Forest sector governance refers to the ways in which officials and institutions (both formal and informal) acquire and exercise authority in the management of the resources of the sector to sustain and improve the welfare and quality of life for those whose livelihoods depend on the sector. Good governance is fundamental to achieving positive and sustained development outcomes in the sector, including efficiency of resource management, increased contribution to economic growth and to environmental services, and equitable distribution of benefits.

Good forest governance is characterized by predictable, open, and informed policy making based on transparent processes, a bureaucracy imbued with a professional ethos, an executive arm of government accountable for its actions, and a strong civil society participating in decisions related to sector management and in other public affairs—and all behaving under the rule of law. Thus, key features of good governance include adherence to the rule of law, transparency and low levels of corruption, inputs of all stakeholders in decision making, accountability of all officials, low regulatory burden, and political stability (see also World Bank 2000).

The rationale for the World Bank to engage in improving forest governance in client countries is twofold. On one hand, broader governance reform processes, such as decentralization and devolution, and public sector reforms present direct opportunities to which the forest sector needs to respond. On the other hand, illegal logging, corruption, and other forest sector crimes, such as arson, poaching, land encroachment, trade in endangered fauna and flora, and evasion of legal taxes and royalties, indicate weaknesses in forest sector governance that need to be addressed. In developing countries, illegal logging in public lands alone causes estimated losses in assets and revenue in excess of US$10 billion annually, more than six times the total official development assistance dedicated to the sustainable management of forests. In addition, about US$5 billion per year is estimated to be lost to uncollected taxes and royalties on legally sanctioned timber harvests, as a result of corruption (World Bank 2004). The global magnitude of the problem as estimated by its direct monetary impacts is staggering.

The associated physical, environmental, and social impacts resulting from poor governance are even more extensive and serious. They are characterized by the following:

- Violation of protected area boundaries threatens the conservation of forest resources and biodiversity.
- More than 350 million rural poor rely heavily on forests for their livelihoods, while more than 60 million depend almost exclusively on them for subsistence. Strong forest governance (including vesting tenurial rights with such communities) is essential for protecting their livelihoods and improving their well-being, and for protecting them from the consequences of illegal logging and unauthorized removals from the forest (World Bank 2006).
- Legitimate forest enterprises are subjected to unfair competition through price undercutting and discouraged from making socially and environmentally responsible investments in the sector.
Forests are a global public good, and their degradation imposes global costs, such as climate change, environmental degradation, and species loss. Improving governance will help contain the negative environmental, economic, and social consequences at the global level.

There are less visible—though highly insidious—costs resulting from the erosion of institutions, the spread of corruption across the economy, and lower growth. These spillover effects are the most far-reaching and significant aspects of the problem of poor sectoral governance. The problem originates in the forest sector but the impacts are transmitted through the economy, weakening governance and the rule of law, impeding investments in legitimate commerce, and undermining the overall governance structure.

Some of the complexities of these relationships and the magnitude of the task to improve forest governance are captured in figure 5.1.

The box in the center of the figure lists “entry points,” or opportunities within the forest sector itself, directed toward reducing the means, motives, and opportunities for crimes and misdemeanors in the forest sector (see note 5.5, Addressing Illegal Logging and Forest Crime). The surrounding boxes indicate the “embedded” nature of the problem in the economy and of the need for other sectors, institutions, and actors to support and complement the within-sector efforts at improving governance and law enforcement. They elaborate on the roles of the overall political structure; of national and international checks and balances; and the contributions of civil society, media, the private sector, and local communities.

Figure 5.1 Identifying “Entry Points” and a Sustainable Reform Process to Improve Forest Governance

- **Political accountability**
  - Political competition, broad-based political parties
  - Transparency and regulation of party financing
  - Asset declaration by legislators and parliamentarians
  - Disclosure of parliamentary votes

- **Checks and balances**
  - Independent, effective judiciary
  - Independent oversight institutions
  - Global initiatives: UN, OECD
  - Convention, anti-money laundering and asset forfeiture

- **Building blocks for effective forest sector management**
  - Adequate legislative frameworks and law enforcement capacity
  - Robust institutions with a service-delivery orientation
  - Competent leadership based on meritocracy and technical skills
  - Institutional oversight including an independent forests monitor
  - Transparent forest fiscal systems based on easy-to-track revenue flows
  - Sound sector policy conducive to competitive domestic markets and international trade

- **Civil society and media**
  - Freedom of press and information
  - Civil society watchdogs
  - Participatory country diagnostic surveys
  - Report cards, client surveys

- **Private sector interface**
  - Streamlined regulation
  - Public-private partnerships
  - Corporate social responsibility

- **Ownership and decentralization**
  - Property and access rights
  - Decentralization with accountability
  - Community driven development
  - Oversight by user groups and citizens organizations
  - Beneficiary participation in projects
Improving forest governance and legislative compliance has been the focus of international attention for a number of years. For maximum effectiveness, the World Bank’s efforts in this area need to be closely aligned with those of other partners, both in client countries and at the regional and international levels. This is especially important because effective action in this area requires collaboration among governments in producer and consumer countries, private sector operators, and civil society. Since 2001, regional Forest Law Enforcement and Governance (FLEG) ministerial conferences have been conducted in East Asia (2001), Africa (2003), and Europe and Northern Asia (2005). The resulting ministerial declarations are important tools that can be used in the dialogue with client governments, as well as in building alliances with the private sector and civil society actors. The World Bank has had a key role in facilitating these conferences and supporting their follow-up. Several multilateral, bilateral, civil society, and private sector initiatives have also originated from these efforts, which can provide traction for the World Bank’s work in this area.

An independent and especially relevant initiative is the European Union (EU) Regulation and Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT). An essential part of the EU FLEGT is the negotiation of Voluntary Partnership Agreements (VPAs) between the EU and interested timber-producing countries. VPAs aim to develop an agreement between producing and importing EU countries that only timber originating legally will be exported and allowed to be imported. If successful, the implementation of the VPAs will result in increasing demand for country-level financing in such areas as strengthening and reforming laws, regulations, and institutions in the forest sector; strengthening the capacity of indigenous and rural communities to manage forests sustainably; independent certification of sustainable forest management; implementation of timber tracking systems; forest products and trade-related information and statistics; and monitoring of forest cover changes to detect illegal activities. This will provide both the need and opportunities for improved collaboration between bilateral and multilateral financing institutions, including the World Bank.

The FLEG initiative enables the World Bank’s project managers and task team leaders to incorporate FLEG into their projects using the political momentum and stakeholder coalitions it creates.

**PAST ACTIVITIES**

A review by the World Bank’s Operations Evaluation Department of the performance of the World Bank’s 1991 Forests Strategy (Lele et al. 2000) pointed to the failure to address governance issues as a serious gap in the World Bank’s work in forestry and recommended that the World Bank help reduce illegal logging by actively promoting improved governance and enforcement of laws and regulations because poor laws and legislation and poor enforcement are fundamental failings in the sector. As a result, the World Bank placed forest governance and illegal logging high on the agenda in its 2002 Forests Strategy. Indeed, the World Bank committed itself to collaborate with borrower countries and partners to reduce by half the estimated annual financial losses from illegal logging by 2013. Likewise, the World Bank’s 2001 environment strategy emphasizes the comparative advantage of the World Bank in supporting better governance, increased transparency, access to environmental information, and public participation in client countries (World Bank 2001).

The earliest explicit attention to forest crimes in Bank project design was in the Philippines in 1983 in the context of the Multisectoral Forest Protection Committees. These issues started to appear in a more systematic way in project design in the 1990s. Adjustment operations in Papua New Guinea in the 1990s supported the introduction of private sector administration of log export taxation. Work in Cambodia in the late 1990s involved the first use by the World Bank of forest law enforcement professionals in policy analysis and project design. Experiments in third-party independent monitoring of forest crime reporting, support for case tracking systems, and recommendations for timber theft prevention planning were among the innovations. In Africa, similar work, including independent forest monitors, was developed in Cameroon, and timber and postconflict issues are now being addressed in Liberia (see box 5.7).

**Country Assistance Strategies.** To examine the extent to which FLEG and related issues are taken into account in Bank Country Assistance Strategies (CASs) today, a review of the most recent CASs for 18 forest-rich countries was carried out in 2006 (World Bank 2006). These 18 countries represent 75 percent of all forests in developing countries. Of these 18 CASs, 17 mention forestry, with 11 containing explicit forestry components. Nine CASs mention FLEG issues specifically, with at least seven outlining FLEG activities (both lending and nonlending) to be undertaken. Five CASs link deforestation to governance issues, and six describe links between poverty and deforestation.

**Lending Operations.** A review in 2006 (World Bank 2006) found there are currently more than 50 active forestry projects in the World Bank’s lending portfolio, with a total cost of
US$2.7 billion and total Bank commitment of US$1.6 billion. A recent assessment of these projects showed that some 35 projects have clearly identified FLEG components, totaling an estimated US$310.8 million. Thus, FLEG activities account for 11 percent of total project costs across all 51 forestry projects and 22 percent of total project costs for the 35 projects with forest governance components (also see table 5.1).

With regard to specific FLEG activities, some of the areas of forest governance addressed in World Bank projects include the following (see box 5.1 for country-specific examples):

- development of national-level forestry policies and management plans;
- capacity development for public agencies to better address forest crimes;
- support for public awareness activities;
- support for natural resource inventories, transparency in concession allocation, forest certification, and chain-of-custody verification; and
- development of forest law enforcement reporting and monitoring systems and provision of equipment and capacity development for staff responsible for management of protected areas.

Table 5.1  FLEG Components in the World Bank Forestry Portfolio, by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Total number of projects</th>
<th>Number of FLEG projects</th>
<th>Total cost (US$ million)</th>
<th>Cost as % of total forestry portfolio</th>
<th>Bank commitment (US$ million)</th>
<th>FLEG amount (US$ million)</th>
<th>FLEG as % of total forestry portfolio</th>
<th>FLEG as % of total FLEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAP</td>
<td>8</td>
<td>7</td>
<td>772.9</td>
<td>29</td>
<td>431.1</td>
<td>40.3</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>ECA</td>
<td>11</td>
<td>9</td>
<td>396.5</td>
<td>15</td>
<td>265.6</td>
<td>32.7</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>LAC</td>
<td>19</td>
<td>13</td>
<td>691.9</td>
<td>26</td>
<td>328.8</td>
<td>123.1</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>MENA</td>
<td>3</td>
<td>0</td>
<td>203.5</td>
<td>8</td>
<td>139.5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SA</td>
<td>1</td>
<td>1</td>
<td>127.1</td>
<td>5</td>
<td>108.2</td>
<td>5.8</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>SSA</td>
<td>9</td>
<td>5</td>
<td>515.1</td>
<td>19</td>
<td>289.7</td>
<td>108.9</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>35</td>
<td>2,707.0</td>
<td>102</td>
<td>1,562.9</td>
<td>310.8</td>
<td>57</td>
<td>101</td>
</tr>
</tbody>
</table>


Note: EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.

Box 5.1  Examples of Bank Support for Prevention and Detection Activities in Project Lending

Examples of FLEG prevention activities in the World Bank’s portfolio:

- Legal and regulatory reform in forest sector (Argentina, Bolivia, Bosnia and Herzegovina, Croatia, Georgia, Madagascar, Mexico, Romania)
- Improving revenue collection and concession systems (Cambodia, Republic of Congo, Georgia, Ghana, the Russian Federation, Tanzania)
- National-level forest management plans and protected-area plans (Bolivia, Cambodia, Ghana)
- Demarcation of protected areas (Argentina, Brazil, Honduras, Ghana, the Lao Peoples’ Democratic Republic [Lao PDR], Uganda, Vietnam)
- Formalization of land tenure rights (Honduras, Vietnam)
- Public awareness activities (Cambodia, Romania)

Examples of FLEG detection activities in the World Bank’s portfolio:

- Forest management information systems (Bosnia and Herzegovina, Georgia, Ghana, India, Lao PDR, Romania, Russia)
- Certification systems (Armenia, Mexico, Russia)
- Monitoring in the field (Peru, Uganda)
- Guard houses, field inspection units, equipment for patrols (Bosnia and Herzegovina, Ecuador, Georgia, Lao PDR, Mexico)
tant part of the World Bank’s contribution to development is the analytical and advisory activities\textsuperscript{3} carried out for client countries. These activities provide a foundation for defining strategic priorities and informing policy dialogue and decisions on projects and programs and comprise economic and sector work, nonlending technical assistance, and knowledge management, as well as training and research services.

The World Bank also has prepared country-level forest sector reviews in several countries with a focus on FLEG. Furthermore, as part of its analytical and advisory work and as an integral part of its strategic approach to forest governance, the World Bank has actively supported international and regional initiatives on forest governance (see box 5.2), including the three regional ministerial FLEG conferences. At the country level, the World Bank has supported the development of national-level action plans related to controlling illegal logging and improving forest sector transparency for Albania, Armenia, Bosnia and Herzegovina, Indonesia, and Russia. In some cases, World Bank work related to investments in other sectors also involves issues of illegal logging and forest governance.

**KEY ISSUES**

Finding ways to improve forest governance is a challenging task. In addition, poor governance in the sector is often symptomatic of poor governance in the overall economy, compounding the problem. For example, illegal money generated from forest crimes often fuels “slush funds” for corruption in other sectors, including campaign financing, speculation, gambling, and human and drug trafficking, all of which have deep negative impacts on the economy at large. This access to illegal money also creates powerful vested interests, both within and outside the sector, which tend to benefit from the status quo and therefore strongly oppose any reforms.

Approaches to addressing forest governance and law enforcement must deal with, among other things, issues connected to land tenure arrangements, access rights (see note 1.4, [Box 5.2 Finding Synergies Between the World Bank Group’s Efforts in FLEG and Its Broader Governance Reforms for Greater Impact](#)), and corporate social responsibility and social and environmental issues in the operations of the International Finance Corporation (IFC) (for example, investment safeguard policies) is extremely relevant to FLEG issues (see note 3.2, Forest Certification Systems).

The forestry work of the World Bank Group needs to be more consciously informed by and aligned with these initiatives. The expertise accumulated in these specialized fields is only now being brought to bear on the problems of forestry. Where it has been applied, for example, in anti-money laundering, it is clear that there is enormous potential to address problems in the sector. There are also potential advantages for these specialized initiatives to work with forestry because this can provide an important sectoral entry point on which to ground the specialized efforts.

Joint analytic work needs to be strengthened across the World Bank’s organizational boundaries, specialists from other areas need to be familiarized with the special circumstances of forestry, and understanding among external stakeholders of the relevance of these tools needs to be improved. Transaction costs involved in working across sectoral lines can be significant and internal incentives need to be aligned to encourage cross-sectoral collaboration.

**Box 5.2 Finding Synergies Between the World Bank Group’s Efforts in FLEG and Its Broader Governance Reforms for Greater Impact**

The forestry portfolio is nested within the World Bank’s overall approach to governance and anticorruption and is consistent with a wide range of governance work being led by other sectors in the World Bank.

Some of the more relevant work of other parts of the World Bank Group on governance includes support to Poverty Reduction Strategy Paper processes and the alignment of the World Bank’s CAS with these processes, work on governance diagnostics and integration of governance and anticorruption elements in the CASs, and the design of specific capacity-building programs based on the diagnostic surveys (Poverty Reduction and Economic Management Network and the World Bank Institute). Other relevant areas of the World Bank’s work focus on anti-money laundering and financial investigation, the Extractive Industries Transparency Initiative, Justice for the Poor, and customs modernization. The World Bank’s legal department has carried out important work in developing a benchmark study for assessing the quality of legal and regulatory frameworks. The Department of Institutional Integrity’s investigative approaches to allegations of corruption in Bank-funded projects provide potentially powerful instruments to combat illegal logging and forest crimes. Similarly, some of the work with corporate social responsibility and social and environmental issues in the operations of the International Finance Corporation (IFC) (for example, investment safeguard policies) is extremely relevant to FLEG issues (see note 3.2, Forest Certification Systems).

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Property and Access Rights), overly complex laws and regulations biased against the poor (see note 5.3, “Strengthening Legal Frameworks in the Forest Sector), and transparency and stakeholder participation in decisions directly affecting their livelihoods. However, an increasing trend toward decentralization (both administrative and fiscal), coupled with increased willingness of governments to allow operation of multistakeholder processes, has created unique demands as well as opportunities for better and different forms of governance (see note 5.1, Decentralized Forest Management, and 5.2, Reforming Forest Institutions). These considerations have been complemented by the universal commitment to the Millennium Development Goals dealing especially with issues of equity and the rights of poor and indigenous forest communities. Thus, decentralization and participation are crucial issues that are extensively discussed in this sourcebook (see note 5.1, Decentralized Forest Management).

A forest fiscal system is needed that, in its broadest terms, influences revenue flows in and out of the sector as well as income distribution across various stakeholder groups within the sector. A well-designed and well-functioning fiscal system is an important instrument with which to address sustainable resource utilization and equity and rural development issues, and to minimize the risks of corruption (see note 5.4, Strengthening Fiscal Systems in the Forest Sector).

In addition, combating large-scale criminal activities requires targeted action to directly improve forest law enforcement so that criminals are apprehended and punished. Combating large-scale criminal activities would also include more fundamental changes to improve the broader governance environment in the forest sector and in society at large to help strengthen law enforcement efforts (see note 5.5, Addressing Illegal Logging and Other Forest Crimes).

In many countries, law enforcement capacity and expertise exists in other sectors and needs to be marshaled in new ways to support forest development. In others, specialized capacity needs to be developed within forestry agencies. Exploitation of new enforcement innovations and opportunities, made possible, for example, by the introduction of anti-money-laundering legislation, the adoption of the UN Conventions against Transnational Organized Crime and Corruption, and by other new legal and judicial innovations, will require new skills and capacity.

**FUTURE PRIORITIES AND SCALING-UP ACTIVITIES**

Support decentralization and devolution of forest management responsibilities. Decentralization and devolution based on the principle of subsidiarity, are means to promote more democratic and equitable management of forest resources and increase the contribution of the sector to poverty reduction. Decentralization and devolution processes can create imbalances and unforeseen negative consequences if they are not carefully managed and accompanied by sufficient capacity building, allocation of financial resources, and creation of mechanisms for downward accountability at the decentralized levels. Bureaucratic resistance to change at the central level, as well as powerful vested interests, can often swing the policy pendulum from decentralization and devolution back to re-centralization, reversing progress and resulting in incoherent policies and regulations.

**Protect the rights of and empower indigenous and local communities through governance reform processes.** Specific attention should be given to using governance reform processes to protect the rights of and empower indigenous and local communities. This can prevent unintended and potentially adverse impacts on forest-dependent livelihoods and traditional rights (see also note 1.3, Indigenous Peoples and Forests, and chapter 12, Applying OP 4.10 on Indigenous Peoples).

**Continue to engage in institutional and legal system reforms in the forest sector.** The World Bank, with its engagement in diverse sectors, helps governments tailor forest sector reform processes to the country context and effectively implement them. A model that works for a post-conflict country (for example, Liberia or the Democratic Republic of Congo) may be very different from what is possible in a country in transition from a centralized, one-party governance structure to a democratic model (for example, the experience of the former communist countries of Eastern Europe). (See note 5.2, Reforming Forest Institutions, for discussion on key principles and structures.)

**Assist in enabling and designing fiscal system reforms that are economically and administratively efficient.** Fiscal system reforms that are economically and administratively efficient allow for appropriate rent capture.

As part of this process, the World Bank should assist governments in assessing the appropriateness of structuring forest fiscal systems to achieve secondary objectives, such as equity and sustainable rural development.

**Center FLEG activities at the country level around more effective integration of the work in the forest**
sector with broader governance and anticorruption efforts. Such instruments as anti-money-laundering and asset forfeiture laws, crime monitoring techniques, customs modernization, and governance diagnostics need to be brought into the picture to combat illegal logging and other forest crime. This will require both helping client countries to establish effective mechanisms for intersectoral coordination and collaboration and joint action (such as dedicated forest crime task forces) and joint work by the respective Bank departments and units.

Work to move actions against forest crime forward. Given the importance of international demand as a driver of illegal logging and other forest crime, the regional FLEG processes should continue to play an important role in creating political commitment and joint action by producer and consumer countries to address these issues. This work increasingly needs to become part of the agenda of existing international, regional, and subregional organizations and agreements to increase both its sustainability and impact. Significant work needs to be done to deepen the technical content of these processes and help them move from political declarations, to effective support, to action at the country level.

Explore and enhance the use of policy lending to enable forest sector governance reforms as discussed in this chapter and associated notes. (For more information on the application of development policy lending for forest sector reform, see note 6.2, Prospects for Using Policy Lending to Proactively Enable Forest Sector Reforms.)

Identify necessary FLEG measures for enabling reduced emissions from avoided deforestation and degradation (REDD) while also exploring opportunities to mainstream FLEG considerations into country dialogue on REDD (see box 5.3).

NOTES
1. Officials and institutions may be either public or private, the first of which may be termed public sector forest governance and the latter corporate forest governance. This distinction is useful in developing a typology of reform measures.
2. How might a policy maker assess the state of forest governance in his or her own country? Systematic and objective quantitative and qualitative estimates of such activities can help benchmark the state of governance in the sector and identify critical areas for reform and can contribute to monitoring the progress of efforts to improve governance.
3. Analytical and advisory activities refer to activities that involve analytical effort with the intent of influencing client countries’ policies and programs and comprise formal and informal studies of critical issues, either at the country level or for specific sectors (for example, economic and sector work, policy notes, and the like). This work has traditionally underpinned lending and investment operations. Nonlending technical assistance is the transfer of skills and knowl-

Box 5.3 REDD and Forest Governance

In response to growing awareness that deforestation and forest degradation are major sources of greenhouse gas emissions, many countries have expressed an interest in implementing payments for forest protection that achieves carbon storage. A UN Framework Convention on Climate Change (UNFCCC) mechanism to establish this is under discussion. The initiative is known as REDD, for Reduced Emissions from Avoided Deforestation and Degradation.

Proponents of REDD see it as a low-cost option for reducing global emissions that could also alleviate poverty and protect biodiversity. However, while much deforestation is a rational response to global and local economics and is the result of government planning, a significant proportion has been, and remains, illegal and uncontrolled. Tackling this latter element of deforestation and establishing basic rule of law in the sector will be a critical prerequisite for governments hoping to achieve reduced deforestation or attract private sector investment in REDD projects, particularly in the early stages of the market.

Previous to the REDD concept, establishing legality in the sector has long been a priority for those working in forests, and it is important that synergies are recognized, continuity is emphasized, and political processes and tools designed to support improved legality in production forests are also used in support of REDD strategies where relevant. Beyond the need to establish legal control of the forest resource, it will also be necessary to tackle systemic issues.

Source: Saunders and Nussbaum 2008.
edge for development purposes and a key instrument for improving policies and project design, enhancing skills, and strengthening implementation capacity.

SELECTED READINGS


REFERENCES CITED


CROSS-REFERENCED CHAPTERS AND NOTES

Note 1.3: Indigenous Peoples and Forests

Note 1.4: Property and Access Rights

Note 3.2: Forest Certification Systems

Note 5.1: Decentralized Forest Management

Note 5.2: Reforming Forest Institutions

Note 5.3: Strengthening Legal Frameworks in the Forest Sector

Chapter 12: Applying OP 4.10 on Indigenous Peoples
Dissatisfied with centralized approaches to governance, many developing countries and countries in transition—it is estimated that 80 percent of them have embarked on some form of decentralization, transferring authority and responsibility for government functions from the central government to subnational governments or civil society and private sector institutions.

Given the right conditions, decentralization of forest management can lead to superior outcomes, improving the effectiveness of public forest institutions by matching the demand for public forest services with their supply by local governments. Decentralized local institutions of the public forest administration can be closer to local people, their demands, and priorities, and thereby offer opportunities for government to become more relevant to local conditions. By emphasizing subnational governmental autonomy, forest decentralization can promote democratic decision-making processes and free top executives of the public forest administration from many routine decisions. If decentralization leads to greater local voice and participation, it can contribute to greater accountability and to reducing forest-related corruption and government misuse of forest resources. Local participation can also induce design of and experimentation with creative and innovative programs that make use of local knowledge and that are tailored to local settings, moving away from the application of standardized actions designed by the central government. Furthermore, forest decentralization can help improve equity through greater capture and local retention, as well as democratic distribution, of forest management benefits. Because of this, decentralization can be instrumental in reducing local conflicts over the use of forest resources and the allocation of resulting benefits and costs among institutions and local people. Thus, decentralization can lead to better governance and improved efficiency, equity, and environmental management outcomes.

However, there are potential risks associated with decentralization. It is an extremely complex undertaking involving multiple levels of government, agencies with different functions, and stakeholders with diverse, sometimes incompatible, interests. Authority, responsibility, and financial and human resources as well as a variety of administrative functions can be decentralized to different degrees, thus creating countless possible pathways to decentralized forest administration. Decentralized forest institutions often cannot function adequately if they are not endowed with sufficient resources and authority. Imbalances in the allocation of authority and responsibility to the various levels of government, possibly because the process is still incomplete, also make efficient public forest service delivery difficult. Regardless of the path to decentralization, inadequate subnational capacity is almost always a limiting factor.

Some obstacles to effective forest decentralization have their origins in the drastic changes in power structures within the government apparatus that are associated with, and required for, effective decentralization, and that occur during the redistribution of authority and resources from the central government to subnational governments. Government officials at the center often resist these reallocations of power. Furthermore, when powers are redistributed to subnational levels, decentralization often also increases the possibility of regulatory capture by local interests. Local government officers and politicians can be even more subject to corruption than those of the central government.

In addition, unless some key functions of government remain at the center, such as defining national forest policy parameters, overall policy coherence in the sector may be lost. The challenge for forest sector planners is to shape and manage decentralization processes in a way that secures its potential benefits while avoiding associated pitfalls. Some of the main promises of decentralization and the corresponding limitations it faces are listed in table 5.2.
With decentralization being such a multifaceted process, there is no single “model” for forest decentralization. Different degrees of responsibility and authority can be transferred to one or more subnational units of government, and the central government may choose to retain a large or limited share of responsibility and authority. The potential benefits and disadvantages mentioned above will emerge depending on the functions being decentralized and on the local governance and institutional context.

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**Table 5.2  Forest Decentralization: Potential Advantages and Dangers**

<table>
<thead>
<tr>
<th>Potential advantages</th>
<th>Potential dangers</th>
</tr>
</thead>
<tbody>
<tr>
<td>There may be reduced bureaucracy and decision-making congestion at the center.</td>
<td>Coordination, implementation, and monitoring of national policies may be more difficult. Central government may be excessively weakened by the transfer of resources to subnational governments. Unclear division of powers may lead to increased conflicts between tiers of government.</td>
</tr>
<tr>
<td>There may be faster decision making, particularly in the case of routine decisions.</td>
<td>Economies of scale in implementing certain actions (for example, procurement) may be lost. Subnational government decision-making capacity may be inadequate.</td>
</tr>
<tr>
<td>Institution building at the local level may increase.  Decisions may be conditioned by local objectives that may not coincide with national objectives. Decentralization may result in the allocation of central resources to regions, ethnic groups, or political associates, which may threaten social coherence. Decentralized organizations may have limited technical and managerial knowledge and lack institutional capacity to manage forest programs.</td>
<td></td>
</tr>
<tr>
<td>If decentralization leads to increased reliance on subnational sources of financing, subnational forest institutions will have a greater incentive to function as separate profit centers with decisions increasingly being subject to the discipline of the market. Subsidized operations will tend to be eliminated.</td>
<td>Decisions that are heavily influenced by financial considerations may not coincide with national or even local objectives. Noncommercial national policy objectives may be lost.</td>
</tr>
<tr>
<td>It is easier to involve local populations, particularly if actions requested from them are linked to benefit sharing.</td>
<td>Local elites may control and use decentralized institutions for their own benefit. Decision making may be less transparent and less responsive. If local governments do not produce a substantial economic surplus, net transfers from the central government may be lost.</td>
</tr>
<tr>
<td>There may be a greater sense of local ownership. Local ownership may be lost if benefit sharing becomes less equitable. Decentralized forestry offices may be controlled by special interests. Decentralization may increase arbitrariness and corruption.</td>
<td>Local elites may gain control of benefits and create greater inequality and increase poverty. There may be overwhelming pressure to “mine” the forest for immediate local benefit.</td>
</tr>
<tr>
<td>Decentralization can lead to larger share of benefits remaining in localities and communities that generate them. Central government may lose essential revenues and manpower. Local elites may gain control of benefits and create greater inequality and increase poverty.</td>
<td>There is potential for harmonizing local traditions and rights with formal governmental norms. If formal norms were previously ineffective and de facto informal norms prevailed, decentralization may increase conflict between formal and informal norms.</td>
</tr>
<tr>
<td>There is potential for harmonizing local traditions and rights with formal governmental norms. Political meddling by central powers may be more difficult. Local government officials with greater responsibility and power may use decentralized institutions for their own political and personal purposes. Political meddling by the central government may simply be replaced by local political interference and government capture by organized elites.</td>
<td>Corruption may decrease if the discretionary power of central government officials is reduced. Those actions and powers of local officials can be more closely scrutinized, and downward accountability and transparency will tend to increase. If centralized monitoring and control are loosened, particularly if decentralization is not accompanied by citizen participation, there may be more opportunities for corruption of local government officials by local elites.</td>
</tr>
</tbody>
</table>

Source: Contreras-Hermosilla. 2006.
Assess the overall decentralization context. Forest decentralization will generally be part of broader decentralization initiatives involving the whole government, which will largely shape what can be done in the forest sector. Government-wide characteristics may impose limits as well as offer opportunities to decentralization in the forest sector. For example, some decentralized governments, such as that of Switzerland, have strong locally elected bodies that make local participation and downward accountability of local public forest administration to local populations and electorates easier to achieve. Other governments are not inclined to go this far and their levels of local participation and accountability may be lower. Project designers must evaluate the relative strengths and weaknesses of public and private sector organizations and their capacity to perform the forest management functions before drawing plans for forest decentralization interventions (see chapter 2, Engaging the Private Sector in Forest Sector Development, and note 2.1, Community-Private Partnerships).

Forest decentralization must be adequately linked to overall decentralization processes because of the multidisciplinary characteristics of forest administration and the numerous cross-sectoral influences that shape forest governance (see chapter 6, Mainstreaming Forests into Development Policy and Planning: Assessing Cross-Sectoral Impacts, and associated notes). For example, in Albania, a Bank intervention observed that the Forest Administration was unable to control illegal logging except in selected areas where it was able to establish operational links with other decentralized agencies. In this case, an interministerial task force of various stakeholders at the national level was complemented by the creation at the prefecture and district levels of intersectoral task forces to organize collaboration (World Bank 2004).

Get the legal framework right. A critical operational consideration to making forest decentralization work is the existence of a clear and consistent legal framework guiding the distribution of responsibilities, resources, and authority at the different levels of government and the relationships between government and local communities and the private sector (see note 5.3, Strengthening Legal Frameworks in the Forest Sector). While this appears to be a self-evident aspect of good governance, experience shows that, in practice, forest decentralization often takes place in an environment of considerable legal uncertainty (see box 5.3). This legal uncertainty is a sure recipe for conflicts between tiers of government and government institutions as well as between public and private entities that defeat the potential governance benefits of decentralization. Legal regimes should provide local people and the private sector with enforceable rights to resources and enable them to play a meaningful role in forest governance.

### Box 5.4 Legal Uncertainty in Indonesia

In 1999 the Indonesian government approved legislation to decentralize government authority, resources, and responsibilities to provinces (second tier government) and districts (third tier). Districts, considered closer to the people and therefore more apt to promote democratization, were assigned primary responsibility for administrative and regulatory functions. However, drafted in haste, the decentralization laws were inconsistent or even contradictory with other laws. And in the midst of the instability that dominated the political scene after the fall of Suharto, corresponding operational regulations to the decentralization laws were slow to come, leaving much to interpretation and to the discretion of local public officials who were often inadequately prepared.

In the same year, the Basic Forestry Law was enacted. This law and its regulations contradicted significant parts of the decentralization legislation. A decree issued a year later sought to clarify matters, limiting forest sector decentralization to marginal functions, and was resisted by some districts. Legal uncertainty surrounding the division of powers and responsibilities created a de facto movement toward forest decentralization and intense conflicts between the district governments and the center.

In these circumstances, and fearing appropriation or interference by other levels of government, forest resource-rich districts had a powerful incentive to accelerate resource exploitation, giving only secondary consideration to the long-term consequences of unsustainable practices. In some cases, legal uncertainty favored the creation of local alliances between powerful groups and government officials. To a great extent, the poor have yet to reap the benefits expected from forest decentralization.

Source: Contreras-Hermosilla and Fay 2005; Boccucci and Jurgens 2006.

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NOTE 5.1: DECENTRALIZED FOREST MANAGEMENT

role in decision making related to the management of forest resources. In most countries, the strength of legal frameworks is becoming more important as forest resources become increasingly scarce and thus the focus of conflicts between different stakeholders (Lindsay 2000).

General decentralization laws will provide most of the legal framework for the forest institutions of government, which must become aligned with those broader laws. An assessment of the legal frame of reference needed to make forest decentralization effective may be required. In most cases, the forest administration alone may be able to handle many of the desired regulatory changes without resorting to parliamentary sanctioning.

**Participation, empowerment, and poverty alleviation.** An important requirement for decentralization processes to succeed and ensure transparency is the ability of local governments to work with local communities and other private sector and civil society stakeholders. The government’s underlying political philosophy must allow local participation in the formulation of local plans and policies and the local forest administration must have capacity to manage these interactions. Government should be fully committed to involving local communities and other stakeholders in decisions related to implementation of forest programs. Adequate management of the interactions between local governments, communities, and private sector entities that may participate in joint schemes for the management of forest resources requires, in addition to capacity to handle technical matters, substantial changes to attitudes and institutional incentives. When these capabilities are not available, technical assistance to support intensive training of government officers, communities, and enterprises will be needed.

Participation mechanisms are likely to work better when government institutions and bureaucracy are exposed to incentives that reward participation; this often means accountability to local institutions and populations rather than exclusively to higher levels of government. In those cases where decentralization is based on local governments run by officials democratically elected by local constituencies, participation and bottom-up approaches to forest management are easier to integrate. But there are other complementary mechanisms as well, including joint projects (for example, comanagement schemes), planning advisory groups, monitored self-regulation of forest-related activities (particularly relevant for the private commercial sector), citizen appeals processes for government decisions, forest forums involving government and civil society, and mandatory disclosure of forest administration records. Local citizen group participation, as observed in Bolivia, India, and Nepal, has contributed to ensuring that measures imposed by higher levels of government take local conditions and traditions into consideration.

Participation by communities and local populations in local government decisions and implementation of forest programs works better when there are clear and tangible benefits associated with such participation for all stakeholders. The flow of information between local governments and local groups must therefore be adequate to enable participatory decision making.

**Adequate balance of responsibilities, powers, and resources at each level of government.** To function effectively and efficiently, each level of government and corresponding agencies must possess sufficient authority to fulfill the responsibilities allocated to them. While this balance is hard to determine with precision in practice, authority without a corresponding measure of responsibility fosters mismanagement and creates opportunities for corruption. In the same vein, responsibility without a measure of power to command resources and implement actions cannot be adequately discharged.

At the same time, power and responsibility are meaningless unless each level of government and each agency can count on adequate financial and human resources. There is no real local autonomy if higher levels of government have exclusive control over what programs and projects will receive financial support (see box 5.5). Transfers of financial resources to lower levels of government are normally needed to empower local levels of the public forest administration to carry out management activities. In some cases, local autonomy may require retention of forest revenues captured by local governments.

**Apply the principle of subsidiarity.** Although there is no formula for deciding what degree of decentralization is optimal to ensure good forest governance, certain functions are best left at the central level and others can best be carried out locally. Subsidiarity, a fundamental concept behind decentralization, establishes that government functions should be carried out at the lowest possible level of government where capacity exists or can be readily created. The proper application of this principle requires an assessment of capacities at different levels of government and of institutions of civil society and the private sector that could assume responsibility for various forest management–related functions. Such assessment is a useful tool for judging the relative desirabil-
Closely linked to effective local participation in decision making and implementation of forest programs is the need to ensure that the actions of local government officers are transparent and that the officers themselves remain accountable to local populations for their actions (see box 5.6). The transfer of powers to local institutions may have worse outcomes than centralized management if accountability mechanisms to local populations are weak. When accountability has been mainly or exclusively to higher levels of government, local groups have no avenue to have their views heard and no power to influence policy design and program implementation. Local forest institutions are at risk of becoming simple extensions of the central government, which naturally tends to use them for promoting central agendas, thus defeating many of the opportunities of decentralization (Ribot 1998). Inadequate or nonexistent downward accountability facilitates control by local elites, often operating in association with local government institutions. This is a real danger, particularly when electoral accountability is weak and where there is a lack of nongovernmental watchdog organizations that can mobilize public opinion.

Indigenous Peoples and local communities. Forest decentralization should include adequate measures to improve community participation and to respect indigenous and traditional rights. In certain circumstances, transferring additional powers to local governments enhances the reach of government in areas where government presence was previously absent or weak. If government policy ignores ancestral rights, local community institutions, and community property, enhanced local government power is likely to lead to or exacerbate social inequality. Forest decentralization projects should therefore contain adequate measures to avoid potentially adverse effects on Indigenous Peoples and other vulnerable communities (see also note 1.3, Indigenous Peoples and Forests, and chapter 12, Applying OP 4.10 on Indigenous Peoples).

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

Clarity of division of responsibilities and authority. Experience acquired in supporting forest decentralization programs indicates that clarity in the distribution of

**NOTE 5.1: DECENTRALIZED FOREST MANAGEMENT**

The 1997 Law of Municipalities assigned considerably expanded responsibilities to municipalities, together with greater administrative and political autonomy. However, municipal governments’ capacity to discharge responsibilities was limited by an imbalance between the new obligations and the financial resources allocated to them by the central government.

Municipalities were entrusted with developing, conserving, and controlling the “rational use of the environment and natural resources...promoting local initiatives in these areas and contributing to their monitoring, vigilance and control...” (Larson 2001: 20). In addition, municipalities were to be consulted before central government approval of resource exploitation authorizations in both national and private lands. Also, municipal governments were to capture at least 25 percent of the revenues originating in these contracts.

Despite these formidable responsibilities, municipalities complained that they did not receive the tax revenues to which they were entitled. The central government on many occasions failed to consult with municipalities in awarding exploitation contracts or simply ignored them. In any case, the central government kept exclusive power to make key decisions over all natural resources.

**Box 5.5 Nicaragua: Asymmetries Between Responsibilities and Resources and Resistance to Relinquishing Power**

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Responsibilities and commensurate resources and authority are essential for quality decentralized governance. The problems faced by the rapid forest decentralization processes in Indonesia illustrate the importance of achieving a clear distribution of authority and responsibilities for various forest management functions (licensing, forest concessions, classification of forests) between the levels of government and between governments and civil society and private sector institutions (Boccucci and Jurgens 2006).

Bureaucratic resistance to change. Decentralization in India (Madhya Pradesh and Andhra Pradesh), Guatemala (Elias and Wittman 2004), Nicaragua (Larson 2001), and other countries shows that government executives are generally opposed to sharing power and resources with lower levels of government. Even when transfer of certain powers is mandated by law, in practice this has meant granting autonomy to manage only the least significant resources, keeping decisions about the use of the most valuable ones at higher levels. Furthermore, higher levels of government commonly have a tendency to maintain control over financial resources, thus effectively shaping the actions of lower levels of government or of local communities and other interest groups that require financial backing. This resistance to sharing power is one of the most critical threats to effective forest decentralization. In most cases, tackling this obstacle entails twin efforts aimed at (i) raising awareness of government officials based on clear and sound intellectual discourse and (ii) identification and support of key agents of change, as in Indonesia. Systems of institutional incentives must be geared toward rewarding progress in decentralization processes. This can be facilitated by democratic decision making schemes that enhance downward accountability of local government officials to local populations. (Resistance to change is also addressed in note 5.2, Reforming Forest Institutions).

Capacity building. Another lesson of experience is that lack of local capacity is often used as an excuse for reducing the pace of forest decentralization or for recentralizing. However, local capacity is unlikely to ever be created unless decentralization takes place. Thus, implementation of forest decentralization programs may require education and training programs for local governments and civil society institutions expected to play a role in the decentralized management of forest resources (World Bank 2004). If significant responsibility for forest resource management is transferred to local institutions, as in Indonesia, technical assistance will be required. Planning such assistance will require an institutional analysis of demands and capacities of the various levels of government and a coherent plan to fill in gaps. Improving the knowledge base and managerial capacity are long-term undertakings that may require sustained support for extended periods. As emphasized by a project in Nicaragua, World Bank interventions should pilot decentralization initiatives and be designed as a series of sequential building blocks as institutional and managerial capacity gradually develops over long periods (World Bank 1998).

SELECTED READINGS


To ensure increased transparency in government decisions, the Public Forest Administration is empowered to consult with various groups of civil society. After decentralization and the reorganization of the forest sector administration, forest resources decisions are no longer at the exclusive discretion of bureaucrats, but are instead subject to public scrutiny and made with public participation. Thus, open auctions govern the allocation of all new concession contracts. Open auctions also rule the sale of confiscated forest products and equipment. Regulations allow the cancellation of previously granted rights only with due process, guaranteeing people’s rights and fostering a balance between regulators and the regulated. Moreover, the forest administration must submit reports to the government twice a year, hold public hearings once a year to explain work carried out, and provide an opportunity for the public to raise questions about performance. Any citizen can freely request copies of official documents.

Source: Contreras-Hermosilla and Vargas Rios 2002.
references cited
Lindsay, J. M. 1999. “Creating Legal Space for Community-Based Management: Principles and Dilemmas.” Food and Agriculture Organization of the United Nations, Rome, Italy.

cross-referenced chapters and notes
Note 1.3: Indigenous Peoples and Forests
Chapter 2: Engaging the Private Sector in Forest Sector Development
Note 2.1: Community-Private Partnerships
Note 5.2: Reforming Forest Institutions
Note 5.3: Strengthening Legal Frameworks in the Forest Sector
Note 5.4: Strengthen Fiscal Systems in the Forest Sector
Chapter 6: Mainstreaming Forests into Development Policy, and associated notes
Note 7.2: Establishing Forest Information Management Systems
Chapter 12: Applying OP 4.10 on Indigenous Peoples

NOTE 5.1: DECENTRALIZED FOREST MANAGEMENT
The World Bank has increased its attention to the processes of building and rebuilding sound public institutions. With respect to forest management, institutional reforms supported by the Bank have sought to take a broad view of the value of forests for the production of timber and nontimber products, as well as for biological diversity conservation and watershed management.

Every country has a different scope, pace, and outcome associated with its reform. Reform takes time and is often implemented in a step-wise manner to minimize risks and frictions among parties. In most cases, reforms are introduced within the context of revisions of forest policy, strategies, and legislation. The latter may be catalyzed by factors outside the sector, including macroeconomic and structural reforms, and should occur in a transparent and participatory manner. The second phase of reform focuses on institutional issues. Considerations in the second phase include the capacity and functions of forest institutions. At this stage, as was done in many countries in western Europe, the roles of forest administration and management may be separated.

Reform processes have covered all the key functions in the forest sector (see box 5.7), including the following:

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**Box 5.7 Functions of Forest Organizations**

When policy makers mandate that forest organizations are to deliver on certain tasks, and when multifunctional forest management is an explicit objective of policy, forest organizations (broadly defined) can be expected to have clear functions specific to the following areas:

**Policy and legislation**
- policy setting
- legislation and regulation
- enforcement of the legal framework

**Forest management services**
- forest management and planning
- fire and pest management
- forest inventory
- forest regeneration
- management for recreational uses
- management for conservation
- management for the provision of environmental services, such as watershed protection

**Other services**
- sale of timber and timber products
- sale of nontimber products
- marketing services (both timber and nontimber forest products)
- socioeconomic services to local communities, derived from state-owned forests (fuelwood, nontimber forest products, grazing resources, and so forth)
- forest extension services to private owners and users

These functions can be provided by multiple organizations, both within the public sector (forest departments, commissions, agencies, and state forest enterprises) as well as outside it, by the private sector and by civil society organizations. In most countries, harvesting, transport, and processing services are provided by the private sector, though often with mixed results.

Management of forests (state and nonstate forests)
- Forest management operations (silviculture, regeneration, harvesting, planning, and control)
- Sales of timber and nonwood forest products

Processing and marketing of timber and nonwood products

Public forest administration
- Formulation of policy and legislation
- Control and enforcement
- Development of forest information systems
- Education and research
- Extension

OPERATIONAL ASPECTS

Reform processes vary. Specific steps in a reform process will vary, depending on initial conditions. To initiate reform, all actors need to cooperatively create a basic understanding of targets and strategy for forest sector management. This policy should focus on equity, sustainability, biodiversity, and economics, and should include strategic guidance for the main actors to determine their objectives and operational methods for using the resource in a sustainable and cooperative way. The main actors are
- national and local governments;
- commercial private sector;
- communities (including Indigenous Peoples) and smallholders, including cottage industries;
- civil society; and
- technical and financial assistance institutions, including research facilities.

Post conflict contexts require attention to capacity issues. In postconflict countries, the capacity of different groups to engage in dialogue may need to be strengthened. This dialogue may need to be facilitated to ensure that all stakeholders start on a level playing field; thus, the process may need to be adapted accordingly (see box 5.8).

The major implementation challenges in reforming forest institutions include organizing a temporary minimal authority structure to deal with short-term necessities,

Box 5.8 The Liberia Forest Initiative: Institutional Reform in a Postconflict Country

In April 2004, the U.S. government sent a team to Liberia to initiate discussions with the provisional government and civil society representatives, and came to the conclusion that Liberia’s forest sector was “utterly dysfunctional” (McAlpine, O’Donohue, and Pierson 2006) and that the Forest Development Authority (FDA) required a complete overhaul and adequate capacity and resources. The unique feature of the multidonor effort that followed was that although donor roles were coordinated to avoid duplication and ensure a strategic approach, each donor maintained a high degree of sovereignty over the allocation of its funds.

The Liberia Forest Initiative (LFI) was designed to promote and assist reforms in Liberia’s forestry sector to create management transparency and ensure that forest resources are managed in an economically, environmentally, and socially sustainable way, to the maximum benefit of all Liberians, in accordance with Liberia’s national policies and laws, and consistent with its international legal commitments. Although it was initiated by the U.S. Department of Agriculture in 2004 in response to concerns that proceeds from unsustainable logging were fueling the ongoing civil war, the LFI quickly came to involve a wide range of governmental and nongovernmental organizations, and has come to encapsulate a broad mandate. From the outset, the LFI recognized that thorough and effective reforms would require cross-cutting attention to the “3 C’s” of forestry in Liberia: the commercial sector, conservation, and community forestry. As a priority focus, however, the LFI identified a few major components as critical to bringing the commercial sector back on line and addressing essential concerns of the UN Security Council:

- Financial management and accountability. There was a critical need to restore transparent financial management policies and practices as well as accountability in the forest sector (in particular, to timber products) and to implement transparent and equitable allocation of resources generated by the forest sector.
- Institution building. An FDA with the staff, skills, and means (financial and physical) to carry out its mandate needed to be established.
- Forest allocation policy and practice. There was a need to plan and initiate formal forest use in a balanced,

(Box continues on the following page)
transparent manner consistent with official Liberian policy and laws as well as with international obligations, including conservation and extractive uses, that is, sustainable forest management.

- **Legitimacy.** Legitimate Liberian authorities needed to be helped to establish control over forest resources.

The institutional reforms were part of a broader forest sector reform process under way in Liberia. Recent achievements of this process include the cancellation of all concessions, preparation of a Forest Policy, preparation and ratification of a completely revised Forest Law, a vision for a long-term governance structure, and the creation of the Forest Reform Monitoring Committee.

The World Conservation Union (IUCN) took the lead in consulting civil society organizations in developing a public communications strategy, involving workshops and various media, which proved effective in conveying the importance of the work of the LFI and garnering support for measures taken. Meanwhile, the UN Security Council renewed sanctions and passed a resolution that the LFI reform recommendations be adopted. This gave impetus to reform of the concession system, and triggered a multistakeholder review committee involving civil society. Similarly, a Forest Reform Monitoring Committee was also established, with a wide spectrum of stakeholders. However, this progress was stymied by the unwillingness of the provisional government to implement the committee’s recommendations, and in response the donor community developed a Governance and Economic Management Assistance Plan for state-owned enterprises, including the FDA, that would impose outside controls and transparency.

The election of Ellen Johnson Sirleaf as president was a pivotal event. On February 6, 2006, soon after her inauguration, she adopted the recommendations and reforms proposed by the LFI, including the cancellation of existing concession permits.

With support from the LFI, the FDA started to reduce staff and select key personnel for carrying out high priority tasks, such as organizing and implementing a new concession and forest management system with the help of foreign expertise; designing the structure of community forests; implementing conservation activities; and setting up the long-term reform process for the FDA, beginning with providing crucial analytical and organizational know-how for strategic planning. In addition, financial and technical services required as supporting elements for the reform needed to be identified and quantified. To initiate these activities and raise knowledge and consciousness, three workshops were held on community forestry, forest policy, and institutional reform.

The activities in Liberia are a work in progress faced with enormous political and human resource obstacles. The future concept and structure of the FDA, proposed in October 2006 (see figure in this box) is generally accepted, but has yet to be finalized.

There are many aspects of the LFI model that could be used to create similar change in other countries, including the integration of forest sector reforms into broader governance and cross-sectoral reforms, the use of a diverse but coordinated partnership of donors, and provision for a strong role for civil society.


a. Organizations involved included the US Forest Service, the US Agency for International Development, and the US Treasury Department, as well as such NGOs as Conservation International and the Environmental Law Institute. Several multilateral organizations subsequently joined, including the World Bank, the European Commission, the Food and Agriculture Organization, the International Monetary Fund, IUCN, Centre for International Forestry Research (CIFOR), and World Agroforestry Centre (ICRAF) (LFI Web site).
such as designing a transparent concession system; establishing an accounting system; defining the role of each stakeholder in the sector; and setting up a strategic planning process to provide guidance for a future forest resource management system that is transparent, participatory, and analytical.

**Separating administrative and management functions.** Efforts should be made to eliminate potential conflicts of interest and to ensure independence, transparency, and neutrality of the public forest administration. This can be done by removing direct administrative and financial links between entities responsible for public functions and state forest management (see box 5.9).

**Accountability of forest institutions.** A mechanism for ensuring accountability of forest institutions should be created, perhaps through the creation of a management board that supervises the activities of the entity managing state forests. The board should include representatives from different relevant government agencies or ministries, as well as professionals with qualifications in forestry, environmental conservation, and corporate management.

Accountability also requires transparent budget procedures and accounting systems that match corporate standards (see box 5.10). These procedures, however, should be achievable and realistic.

**Change management.** A good strategy and structure are not sufficient to guarantee successful reform; it also requires people to align with the new direction, to bring life into the new structures, and to commit to strive for new goals. A strategic change-management approach can be a valuable investment for the future of an organization. Change management is a systematic approach to dealing with change from the very beginning of a change program and during all planning and implementation stages. Change management links the perspective of the organization with the perspective of the individual employee. Change management can increase the speed of implementation of a change project and decrease the costs. Effective change management requires that

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**Box 5.9 Reducing Conflict of Interest in Forest Management: An Example from Countries in Transition**

In several countries in transition in Europe and Central Asia, earlier institutional arrangements in the forests sector suffered from conflicts of interest because the same body was both supervising and controlling its own operations. To remove this conflict, the proposed institutional structure separated these two functions. With this arrangement, forest administration, as part of its enforcement function, supervises and controls how forests are managed, whether owned by the state (and managed by the state forest enterprise) or by private forest owners (see box figure). A separate control activity for financial flows should also be maintained or set up, either through an independent government body or accredited private auditors, which typically are used in many Western European countries.

**Source:** World Bank 2005.
the transformation process has leadership, top-level management commitment, and broadly based stakeholder participation;

- implementation is carried out through an independent and influential change team or steering committee;
- structure follows strategy: careful planning should set the foundation, but determination and speed are necessary for success during implementation;
- “quick win” achievable subtargets are set to help create and maintain momentum;
- people are actively engaged to build ownership from the very beginning of the change journey;
- second- and third-level management, key to success, adequately buy in; and
- communication and information, essential for both internal and external audiences, are professionally prepared.

Capacity considerations. Reforms of forest institutions must be linked to building necessary capacity. The management objectives for service delivery organizations are to provide forest goods and services for forest industries and for households while maintaining the forest’s ability to provide public goods (such as watershed protection and biodiversity conservation). Implicit in the idea of forest organizations as service delivery institutions is that their services are provided to meet the demands of both private and community forest users. Some forest institutions may have the necessary capacity and simply require redeployment of these capacities. In most cases, however, the requisite capacity is not available, underscoring the importance of appropriate training.

Assessing success. Measures should be in place to assess the success of institutional reforms. Measurement of success could be based on overall sectoral performance, including improved forest management, greater investment and job creation in the industry, stronger financial performance of both private and public institutions, better environmental protection, improved protected area management, and greater benefit for civil society. However, even in the best-run forest management organizations, these parameters are seldom assessed in any systematic way. Thus, innovative approaches to assessing performance must be introduced that enable policy makers to determine whether public expenditures are achieving desired outcomes (see box 5.11).

LESSONS LEARNED AND RECOMMENDATIONS

Box 5.10 Measures for Transparent Budget Procedures

Measures proposed for countries in transition in Europe and Central Asia to increase transparent budget procedures and enhance accounting systems include the following:

- To assign the responsibility for controlling forest harvesting and management to state forest administration.
- To determine appropriate funding for state forest management, physical targets for forest management and environmental conservation should be defined, and necessary investment requirements and operational costs assessed. Funding requirements may include ensuring cost efficiency of forest operations by using subcontractors from the private sector when possible; carrying out independent research on efficiency factors; establishing the transfer to the state budget based on a residual amount determined by deducting estimated costs from total revenue (allowing efficiency gains to remain in the organization as an incentive for improved performance).
- Financial auditing through accredited third-party auditors should be arranged.
- An independent budget for the entity managing state forests should be established (to assist in increasing productivity and efficiency in state forest management). The budget should be associated with well-defined obligations toward the state budget, and development of salary schemes should be based on staff performance to reduce incentives for corruption.
- Marketing of timber and nonwood forest products based on competitive bidding should be arranged to establish fair, market-based prices; ensure open and equal access to timber and nonwood resources for potential beneficiaries at equitable conditions; and limit monopolistic features in resource supply.

Source: PROFOR 2003.
FOR PRACTITIONERS

There are a number of lessons learned that merit attention in the implementation of institutional reforms:

- The context should define the process of reform. Accordingly, it is important to distinguish between situations in countries in economic transition (for example, the Europe and Central Asia region, and China and other parts of Asia); countries recovering from crises (the Democratic Republic of Congo, Liberia), and countries responding to recent developments and having forests serve multiple functions (Kenya, Tanzania).
- National forest policy and strategy should be the basis of institutional reforms—not vice versa.
- Markets can be the best drivers toward sustainable forest management, but reliance on markets can be devastating if not coupled with necessary safeguards.
- Sustainable forest management provides an appropriate framework for the assessment of policy options. Impacts should be quantified and properly evaluated before selecting the most desirable option.
- Stakeholder participation and transparency are essential in assessing policy options and implementing institutional reforms.
- Experience in large countries like the United States and Canada shows that decentralization in forest administration is an appropriate strategy within an adequate national legal and institutional framework, and that forestry development is best addressed at the local level (see note 5.1, Decentralized Forest Management). Decentralization reforms have to be coupled with strong organizations at the regional level and effective monitoring and control systems to prevent short-term political and economic interests from making uncontrolled use of forests and to reduce the potential for elite capture.
- Where forests are large and diverse, a combination of institutional arrangements for forest management may

NOTE 5.2: REFORMING FOREST INSTITUTIONS

Box 5.11 Citizen Report Cards: Benchmarking Public Service Delivery

The Citizen Report Card (CRC) is a simple but powerful tool used to provide public agencies with systematic feedback from users of public services through sample surveys on service quality to enable public agencies to identify strengths and weaknesses in their work.

CRCs provide an empirical, bottom-up assessment of the reach and benefit of specific reform measures. CRCs identify the key constraints that citizens (especially the poor and the underserved) face in accessing public services and benchmark the quality and adequacy of those services as well as the effectiveness of the staff. CRCs aid in generating recommendations on sector policies, program strategy, and management of service delivery.

Citizen report cards can accomplish the following:

- Help to convert individual problems facing the various programs into common sector issues.
- Facilitate prioritization of reforms and corrective actions by drawing attention to the worst problems, and facilitate cross-fertilization of ideas and approaches by identifying good practices.
- Provide a benchmark on quality of public services as experienced by the users of those services. Hence, CRCs go beyond the specific problems that individual citizens may face and view each issue from the perspective of other elements of service design and delivery, as well as in comparison with other services, so that a strategic set of actions can be initiated.
- Suggest that dissatisfaction has causes that may be related to the quality of service (such as reliability of water supply), the type of difficulty encountered while dealing with the agency to solve service problems (such as complaints of water supply breakdown), and hidden costs in making use of the public service (such as investments in filters to purify drinking water). Therefore, CRCs delve into different aspects of performance to provide indicators of problem areas in public services.
- Test out different options that citizens wish to exercise, individually or collectively, to tackle current problems (for example, whether citizens are willing to pay more, or be part of a group that has the responsibility for managing public water sources). Hence, CRCs are also a means for exploring alternatives for improvements in public services.

CRCs have gained credibility because the methodology involves systematic sampling across all subsections or segments—including those who are satisfied as well as the aggrieved—and presents a picture that includes all opinions.

be required, including, among others, lease rights, concessions, and privatization of forest land.

- Transaction costs tend to be high in countries where markets do not yet work effectively, corruption is common, risks and business protection costs are high, and other structural issues (uncertainties and frequent changes in taxation and other rules) increase costs to economic operators. High transaction costs significantly reduce the international competitiveness of the forestry sector and impede private investment. Institutional reforms should pay attention to the potential for reducing transaction costs.

REFERENCES CITED


CROSS-REFERENCED CHAPTERS AND NOTES

Note 5.1: Decentralized Forest Management
The law is a powerful tool for shaping forest sector governance. Laws can create institutions and define institutional powers and responsibilities. Laws can set the bounds of acceptable behavior and set the punishment for crossing those bounds. Laws can change the allocation of money among government programs, and shift control over forest resources between central and local government and between government and other actors. Laws can define and strengthen property interests. Law can be part of the healing process that follows years of conflict (see box 5.12). In short, law plays a role in every forest governance issue (see chapter 5 for a definition of governance).

The legal framework applicable to forests has at least two areas that the World Bank may help to strengthen. The first, and most obvious, is the law itself—usually statutes and regulations—and the instruments created to operate under the law, for example, contracts. The second is the technical capacity to work within the legal system. This includes the legal knowledge of forest officers and the forest-related knowledge of legislators, prosecutors, judges, and others who help shape and implement forest laws. It also includes the capacity of citizens to understand and work under the law. Making communities, enterprises, and civil society effective users of law and active participants in its development boosts the rule of law and amplifies the benefits of improving the laws.

The usual focus of World Bank and donor legal framework projects is on the first of these areas, aiming to reform and strengthen the law. In the process, however, the projects also can strengthen capacity. For example, compiling an accurate set of the existing forest law is a first step toward writing new law, but the compilation process itself can also strengthen implementation of the present law. Public vetting of drafts of new laws is a way to improve the substance of reforms. It also gives officials hands-on training in dealing with the public, and gives stakeholders practical experience in policy making.

Strengthening forest legal frameworks typically requires legal advisers, but the task calls for skills that go beyond knowledge of the law. Lawyers working in concert with foresters, economists, policy experts, government officials, and stakeholders can build frameworks that promote both sustainable development and the rule of law.

**OPERATIONAL ASPECTS**

The ultimate goal of designing legal frameworks is to ensure the creation of responsive structures that are capable of adapting to changing needs and conditions. Writing a law that works is no easy task, and the stakes are high. A really bad effort can leave the country with a law that looks impressive but is of little practical use and may promote cynicism about government and dampen commitment to the rule of law. A really good effort can set the stage for more effective forest administration. More important, it can improve the transparency of forest governance, motivate under-represented stakeholders to get involved in forest policy, and encourage respect for the law.

**Working with the law**

Writing forest laws. A good way to start is to consult two recent references on writing forest law. One, from the World Bank in collaboration with the Food and Agriculture Organization (FAO), is *Forest Law and Sustainable Development: Addressing Contemporary Challenges Through Legal Reform* (Christy, Di Leva, and Lindsay 2007). It is a comprehensive monograph on drafting forest law, with practical knowledge from experienced forest law drafters. Annex 5.3A to this note contains an outline of the monograph’s contents that
can serve as a checklist of topics for the drafter to consider. The other reference, from the Development Law Office of FAO, is a paper listing six basic principles for forest law assistance projects (Lindsay, Mekouar, and Christy 2002). Annex 5.3B to this note contains a list from that paper of six principles for effective forest law. The ideas offered here largely come from those two sources.

Another important first step is to consider the dynamics of working with the lawyers and within a legal paradigm (see box 5.13).

Another challenge is to eliminate unnecessary regulation and circumscribe the discretion of forest officials. The motive goes both to improving governance and to reducing constraints on forest use. Layers of regulation and large amounts of official discretion create opportunities for waste and corruption. The ideal level of regulation conserves the resource while allowing people broad opportunities to enjoy resource benefits.

LIMITING POWER EXERTIONS. A further step toward good governance is to create checks on power exertion. These may include

- increased transparency, so that the press and public opinion can have a stronger influence on forest management;
- watchdog institutional structures, such as advisory boards, ombudsmen, or inspectors general;
- allowing citizen or community access to the courts to enforce rules or collect payments due the government;
- procedural steps, such as environmental impact assessments, that require the government to make a reasoned review of alternatives before taking action; and
- substantive standards in the laws to limit agency discretion.

Practical reforms. Finally, the legal adviser routinely faces the problem of making reforms practical. A system that is too elaborate risks overtaxing the technical capacity of a country and tying the forests down in lengthy procedures. The results may be frequent government shortcutting of the laws and resulting loss of the rule of law. Alternatively, the government could try to live by the letter of the law and end up mired in process, leading people to seek access to the forest through illegal means (see note 5.5, Addressing Illegal Logging). Practicality may demand simpler requirements or...
Team leaders unaccustomed to working on laws with lawyers may wonder what to expect. Here are a few notes based on project experience.

Legal projects often require more than one lawyer because projects cross legal disciplines. A national consultant typically supplies essential knowledge of the existing national legal framework, while an international consultant brings knowledge of other areas, such as international standards, approaches to forest law reform, or legislative drafting.

Plan to give the lawyers some time to build working relationships with each other and with the team. The international consultant will need to learn about the existing national legal framework. The national consultant may need to learn about forest law. Both will need to gain a full grasp of the local forest context and the policy that the team is advocating that the government adopt.

Some team leaders worry whether lawyers will work well with technical advisers. Usually this is not a problem. The lawyer’s role in society is to bridge people and the law, and to do that, the lawyer must be able to work with others on their own terms.

Still, technical advisers may find the process of legal reform to be novel and challenging. Just as writing a technical paper requires the writer to come to terms with the exact ideas that the writer wants to convey, writing a law requires the policy maker to come to terms with exactly what the policy means. Writing a law demands detailed consideration of practicalities and processes that might be glossed over in discussing the broader outlines of a policy.

Also, the law may require technical advisers to learn new terms and use old terms in new ways. A common example is the word “forest.” To the forester, this may mean land bearing or capable of bearing tree cover. Strangely, the scientific definition may have little utility in the law, which might define forests in terms of land that the government has reserved or has placed in a particular class in a cadastral survey. In the end, these definitions are just tools for the accomplishment of particular tasks, and each task calls for the appropriate tool. The task of scientific forest management calls for the science-based definition, whereas efficient governance calls for the administratively derived definition.

Technical advisers may find legal language complex or awkward. At times, a legal drafter will sacrifice clarity in pursuit of precision. A good lawyer, with enough time, can be simple, clear, and precise. A lawyer faced with deadlines, or one who needs to follow old, complex phrasing to ensure that the local courts will interpret the new words like the old, may fall short of the ideal. Lawyers can be particular about language—words are their stock and trade. During training and practice, a lawyer encounters dozens or even hundreds of examples of inadvisably chosen words leading to legal disputes. Do not be surprised if a lawyer heavily edits any nonlawyer’s attempts at legal drafting or if the lawyer suggests to others that they simply explain the policy more fully and leave the legal drafting to the lawyers.

Finally, some scientifically trained advisers are taken aback by the way lawyers think:

- A scientist is trained to look for truth, derived from objective facts. A lawyer is trained to advocate for what is good, often influenced by subjective values. Any practical adviser knows that good policy requires consideration of both facts and values. But the lawyer’s focus on what is good can sometimes make the lawyer seem callous to the facts, just as a scientist’s focus on what is true can sometimes make the scientist seem callous to human values.

- A scientist is taught to see the world through a lens of logic: induction and deduction. A lawyer is taught logic but also learns that law grows out of history: from precedent, politics, and practical experience. In fact, to the law, sometimes “a page of history is worth a volume of logic.”

- A scientist is taught to look for the mean: the average or expected. A lawyer is taught to think about the outliers: the criminal in society, the loophole in the law, the rare contingency that the law must anticipate, a precedent that might be set.

- A scientist sees proof as a matter of statistics. That which, 19 times out of 20, cannot be the result of chance alone is considered a significant event. A lawyer sees proof as a function of legal context. Some things may be presumed true before knowing any facts; some may be taken as true if they are more likely than not; some may only be considered true if they cannot reasonably be considered false.

These disciplinary differences are usually not as daunting as the cultural differences that project teams must bridge. As with cultural differences, the key is to be aware of your own practices and to be open to the practices of others.

Source: Rosenbaum 2006.
a. United States Supreme Court Justice Oliver Wendell Holmes, Jr., writing the opinion of the Court in New York Trust Co. v. Eisner, 256 U.S. 345, 345 (1921).
requirements that phase in over time, so that the government and forest users have the opportunity to adapt to the new regulatory system.

**Improving capacity and law through good process**

The process of reforming the law often gives the World Bank opportunities to address the other avenue of strengthening legal frameworks: increasing the legal capacity of government and stakeholders. These activities can be synergistic.

**Compiling existing forest laws.** A first step in legal reform is to compile the texts of the existing forest laws and, often, also property, administrative, criminal, and other general laws that affect forest management. In some countries, no one will have seen such a collection before. The forest laws may have been amended many times over the years, but no one may have published a version with all the amendments. The government may have produced many forest regulations but never have organized them into a single collection. The officials in the field charged with implementing and enforcing the law may have little idea what it looks like, and the forest-dependent people affected by the law may have no easy way to know what the law is.

**Understand legal context and legal practice linked to forests.** A second step is to investigate the legal context of the country and the legal practices associated with the forests. This may expose any number of legal capacity issues, directly or indirectly linked to reform of the law. For example, forest officers may lack an understanding of basic policing skills and may not be properly preserving evidence of unlawful activities. Prosecutors and judges may lack a basic understanding of forest issues and may not be giving proper weight to the suppression of forest crimes. Land records may be incomplete or nonexistent, making it difficult to determine tenure rights. A law reform project is seldom tasked with addressing problems like these, but it can flag them for other projects and donors to address.

The most important capacity-building effort of a law reform project is typically also the most important step in improving the substance of the law: vetting proposals for the new law with government officials and local stakeholders.

**LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS**

The forest legal framework must be responsive to change. History teaches that the social demands on the forest are slowly but constantly changing, and no one can possibly anticipate all the situations that will come before the law. It follows that for the legal framework to function, it must have flexibility.

**Incentives and feedback mechanisms.** Experience has demonstrated that the best legal systems achieve their goals through structures that contain incentive and feedback mechanisms. The hallmarks of those systems are transparency, accountability, and public participation. The true art of legal reform is to create a framework that is consistent with social change but that also drives institutions to change, striving for better governance of the forest.

**Reflecting current values is important.** Forest law reform efforts typically share some common challenges. One is incorporating modern values into forest laws. Forestry as a profession has long embraced sustainability, but notions of what resources the forester must conserve have changed as society’s knowledge and interests have changed. Now society may be as interested in biodiversity conservation and carbon sequestration as in fuel and fiber production, and ideally governments want their laws to reflect current values.

Values determine not only what resources the forester should conserve but who should have access to those resources. The present trend is greater recognition of indigenous, aboriginal, traditional, and community uses, which centralized forest management agencies have often marginalized. Writing modern standards that can coexist with uncodified traditional rights and expectations can be difficult. The drafter is often tempted to focus on commercial, large-scale forest use, but slighting traditional uses can promote conflict and disrupt forest-dependent communities. A project that hopes to combat poverty and promote the welfare of rural forest communities must consider their expectations and rights, including the particular rights of Indigenous Peoples (see note 1.3, Indigenous Peoples and Forests).

**Involve stakeholders.** Involving the public almost always strengthens the legal framework. Reviewers with multiple interests and perspectives shed new light on problems, exposing issues that a drafter listening only to government foresters might miss. Involvement also gives the public a sense of ownership of the law. A group that participates in the democratic process of lawmaking is more likely to respect the law than a group that has the law imposed upon them without consultation.
In addition, the process of public vetting builds capacity, both in the government and among stakeholders. Legislators and other elected officials bolster their knowledge of forest policy. Forest administrators, who often carry responsibility within the government for producing the first formal drafts of the law, learn how to tap stakeholder input. Being able to conduct a meeting where citizens feel respected and heard is a surprisingly rare skill. The technical skills of foresters often outweigh their social skills, but forest administrators have to master the social and political demands of public outreach. For their part, citizens, businesses, and civil society organizations must learn how to be effective participants, and like the government officials, they must learn to listen and not just make speeches. In the best of circumstances, all sides build trust, forge lines of communication, and learn patterns of dispute resolution that will continue to serve them for years after the new law is enacted, while the government implements the law (see box 5.12 for more about conflict and legal reform).

SELECTED READINGS

REFERENCES CITED

CROSS-REFERENCED CHAPTERS AND NOTES
Note 1.3: Indigenous Peoples and Forests
Chapter 5: Improving Forest Governance
Note 5.1: Decentralized Forest Management
Note 5.5: Addressing Illegal Logging

NOTE 5.3: STRENGTHENING LEGAL FRAMEWORKS IN THE FOREST SECTOR
ANNEX 5.3A  A CHECKLIST OF POTENTIAL ISSUES FOR THE FOREST LAW ADVISER

Note that in a given project, not every issue will rise to the point of demanding legal reform. This annex is based on Christy, Di Leva, and Lindsay (2007).

| Sustainability and environmental protection | Promoting noncommercial uses and values, such as environmental services  
Creating reserves and parks  
Creating standards or incentives for private forest stewardship |
| --- | --- |
| Commerce and trade | Regulating domestic transport and sales  
Regulating mills and other processing of forest products  
Regulating international trade associated with forests |
| Finance and taxation | Setting taxes and fees  
Providing for collection of taxes and fees  
Establishing dedicated uses of forest income, such as forest funds |
| Institutional reform | Establishing roles of minister and forest agency  
Assigning roles among competing ministries  
Enhancing the public’s role  
Establishing commissions and advisory bodies  
Defining the role of state forest corporations |
| Offenses and enforcement | Delineating the enforcement powers of officers  
Defining criminal offenses and determining associated penalties  
Defining civil wrongs and setting the associated measures of damages  
Setting the process for prosecuting or compounding offenses  
Setting rules of evidence and proof |

### Tenure
- Recognizing traditional and customary rights
- Providing for rapid adjudication of disputed boundaries and claims
- Delineating private property rights

### Public forest management
- Setting primary management goals beyond production of economic goods
- Establishing inventory and planning requirements, with environmental impact assessments
- Controlling concessions

### Private forest management
- Simplifying commercial regulation
- Setting environmental standards

### Decentralization and devolution of authority
- Setting rules for community forestry
- Delineating powers of local governments over forests

### Public participation and transparency
- Requiring public access to agency plans, rules, and guidance
- Allowing public participation in agency planning, rule-making, and enforcement
- Creating efficient conflict resolution mechanisms
- Requiring public officials to disclose financial interests

### Commerce and trade
- Regulating domestic transport and sales
- Regulating mills and other processing of forest products
- Regulating international trade associated with forests

### Finance and taxation
- Setting taxes and fees
- Providing for collection of taxes and fees
- Establishing dedicated uses of forest income, such as forest funds

### Institutional reform
- Establishing roles of minister and forest agency
- Assigning roles among competing ministries
- Enhancing the public’s role
- Establishing commissions and advisory bodies
- Defining the role of state forest corporations

### Offenses and enforcement
- Delineating the enforcement powers of officers
- Defining criminal offenses and determining associated penalties
- Defining civil wrongs and setting the associated measures of damages
- Setting the process for prosecuting or compounding offenses
- Setting rules of evidence and proof
ANNEX 5.3B  SIX DRAFTING PRINCIPLES FOR CREATING BETTER FOREST LAWS

From Lindsay, Mekouar, and Christy (2002).

Principle 1: Avoid legislative overreach
The new law should match the capacity, needs, and social context of the country.

Principle 2: Avoid unnecessary, superfluous, or cumbersome licensing and approval requirements
These can stifle private sector forest use. Do not create these without good cause.

Principle 3: Include provisions that enhance the transparency and accountability of forest decision-making processes
A broad range of mechanisms are available to accomplish transparency and accountability, including specific limits on the exercise of government discretion, requirements to seek public comment on plans and decisions, access to information rules, oversight bodies, and citizen access to the courts.

Principle 4: Enhance the stake of local nongovernment actors in the sustainable management of forests
The trend around the world is toward more local control of forest resources. The law can guarantee local actors secure rights while also granting them some flexibility in how they exercise those rights.

Principle 5: The drafting of law needs to be a broadly participatory process
Public participation improves the substance of law, and the process helps build support for law.

Principle 6: Increase the effectiveness of direct law enforcement mechanisms set forth in forestry legislation
Reformers should pay attention to both the penalties and the processes of law enforcement.
Fiscal instruments encompass a wide range of mechanisms by which money flows between public and private sector institutions involved in the forestry sector. Flows from the private sector to the public sector (forest charges) can be broadly categorized as taxes, royalties, fees, and fines. Financial flows in the other direction (incentives) include tax incentives, grants, subsidies, and subsidized loans. Other fiscal instruments include temporary measures (such as performance bonds) and direct intervention by the state (for example, joint ventures, public shareholding, state marketing boards, and price restrictions). All of these instruments have different strengths and weaknesses (see box 5.14) and deciding on the right mix of instruments depends on the objectives that the forestry policy maker wishes to achieve.

The main objectives of fiscal instruments in the forestry sector are the same as in other parts of government. The two most important are to raise money for the state and to cover the costs of forest administration. In addition, a distinction should be made between raising revenue from the use of the forest resource (royalties) and general revenue collection (taxes).

Fiscal instruments (charges and incentives) can also be used as tools for policy implementation, either to promote

### Box 5.14 Common Problems with Fiscal Systems in the Forestry Sector

Fiscal systems in the forestry sector generally suffer from three similar problems:

**Inadequate rent capture.** Charges for the harvesting of publicly owned forest resources often do not capture the full commercial value of the harvested products. Charges are often set administratively and are not updated frequently, so they rarely reflect true market values. The main consequence is that these artificially low prices distort markets, discourage efficient use of the resource, and result in lost revenues to the state. Inadequate charges may also encourage corruption, if government officials can capture some of the uncollected rent for themselves during the process of monitoring, controlling, and approving forestry activities.

**Complexity.** Fiscal systems in the forestry sector are often complicated, as a result of administrative processes (setting and collecting forest charges, for instance) that attempt to replicate market forces by the use of detailed schedules of charges according to product type, tree species, forest location, and total area of production. The main consequence is that such systems are often expensive to administer and administration costs can account for a high proportion of total revenue collected. Complexity may also present more opportunities for corruption.

**Perverse or unintended effects.** Fiscal systems also often have unintended effects, particularly with respect to environmental and social aspects of forest management. Incorrect pricing often leads to poor harvesting practices (for example, selective harvesting rather than harvesting of all commercial trees, thus leaving large amounts of roundwood as waste in the forest). Fiscal systems are also sometimes inequitable, especially where harvesting activities impose costs on people living in and around forests but provide them few benefits.

forestry policy or to promote other government policies. Forestry policy objectives largely center on sustainable forest management (that is, the promotion of good forest practices and deterrence of bad practices). Broader policy objectives can include income redistribution, correction of externalities (nonmarket costs and benefits), strengthening of legal compliance, and encouragement of economic development (for example, through the creation of income, employment, and value added).

Three other issues should also be considered in the design of any system of fiscal instruments:

- **Economic efficiency.** Fiscal instruments often result in market distortions (they alter the costs and prices of inputs and outputs in the sector). These should be minimized wherever possible, unless introduction of such distortions is a specific policy objective.
- **Administrative efficiency.** The public costs of enforcement and the private costs of compliance with the fiscal policy should be appraised and minimized wherever possible.
- **Equity.** The impact of fiscal instruments on different income groups should be considered. All groups should face the same set of charges and incentives, unless income redistribution is an objective of the fiscal policy (to assist with poverty reduction, for instance) (see box 5.15).

### OPERATIONAL ASPECTS

**Technical and policy considerations can shape fiscal instruments.** Fiscal instruments employed in the forestry sector encompass a wide range of different types of forest charges (see annex 5.4A to this note) and incentives. Operational aspects of the design of fiscal systems in the forestry sector fall into two broad categories. The first includes technical considerations, such as setting the correct level of charges and incentives and designing a system that is efficient and equitable. The second includes policy-related considerations: Does the system promote good forest management, good governance, and poverty alleviation? Box 5.16 presents a brief summary of some of these issues, which are further elaborated upon in this note.

**Setting forest charges correctly.** To ensure that forest charges are economically efficient and do not introduce unintended distortions in the markets for forest products, the correct levels of forest charges must be established. Because charges for services and materials (fees) should reflect their costs, and general taxes are largely outside the control of forestry administrations, the main concern of forestry administrations is usually to establish the correct level of royalty payments (that is, payments for the use of the resource).

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**Box 5.15 Informal Competition for Harvesting Rights in Fiji**

Most natural forest resources in Fiji are owned by local communities (native landowners), but monitoring and control of forest harvesting is performed by the Forestry Department. The Forestry Department, along with the Native Land Trust Board, assesses and collects a variety of royalties and fees. Some of this revenue is retained by the two organizations to cover their administrative costs, but the majority of the revenue collected is distributed to individuals in local communities where harvesting has occurred.

To gain access to forest resources, forest operators have to obtain a license from the Forestry Department and (at least informal) approval from local communities where they wish to harvest. As part of the negotiations with local communities, it has become common practice for potential license holders to offer additional benefits (monetary or in kind, known as “commissions” or “goodwill”) to communities where the harvesting will occur. Because of the infrequent revision of royalty rates, these additional payments can be almost as much as the revenue collected through the royalty system.

Analysis of the total amount of revenue collection has shown that almost all the rent from forest operations is collected and that about 85 percent of this is paid to local communities (with the remainder retained equally between the Forestry Department, the Native Land Trust Board, and the forest operator). This high level of rent collection is no doubt due to the presence of the informal market mechanism on top of the official forest revenue system.

The success of this system is due to the following factors: a high level of competition for the resource; well-informed communities with a long tradition of community rights; a strong legal framework and institutions to support local communities; and the creation of an established norm to make informal payments on top of official royalties and fees.

In theory, the royalty payment for roundwood harvested from the forest should equal the price that would be paid for standing trees (stumpage value) if they were sold in a competitive market. This price can be calculated as the value of the roundwood at the port or processing plant (determined by species, quality, product prices, and the efficiency of processing plants), less the costs of harvesting, extraction, and transport (determined by the efficiency of the producer and location-specific factors, such as terrain, forest stocking, and transport distance).

Royalty payments can be established through competitive means, such as competitive bidding in auctions or tenders, or they can be set by the forestry administration. In the latter case, consultation, negotiation, or calculation of the stumpage value (as described above), can be used to set the payment.

Because of the effort involved, infrequent revaluation of royalties is a major problem in many countries, although some countries regularly alter royalties according to predetermined formulae (for example, taking into account price indexes for the main operational costs and forest product prices). Another difficulty with setting royalties administratively is obtaining reliable information about costs and prices for the calculation of stumpage values. In addition, information about forest stocking is sometimes needed to calculate appropriate royalties (especially where royalties will be collected using area-based charges).

Traditionally, competitive mechanisms have mostly been used to establish royalties for relatively small, short-term sales of standing trees (especially from forest plantations). Royalties on production from longer, large-scale forest concessions have more commonly been established using administrative means. However, it is possible to combine both methods for forest concessions by, for example, setting volume- and area-based charges according to a predetermined formula and using a bidding process to set a license charge (World Bank 2003).

FISCAL INCENTIVES. Fiscal incentives are a subset of a broad range of measures that encourage others to act (FAO 2004). Incentives are most commonly used to promote activities that result in net nonmarket benefits (that is, production of goods and services, usually social and environmental, that have no value in the marketplace and are not, therefore, a source of revenue for the forest owner). In many countries, incentives are used to promote tree planting and afforestation in general, with a broad assumption that these actions will usually lead to net nonmarket benefits. However, with the development of payments for environmental services (PES) and funding mechanisms to support international conventions, incentives are gradually becoming more accurately targeted toward specific activities that result in specific nonmarket benefits (for further details, see note 2.3, Innovative Marketing Arrangements for Environmental Services).

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The most common fiscal incentives in the forestry sector are reductions in forest charges (for example, provision of materials or services by the forestry administration at low cost or reductions in taxes and forest charges if operators build processing facilities). Other incentives include direct transfers from the public to the private sector if operators undertake certain activities (grants or subsidized loans for afforestation, training, or forest industry development, for instance). As with forest charges, effectiveness, efficiency, and equity are important issues that should be addressed as part of the design of any forestry incentive scheme.

Targeting incentive schemes. With respect to effectiveness, incentive schemes should be properly targeted toward both the objectives that it sets out to achieve and the individuals or institutions that it aims to influence. In this respect, it is generally better to offer direct transfers to support specific activities in the forestry sector rather than to reduce forest charges as an incentive.

Targeting and establishing the correct level of incentives are also important to achieving economic efficiency. Incentives should only be offered to support activities that result in net nonmarket benefits and the efficient level of incentives will be that which reflects the level of those benefits (as opposed to the cost of the relevant activities). Common problems in this area include the following:

- **Overpayment of incentives.** Overpayment occurs where a flat-rate subsidy or grant payment is used to encourage an activity. Inevitably, some recipients of such payments will receive more than would be necessary to make them undertake these activities. The difference between what is paid and what would be required is sometimes referred to as the deadweight of the incentive. This can be minimized by using competitive tendering for specific activities rather than flat-rate grant schemes.

- **Non-additionality.** This is an extreme form of deadweight, where recipients are paid to do something that they would have done anyway (without any incentive). This often occurs where an incentive is given to do something that is already required by law (for example, fiscal incentives to promote industry development where concessionaires are already required to build processing facilities as part of their concession agreements).

- **Displacement.** Displacement occurs when an incentive results in a change in behavior but little or no increase in the total amount of the desired activity. It is often associated with location-specific incentives, such as grants for tree planting that result in changes in the location of tree planting but little increase in total tree planting.

The issues just mentioned are starting to gain the attention of policy makers (for example, in the rules and procedures for investments for credits under the Kyoto Protocol) and again, direct transfers (as opposed to forest charge reductions) are likely to offer a better opportunity to improve targeting and efficiency.

**Political considerations.** Fiscal policies in the forestry sector have a huge impact on the success of forestry policy. In addition, the administration of fiscal instruments often accounts for a significant proportion of the forestry administration's functions. Consequently, it is essential that fiscal policies support policy objectives and are administratively feasible.

Political consensus and broad stakeholder support must be built for fiscal policies in the forestry sector to be successfully reformed. An approach to revenue collection based on a social contract between government and the public, rather than coercion, is likely to be more sustainable in the long run. Consultation, transparency, and public disclosure of information during the establishment and collection of forest charges is likely to build support for the process and reduce the possibility for vested interests to block reforms. Coordination with policy makers in other parts of government should also assist in this respect.

**Administrative considerations.** Administration of fiscal instruments should be based on a stable framework, supported by legislation, that establishes the basic principles and procedures for forest charges and incentives but, at the same time, allows the forestry administration the flexibility to revise the instruments when required (in response to changing market conditions, for instance). The infrequency of revisions to forest charges is often a result of the requirement that the changes only happen through legislation. Thus, it is better to use primary legislation to establish the mechanisms and procedures that will be used to set forest charges, with appropriate mechanisms for regular reviews, oversight, and consultation.

In practical terms, fiscal instruments should be simple to administer and easy to enforce, and should minimize the need for discretion or judgment by forestry administration staff. A simple forest revenue system that can be easily enforced will be better than a more complicated system that is easy to evade. Where evasion is high, the partial enforcement of revenue collection can have a significantly detri-
mental impact on the equity of the forest revenue system and is likely to result in little public support for the forestry administration.

Poverty alleviation considerations. Because poverty alleviation is a major national priority in most developing countries, forestry policy (including fiscal systems in the forestry sector) should be designed with this in mind (see chapter 1, Forests for Poverty Reduction, and associated notes). Subsidies and other fiscal policies for nonforest activities can also undermine indigenous communities' interests in and claims on forest resources.

To make fiscal systems more advantageous to poor people, decision makers should gather and analyze information on the impacts of various policy and management options on the livelihoods of people living in and around the forest, for example,

- the ways in which commercial forest harvesting affects the availability of wildlife, nonwood forest products, and other forest services used by local people;
- the effect of protected areas or bans on hunting and collection of nonwood forest products on local livelihoods;
- the value of fuelwood and nonwood forest products lost if a degraded forest area were to be converted to planted forest; or
- the beneficiaries of financial incentives with regard to planted forest development.

Nonfinancial considerations: In addition to the financial costs and benefits to forest owners and other stakeholders, nonfinancial aspects must also be considered. Many of these are local and can be detrimental to poor people, including degradation of soil and water resources, loss of access, and degradation or loss of forests that have cultural or spiritual value.

Fiscal systems that appear to be fair to stakeholders at the national level may have negative effects on poor communities if those communities bear the burden of some costs, but do not share the benefits of forest management. Thus, fiscal systems can attempt to compensate for some of these effects through revenue- or benefit-sharing arrangements (see below) or can be combined with incentives to support local participation in forest management or regulations to minimize the negative impacts of forest management on communities.

Revenue sharing. A recent trend in many countries is the development of revenue sharing or revenue retention mechanisms, or both. Revenue sharing occurs when part or all of the public revenue from forest operations is shared with individuals or local levels of government (usually in locations where production occurs). Revenue retention occurs where the forestry administration keeps some or all of the revenue collected and uses it to fund their operations.

The earmarking or hypothecation of government revenue is generally not recommended because it goes against the principle of good public financing that public revenue should be collected according to ability to pay and disbursed according to need. However, revenue sharing is often proposed as a mechanism to generate local support for forest protection and use. Revenue sharing and revenue retention are also suggested in situations where disbursement of public funds is slow and unpredictable.

Although the use of revenue sharing should generally be minimized, the above arguments may sometimes be valid. If so, the following should be considered:

- Governance and administrative capability. Any decision to automatically share revenue with lower levels of government (or communities) should consider whether the scheme will result in the desired effect. Lower levels of government are likely to have less capability to manage funds and, in particular, may be less qualified to properly assess and collect forest charges. In addition, it should not be automatically assumed that lower levels of government are more responsive to local people’s needs (see note 5.1, Decentralized Forest Management).
- Property rights. In some countries, forest resources are managed by the government on behalf of local people (for example, where local communities own the land under forests or own the forests entirely). In such cases, revenue sharing is appropriate and the amount of revenue shared with local people should be determined on the basis of the value of their property rights.
- Community forest management. In some countries, complete (or nearly complete) control over forest management has been delegated to local communities. In such circumstances, the role of the forestry administration should be as a facilitator, to ensure that best practices in revenue collection are followed and to build capacity in local governance and administrative capability (see note 1.2, Community-Based Forest Management).
- Forest administrations as service providers. If the forestry administration is providing a good or service, it is performing the function of a state-owned enterprise and it
is reasonable to allow the administration to retain the revenue from charges it collects from such activities. Similarly, it is acceptable for forestry administrations to retain some revenue to cover the costs of administering the forest revenue system, when the costs of doing so can be clearly identified and quantified.

Revenue sharing is not a panacea for problems of weak governance and administration in the forestry sector at the national level. As with other aspects of fiscal policy in the forestry sector, any decision to implement revenue sharing should be based on a robust appraisal of what the problems are and how revenue sharing might address these problems.

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

Based on the lessons learned from countries’ experiences with fiscal instruments, the following are recommendations for best practice in this area.

Policy and administration

- Fiscal policies in the forestry sector should support forestry policy objectives and the broader objectives of government. Negative impacts on efficiency and equity should be minimized.
- Fiscal policy reform requires political support and some degree of consensus and should not be viewed as a purely technical issue. Open debate and transparency in the procedures for revising and implementing fiscal policy are necessary to build this support.
- Administration of fiscal instruments should be as simple as possible and calculation of forest charges should be based on objective criteria. The need for discretion or judgment by field staff responsible for assessing and collecting charges should be minimized.
- The general framework for fiscal policies should be established in primary legislation, but forestry administrations should be empowered to revise the details of implementation. Automatic and regular reviews of fiscal instruments should be implemented according to clearly defined, rigorous, and objective processes and procedures.

Defining the mixture and level of fiscal instruments

- Wherever possible, market mechanisms should be used to establish the levels of charges and incentives rather than administrative means.
- When charges and incentives are set administratively, they should be based on a rigorous and objective calculation of costs and benefits. In particular, forest charges should be based on independent or aggregate information about forest product prices, and charges levied on individual operators should not be based on stated prices. Incentives should be based on the benefits of activities that are being encouraged rather than their cost.
- Incentives should be used to achieve clearly defined policy objectives; they should be properly targeted and regularly evaluated. Incentives in the form of direct transfers will generally be more successful than reductions in forest charges. Incentives should also be structured to maximize net benefit and minimize deadweight, nonadditionality, and displacement.
- There is a tradeoff between administrative efficiency and economic efficiency in fiscal instruments. More complicated instruments tend to be more economically efficient but more expensive to administer. Numerous charges should be avoided (especially where they are levied on the same item). However, in general, a mixture of different types of charges may be optimal. Thus, countries should not rely on volume-based charges alone, but should consider greater use of area-based charges and license charges.

Revenue sharing

- In general, hypothecation of forest revenue is not good practice in public finance and should be avoided. However, under some specific circumstances it can be justified. The first is where local people or communities have clearly defined property rights over some or part of the forest resource. The second is where the forestry administration is collecting charges to recoup costs for the provision of a good or service (which can include the cost of administering the forest revenue system). In such cases, revenue sharing should be based on an objective appraisal of the amount of revenue that should be shared or retained.
- Little evidence supports the hypothesis that revenue sharing alone will result in improved forest protection by local communities. In situations where conflict with local communities is an issue, it may be preferable to devolve complete responsibility for forest management (including revenue collection) to local communities. In such cases, the forestry administration’s role becomes that of a service provider, to ensure that best practices in revenue collection and administration are followed.
Any proposal to implement revenue sharing should consider local governance and the administrative capability of local communities or lower levels of government to implement such systems. Where governance and administration at the national level are weak, the situation is likely to be even worse at lower levels of government.

SELECTED READINGS


IUCN. 2000. *Financing Protected Areas: Guidelines for Protected Area Managers.* Best Practice Protected Area Guidelines Series No, 5. Gland, Switzerland: IUCN.


REFERENCES CITED


CROSS-REFERENCED CHAPTERS AND NOTES

Chapter 1: Forests for Poverty Reduction, and associated notes

Note 2.3: Innovative Marketing Arrangements for Environmental Services

Note 5.1: Decentralized Forest Management
Gray (1983) lists different types of forest charges commonly used in the forestry sector. In addition to these, fines can also be considered a type of forest charge. A summary of the main features of 12 different types of forest charges is given below:

- **License charges.** License charges are a type of royalty or fee to cover the administrative cost of issuing licenses. They are usually lump-sum payments that may vary by the license area or duration and can be collected at the start of a license or annually. To be economically efficient, license charges should reflect the value of the security of wood supply conferred to the license holder or should cover the cost of administering the license (or a combination of the two). They may also be used to capture some of the value of production (that is, they may be part of the royalty on production) if this is not fully reflected in other charges. The costs of collection and administration are low and these charges are difficult to evade, so they are administratively efficient. License charges tend to have little impact on equity, but they can be used to redistribute income (by setting lower license charges for smaller operators, for instance). License charges are quite common in the forestry sector.

- **Annual area charges.** These charges are usually a type of royalty and are calculated as a fixed amount multiplied by the whole license area. Annual area charges are generally easy to administer and have little impact on equity. They can be economically efficient (that is, they can reflect the value of wood production), but it is often difficult to assess the correct level of charges because of the need for detailed information about forest stocking. Consequently, area charges are often used in combination with volume-based charges to collect royalties.

- **Charges based on standing volume, allowable cut, or property values.** These charges can be a type of royalty or can be used for general tax collection, or both. They are usually calculated as a fixed amount multiplied by standing volume or allowable cut or are related to property values. They are generally administratively efficient and have little impact on equity, but economic efficiency suffers from the same problems noted with annual area charges. The use of such charges as a component of royalty collection is not common, but these charges are sometimes used as a form of income tax on forest owners (mostly in developed countries).

- **Charges based on the area logged.** These charges are very similar to annual area charges, but are based on the area logged rather than the total license area. The main difference is that it is sometimes difficult to determine the area that has been logged. These charges are not commonly used.

- **Volume-based charges.** Volume-based charges are the most common type of royalty and are calculated by multiplying the volume harvested by a price. The prices used in this calculation can be derived in a variety of ways. A simpler version of this is per tree charges (where the number of trees is multiplied by a price). These charges can be economically efficient if the price reflects the true value of the wood produced, which is often not the case. The administrative efficiency of volume-based charges is often low because considerable effort (and cost) is required to monitor the level of production and to establish the correct price levels to use. Volume-based charges can be inequitable because they are often the same for all producers and do not account for location-specific differences in production costs (such as terrain or distance to market). However, they can be used as a policy tool, by adjusting charges to reflect policy objectives (for example, by deliberately lowering charges on lesser known species to encourage their use).

- **Charges on production of forest products.** These charges are similar to volume-based charges but are charged on the output of processed forest products and nonwood forest products. They are common and can be collected in addition to or in place of volume-based charges on roundwood. They can be used to support policy objectives (by deliberately setting low charges for nonwood forest products to promote rural income generation, for instance).

- **Charges on exports.** Charges on exports can be collected from exports of roundwood or processed forest products and are used in many countries. They have similar strengths and weaknesses to the charges on production of forest products but are generally more administratively efficient (because monitoring is usually easier and costs less). The purpose of such charges can be to collect additional royalties or general tax collection. A combination of low volume-based charges and export charges on roundwood is frequently used to promote domestic processing of roundwood by deliberately distorting the market (that is, reducing the domestic roundwood price to less than the international trade price).
Fees for services or materials provided. These charges are common and are payments for services or materials provided by the forestry administration. They may or may not be voluntary, depending on whether the operator has a choice to request the service or materials. Their purpose should be to cover the costs of providing these services or materials, but they are sometimes used to collect additional revenue. They are generally administratively efficient and have little impact on equity (unless a significant proportion of these charges are paid by small, low-income producers). They can be economically efficient if they reflect the true value or cost of the services or materials provided, which is often not the case. They can also be used to promote other policy objectives.

Charges on equipment or workers. Specific charges on equipment or workers are uncommon, but a number of countries collect charges for registration or permits to trade in forest products or to operate processing plants.

General taxes. Companies operating in the forestry sector are also usually required to pay the same taxes as other industries (corporate taxes, income taxes, sales taxes, value-added taxes, and so forth). Their purpose is to collect government revenue, and responsibility for such taxes is usually outside the control of the forestry administration. However, in some countries, tax incentives are used to encourage certain forestry activities (afforestation, for example).

Profit-based royalties. These types of charges (sometimes called “resource rents”) are usually calculated as a proportion of the profits earned by companies working in the sector. They are common in other extractive industries (mining, for instance) but have rarely been used in the forestry sector.

Fines. The main purpose of fines is to deter illegal activities in the forestry sector. Fines are usually fixed in legislation or regulations and are usually not based on any economic criteria, although they are sometimes based on a multiple of the value of illegal products seized or identified by the forest administration (called “compounding”). The administrative and economic efficiency of fines is generally low and could be improved in many countries. Similarly, if law enforcement is weak, the imposition of fines can be inequitable.
Forest crime—including illegal logging—and corruption are present throughout the world. It is particularly troubling in developing countries, where illegal logging in public lands alone causes estimated losses in assets and revenue in excess of US$10 billion annually, more than six times the total official development assistance dedicated to the sustainable management of forests (World Bank 2004). Governments lose as much as US$5 billion annually from evaded taxes and royalties on legally sanctioned logging. 1.6 billion people depend upon forests for part of their livelihoods, and as many as 350 million people living in and around forests are heavily dependent on forests for their livelihoods and security (see chapter 1, Forests and Poverty Reduction, and associated notes). These vulnerable groups are at risk from illegal logging and removal of timber and nontimber products from the forests. Moreover, violations of protected area boundaries threaten the conservation of forest resources and biodiversity.

Illegal logging also subjects legitimate forest enterprises to unfair competition through price undercutting and discourages them from making socially and environmentally responsible investments in the sector. There are less visible—though highly insidious—costs resulting from the erosion of institutions, the spread of corruption across the economy, and reduced growth. Finally, forest crime creates negative environmental, economic, and social consequences at the global level as well. Forests are a global public good, and their degradation imposes global costs, such as climate change and species loss.

While illegal logging and other forest crime can, from a national point of view, be important in both small and large and high-forest and low-forest countries, from a global perspective it is possible to indicate where these impacts are likely to be most harmful. It is also possible to establish that the problems in the forest sector are closely linked to broader issues of governance (figure 5.2).

Trade has been identified as an important driver of illegal logging and other forest crime. The value of suspicious wood products worldwide may be as high as US$23 billion. Out of the total of illegal timber, it is estimated that about US$5 billion enters world trade, representing as much as 10 percent of the value of global trade in primary wood products. Trade in timber products is often routed through third countries, adding another trade-related dimension to the problem (China, for example, reexports about 70 percent of its timber imports). An economic analysis based on simulations from the Global Forest Products Model suggests that this illegal material depresses world prices by 7–16 percent on average (Seneca Creek Associates and Wood Resources International 2004).

Forest crime ultimately results from a failure of the rule of law. Two types of failure in the legal system lead to criminal behavior: failures of law and failures of implementation (see note 5.3, Strengthening Legal Frameworks in the Forest Sector). When laws themselves are flawed or contradictory, the focus of combating illegal logging and other forest crime should be on legal reform, whereas when the “right” laws are in place the focus should be on enforcement.

Fuelwood accounts for the largest single use of wood (by volume) around the world. In developing countries, most fuelwood is consumed for domestic and small-scale industrial uses and comes from family labor or informal supply systems that are often based on sources of supply outside officially recognized forest areas, such as farmland, brush and scrubland, and other scattered trees. A substantial portion of fuelwood collection takes place outside formal forest management and in some, perhaps in many, circumstances, is in violation of the law.

Other illicit activities are also associated with timber harvesting and trade, beyond cutting trees where and when it is proscribed. Such activities include irregular timber sales; corruption in the award of concessions and

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**NOTE 5.5**

**ADDRESSING ILLEGAL LOGGING AND OTHER FOREST CRIME**
service contracting; evasion of taxes, royalties, and other fees by enterprises or by communities or private forest owners; circumvention of labor laws; and unauthorized wood processing. Although no reliable estimates are available, anecdotal evidence and stakeholder interviews suggest that in state-owned forests, financial losses from corruption can be as high as or even higher than those from stolen timber (Savcor Indufor Oy 2005). In practice, the distinctions between illegal logging and other timber-related crime become blurred. The same perpetrators may be responsible for outright theft or corruption-related illegal logging.

Corruption and other financial crimes often involve money laundering, adding another dimension to the constellation of what should be considered forest crime. In addition to the timber-related crimes, forest crime also includes such illegal activities as wildlife poaching, arson, and unlawful conversion of forest lands for other uses.

Despite the magnitude of the problem and existing measures to combat corruption (see box 5.17), there are few instances of prosecution and punishment. In fact, if there are prosecutions, it is the poor, looking to supplement their meager livelihoods, who are victimized and sent to jail, while large-scale operators continue with impunity. Arguably, this is the worst form of violation of equity and justice, arising from a clear failure of governance, and it needs to be addressed.

**OPERATIONAL ASPECTS**

**Understanding causes of illegal logging and other forest crime**

Reducing illegal logging and other forest crimes through Bank operations requires understanding the underlying causes and implementing actions that address these causes and complement national and local contexts. The ways that drivers behind illegal logging and forest crime operate are highly country and location specific, and depend on economic, social, and cultural factors as well as the type of forest resource and its ownership or tenure arrangements. An appropriate set of responses can only be defined at the country level in processes involving the key stakeholders who interact with the forest resources.

**Means, motive, and opportunity construct.** The "means, motive, and opportunity construct" (see annex 5.5A to this note) is useful to analyze the causes of crime. In this framework, persons motivated by greed, need, or other desires employ the tools (means) available to them to exploit the existing vulnerabilities (opportunities). Illegal logging and other types of forest crime take place when these three factors are in place simultaneously (that is, when there is a motive to act illegally, the potential illegal operators have the means to do so, and the context in which they operate provides an opportunity for illegal action) (figure 5.3). The responses to illegal logging and other forest crime then need
to focus on reducing the motivation for unlawful action, foreclosing the opportunities, and eliminating the means available to those operating outside the boundaries of the law.

The means, motive, and opportunity construct is of particular value in suggesting areas of comparative advantage across potential partners in improving forest law enforcement and governance. For example, consumer countries and industry occupy particular niches in helping to reduce the motive for illegal logging by reforming markets and public procurement policies that discriminate against stolen

Figure 5.3 National Action and International Cooperation for Controlling Forest Crime

<table>
<thead>
<tr>
<th>Eliminating means</th>
<th>International</th>
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<tbody>
<tr>
<td>Financial due diligence</td>
<td>Mutual legal assistance</td>
</tr>
<tr>
<td>Anti-money laundering</td>
<td>Financial due diligence and anti-money laundering</td>
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<tr>
<td>Asset forfeiture</td>
<td>Asset forfeiture</td>
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<table>
<thead>
<tr>
<th>Foreclosing opportunity</th>
<th>International</th>
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<tbody>
<tr>
<td>Improve forest management</td>
<td>Customs cooperation</td>
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<tr>
<td>Legal and judicial reform</td>
<td>Voluntary partnership agreements</td>
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<td>Anticorruption</td>
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NOTE 5.5: ADDRESSING ILLEGAL LOGGING AND OTHER FOREST CRIME
material. Governments and financial institutions can help limit the development of excess wood-processing plants and equipment by requiring and exercising due diligence in assessing wood supply and land availability in consideration of wood-based and agro-industrial investments. Producer countries have obvious priority with respect to improving forest management and control as an approach to reducing the opportunities available for illegal activities.

Need-based versus greed-based causes. Differentiating between illegal activities motivated by poverty (such as fuel-wood and fodder collection needs, for example) and those resulting from outright greed and that often involve organized criminal activity (such as commercial logging in protected areas) is also helpful in formulating effective and equitable responses to address these complex problems.

Framework to combat illegal logging and other forest crime

An effective strategy to combat illegal logging and other forest crime combines elements of prevention, detection, and suppression in a way that helps to achieve both short-term gains (such as increases in forest revenue, or the apprehension and conviction of the most flagrant violators of laws) to maintain the momentum of the process, and longer-term systemic changes (legal and institutional reforms and reduction of possibilities for corrupt behavior).

Prevention. Prevention combines the promotion of good governance in and outside the forest sector in general with more specific actions focused directly on forest crime. Links to broader development (poverty reduction, land use, industrial development, rural development, institutional reform, and the like) and forest sector policies, strategies, and programs (such as national forest programs) are evident, as are links to legislation in other sectors. These links require coordination to avoid overlaps and missed opportunities.

Effective prevention of forest crime may need to address the following issues:

Supply-demand imbalances
- Improving the availability of legal wood (fuelwood, charcoal, and building materials) or substitutes (kerosene, solar energy, gas) to meet basic needs of rural and urban populations
- Improving the availability and reducing the cost of legal industrial roundwood (for instance, through industrial plantations; see note 3.3, Forest Plantations)
- Ensuring that proper due diligence on the availability of legal timber is carried out before authorizing or financing forest industry capacity expansion (see note 5.4, Strengthening Fiscal Systems in the Forest Sector)
- Restructuring industry and downsizing excess capacity

Quality of legal and regulatory frameworks within and outside the forest sector
- Securing forest land tenure and access rights of the local or indigenous communities to timber and wildlife (see note 1.4, Property and Access Rights)
- Ensuring recognition of the legitimate needs of different stakeholders in forest concession agreements
- Simplifying overly complex laws and regulations that are not in line with the capacity of the different groups of forest users to comply with the legal requirements (especially for community and small-scale private forest owners)
- Identifying and resolving conflicting legislation and regulations (central vs. decentralized levels, different sectors) (see note 5.1, Decentralized Forest Management)
- Reducing unreasonably high costs of compliance for legal operators (by streamlining administrative procedures and reducing processing time of contracts and permits)
- Increasing costs of illegal operators through adjustments in penal codes to ensure that these constitute effective deterrents to forest crime
- Including appropriate means to prevent crime in forest management plans in commercial concessions (for example, by closing roads after harvesting, employing routine patrols, and determining what sort of tree marking and log labeling systems are used)

Institutional structures and incentives
- Addressing broader governance failures, such as lack of transparency and accountability, and corruption (for example, by reorganization of the public forest administration, improvements in procedures for concession award and timber sales, improvements to financial audit systems and staff incentive systems)
- Promoting independent forest certification schemes and other demand-side measures related to corporate social responsibility (for example, third-party audited systems for verification of legal wood origin), especially in cases where demand for timber and other forest products is driven by export markets (see note 3.2, Forest Certification Systems)
- Creating positive incentives for those complying with legal requirements, especially in situations where they
initially have to compete with illegal operators (for example, reduced concession fees for producers certified by an independent third-party)

- Promoting partnerships with civil society, such as consultative groups and joint government–civil society structures for monitoring forest activities
- Creating and strengthening high-level, intersectoral coordination mechanisms to harmonize policies, minimize negative cross-sectoral impacts (for example, with agricultural policies), and ensure that broader reforms have important and positive law enforcement benefits in the forest sector
- Collaborating with financial institutions to establish means to foreclose opportunities to launder profits from illegal forest operations

Forest monitoring and information

- Improving information on forest resources and legal harvest at the forest management unit level (for example, forest inventories and management plans that are of appropriate technical quality and detail, and log-tracking and chain-of-custody systems) (see note 7.2, Establishing Forest Information Management Systems)
- Publicly disclosing information on forest cover change, forest concessions, management plans and harvesting quotas, logging and timber transport, and forest revenues; and making such information accessible (for example, by posting it on the internet) to minimize manipulation, self-censorship, and physical risk to those involved in law enforcement

Capacity building and awareness

- Improving capacity of both forest and judicial authorities to enforce forest legislation from detection to conviction, thus establishing an effective deterrent
- Conducting campaigns that inform the public about the provisions of forest law in local languages, thereby ensuring that users are at least aware of rights, restrictions, and prohibitions
- Indicating actions that the public can take to support law enforcement efforts (for example, ways to report illegal activity)

Because preventive measures target the fundamental problems underlying illegal logging, many of them can be expected to take effect only in the medium and long term.

Detection. Detection refers to various methods of collecting and processing information on forest crime and related trade with the objective of identifying illegal activities and facilitating the design of improved policies. Detection can entail the following:

- Monitoring and surveillance to determine if and where crime is occurring, to set priorities, and to evaluate other elements of the enforcement program. The kinds of information that are needed include the geographic incidence of different crimes, the types of crimes that are occurring, the types of perpetrators, and the apparent levels of crime.
- Using systems that include satellites, aircraft, and ground monitoring and surveillance personnel to document the location, type, volume, and if possible, the identity of violators involved in illegal logging activities. The procedures used to draw inferences for use with the rest of the law enforcement program are just as important as the sophistication of the data collection processes.
- Employing indirect methods to assess the prevalence of illegal activity (for example, comparisons of data on production, consumption, and trade in forest products often show significant disparities between trading partners’ recorded exports and imports. These differences can indicate the potential magnitude of timber theft, smuggling, and transfer pricing).
- Establishing a process to determine if any institutional weaknesses exist that can create opportunities for timber theft (such as opportunities created by inadequate boundary marking, product marking, product measuring, product tracking, or an inadequate process of checking for revenue payments).
- Collecting evidence and documentation on a specific incident as the basis for arrests, judicial proceedings, fines, or other action. Specialized expertise is needed to employ techniques that are appropriate to the suspected crime and the national legal system.
- Establishing crime monitoring systems that collect data for evaluating the enforcement program’s impact and efficiency, and for providing feedback to program planners.
- Increasing forest transparency and crime detection through independent forest monitoring, especially in countries with weak government systems prone to corruption.

Suppression. Suppression of illegal activity should be the last recourse in a forest law enforcement program, because it almost inevitably involves the use of force. Suppression measures pose risks to agency personnel, the public, and the lawbreaker. The indiscriminate use of force also poses risks to the public at large. Because the people involved in crimi-
nal activity at the field level are often simply laborers (and usually poor people with few alternatives) working at the direction of others, genuine ethical reasons exist to question the use of force. In any responsible suppression program, these risks need to be systematically considered in light of the probability of success, the accountability and transparency of the suppression effort, and the skills and training available to law enforcers. In addition, suppression is an area for which the World Bank has strict guidelines based on its mandate that define its level of involvement.

Effective suppression may require the following:

- Developing risk-success matrices to make appropriate preparations for safe conduct of suppression operations, or to determine when safe operations are a practical impossibility. Such matrices should be developed by law enforcement practitioners.
- Tailoring institutional arrangements for major suppression efforts or crackdowns to local circumstances (see note 5.2, Reforming Forest Institutions). However, these arrangements also clearly need to incorporate adequate provisions for accountability and transparency commensurate with the likely use of force and the need for security and confidentiality.
- Developing interagency arrangements in which the police, military, customs, and other law enforcement agencies frequently and effectively work together with natural resource agencies. These arrangements require resources, budgets, planning, and reporting provisions to be in place.
- Training staff members at all levels where extraordinary suppression efforts are needed, for example, in specialized skills such as investigating criminal activities, documenting crimes, handling evidence, and preparing judicial proceedings. In highly dangerous or specialized investigations, training appropriate for undercover operations, firearms safety, and other special expertise may be needed.

The complexity and risk of suppression efforts underscore the value of measures to avoid the emergence of a serious law enforcement problem through sound prevention and detection efforts. Where such efforts fail, or are not made, the problems of suppression can rapidly become nearly insurmountable.

Many of the specific interventions and tools discussed above can simultaneously contribute to more than one of the enforcement functions of prevention, detection, or suppression. Issues of cost, risk, capacity, and commitment need to be addressed in the design of these programs.

Annex 5.5B to this note brings the drivers of forest crime (motive, means, and opportunity) together with the prevention-detection-suppression framework in several typical typologies of forest crime, and can be used as a tool to facilitate discussion in country contexts (for example, in the context of national-level action plans as discussed below).

### National-level processes to combat illegal logging and other forest crime

National and local level forest law enforcement programs. Forest law enforcement programs need to be formulated at the national and local levels, building on established laws, institutional arrangements, and the interests and capabilities of different stakeholders, and need to address the specific crime problems being encountered.

As a consequence of the FLEG processes (see chapter 5), some countries are beginning to address forest crime through concerted, coordinated, multistakeholder, national-level FLEG processes, resulting in national-level FLEG action plans. Experience with these processes has demonstrated that combating illegal logging and other forest crime is as much a political process as it is technical, and involves reconciliation of the various stakeholder interests in a manner that enables change. Where the economic stakes in illegal activities are high, powerful interest groups can forcefully protect the status quo even if the outcome is clearly negative from society’s point of view.

**Stakeholder coalitions.** Rarely is one stakeholder group able to push through a major change in the established power balance. Instead, successful change processes rely on coalitions of several interest groups with different capacities. Local and international NGOs have often managed to bring the problem of illegal logging out in the open and raise awareness among politicians and the general public of the need to act. Representatives from interest groups directly involved in timber production can wield considerable influence among their peers and colleagues. High-level political champions are also required who are able to fend off efforts to slow down the implementation of the proposed measures through behind-the-scenes maneuvering.

Partners willing to support FLEG can be found among many stakeholder groups. Ministries of finance and local municipalities are interested in the increased tax revenue that reduction of illegal activities could bring about. Forest
Enterprises may be motivated to join the effort because of market pressure or ethical reasons. Local people whose rights are trampled by illegal loggers are potential partners, as are NGOs concerned about protection of the environment, human rights, and democracy. In addition, there are always individuals in all stakeholder groups and institutions, including public forest administration, who need no other motivation than pursuit of fairness and justice. External partners can reinforce and support these progressive groups and, within the boundaries of their mandates, facilitate their work at the political and technical levels.

FLEG processes should bring partners together. The aim of a national FLEG process should be to bring all these partners together to enable them to reinforce each other. Although it is evident that there will not and should not be any standard model for such processes, some common elements seem to characterize the more promising initiatives currently under way:

- Establishment of a mechanism for interministerial coordination, and a forum for stakeholder participation
- Use of an analytical process for assessing the magnitude, scope, and dimension of the problems related to law enforcement and governance
- Creation of awareness, information sharing, and, if necessary, whistle blowing, to “name and shame” the worst perpetrators of forest crimes
- Use of a consultative and consensus-building process to define the scope of actions and priorities
- Detailed definitions of the actions, responsible stakeholders, mechanisms of implementation, and financing (both internal and possible external sources)
- Obtaining political endorsement and support for the FLEG actions

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

General lessons

Successful change processes rely on coalitions of several interest groups with different capacities. Partners willing to support FLEG can be found among many stakeholder groups, such as ministries of finance and local municipalities, forest enterprises, local people, and NGOs. In addition, all stakeholder groups and institutions, including public forest administrations, house individuals who need no other motivation than the pursuit of fairness and justice. External partners can reinforce and support these progressive groups and, within the boundaries of their mandates, facilitate their work at political and technical levels.

- Where the economic stakes in illegal activities are high, powerful interest groups can forcefully protect the status quo even if the outcome is clearly negative from society’s point of view.

Country-level lessons

Address key drivers both within and outside the forest sector. Some governance issues relating to forest crime lie entirely within the forest sector while others affecting forests and forest-dependent people extend beyond this sector. Some of the governance work of other parts of the World Bank Group may help address these nonforest-sector issues, including support to Poverty Reduction Strategy Paper processes and the alignment of the World Bank’s CASs with these processes, work on governance diagnostics and integration of governance and anticorruption elements in the CASs, and the design of specific capacity-building programs based on the diagnostic surveys (Poverty Reduction and Economic Management Network and the World Bank Institute). Other relevant areas of the World Bank focus on anti-money laundering and financial investigation (Financial Market Integrity group, Extractive Industries Transparency Initiative, Justice for the Poor, and customs modernization). The World Bank’s legal department is carrying out important work in assessing the quality of legal and regulatory frameworks. Similarly, some of the work on corporate social responsibility and social and environmental issues in the operations of the International Finance Corporation (for example, investment safeguard policies) is extremely relevant to FLEG issues.

Combine actions with both short- and long-term implications in a realistic, step-wise plan. Visible short-term impacts are often needed to create and maintain momentum, whereas long-term work on the structural drivers is necessary to ensure that these efforts are sustainable over time. Early “wins” (for example, significant increases in forest revenue) are important to motivating continued efforts.

Address both failures of law and failures of implementation. First, ensure that the correct laws and policies are in place. Second, work to enforce the law. This two-
A **pronged approach to legal compliance** is the only way to ensure that the full range of motivations, opportunities, and means for illegal behavior are addressed.

**Strengthen supply-side measures with measures to control imports of illegal timber and wood products.** This is especially important in countries where export demand is a significant driver of illegal activities in the forest sector. It should be noted that—at least in principle—these measures could also be extended to other products (for example, wildlife or products derived from illegal conversion of forest lands).

**Integrate anti-money-laundering and asset forfeiture laws into the fight against forest crime and related corruption.** These tools, along with the UN Conventions Against Corruption and Transnational Organized Crime, provide strong and effective regimes that governments can use to fight forest crime and related corruption.

**Risks**

Focusing more directly on illegal logging and other forest crimes will not always be a natural or comfortable role for development agencies, including the World Bank. Inevitably, development agencies will become involved in complex and controversial issues regarding the quality of laws, and at times these institutions will be put at odds with powerful interest groups, including high-level government officials, defending the status quo for personal gain. Consequently, there are two potential areas of risk for the development community:

- As with any complex and controversial issue involving different interests and actors, there are **reputational risks** related to work with FLEG. The World Bank and its partners need to be especially sensitive to issues related to human rights and equity in their work. Transparency and advocacy and support for participatory approaches are important means to avoid these types of risks.

- A more vigorous engagement with FLEG will also inevitably involve difficult issues related to national sovereignty in the management of natural resources. This **political risk** needs to be carefully managed.

**Opportunities**

Specific opportunities for action by the international community include the following:

- Address critical gaps in the understanding of the nature of the governance challenge. An illustrative list of important areas for focus follows:
  - Development of diagnostics to benchmark forest crime and the state of forest governance in high-priority countries, and identification of indicators to monitor the progress of proposed interventions
  - Advancements in the role of independent monitors in making forest operations more transparent and in providing legal operators with positive incentives
  - Institutional (and incentive-compatible) reforms of forestry agencies in Bank client countries that include gaining a better understanding of the role of incentives (including salary structure and so on) for civil servants
  - Development approaches to forest industry restructuring and retrenchment that will efficiently and effectively help address imbalances in wood supply and demand
  - Establishment of information management systems and use of geographic information systems for overall monitoring of the forest resource

- Deepen the technical content of FLEG processes at the international and national levels, mobilize opportunities for multilateral enforcement action, and integrate the regional FLEG processes into existing structures for regional cooperation

- Promote collaboration between the progressive elements of the industry, international financing institutions, and international NGOs involved in the FLEG process to develop, improve, and harmonize safeguards and due diligence on forest investments (see note 5.4, Strengthening Fiscal Systems in the Forest Sector). The aim should be both to ensure the legality of the timber used and to mitigate the risk for other forest crimes, such as poaching, arson, and encroachment of forest areas, resulting from forest industry investments.

- Ensure effective coordination between the implementation of the FLEGT Regulation and Action Plan and other FLEG efforts. The aim should be to strengthen the links between the voluntary partnership agreements envisioned in the FLEGT action plan and the lending and advisory operations of the international financing institutions, especially the World Bank.

- Explore the potential for initiatives similar to the Extractive Industries Transparency Initiative (EITI)\(^2\) to increase transparency of forest sector financial flows in some key forest countries, especially where a relatively small number of companies operate large forest concessions.
NOTES
1. This note is based on World Bank (2006).
2. See EITI’s Web site for more information: http://www.eitransparency.org/.

SELECTED READINGS


REFERENCES CITED


CROSS-REFERENCED CHAPTERS AND NOTES
Chapter 1: Forests for Poverty Reduction, and associated notes
Note 3.2: Forest Certification Systems
Note 3.3: Forest Plantations in World Bank Operations
Chapter 5: Improving Forest Governance
Note 5.1: Decentralized Forest Management
Note 5.2: Reforming Forest Institutions
Note 5.3: Strengthening Legal Frameworks in the Forest Sector
Note 5.4: Strengthening Fiscal Systems in the Forest Sector
Note 7.2: Establishing Forest Information Management Systems

ANNEX 5.5A DRIVERS OF ILLEGAL LOGGING AND OTHER FOREST CRIME: MOTIVE, MEANS, AND OPPORTUNITY

Using the motive, means, and opportunity elements to analyze illegal logging and other forest crimes illuminates fundamental drivers of the problem (Magrath et al. 2007). This annex presents an overview of some of these drivers derived from a set of country-level studies and assessments.

Motive

- Overriding need to generate foreign exchange
- Imperative to finance military operations
- Poverty and lack of alternative income
- Lack of affordable fuel alternatives
- Denial of access by local people to resources they need for subsistence or livelihoods
- Indiscriminate (regarding legality of origin) demand for timber in neighboring countries
- Indiscriminate international demand for timber
- Economic factors and policies favoring forest conversion
- Low cost of illegal timber (that is, ineffective sanctions) and rent-seeking business culture in the forest sector companies
- Overcapacity in the wood processing industry
- Difficulty complying with legal regulations (especially by small-scale producers, concession holders, communities, and private forest owners)
- Bureaucratic laws related to forest management (cost of complying with laws is too high)

Means

- Roads, navigable rivers, harbors, and other transport infrastructure
- Labor in forest areas (often without alternative sources of livelihoods)
- Capital to finance illegal logging and other forest crime
- Equipment for logging and transport of timber and wood products
- Opportunities for money laundering to hide financial proceeds

Opportunity

- Weak governance in parts or all of the country (including areas affected by conflict and war)
- Breakdown of institutional controls and lack of accountability of public officials
- Rapid and disorganized decentralization and lack of institutional capacity at decentralized levels (see note 5.1, Decentralized Forest Management)
- Ambiguous forest land tenure (that is, lack of legal definition, overlapping uses, conflicting laws, and so on) (see note 1.4, Property and Access Rights)
- Inadequate or inappropriate legal framework (not based on a social contract with key forest users) (see note 5.3, Strengthening Legal Frameworks in the Forest Sector)
- Lack of or weak recognition of customary rights (of local and indigenous communities)
- Weak internal organization of these communities
- Inadequate or inappropriate prescriptions for forest management and use (regulations)
- Lack of reliable and up-to-date information on forest resources and their use
- Weak, poorly managed, or corrupt forest administration
- Ineffective or corrupt law enforcement
- Ineffective or corrupt judiciary
- Weak governance or contradictory policies in sectors related to forestry
- Weak control of illegal exports in producing countries or imports in purchasing countries

Source: Modified from Puustjarvi (2006b).
## ANNEX 5.5B  TYPICAL CONTEXTS OF ILLEGAL LOGGING: DRIVERS AND POTENTIAL RESPONSES

<table>
<thead>
<tr>
<th>Typical contexts</th>
<th>Potential drivers (motive, means, opportunity)</th>
<th>Potential responses</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Illegal logging</strong></td>
<td><strong>for securing subsistence</strong></td>
<td>• People unable to meet their basic needs</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Legalize illegal use or simplify regulations concerning access to public forest or wildlife resources</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Create opportunities for income generation</td>
<td></td>
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<td></td>
<td></td>
<td>• Offer alternatives to fuelwood as source of energy</td>
<td></td>
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<tr>
<td></td>
<td>• Lack or high cost of alternative energy</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Small-scale illegal logging to enhance livelihoods by</strong></td>
<td>• people without legal access to forest land</td>
<td>• Poverty</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• managers or owners of community forests</td>
<td>• Create opportunities for income generation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• private forest owners</td>
<td>• Reduce bureaucracy and fees associated with illegal timber harvesting</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Clarify land tenure, consider establishing local tenure of forest land</td>
<td></td>
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<tr>
<td></td>
<td>• Complex legal procedures related to harvesting and access to forest resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Disputes over land tenure rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Inefficient legal procedures</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Large-scale commercial illegal logging</strong></td>
<td>• Poorly motivated staff in public forest administration or enterprises</td>
<td>• Increase resources and enhance independence of forest law enforcement</td>
<td>D+S</td>
</tr>
<tr>
<td></td>
<td>• High cost of legal timber</td>
<td>• Enhance effectiveness of financial audits on public forest administration or enterprises</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>• Capacity of wood processing industries exceeding legal supply</td>
<td>• Provide support to patrolling networks among private forest owners</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>• Export demand insensitive to legality of timber</td>
<td>• Use anti-money-laundering laws</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Inefficient legal procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conflict timber</strong></td>
<td>• High cost of armed conflict</td>
<td>• Focus on conflict resolution and management</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• Poor control of timber imports in recipient countries</td>
<td>• Improve controls on origin of timber</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>• Ineffective international sanctions</td>
<td>• Promote international collaboration in sanctioning conflict timber</td>
<td>S</td>
</tr>
</tbody>
</table>

(continues on the following page)
<table>
<thead>
<tr>
<th>Typical contexts</th>
<th>Potential drivers (motive, means, opportunity)</th>
<th>Potential responses</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other forest crime</td>
<td>Irregular timber sales, award of concessions and service contracting</td>
<td>• Low risk of sanctions • Poorly motivated staff in public forest administration and enterprises • Poorly organized and corrupt financial audit system • Inefficient legal procedures</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improve procedures for timber sales and awarding concessions to increase transparency and accountability • Increase proportion of timber sold or concessions awarded through competitive bidding • Reorganize public forest administration to increase staff motivation • Enhance effectiveness of financial audits on public forest administration or enterprises • Improve data management and transparency in public forest administration and enterprises</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Strengthen cooperation with police force and judiciary • Amend penal code</td>
<td>S</td>
</tr>
<tr>
<td>Evasion of taxes, royalties, and other fees by enterprises</td>
<td>• Unreasonably high tax burden in relation to timber price and general tax level</td>
<td>• Adjust taxes as appropriate • Impose sanctions on enterprises found guilty of tax evasion</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• Poorly organized and corrupt financial audit system • Inadequate accounting systems in private enterprises • Inefficient legal procedures</td>
<td>• Enhance effectiveness of financial audits on enterprises • Oblige enterprises to provide required information in an easily accessible form • Strength cooperation with police force and judiciary to achieve minimum acceptable level of compliance • Amend penal code</td>
<td>D</td>
</tr>
<tr>
<td>Evasion of taxes, royalties, and other fees by communities or private forest owners</td>
<td>• Low risk of sanctions</td>
<td>• Adjust taxes, royalties, and other fees to levels at which most communities or private forest owners would make the payments voluntarily</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• Inadequate accounting systems in private enterprises or communities</td>
<td>• Promote sound accounting practices in community forestry • Enhance effectiveness of external financial audits on community forests and private woodlots within the limits of available resources</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>• Inefficient legal procedures</td>
<td>• Strength cooperation with police force and judiciary to achieve minimum acceptable level of compliance • Amend penal code</td>
<td>S</td>
</tr>
<tr>
<td>Circumvention of labor laws</td>
<td>• Indifferent attitude in enterprises toward labor laws</td>
<td>• Impose sanctions on enterprises found guilty of circumventing labor laws</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• Poorly organized and corrupt oversight</td>
<td>• Impose sanctions or disciplinary actions on companies proven to circumvent regulations</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>• Inefficient legal procedures</td>
<td>• Strength cooperation with police force and judiciary to achieve minimum acceptable level of compliance • Amend penal code</td>
<td>S</td>
</tr>
<tr>
<td>Unauthorized wood processing</td>
<td>• Strong domestic and export demand encouraging unauthorized wood processing and illegal logging • Excessive bureaucracy related to licensing • Poorly organized and corrupt oversight • Inefficient legal procedures</td>
<td>• Enable an increase in authorized processing capacity by increasing legal timber supply • Simplify licensing procedure • Impose sanctions or disciplinary actions on companies proven to circumvent regulations • Strength cooperation with police force and judiciary • Amend penal code</td>
<td>P</td>
</tr>
<tr>
<td>Wildlife poaching</td>
<td>Wildlife poaching for subsistence needs</td>
<td>• People unable to meet their basic needs • Lack of or high cost of alternative sources of food</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Legalize illegal use or simplify regulations concerning access to wildlife resources • Create opportunities for income generation • Offer alternative sources of food</td>
<td>P</td>
</tr>
<tr>
<td>Typical contexts</td>
<td>Potential drivers (motive, means, opportunity)</td>
<td>Potential responses</td>
<td>Type</td>
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</tr>
<tr>
<td><strong>Wildlife poaching to engage in trade in animals and animal parts</strong></td>
<td>• Poverty</td>
<td>• Create opportunities for income generation, reduce bureaucracy and fees associated with legal timber harvesting</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• Complex legal procedures for hunting of wildlife</td>
<td>• Clarify hunting rights with focus on rural poor</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td>• Disputes over hunting rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Poorly organized, under-resourced, and corrupt wildlife law enforcement</td>
<td>• Strengthen wildlife law enforcement</td>
<td>D+S</td>
</tr>
<tr>
<td></td>
<td>• Corrupt community leaders</td>
<td>• Improve internal control of law enforcement staff</td>
<td>D+S</td>
</tr>
<tr>
<td></td>
<td>• Criminal groups organizing illegal hunting by recruiting rural poor</td>
<td>• Improve internal control in communities</td>
<td>D+S</td>
</tr>
<tr>
<td></td>
<td>• Inefficient legal procedures</td>
<td>• Strengthen cooperation with police force and judiciary and target the organizers or financiers behind these activities</td>
<td>D+S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Amend forest-related legislation and penal code</td>
<td>D+S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use anti-money-laundering and asset forfeiture laws</td>
<td>D+S</td>
</tr>
</tbody>
</table>

| Arson associated with subsistence-level slash-and-burn agriculture | • Poverty | • Land tenure reform | P |
|                                                                 | • Lack of viable alternative agricultural systems | • Agricultural intensification | P |
|                                                                 | • Marginalization and disempowerment of Indigenous Peoples | • Legal reform to decriminalize slash-and-burn agriculture | P |

| Arson associated with large-scale land clearing for commercial agriculture | • Biased policies and incentives | • Policy reform based on strategic environmental assessment | P |
|                                                                            | • Weak regulatory controls of land development | • Regulatory reforms to monitor and control land development | P+D |

| Encroachment Conversion of forest land associated with subsistence-level slash-and-burn agriculture | • Poverty | • Land tenure reform | P |
|                                                                                                    | • Cyclical unemployment | • Agricultural development | P |
|                                                                                                    | | • Stabilization policies | P |

| Conversion of forest land associated with large-scale land clearing for commercial agriculture | • Distorted policies | • Policy reform | P |
|                                                                                                    | • Corrupt land access arrangements | • Anti-money-laundering and asset forfeiture laws | S |

*Source: Adapted from Puustjarvi (2006a).*

*Note: P = prevention; D = detection; S = suppression.*