An important recent paradigm shift in forest development in Asia and the Pacific (as in many parts of the world) has been the move from centralized to decentralized forest management. If, however, governance is defined as ‘the procedures and rules by which decisions are made and consensus is reached, as well as mechanisms to hold decision makers accountable for their actions’ (Menzies, 2004, p450), the extent to which powers of decision making and enforcement are really being devolved to forest communities remains questionable.

‘Forest-rich’ countries such as Indonesia have been especially slow to devolve such powers. Where local communities have been given the responsibility for restoration of degraded areas, the products from regenerated forests have frequently been appropriated or taxed. Questions of gender, class and caste continue to divide communities: decentralization does not by itself ensure equality and may pose greater challenges for women as traditional values are revived. Policies of decentralization and devolution that do not include adequate community participation or genuine downward shifts of power and responsibility cannot produce favourable outcomes in terms of poverty alleviation or sustainable forest management.

Community perception of tenure security is vital (though formal title is not always essential) and affects such problems as forest fire and some forms of illegal logging. Tenure security includes not only effective community institutions but also the ability to respond to critical turning points when political conditions change. In many countries tenure security has been difficult to achieve, as governments continue to claim ownership of the forests and traditional tenure is unrecognized. This situation leaves local farmers vulnerable to pressures from both government and corporate interests. Paradoxically, in Papua New Guinea, where forests are
owned by local people, the government has implemented a forest policy based on export logging without adequate consultation or empowerment (Bun et al, 2004; Turia, 2005; Box 3.1).

This overview examines these issues, beginning with the state of the forests as measured by the FAO (2005a), followed by a general discussion of decentralization and devolution. The major findings are identified from two earlier conferences (Davao in 1998 and Interlaken in 2004) together with conclusions from other relevant sources. Such findings formed the background to the 2006 meeting in Yogyakarta.

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**Box 3.1 Governance and community-based forestry in Papua New Guinea**

*Lesley Potter and Yati A. Bun*

A stated objective of the Papua New Guinea Forestry Act of 1991 was to maximize local participation in the development of forest resources as a renewable asset. However, since the beginning of export logging in 1979, commercial extraction has been almost entirely controlled by foreign companies.

**Forest governance and decentralization**

Each of the 19 provinces has a forest management committee which develops forestry plans. These are passed to the National Forestry Board and eventually the Minister of Forests for endorsement. After offering a timber area for sale, the Board is supposed to consult the customary owners and the provincial government. Landowners form a company, obtain a timber permit and then sign a ‘logging and marketing agreement’ with a foreign logging firm. This approach has failed: in October 2006, there was no successful landowner company operating at any logging concession in the country.

**Community forestry in Madang**

The Madang Forest Resource Owners Association (MFROA) represents an effort to make community forestry successful and sustainable. Those wanting to develop their own forest resources seek help from the Foundation for People and Community Development Inc, a local NGO, to get them started. The NGO provides training in forest and business management, portable sawmill technology and maintenance. MFROA members will soon be able to market fully certified eco-timber. This is a significant milestone as no large-scale commercial forestry operations in Papua New Guinea have earned such independent certification.
The experience of Madang exemplifies the kinds of problems and opportunities that exist in connection with community forestry. In the 1970s Madang was the first province to experience large-scale clear-felling. The unfavourable environmental and social impacts persuaded many landowners to place higher value on their forests and seek to manage them themselves. However, the use of their assets is seriously restricted by government regulations and lack of proper assistance. Obtaining the necessary permit for cutting timber involves 34 steps, and compliance with this regulation is onerous. Most villagers are illiterate and fall easy victims to unscrupulous negotiators. Local landowners face four particularly difficult problems:

1. Not knowing their rights: Landowners are not given enough information to understand their rights. They have a right not to sign over their forest resources: it should be made clear that they have a choice.
2. Not knowing how to begin: Some do not know that they need a licence to cut timber for commercial purposes, even when they own the forest land.
3. Lacking capital and technical support: Many landowners wish to develop and manage their forest resources but lack capital and need regular extension services. Community forestry is new and not well understood by government. It does not generate as much government revenue as industrial logging.
4. Making a commitment to hard work: Managing one’s own forest resources is not easy. Getting agreement from all members of a clan is a major challenge, with members often needing to pool resources. Many questions arise regarding operations, marketing and income distribution.

Changes needed on the part of government to assist community forestry

- Current forestry laws primarily support round log exports and large scale logging activities, and are too cumbersome for community forestry.
- The provincial forest management committees do not function well. They are critical to bring decision making in forestry closer to the grassroots.
- The development of forestry resources is a major investment in bringing government services to rural dwellers. Special programmes and adequate funding are needed for communities to take up forest management.
- The potential for harvesting and marketing non-timber forest products, which could improve local economies, is inadequately understood.

Conclusion

In Papua New Guinea, land and forest are customarily owned. The rightful landowners need to be given the opportunity to manage their forest resources themselves with the encouragement and support of the national government. The rights of customary landowners should not be removed.
The State of Forests in the Asia-Pacific Region

The countries of the Asia-Pacific region\(^1\) cover almost 22 per cent of the world’s land area and account for 19 per cent of its forests. They are also home to more than 55 per cent of the world’s population, though both forests and people are unevenly distributed (FAO, 2005a). The current state of the region’s forests provides the backdrop to the analysis that follows.

The most recent global definition of forests identifies ‘trees higher than 5 metres and a canopy cover of more than 10 per cent, or trees able to reach these thresholds in situ’ (FAO, 2005a, p69). Regenerating forests are included, as (more controversially) are forest plantations, which are now assuming considerable importance. ‘Primary’ forests consist of native species ‘with no clearly visible indications of human activities’ (FAO, 2005a, p171). Local experts might dispute the figures, and others would question the continuing existence of primary forests. The value of the FAO numbers, however, is their broad comparability for the identification of general trends.

Several countries in Southeast Asia, especially Indonesia, Vietnam and Cambodia, together with Papua New Guinea in Oceania, experienced a high annual loss of their ‘primary’ forests between 2000 and 2005 (Table 3.1). In Northeast Asia, on the other hand, Japan actually increased its primary forests and retained a high proportion of its land under forest cover, though 41 per cent of that consisted of plantations. While Indonesia’s primary forests declined by 1.4m ha/yr, the area of plantations in China rose by virtually the same amount, 1.5m ha/yr. Vietnam, India, South Korea, Indonesia and Myanmar were involved to varying degrees in new plantation development; similar planting occurred earlier in Thailand and the Philippines (FAO, 2005a, Annex 3). The larger countries of Oceania, such as Australia and New Zealand, also have important areas of plantations. Regeneration of natural forest has become a major concern in the rather forest-poor countries of South Asia (including India and Nepal) and in China and Vietnam. Much of this regeneration is now in local hands.

Within the region one of the most important drivers of forest change has been the rapid emergence of China as a huge market for timber and wood products from Southeast Asia and Oceania (as well as Russia), replacing Japan, which had previously dominated the regional timber trade. Northern Myanmar, Indonesia (especially Papua) and Papua New Guinea have been major sources, with a high proportion of the timber being obtained illegally (Bun et al, 2004; EIA/Telapak, 2005; Global Witness, 2003, 2005; White et al, 2006). This new trade is partly responsible for some of the rapid recent declines in natural forests.\(^2\)

Asia-Pacific Experience

Devolution of aspects of forest management from government forest departments to local communities has become a widespread phenomenon in Asia and the Pacific
<table>
<thead>
<tr>
<th>Country</th>
<th>Forest area (000ha)</th>
<th>Per cent of total land area</th>
<th>Percentage change, forest and woodlands 2000–2005</th>
<th>Primary forest as percentage of forest area</th>
<th>Change 2000–2005 (ha/yr)</th>
<th>Plantations as percentage of forest area</th>
<th>Change 2000–2005 (ha/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northeast Asia</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
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<td>+2.2</td>
<td>5.9</td>
<td>0</td>
<td>15.9</td>
<td>+1,489,000</td>
</tr>
<tr>
<td>Japan</td>
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<td>68.2*</td>
<td>ns</td>
<td>18.5</td>
<td>+107,400</td>
<td>41.5</td>
<td>–2000</td>
</tr>
<tr>
<td>Rep. Korea</td>
<td>6265</td>
<td>63.5*</td>
<td>–0.1</td>
<td>ns</td>
<td>ns</td>
<td>21.8</td>
<td>+35,200</td>
</tr>
<tr>
<td><strong>Southeast Asia</strong></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>10,447</td>
<td>59.2*</td>
<td>–2.0</td>
<td>3.1</td>
<td>–26,800</td>
<td>0.6</td>
<td>–2600</td>
</tr>
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<td>Indonesia</td>
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<td>55.0</td>
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<td>69.9*</td>
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<td>9.2</td>
<td>ns</td>
<td>ns</td>
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<td>18.3</td>
<td>0</td>
<td>7.5</td>
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<tr>
<td>Myanmar</td>
<td>32,222</td>
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<td>ns</td>
<td>ns</td>
<td>2.6</td>
<td>+30,600</td>
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<tr>
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<td>24.0</td>
<td>–2.1</td>
<td>11.6</td>
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<td>8.7</td>
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<td>Thailand</td>
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<td>44.4</td>
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<tr>
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<td>ns</td>
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<td>32.0</td>
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<tr>
<td>India</td>
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<td>Nepal</td>
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<td>9.6</td>
<td>–7000</td>
<td>1.5</td>
<td>+200</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1902</td>
<td>2.5</td>
<td>–2.1</td>
<td>ns</td>
<td>ns</td>
<td>16.7</td>
<td>+4400</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1933</td>
<td>28.9</td>
<td>–1.5</td>
<td>8.6</td>
<td>–6000</td>
<td>10.1</td>
<td>–5141</td>
</tr>
<tr>
<td><strong>Oceania, Pacific</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Australia</td>
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<td>21.3</td>
<td>–0.1</td>
<td>3.2</td>
<td>0</td>
<td>1.1</td>
<td>+56,200</td>
</tr>
<tr>
<td>Fiji</td>
<td>1000</td>
<td>54.7*</td>
<td>ns</td>
<td>89.4</td>
<td>0</td>
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<td>0</td>
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<td>42.2</td>
<td>0</td>
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<tr>
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<td>–250,000</td>
<td>0.3</td>
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<td>Solomon Islands</td>
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<td>77.6*</td>
<td>–1.7</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
<td>ns</td>
</tr>
</tbody>
</table>

**Notes:** * = 'Forest-rich' country; ns = not stated.  
**Source:** FAO (2005a), Annex 3: Global Tables.
in the past 30 years, part of an inexorable global trend (White and Martin, 2002a). The tentative beginnings of ‘social forestry’ projects were noted in the Philippines, Thailand, Java and India in the 1970s, at the same time as village associations in Nepal’s Middle Hills were given some responsibility for degraded forest. The nature and scope of these approaches differed, but the delegation of authority to communities was very limited3 (Gibbs et al, 1990; Pragtong and Thomas, 1990; Stoney and Bratamihardja, 1990; Poffenberger, 1990, 2000; Gilmour, 2003). The past 15 years has seen the most marked changes, with many more governments involved. The communist states of China, Vietnam and Laos have allocated land directly to households, mainly for purposes of reforestation. India has embarked on a large programme of joint forest management that now covers about 25 per cent of all forests. It is a collaborative effort between communities and individual states, especially four states with considerable tribal populations (Milne, 2005). The Philippines offers upland forest leases to settler migrants and certificates of ancestral domain to indigenous minorities. The growth of forest user communities to manage regenerated forests in Nepal has become famous, covering 28 per cent of the potential community forest area, though the approach works better in the Middle Hills than in the forest-rich Terai (Gautam et al, 2004; Adhikari et al, 2006).

Why has this process taken place? Quickening rates of tropical deforestation during the 1980s led many experts at multilateral agencies to reconsider the wisdom of industrial forestry and the capacity of state agencies to sustain natural forests.4 Many national forest departments were also accused of corruption, supporting illegal logging and abusing the forests for political gain (White and Martin, 2002a). The World Bank began promoting community forestry as a new model of development assistance, though issues of tenure were rarely addressed and projects mainly emphasized capital and technical aid (Poffenberger, 2000). Government agencies themselves became more receptive to some form of devolution, since policies excluding people from forests were clearly failing and conflicts were increasing, creating a ‘sense of crisis’ (Menzies, 2002, p6). Larson (2005) and Dupsar and Badenoch (2002) attribute the change to common goals of cost reduction and improved efficiency among state forest agencies, rather than any more sympathetic stance toward indigenous or local people, as suggested by White and Martin (2002a).

There has been considerable scepticism about the extent to which powers of decision making and enforcement are really being devolved to communities, in addition to the more onerous responsibilities of restoration, protection and monitoring. Edmunds and Wollenberg (2004, p158) conclude that devolution policies represent ‘a shift in the manner in which central governments control forest management, rather than a genuine shift in authority to the poorest forest users’.5 Community-based forest management in the Philippines, often presented as one of the more successful Asian examples, has been lambasted as ‘a misnamed continuation of central control . . . [that] has enabled self-interested bureaucracies
to inhibit the sharing and transfer of power’ (Gollin and Kho, 2002, quoted in Menzies, 2002, p14; Menzies, 2004). Guiang et al (Chapter 11 of this volume) note a growing ‘disconnect’ between policy and reality, with the resource rights of communities under devolved forest management being regularly suspended or cancelled by the forest agency.

Not participating in the trend towards devolved forest management until recently were the four territories that still retained well-stocked forests: Indonesia (outside Java), East Malaysia (Sabah and Sarawak), Cambodia and Myanmar. Indonesia, with the thoroughgoing decentralization that occurred so swiftly after the demise of the authoritarian Suharto regime in 1998, offers perhaps the most interesting possibilities, despite the slow acceptance of change by the central Forestry Department.

**Findings from the two conferences on decentralization**

The 1998 Davao meeting, organized by the Bangkok Regional Community Forestry Training Center (RECOFTC), brought together representatives from Southeast and South Asia, and also from China, New Zealand and West Africa. In their overview of themes and issues, Fisher et al (2000, pvi) defined decentralization as ‘relocation of administrative functions away from a central location’ and devolution as ‘the relocation of power away from a central location’. I have adopted these useful definitions in this chapter. Three basic approaches were identified:

1 Decentralization without devolution. The Indian Joint Forest Management schemes provided an example. The state forest departments set the objectives; communities had responsibilities and some benefits but little or no authority.

2 Decentralization of forest management to local government but not to local communities. The Philippines was suggested as an example, but local governments still lacked power.

3 Handing over of a significant amount of control to local communities or individuals. Such an outcome was said to be rare, with Nepal the exception, but even there contradictions existed between the rights of forest user groups and those of local government. As one of the Nepal case studies pointed out, decentralization of government administration had undermined pre-existing community forestry (Upreti and Shrestha, 2000, p139).

In a separate paper, Fisher (2000) provided a further analysis of four concepts: decentralization, devolution, power and participation. In discussing participation, he noted that access to valuable forest resources was rarely provided, with community forestry often applying only to degraded areas. Banerjee explored the prospects of forest reform in which forests were actually returned to the people, who were given both power and management responsibility. However, he was not optimistic that
such policies would be introduced because ‘in spite of the rhetoric . . . participation is dismal’ (Banerjee, 2000, p46).

Devolution in New Zealand took a unique turn: the government was selling parts of the forests (though not the land) to both local and foreign investors and distributing the functions of the forestry department to other agencies, such as conservation and agriculture (Clarke, 2000; see also Box 3.2).

**Box 3.2 Forest sector restructuring in New Zealand: The ‘big-bang’ approach to decentralization**

Lesley Potter and Colin O’Loughlin

New Zealand’s forests occupy 31 per cent of the country’s land area. The indigenous forests, covering mainly hill and mountain lands, are managed primarily for conservation and environmental protection, while introduced plantations of *Pinus radiata*, on 7 per cent of the land, supply 99 per cent of total timber production.

By the 1960s the state-run New Zealand Forest Service (first established in 1919) had developed into a complex organization controlling all aspects of forest management, including research, silviculture, some sawmilling and all timber sales. In the mid-1980s it employed over 7000 people. Through the 1970s and 1980s there was growing dissatisfaction with the service’s organization and performance, both from the green movement, which lobbied for the indigenous forest estate to be managed by a conservation organization, and from the auditor general, who deemed the service’s accounting system to be satisfactory for managerial but not for commercial purposes. The Treasury proposed that the commercial activities be transferred to a separate state-owned enterprise.

The government decided in December 1985 to split the New Zealand Forest Service into a commercial corporation to administer wood production and wood processing, and a separate organization, the Ministry of Forestry, to undertake sectoral and regulatory functions and research. A new Department of Conservation was set up to manage conservation lands, including the indigenous forests. On 1 April 1987 the New Zealand Forest Service was disestablished and its functions transferred to the New Zealand Forestry Corporation, the Ministry of Forestry and the Department of Conservation.

The rapidity of the changes and the limited discussion of the intended restructuring caused great distress. Affected individuals, communities and whole districts dependent on forestry for their livelihoods had little time to plan for and adjust to the new conditions, as 3205 staff lost their jobs. The situation was exacerbated three years later, when the state forests were privatized and the New Zealand Forestry Corporation disappeared. The Treasury and the Forestry Corporation developed a design for the pending sale of forests that did not threaten any future ownership of the lands by the indigenous Maori population. The purchaser bought
the existing trees, buildings and other fixed assets, but the land itself remained in Crown ownership. It could be leased back to the purchaser for approved activities such as planting replacement crops. Foreign ownership increased from less than 2 per cent in the 1980s to approximately 48 per cent after 1996.

**Economic outcomes of privatization**

The sale of the state’s plantation forests between 1990 and 1996 realized NZ$3.4 million. Over the 1990s, total investment by foreign and domestic forestry companies, including investment in wood-processing facilities, approximated NZ$800 million. Between 1993 and 2000, 430,000ha were added to the plantation estate, most planted by farm foresters, investment foresters and other small landowners. After 2000, planting rates plummeted because of falling profitability.

**Social implications of privatization**

The social impacts of dismantling the New Zealand Forest Service and privatizing the plantations were widespread. Forestry towns suffered substantial hardship when large numbers of workers lost their jobs. In the Northland region, with a large Maori population, the changes were accompanied by a drastic drop in forestry labour requirements and a marked deterioration in the local economy.

**CONCLUSIONS**

- In designing large-scale restructuring, government needs to keep the public and the industry informed about what is being planned. In New Zealand social costs were higher than they needed to be, with resulting hardship and resentment.
- The results of decentralization and privatization demonstrate that the private sector can manage industrial forests more efficiently than the state. The investment in wood-processing facilities and improvements in business capability dramatically increased the profitability of the plantation forests.
- The New Zealand forestry sector, which exports most of its produce, is very susceptible to changes in the strength of the local currency against those of wood-importing nations and increased costs of production. Since 2003, these factors have overridden the impacts of the earlier reforms on forestry sector profitability.

There was no mention of other parts of the Pacific at the Davao meeting. In general, the tone of this workshop was not sanguine, since genuine devolution and participation of local communities were seen to be very rare.

The Interlaken meeting, held in Switzerland in 2004 and organized by the Swiss and Indonesian governments in support of the United Nations Forum on Forests and co-hosted by CIFOR, was more global in its ambit: country cases included the US, Switzerland and Russia as well as developing states in Africa, Latin
America and Asia. Its aims were also more specific, seeking to identify positive strategies to make the decentralization process work by examining the experience of countries where it was already advanced. There was an initial focus on federal systems; however, the type of decentralization involved there was revealed as not widely applicable (Gregersen et al, 2005). Ferguson and Chandrasekharan (2005) provided a further classification of approaches to decentralization and devolution, using several Asia-Pacific countries as examples: devolution to district governance (the Philippines and Indonesia); devolution to village governance (Korea and Nepal); decentralization involving customary ownership (New Guinea and Fiji); decentralization through privatization (China, Vietnam and Australia); and reversal of devolution in a federal system (again Australia). Melanesia, where the prevailing customary ownership systems differ from those in many other countries, was now represented.

Ribot took a more theoretical stance, focusing on institutions, representation, power and accountability. He listed practical questions to be asked by policymakers, activists and others about the kinds of institutions involved and the powers being transferred ‘to provide the equity, efficiency, development and environment benefits that decentralization promises’ (Ribot 2005, p100). Larson found problems especially in legal frameworks, in checks and balances on levels of power and authority, and in enforcement of regulations. Her overview of the inadequacies and inefficiencies of decentralization efforts led her to conclude that ‘democratic decentralization is hard to come by’ (Larson 2005, p55). Summing up, Capistrano and Colfer (2005) emphasized the gap between theory and practice. They noted the ‘critical importance of the dynamic balance between authority, accountability mechanisms, responsibilities and revenue sharing across different levels of government’ (Capistrano and Colfer, 2005, p301).

Although the conclusions from this workshop were similarly pessimistic, the emphases on power and accountability and the scale of management provided new insights. As noted in the foreword to the resulting book, ‘The challenge is to find a governance framework that can balance the various local, national and global interests related to forests’ (Wahjudi Wardojo and Roch, 2005). Such a challenge continued to confront us in the Yogyakarta meeting.

**Dupar and Badenoch’s approach**

Dupar and Badenoch (2002), examining decentralization in the uplands of mainland Southeast Asia (Vietnam, Laos, Cambodia, Thailand and southern China), used a framework developed by Agrawal and Ribot (1999) to identify actors, powers and accountability relations and classify the type of decentralization at each site. They also noted the prevalence of large, donor-assisted participatory projects across the region, especially in Laos, Vietnam and Cambodia. The fact that China led the way from 1980 made it easier for Vietnam and Laos to follow a decade or more later, although Dupar and Badenoch described the process in both Vietnam
China’s household responsibility system, in which land was provided to households on long leases, was instead a form of privatization, though with strict controls on removal of products.

In their conclusion, Dupar and Badenoch stressed the importance of secure tenure, at either individual or community level, with strong mechanisms for downward accountability. Close social ties between leaders and the community were an important positive factor, enhancing social capital and likely to improve livelihoods, though livelihood and environmental objectives did not always converge. The development of independent mechanisms for conflict resolution could improve the likelihood of success in promoting both environmental sustainability and livelihood security.

**TENURE: A CRITICAL FACTOR**

*Who Owns the World’s Forests?* is the catchy title of a study by White and Martin (2002a) that attempts to assemble official tenure data for most of the world’s top forested countries. The authors distinguish between community lands, which are legally private property, from those considered to belong to the state, although in the latter case there is often a vast difference between official ownership and effective authority. In Africa and Asia ‘governments own most forestland, but often appear to have authority over very little of it’ (White and Martin, 2002a, p4).

Although only seven countries from Asia and the Pacific are represented, the variation among them is striking. It is clear that government landownership is by far the most dominant scenario, but this varies from around 100 per cent (Myanmar and Indonesia) to 3 per cent (Papua New Guinea). India stands out in the amount of public land reserved for community and indigenous groups, but a considerable area of private land is also in the hands of such groups in China, Australia and Papua New Guinea. The national governments usually prefer to lease forested land to large firms in concessions; that used to be true in the Philippines and is still the case in parts of Indonesia, Malaysia, Cambodia and Papua New Guinea. The current state of the forests as a result of concession activities is one reason for the shift to community forestry. Although the Philippines do not feature in White and Martin’s figures, the legal recognition in 1997 of ancestral domain rights over more than a third of the former public forest represents a considerable triumph for the indigenous tribal communities, despite administrative and other problems in implementation. Traditional ownership in Papua New Guinea, on the other hand, is not without its difficulties, as unscrupulous firms have taken advantage of people’s limited negotiating experience and promised benefits are seldom realized (see Box 3.1). Their plight is similar to that of their counterparts in Indonesian Papua, who have been recognized as traditional owners and offered logging rights
up to 10,000 ha if they apply for a licence from the Forestry Department and set up a cooperative (called kopermas). They are approached by Malaysian logging companies, who pay them ridiculously small sums for the rights to establish the kopermas and log the forests (Alhamid, 2004; EIA/Telapak, 2005).

In their concluding section, White and Martin (2002a, p22) suggest ‘the recognition of indigenous rights and community ownership – and the broader rationalization of public forest tenure – present an historic opportunity for countries to dramatically improve the livelihoods of millions of forest inhabitants’. A companion report lists the elements of tenure security. Most important is effective community institutions (including clearcut and enforced rules and resource boundaries) (White and Martin, 2002b, p5). Legal activism for community claims, accompanied by community mapping of resources, public education and lobbying, are important strategies. It is also vital to make the best use of ‘critical turning points . . . during a transition to democracy’ (White and Martin, 2002b, p14).

Such a turning point occurred most remarkably in Indonesia in 1998, with the fall of the Suharto regime. Although the subsequent rapid decentralization and changes to the Forest Law have provided opportunities to forest communities, there has also been frustration with the protracted negotiations necessary to change the mindset of government agencies.

**Community-based Tenure in Indonesia**

In 1993, the Indonesian Tropical Institute (LATIN) established the Community Forestry Consortium, which worked to document indigenous management systems in several provinces. Together with the World Agroforestry Centre (ICRAF) and the French research group ORSTOM, they assembled data concerning the indigenous agroforests at Krui (Lampung), based on the collection of damar resin. These dipterocarp forests (*Shorea javanica*) had been planted by generations of local Pesisir people and were managed by the marga, or communal group (Michon et al., 2000). From 1991 the Krui area had been declared state forest land and had come under threat from oil palm companies and logging interests. Biodiversity assessments, silvicultural studies and participatory mapping were assembled as evidence of the Krui system’s environmental and social benefits. The Minister of Forestry was persuaded to consider this area a special case, and in January 1998 he declared Krui to be a KDTI (*kawasan dengan tujuan istimewa*, meaning ‘special use zone’) of 29,000 ha. For the first time, local residents were permitted to harvest both timber and non-timber forest products from a state forest, as well as being granted unconditional management rights through a community governing structure. The ICRAF team drew on Philippine experience with certification of ancestral domain to serve as a blueprint for this measure.

It was hoped that this legislation would persuade the Ministry of Forestry to recognize the benefits from community-managed forests and move to a
broader implementation of such policies, especially when, a few months later, the Suharto regime fell and citizens expected wide-ranging democratization. However, in this new period of ‘reformation’ the KDTI was perceived as too limited: it would have left the farmers dependent on the Ministry of Forestry. A follow-up study found that most farmers had never heard of the legislation yet felt reasonably secure in their tenure. The KDTI was neither implemented nor enforced, although it is now considered ‘the most community-friendly tenure so far offered by the Ministry of Forestry’ (Colchester et al, 2005, p19). Krui continues to be singled out as the one example of successful community forestry in Indonesia (Casson, 2005).

Following the fall of Suharto, the new Indonesian Government rapidly pushed through decentralization laws (Numbers 22 and 25 of 1999) and a revised forestry law (Number 41 of 1999). A 1998 decree granting local cooperatives 35-year use rights in production, protection and conservation forests was changed in 2001, allowing the establishment of leases and permits over community forests (hutan kemasyarakatan, or HKm), but only for a maximum of 25 years and outside nature reserves. One area where a number of HKm permits have been granted, largely as a result of campaigning by ICRAF, is in the coffee lands of Sumberjaya, also in Lampung. Scientific studies have shown that multistrata coffee, grown in the shade under other planted trees, is reasonably protective of the hilly environment and the watershed of the Way Besai River (Verbist et al, 2004). Farmers must agree to guard remaining natural forest and adopt conservation techniques to minimize erosion. The farmers of Sumberjaya consider themselves better off once the system is in operation; the level of forest fires also decreases markedly: ‘It is perceived land security, not actual title (or permit) which encourages farmer confidence and investment’ (Colchester et al, 2005, p26; Suyanto et al, 2005, p1).

Another example of the slow evolution of community management has been in the recognition of indigenous rights in the large Kayan Mentarang National Park in East Kalimantan. This area of 1.4m ha is home to 16,000 Dayak people, whose lives and management of natural resources are regulated by adat, or customary law. In 1980 the area was originally proclaimed a nature reserve, in which no human activities were permitted. The Worldwide Fund for Nature (WWF) and the Indonesian Institute of Sciences (LIPI) carried out studies (including community mapping) from 1991 to 1997 to demonstrate community claims to the land and the forests. On the basis of those studies, the area became a national park, in which community activities are allowed. In their continuing struggle for recognition, the communities formed an inter-adat institution, the Alliance of the Indigenous Peoples of Kayan Mentarang National Park (FoMMA). With the WWF they lobbied the government to create a new model of collaborative national park management, and in this they achieved a compromise. A policy board, set up in 2002 with representatives from the central, provincial and district governments and the local communities, makes recommendations to the Minister of Forestry, though it does not have full management authority. Its challenge is to secure the
economic future of the communities through rewards paid for environmental services (Eghenter et al, 2003).

The new forestry law permitted district governments to issue small-scale (100ha) timber concessions to firms that negotiated harvesting agreements with communities. This provided space for communities in provinces such as East Kalimantan to develop bargaining skills and ‘self-enforce’ their rights to secure profits from the forests (Engel and Palmer, 2006; Palmer and Engel, 2006). As Palmer and Engel demonstrate in a large study covering 65 communities, these activities were empowering: ‘While the Ministry of Forestry still has formal ownership and land title to all of Indonesia’s forests, this finding suggests that people already feel that they own the forest regardless’ (Palmer and Engel, 2006, p28). The concessions allowed villagers to benefit for the first time from the proceeds of logging, though at times they also generated social conflict, both within and between communities, and caused damage to the forests. Other researchers have been less sanguine about the cash benefits obtained from the small concessions, at least in Malinau District (see Chapter 10). The benefits are described as being ‘short-term, less than their potential and captured by the elite’ (Wollenberg et al, 2006, p8), and the forests as degraded and fragmented. As many of these small concessions fell within larger concession boundaries, they were banned by the central forestry department in 2002, though they were still in operation in some districts until 2004.

The small gains through community forestry and the KDTI encouraged activists to push for further change. ICRAF researchers engaged in detailed analyses of Indonesia’s ‘forest zone’ found that 25 per cent of it was used for agriculture or remained as grassland. They recommended that it be declassified from the ‘forest zone’ and titled. Such a process is seen as a critical first step toward recognition of indigenous and other community tenure.

Leasing forested lands to communities (like the existing community forests) would shield them from other claimants but provide rules for forest management. Eventually some leases could be converted to community landownership, using the Philippine model. The paper ends with a statement of national responsibility: ‘While international assistance could be useful, in the end, progress will depend upon Indonesian leadership and political will’ (Contreras-Hermosilla and Fay, 2005).

**Community-based Tenure in Other Countries**

Malaysia presents a different scenario in legal terms, though the results are similar. The category ‘native customary land’ (NCL), instituted in Peninsular Malaysia in colonial times to protect indigenous Malay land from the rubber industry, was later extended to the Borneo states of Sabah and Sarawak, where those who could prove their indigenous status could register their land. Much of the land so designated was still forested, and on it local people could continue traditional
activities. However, under modern pressures for ‘development’, these lands have increasingly been sought for alternative uses by outsiders, for both logging and plantation crops. In Sabah, plantation and other interests may secure country leases and temporary occupation licences for unregistered NCL. Even when people apply to register their lands, applications may take decades to process, especially where claims are overlapping. Frustrated locals sometimes invite logging companies to secure a temporary occupation licence and remove timber in exchange for part of the proceeds. Vaz (2006), involved in a partnership between a community and a conservation NGO in a remote upland area of Sabah, noted that it was only through the rapid creation of a communal ‘native reserve’ that a large area of excellent forest could be secured from the imminent threat of logging and its resources safeguarded for domestic access and possible tourism development. Negotiations were difficult because powerful interests within the village were more focused on obtaining profits from logging. The villagers were able to retain their communal forests with the collaboration of sympathetic government officers as well as WWF Malaysia, though the need to improve livelihoods remained unresolved.

Building on village traditions that had survived the disturbances of the previous 20 years, community forestry in Cambodia was started by NGOs in the early 1990s and grew rapidly. It is, however, still largely dependent on foreign donors and NGOs, and the degraded forests generate little income for participants (Sunderlin, 2006). The Cambodian government in 2004 promulgated a decree on community forest management that should have provided some security of tenure. Many villagers had previously lost land to logging concessions in the flurry of ‘anarchic logging’ during the 1990s. Analogous to the Indonesian situation, their rights are currently threatened by expansion of planted tree crops, in this case large-scale rubber plantations (NGO Forum, 2002 and 2004).

One Southeast Asian state that still seems to be going against the trend towards establishing community forests is Thailand, even though the past 14 years has seen various drafts of a community forests bill. Upland dwellers found their land declared ‘conservation forest’ as a result of the Royal Forest Department’s policy to place 25 per cent of the country under conservation. In northern Thailand the conservation zone covers 48 per cent of the area, reaching 80 per cent in some provinces (Zurcher, 2005). The livelihood insecurity of upland dwellers, many of whom belong to ethnic minorities, is compounded by persistent threats of relocation to lowland areas. Activist groups have taken up the farmers’ cause for legal recognition of community forest rights, mounting vigorous arguments to counter urban environmentalists, who are largely blamed for the failure of the community forests bill in the Thai Parliament. Walker (2004) has drawn attention to the widespread commercialization of upland agriculture, which does not match the image of the farmer as a forest dweller leading a largely subsistence lifestyle. What he terms the ‘arborealization’ of agriculture by activist groups has led to the stereotype of farmer-forager practising shifting cultivation and collecting forest products. The bill would not permit farming in community forests, so the
farmers could be worse off. A better strategy would be to acknowledge the role of the market in upland farming and to remove commercially farmed lands from the conserved forest. As with the Indonesia case, revision of land management categories is urgently required.

**Tenure and forest fire**

Both fire incidence and its suppression are often linked to the tenure status of local communities. For example, in the series of eight studies conducted across Sumatra and Kalimantan (Indonesia) in 1999 and 2000 by a joint team from CIFOR and ICRAF, by far the most significant cause of fire was burning related to land tenure and land-use conflict and competition. People would burn to establish property claims or drive away competing occupants (Dennis et al, 2005). As already noted, improved tenure status in Sumberjaya (Sumatra) reduced fire incidence (Suyanto et al, 2005). Fire suppression is also affected by tenure: if people perceive that the land belongs to others (including the government), they have little incentive to put fires out. Although traditional methods of fire control were once widely practised, for example in northern Thailand and northeastern India, the intrusion of government authority eroded such systems, as people felt the responsibility was no longer theirs (Pearmsak Makarabhirom et al, 2002; Darlong, 2002). Allocating forests to communities has been recommended as the most effective means to control fire in Vietnam (Ha Thi Linh, 2002).

**Tenure and illegal logging**

In Indonesia, processing capacity and industrial demand for wood products far outweigh the supplies of timber from legal sources, such as concessions, which means that much internal trade is technically illegal. This is especially true in provinces such as Riau, where large pulp and paper companies continue to obtain fibre mainly from natural forests (Potter and Badcock, 2000; Barr, 2001). Illegal logging, though not a new phenomenon, has increased greatly over the past decade and has many manifestations (Casson and Obidzinski, 2002; FAO, 2005b; Obidzinski, 2005). Institutional attempts to control it are being put in place at all levels, from local efforts to exclude outsiders from community forests, to government policing, aided by international organizations such as Forest Law Enforcement and Governance, and global private initiatives to certify ‘legally’ sourced timbers. With many opportunities for large profits still available to government officers, together with smaller amounts for local, national and regional entrepreneurs, this question is complex. One must examine the political economy of illegal forestry activities at different scales. As Dudley (2002, p168) points out, a villager’s view of illegal logging is affected by community dissatisfaction with government forest policy and a perception that access to forest resources is
being threatened. Many villagers, whose rights in their traditional forests are not recognized, depend on ‘illegal’ logging to survive and may be adversely affected by forest law enforcement (Colchester, 2006).

In Vietnam the state largely blames local people’s illegal logging for its recent high deforestation rates. Vietnam has a partial logging ban, with small quotas being set each year for legal felling; the high demand for timber and wood products, as in Indonesia, is met by ‘illegal’ logging. The state had control over most forest areas and, until 2004, would not allow stocked forests to be managed by communities. After the land law was revised in 1993, small areas of mostly bare land were given to households (20-year leases for farmlands and 50-year forest leases). The law was changed in October 2004 to allow for allocation of forestland to communities (Tan Quang Nguyen, Chapter 12 of this volume), though much larger areas of forest still remained under state forest enterprises. These have been logged intensively, rapidly reducing the standing volume of timber. The enormous profits from the wood trade have led to corruption at all levels. Since many households still have no forest land, they justify their activities through a sense of entitlement and social justice (McElwee, 2004, p112). As in Indonesia, the problem is related to questions of tenure and poverty as well as trade.

**EQUITY ISSUES: GENDER AND CASTE**

In the literature on community forest management, there is generally some mention of equity, but few studies directly address the important questions of gender, caste and class. The most important research on this topic comes from South Asia, especially India and Nepal.

Decentralization, though likely to expand the scope of citizens’ participation in governance, will not by itself ensure that women and men are represented on an equal basis. Where decentralization confers power on ‘traditional’ authorities, such as tribal elders, it may be inimical to women’s interests (Molyneux and Razavi, 2005). Referring to Indonesia, Siahaan (2002) argues that decentralization does not work in a gender-neutral framework: local governments face structural and cultural obstacles to realizing gender equity. The revival of local patriarchal values and institutional constraints pose great challenges to women, who have higher rates of illiteracy and unemployment than men. Increasing the cost-effectiveness of participatory development planning and improving women’s self confidence means involving women.

What Agarwal (2001) has termed ‘participatory exclusions’ in her studies on India and Nepal is equally a problem in mainland Southeast Asia (Dupar and Badenoch, 2002), the Philippines (Edmunds and Wollenberg, 2003) and Indonesia (Siahaan, 2002). Agarwal first presents a typology of participation, from nominal group membership through passive participation to active and finally empowering participation that influences a group’s decisions. As she then argues, most women
are not even participating at the nominal level and have no membership in community forest groups. India’s Joint Forest Management committees are far from democratic: women are either absent from the discussions or have no influence on decisions, despite being responsible for everyday forest protection activities and highly dependent on collection of forest resources, such as firewood, grass and certain foods. When a forest is closed to allow regeneration, they may be forced to travel long distances to find new sources. Sarin et al (1998) present case studies of the severe impact of forest closures on very poor women, especially fuelwood headloaders. Moreover, women often know more than men about particular tree species and other aspects of the local environment. Women's exclusion from decision-making has implications for equity, efficiency and forest planning, and to gain entry, women must learn to bargain with the state, the community and the family (Agarwal, 2001). Under pressure from external agents, the Indian state has more recently introduced rules for minimal female participation (at least 50 per cent representation of women in the Joint Forest Management general body and 33 per cent in the executive).

Though echoing Agarwal’s findings in her own research in Orissa, Arora-Jonsson concluded that women preferred to work through their own groups when it came to local development and resource management, since they had more space to exercise agency in those contexts. Women’s savings and credit groups enabled them to carry out collective activities, such as planting trees, tending backyard plantations or cleaning village commons. Given the deeply entrenched nature of patriarchy in India, she questioned whether women in fact wanted to join formal associations or committees (Arora-Jonsson, 2005, p28, and Chapter 4 of this volume). Women often took on activist roles, supporting men’s organizations with marches and blockades, at times challenging both the Forestry Department and illegal loggers. However, talk of a wider network, in which issues such as dowry payments and domestic violence might be raised, made the men uneasy. Plans for a federation of women’s groups were eventually stopped by withdrawal of funding: ‘the dreams of a federation are still distant, perhaps because it is still too threatening’ (Arora-Jonsson, 2005, p105).

A study by Nightingale (2005) provides a nuanced analysis of the interrelationships between gender, caste, work and the forest in a forest user group in northwestern Nepal. Nightingale focuses on caste and the differentiation of knowledge, with the district forest office being the repository of ‘scientific forest management’, which is regarded as superior and transmitted to the village through the high caste, literate male elite. The adoption of such practices is used both to gain favour with the district office and to assert authority within the group. However, such forest practices potentially undermine three objectives of community forestry: a pro-poor orientation, promotion of democratic institutions and maintenance of ecosystem health (Nightingale, 2005, p584). Although the literate, high-caste men claimed the right to control the forest user group and manage the forest, it was the illiterate, low-caste men and illiterate women of all castes who did most
of the forest work. Women were able to challenge the elite through their practical understanding of the forest. They prevented the men from trying to introduce permits for collection of firewood and leaf litter, resources harvested almost daily. Although they had important contributions to make, however, they subordinated their knowledge to that of the elite. The management techniques promoted were for production of timber, not the multi-species ‘subsistence’ harvesting needed by the village. As noted in the discussion on India, scientific forestry cannot produce resources needed for daily survival, yet it is being promoted in community forests (see Chapter 9).

In the examples from both Arora-Jonsson and Nightingale, marginalized groups are still able to find ways of asserting their own agency and fighting back against the restrictions of a social system that is slow to change. Dupar and Badenoch (2002) suggested that targeted development interventions combining requirements for participation of marginalized groups with informal education to build confidence were likely to be most successful. In Nepal, some women have taken over management responsibility of forest user groups from men: Poffenberger (2000) indicated that 30 per cent were run by women, including some of the most active.16 A recent overview suggests that ‘equity and gender issues are now being emphasized in donor-funded projects and the training of [district forest office] staff’ (Katila, 2005).

**Conclusions**

Hierarchical, command-and-control approaches to forest governance, in which central governments developed policy and their forestry departments implemented it (called ‘old governance’), have given way to more democratic arrangements emphasizing collaboration and interdependence between the state and civil society (‘new governance’). New governance usually includes some measure of decentralization and devolution (Gluck et al, 2005). It also needs to coordinate the involvement of a variety of private and public actors with different objectives – the local community, nongovernmental organizations (both local and international), international research institutes, private firms, traders and others in national and international marketing chains, and members of local, regional and national government agencies. Such groups constitute a ‘policy network’ with a great diversity of values, but flexibility and trust are of high importance, the aim being ‘to steer multiple actors towards public goals such as sustainable forest management’ (Gluck et al, 2005, p54). Moving across scale from community to local and central government and back and identifying appropriate roles for each level become easier when interested intermediaries are in place to build capacity and smooth the path.

To what extent do these ideas fit the reality of the situation in the Asia-Pacific forests? It is worth remembering that before the old governance regimes developed,
with the spread of colonialism and the concepts of scientific forestry, earlier traditional forms of governance held sway, under which local communities managed their forests according to their own rules. Both forms are still evident in parts of the region today, and traditional forms are still powerful in areas remote from central government influence. Decentralization can have the effect of destabilizing such systems but not offering coherent alternatives, sometimes replicating remnants of the old command-and-control systems (still quite prominent in India, Nepal and Myanmar), at other times producing only anarchy and corruption by local elites. Cambodia, Indonesia and Vietnam have certainly experienced the latter outcome, which appears more prominent in states with high demand for forest products and easy opportunities for illegal logging and smuggling beyond national borders.

The role of intermediaries in policy networks is highly important, especially in the early period of decentralization and devolution. NGOs and international research groups have been the catalyst in securing more community-friendly tenure arrangements in Indonesia, simultaneously reducing the incidence of forest fire. Though such organizations have their own agendas, they are nonetheless needed until local institutions are strong enough to negotiate with all stakeholders on an equal basis. The urgent need for strong and secure tenure is especially vital where corporate interests can override traditional arrangements.

Equity issues within local communities are often overlooked in the establishment of local institutions, which may quickly be dominated by male elites. As detailed studies indicate, women may initially have to seek 'underground' ways of influencing decisions, though legislation mandating representative membership would at least ensure adequate flows of information to those most affected.

Although the kinds of decentralization and devolution identified in this overview remain inadequate, messy, slow in implementation and often disappointing to their participants, nevertheless there are signs of improvement in some areas. The impetus and the zeal certainly exist for better systems of forest management with real devolution of power to forest communities. The people will be satisfied with nothing less.

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Notes

1 The countries under study include those in the FAO categories of East Asia, South and Southeast Asia and Oceania. West and Central Asia, which collectively have a small forest area, are omitted.

2 Using figures from Bisnis Indonesia of illegal timber exports from Papua at 600,000m$^3$/month in 2002, Alhamid calculated that the income from that source of 7.2 trillion rupiah per year was five times greater than the provincial budget and three times the budget of the Indonesian military (Alhamid, 2004, p273).

3 From an extension of traditional tumpangsari systems in Java (where food crops are planted among regenerating teak trees for the first two years), to village wood lots planted in India to take pressure off natural forests and family based agroforest homelots in the Philippines. In Thailand the forest village programme was adopted in 1978, the same year as Nepal’s Forest Act was amended to permit the handover of degraded forest land to local Panchayats.

4 That ‘narrative’ of deforestation ignored villagers’ traditional contribution to forest maintenance (Arora-Jonssen, 2005).

5 Emphasis in original.
6 Published as T. Enters, P. B. Durst and M. Victor (eds) Decentralization and Devolution of Forest Management in Asia and the Pacific, RECOFTC Report No 18 and RAP Publication 2000/1, Bangkok.

7 Emphasis added.


9 Fujita and Kaisone’s study on Laos (Chapter 8 of this volume) uses a similar framework.

10 Under the definition provided by Fisher et al, this process would also be ‘decentralization without devolution’.

11 Data are available for 24 of the top 30 forested countries, representing 93 per cent of the world’s natural forests.

12 Initially, farmers receive a six-year provisional permit.

13 It is interesting that some of these permits are in protected forest, from which the Indonesian government had previously evicted coffee growers.

14 In 1985 the target of permanent forest cover was set at 40 per cent, of which 15 per cent was conservation forest and 25 per cent production forest. After floods in the south in 1989, which led to a logging ban, those figures were reversed. In 1992 the agency subdivided the forest reserves for agricultural, economic and conservation purposes (Zurcher, 2005).

15 The last rejection in the Senate was in 2002.

16 The Nepal–Australia Forestry Project, which operated in two districts over 25 years, had shifted its focus to expanding women’s literacy in its final years of operation in order to support women’s involvement in the forest user groups.