other sources, particularly government sources. This consequently reduces competition for CFUG timber, resulting in low prices. In addition, the imposition of a 15 per cent tax on the sale of certain species has created additional disincentives to sell timber outside the CFUG. Communities believe that anything with high commercial value unnecessarily draws authorities' attention and that they enjoy more autonomy if they manage resources only for subsistence purposes. One option is to enter into non-transparent transactions or even illegal activities to sell their forest products. This is a serious problem particularly in the NTFP trade. Producers and collectors are in a weak position with low bargaining power and they have no control over the long and non-transparent market chain; they become price-takers.<sup>15</sup> Another option is to resort to bribery, which is an easier way to persuade government officials than fulfilling difficult formal requirements. The saying that 'more regulation means more corruption' is well understood in the Nepalese bureaucracy in general and in forestry in particular (Paudel et al, 2006).

## Discussion

The cases highlight three types of regulations that influence the outcomes of forest tenure reforms. The first type limits the area available to communities in terms of size and/or quality of forests. Examples are India's Tree Growers' Cooperative Society programme, Nepal's recent policy limiting access to the more productive areas of the *terai*, the Philippines' earlier government initiatives under the Integrated Social Forestry Program that allocated to communities only land already denuded of trees and Cameroon's policy limiting community forestry to the less productive nonpermanent forest estate. In all these cases, the states' tendency to retain valuable forestland is rooted in their colonial tradition and perpetuated by modern forest bureaucracies.

The second type of regulation emphasizes conservation by delineating conservation areas and imposing limits on use. This is illustrated by the extractive reserve in Porto de Moz, Brazil. Even though grassroots mobilization was what led to the reserve, the government's environmental and conservation objectives have tended to prevail over the interests of local populations.

The third type of regulation imposes bureaucratic requirements that restrict communities' commercial use of valuable forest resources. The experiences of the forest resources development cooperative in the Philippines, the community concessions in the Petén, Guatemala, and the CFUGs in Nepal demonstrate the complex processes and high transaction costs involved in the commercial use and marketing of valuable timber and NTFPs, sometimes even after communities have satisfied regulatory requirements.<sup>16</sup>

The regulatory frameworks accompanying tenure reform have often limited the benefits to communities and individuals. The first type of regulation restricts the potential contribution of more valuable resources to livelihoods and poverty alleviation. Overemphasis on conservation objectives and related limits on resource use may place unreasonable (as well as unenforceable) limits on livelihoods. Imposing excessive bureaucratic requirements for commercial use and marketing of valuable forest products makes it almost impossible for communities to participate in formal markets without outside support or losing resource rents through elite capture. This in turn minimizes the flow of economic benefits to local communities, reducing the potential of the tenure reform to advance livelihoods and alleviate poverty in rural areas (see Chapter 8).

That regulations accompanying forest tenure reforms have negative effects on communities is clear, but it is more difficult to isolate impacts of forest regulations on forest conditions. Some regulations are not really enforced, as the cases from Brazil and Nepal suggest. Nevertheless, trends in forest conditions are generally positive in the different cases analysed, except in Cameroon, where conditions have declined. India's Tree Growers' Cooperative Society model, despite limited area coverage and less productive lands, has improved forest conditions. The forests in Brazil's extractive reserve programme may have marginally improved with the exclusion of the larger loggers, although some regulations are not actually enforced. Conditions in the Ngan Panansalan Pagsabangan forest have slightly improved, conditions in the Petén are substantially better than in surrounding non-managed areas and in Nepal significant improvements in forest condition were noted (see Chapter 9). Such improvements, however, may be attributed to other factors, such as the nature of the reform, its associated local and external support and/or the location of the forest, besides regulations. Indeed, in some cases, such as in Cameroon, tight regulations may have worked against both people and forests, causing declines in forest conditions and little improvement in livelihoods.

States may not necessarily have sinister motives in controlling forestland and its resources. Forestry agencies have justifications for all three types of regulations, which may be based on economic, moral and technical grounds. Limiting the area for communities may be aimed at getting the highest possible rents for the state in the most efficient way, though it may also involve private gain or doing political favours for certain supporters.<sup>17</sup> Regulations to limit use of conservation areas are founded on the idea that forests should serve the public interest and hence have a moral logic. The third type of regulation – bureaucratic requirements – is associated with forestry's culture, which holds

that foresters possess superior technical knowledge and hence need to control all forest operations to ensure a more rational form of forest management and use. At the same time, regulations may represent growing and sometimes self-serving bureaucratic systems, untouched by reforms intended to reduce burdens, corruption and inequities.<sup>18</sup>

Whatever their rationale, regulatory frameworks tend to undermine the goal of local appropriation and the expectation that greater local 'ownership' (literally and figuratively) or 'buy-in' will lead to long-term commitment, income and hence sustainability in forests. Excessive regulations, in particular, interfere with such ownership, may override and weaken effective traditional practices and could encourage profitable illegal activity. This is demonstrated in Brazil, where excessive regulations on land use and forest management result in non-compliance and 'illegal' timber harvesting by the local communities in their extractive reserve.

This is not to imply that all state forestry regulation is unnecessary. There is no question that clear and enforceable rules can protect and improve forest conditions – and that the state often has a role to play in both rule-making and enforcement. What is in question, however, is what kind of regulation and how much is needed to achieve outcomes that balance the objectives of improving both livelihoods and forest condition. Obviously, regulations that are enforceable are more useful. Sometimes, rather than improving unworkable regulations, and hence improving quality, governments simply issue *more* regulations. This is what happened in 2006 in Nicaragua. There, the failure to enforce the forestry law led to a forest emergency declaration and then a moratorium prohibiting timber exports and the logging of certain species and establishing no-logging zones. In addition, more entities were included in forest law enforcement – which only resulted in more chaos, at least for a time.

How, then, could forest regulations better serve the interests of local communities and promote forest sustainability under new tenure arrangements? Lessons learned in many countries indicate general principles for successful implementation of community forestry initiatives (Gilmour et al, 2005):

- avoiding over-regulation so that the partners in implementation, particularly the local communities, can comply;
- starting with simple initiatives and adding complexity based on the ability of partners to handle increasingly complex tasks;
- minimizing transaction costs for all partners.

These principles of course are easier said than done. Recommendations like 'removing regulatory barriers' (Scherr et al, 2003) and 'deregulation' (Fay and Michon, 2003) seem not to appreciate that these are issues of power relations rather than administrative or technical concerns. It would be naive to assume that forestry agencies will easily relinquish regulatory power and give local communities more control over forest access, use and management under the new tenure arrangements. Even in countries such as Nepal and the Philippines, which started with progressive community forestry policies, new

sets of regulations or policies can easily undermine earlier initiatives. In Nepal, for instance, the progressive Forest Act of 1993 and Regulation of 1995, which granted greater rights to CFUGs to manage community forests and promoted more equitable sharing of forest benefits, have been diluted by recent decisions: the Forest Policy of 2000 and the 2003 Collaborative Forest Management Plan undercut previous rights and imposed a 40 per cent tax on revenue generated from the sale of timber in the *terai*. Similarly, in the Philippines, the early momentum and optimism associated with adopting community-based forest management was dampened by a series of national permit suspensions and the attempt to cancel all community forest agreements except those with foreign funding.

Attempts to simplify regulations have not been encouraging in many parts of the world. In Brazil, although simplified plans are easier to develop, obtaining approval is still difficult (Carvalho, 2008). In Nicaragua, simplified plans were developed to salvage timber affected by Hurricane Felix in September 2007, but six months later, as the wood rotted and the rainy season approached, communities were still awaiting formal approval (Larson et al, 2008). Even these plans required the signature of a forester and hence entailed a financial investment. Exactly the same situation has been observed in the Philippines. Securing salvage permits to sell trees felled by typhoons, even if the trees had been planted by the farmers themselves in their community forest areas, can take more than six months and involve many transaction costs.

Enabling regulatory frameworks cannot be developed overnight. They are often a product of long and continuing struggles by strong community alliances that must be able to wield countervailing power to challenge the territorializing behaviour of the state (see Chapter 6). In Nepal, the imposition of the 40 per cent tax on timber revenue was challenged by the Federation of Community Forest Users, Nepal (FECOFUN)<sup>19</sup> in the Supreme Court (Bhattarai, 2006). The court declared the regulation unconstitutional and the government eventually reduced the tax to 15 per cent. FECOFUN has successfully tackled other national and local issues confronting community forestry in Nepal (Paudel et al, 2008a; Bhattarai, 2006). In Guatemala, the Association of Forest Communities of Petén went to court over a proposed government project in 2003 aimed at expanding the protected area around the Mirador Basin by dissolving the community forest concessions and integrating community members into private 'sustainable ecotourism initiatives'. The association argued that the affected communities had not been consulted and that the plan could actually increase pressure on the reserve (ACOFOP, 2005; Gómez and Méndez, 2005). Guatemala's Supreme Court ruled in its favour and declared the project illegal in mid-2005. As such experiences demonstrate, investments in building strong community alliances constitute a key strategy for making the existing forest regulatory framework more responsive.

Considering the tendency of forestry agencies – with their bureaucratic traditions and regulatory mandates – to craft and enforce strict regulations, community networks and their allies should advocate for simple and enforceable regulations that build on existing rights and management practices (Larson

and Ribot, 2007). To enhance credibility and generate strong external support, community alliances such as FECOFUN should also police their own ranks, ensure accountability mechanisms and encourage cooperative values among members.

More importantly, higher levels of government, NGOs, donors and the grassroots all need to effect a paradigm shift on the discourse regarding local people, forests, conservation and sustainable use of forests. In many developing regions, there is still a strong dichotomy between protection and destruction (read: logging) and forest agencies still treat local people as a resource to provide cheap labour in forest rehabilitation or an instrument to achieve biodiversity and related conservation objectives. Such a discourse needs to be replaced with a rights-based philosophy of forest management (Larson and Ribot, 2007) that grants greater sovereignty to local communities over forest resources without sacrificing sustainability. Such a paradigm needs to influence national forestry schools and shape the next generation of foresters, with the goal of institutionalizing new ideas about forests and regulations that build on local strengths and capacities and helping foresters become facilitators rather than purely regulatory agents. In the medium term, the paradigm also calls for the reinvention of forestry agencies, which can devolve not only responsibilities but also authority to local communities, change outmoded regulatory policies and procedures and retool staff with skills in negotiation, conflict resolution and extension service to better serve local communities.

A major challenge is how a state regulatory framework can accommodate diverse local realities (including self-regulation) in a way that improves local livelihoods and alleviates poverty without undermining the productive, environmental, cultural and other values that forests provide. With new schemes such as REDD (reducing emissions from deforestation and forest degradation) likely to complicate regulations even further, it is crucial to clarify rights and tenure to protect communities from the excesses of the state's regulating power.

## Notes

1. We wish to thank Sushil Saigal and Phil René Oyono for their inputs on the India and Cameroon cases, respectively.
2. In this chapter, transaction costs refer to the costs (financial and other) associated with complying with regulations and bureaucratic requirements, such as obtaining leases, agreements or permits and preparing management plans.
3. Regulatory capture refers to situations in which a government regulatory agency, such as the forest department created to act in the public interest, instead acts in favour of the commercial or special interests of parties other than local communities.
4. For examples see O'Brien et al (2005) and Adhikari and Lovett (2006). Verifor has compiled useful studies of 'forest verification systems' but without specific emphasis on communities (see [www.verifor.org](http://www.verifor.org), last accessed September 2009).
5. We wish to thank Timothy Synnott for pointing out these two different definitions.

6. Except when other references are cited, this section is largely drawn from the CIFOR-RRI country report on India by Saigal et al (2008).
7. Thanks to Deborah Barry for this point.
8. A revenue village is an administrative category in India, which is below district and *tehsil*. It has defined boundaries and may contain one or more hamlets.
9. More recently, expiring timber concessions are being converted into industrial forest management agreements (IFMA) to meet legal requirements under the 1987 Philippine Constitution. However, some critics argue that IFMA is just a redressed version of the timber concession system.
10. In translation, 'Green Forever'.
11. Except when other references are cited, this section is largely drawn from Larson et al (2008a).
12. Compared with forestry, the agriculture and livestock sectors are less regulated and hence involve much lower transaction costs. In some cases, this creates perverse incentives to deforest, as people prefer to pursue agriculture and ranching in forestland.
13. This is not as positive as it might sound, however, since what it does in practice is guarantee payments to foresters even if communities develop the plans themselves.
14. Except when other references are cited, this section is largely drawn from Paudel et al (2008a).
15. A price-taker is an economic actor that must accept the prevailing market price for its products because its own transactions are unable to affect the price.
16. In many cases, larger private sector actors complain about the burden of forestry regulations as well. Still, in general, they are better equipped than communities to deal with regulations and bureaucracies; they also often receive special treatment because of their personal and political connections (see Larson and Ribot, 2007).
17. An example of doing political favours for certain supporters is well exemplified in the case of the Philippines during the Marcos administration, when the issuance of timber licence agreements in productive forests was used to gain political support from the elite group while communities were allocated denuded areas to reforest, thereby providing cheap labour to the government.
18. Thanks to Timothy Synnott for pointing this out.
19. FECOFUN is a national federation of forest users across Nepal with membership of almost 12,000 formally registered user groups dedicated to promoting and protecting users' rights (see Chapter 6).