



PART I

Priority Themes and Operational Aspects



CHAPTER 1

Forests for Poverty Reduction

The majority of the world's poor are concentrated in rural areas and, consequently, depend on natural resources, over which they exercise little control, for their livelihoods. It is estimated that 60 million Indigenous Peoples are totally dependent on forests, 350 million people are highly forest dependent, and 1.2 billion are dependent on agroforestry. The scale and significance of poverty issues on forest lands demand that poverty alleviation efforts give special attention to forest areas and the people living in them.

Poor rural families depend heavily on “wild” resources; in both forest-poor and forest-rich contexts, forest products are used for fuel, food, medicines, construction materials, fertilizers, and cash. Reliance on these resources often increases in times of personal, family, or social hardship, with these wild resources being especially important for women, children, and ethnic minorities. In many cases, as people get richer, they use and sell fewer of the forest products that are considered inferior goods. However, most people in Sub-Saharan Africa have not gotten richer, resulting in growing markets for all forest products as populations and urbanization increase. A similar situation is found in the poorer regions of Asia. (See box 1.1.)

Smallholders living in forest margins in diverse parts of the world earn 10–25 percent of their household incomes from nontimber forest products, many of which are either undervalued or omitted completely from conventional economic income statistics (see Note 1.1, Mainstreaming the Role of Forests in Poverty Alleviation; Ndoye, Ruiz Pérez,

and Eyebe 1999). Studies of income from indigenous natural resource management and small-scale local forest enterprises in a number of countries in Africa, and joint forest management in Madhya Pradesh state in India, are but a few of the studies showing the significant impacts of these activities on the income of poor people (see Monela et al. 2004;

Box 1.1 What Do We Mean by Poverty?

Poverty is a multidimensional concept, the measurement of which continues to be debated. A detailed overview of poverty concepts is provided in the World Bank's World Development Report on *Attacking Poverty* (World Bank 2001). This report states that poverty is not solely about material deprivation, but is also related to broader notions of risk, vulnerability, social inclusion, and opportunities. Poverty encompasses all forms of deprivation that prevent a person from achieving his or her aspirations.

This broader definition of poverty has policy implications because it underscores the positive interactions of interventions in a broad set of welfare dimensions. In practice, it implies that the nature of the problem must influence selection of the appropriate welfare measure.

Source: Authors' compilation from World Bank 2001.

Angelsen and Wunder 2003; and Mallik 2000 as cited in Scherr, White, and Kaimowitz 2004). A meta-review of 54 case studies that examined income from forest products in rural areas of developing countries found that forest income (ranging from US\$0 to US\$3,458 and averaging US\$678 per year, once adjusted for purchasing power parity) made up one-fifth of household income of the population sampled for the report (Vedeld and others 2004). Wild food, fodder for animals, and fuelwood were the most important products and accounted for approximately 70 percent of forest income. Household forest income increased with increased distance from markets, suggesting that forests are important for communities with limited alternative income opportunities. In some cases, forest environmental income had a strong and significant equalizing effect on local income distribution (Vedeld and others 2004).

It is also estimated that globally 17.4 million people (full-time equivalents) earn their livings from formal sector forest-based employment (that is, enterprises with more than 20 employees) in forestry, wood industries, furniture, and pulp and paper (Poschen and Lougren 2001, as cited in Scherr, White, and Kaimowitz 2004). Poschen and Lougren estimate that an additional 30–35 million are employed—most of them in Brazil, China, India, Indonesia, and Malaysia—in the informal and subsistence forest-based sectors.

TYPES OF RELIANCE ON FORESTS. Forest uses by local populations change through the transition from hunting and gathering to sedentary agriculture, and vary with households' socioeconomic levels. Across this spectrum, forests tend to become less dense and forest cover decreases in association with growing population densities and higher market demands, and in association with changing types of forest use. There are, of course, exceptions to this trend.

Often, the proportion of overall household income from certain forest products tends to decline as households move from hunting and gathering to sedentary cultivation. This is a reflection of more than just increased income opportunities in agriculture and other domains; it is also indicative of the decreased availability of types of forest resources that were previously abundant. In other cases, the proportion of a household's income from the forest can continue to be substantial when combined with agricultural activities, even despite a decrease in high-value timber stocks in the region: a seven-year study in the Brazilian state of Amapá showed that when sawtimber, poles, and firewood are produced in a management system that combines forestry and agriculture, they can provide significant additional income for Amazonian smallholders (Pinedo-Vasquez et al. 2001).

The growing importance of nonfarm rural activities as a source of rural household income, and the significant share of the nonfarm total accounted for by forest product activities, make this one of the most important vehicles through which the forest sector can contribute to poverty alleviation. As sources of income, commercial forest product activities have, in principle, the potential to help households move out of poverty. However, as labor costs increase, many of these low-value, labor-intensive activities are abandoned. Other commercial products cease to be used as incomes increase because they are “inferior goods” for which there are ready substitutes, lowering their overall marketability. This generally shifts forest use to more valuable forest products and activities that gradually require more and more skill and capital inputs. Thus, dependence on different forest products will likely vary with socioeconomic levels: a dependence on low-valued activities will decrease as poverty is lessened and households move out of poverty, in favor of higher-valued activities with greater returns.

FORESTS IN RURAL POOR'S ASSET PORTFOLIO. Natural assets, such as forests, are of particular importance to the poor, partly because of their lack of access to financial and physical capital and formal forms of human capital, such as education. As portfolio managers, the poor draw down some forms of capital to convert to other forms; commonly, for example, the poor temporarily draw down stocks of natural capital (for example, harvesting fuelwood for sale) to invest in their portfolio, recognizing the fungibility of assets. Insistence on an unchanging “steady state” forest reserve underplays forest dynamics and can limit the options open to the poor. A flexible, comprehensive, and dynamic view of natural assets and the whole portfolio is needed. Forest products and outputs fulfill different functions for people at different socioeconomic levels, and multiple goals and strategies may be needed to reach different groups, even those depending on the same forest.

LINKAGES BETWEEN FOREST-BASED POVERTY ALLEVIATION AND RURAL LIVELIHOODS. Forest-based poverty alleviation cannot be isolated from other aspects of livelihoods. The majority of those who can benefit from forest products live outside forests; they live in predominantly agricultural landscapes, and for many of them the forest products they use come as much from the farm as the forest. Reflecting this, forest-based poverty alleviation has to be linked to other land uses, such as agriculture, grazing, and agroforestry systems. On-farm tree-growing schemes have had limited success so far; thus, new strategies of integrating multiple land uses must be explored.

A summary of the salient features of linkages between forests and livelihoods and how they have been changing are provided in table 1.1.

Forests provide a tremendous source of natural capital that can be used to alleviate poverty in two ways. The first is poverty avoidance or mitigation, in which forest resources serve as a safety net or fill gaps by providing a source of petty cash. For example, the Tawahka of Krausirpi in Honduras cope with short-term and personal shocks (for example, a poor bean harvest or a sick child) through the sale of forest products. The same community uses forest product sales (for example, bushmeat) to cope with covariate shocks, such as the rapid decline in cocoa markets following a drop in cocoa prices. The use of forests as natural insurance is important for forest dwellers because their livelihoods are

characterized by unusually high levels of environmental, agricultural, epidemiological, and market uncertainty. Moreover, the remote location of most forest dwellers implies limited access to more conventional forms of insurance, including formal credit and insurance programs.

The second is poverty elimination, in which forest resources help to lift the household out of poverty by functioning as a source of savings, investment, accumulation, asset building, and permanent increases in income and welfare. As a source of income, forests can provide a decent living when markets are accessible, especially if a household is involved in the planting, harvesting, processing, transporting, and trading of forest products. These households are usually involved in varying degrees of forest management because such income from forests is seldom obtained by

Table 1.1 Changing Linkages between Forests and Poverty

Characteristics of livelihood inputs from forests	Impacts of change on forest livelihood inputs
<p>Subsistence and cultural importance Forests form an integral part of the social and cultural framework for forest dwellers.</p> <p>Forest products supplement and complement inputs of fuel, food, medicinal plant products, etc., from the farm system; often important in filling seasonal and other food gaps, particularly in hard times; forest foods enhance palatability of staple diets and provide vitamins and proteins.</p>	<p>Likely to weaken, but persists widely in some aspects (e.g., medicinal).</p> <p>Can become more important where farm output and/or nonfarm income declines. Likely to decline in importance as government relief programs or new agricultural crops make it less necessary to fall back on forest resources, as incomes rise and supplies come increasingly from purchased inputs, or as increasing labor shortages or labor costs militate against gathering activities or divert subsistence supplies to income-generating outlets.</p>
<p>Agricultural inputs Forests provide a starting point for rotational agriculture and protection; on-farm trees also provide shade, windbreaks, and contour vegetation; trees and forests also provide low-cost soil nutrient recycling and mulch. Arboreal forests provide arboreal fodder and forage, and fiber baskets for storing agricultural products, and wooden plows and other farm implements.</p>	<p>Trees can become increasingly important as a low-capital means of combating declining site productivity and a low-labor means of keeping land in productive use (e.g., home gardens). But increased capital availability, and access to purchased products, is likely to lead to substitution by other materials (e.g., by pasture crops, fertilizer, or plastic packaging).</p>
<p>Commercial outputs Forests help diversify the farm household economy, provide counter-seasonal sources of income, and are a source of income in hard times.</p> <p>Many products are characterized by easy or open access to the resource, and by low capital and skill entry thresholds; overwhelmingly small, usually household-based, activities; mainly low-return, producing for local markets, engaged in part-time by rural households, often to fill particular income gaps or needs; limited growth potential, but very important in coping strategies of the poor. Forest products are often particularly important for women (as entrepreneurs as well as employees).</p> <p>Some forest products provide the basis for full-time and high-return activities; usually associated with high skill and capital entry thresholds and urban as well as rural markets.</p>	<p>With increasing commercialization of rural use patterns, some low-input, low-return activities can grow; however, most are inferior goods and decline. Some are displaced by factory-made alternatives, and others become unprofitable and are abandoned as labor costs rise. Gathered industrial raw materials tend to be displaced by domesticated supplies or synthetic substituted.</p> <p>Higher-return activities serving growing, specialized demand are more likely to prosper, particularly those serving urban as well as rural markets; an increasing proportion of the processing and trading activity is likely to become centered in small rural centers and urban locations.</p>

Source: Arnold 2001.

harvesting forest products that are open access or common property resources from unmanaged natural forests.

Another rationale for prioritizing poverty reduction through forests is the Millennium Development Goals (MDGs). Countries that have adopted these goals have set a target of halving global poverty by 2015, and for institutions such as the World Bank, reducing global poverty is the main challenge. While economic growth appears to be the means to lift the poor out of extreme poverty in the developing world, the capacity of the poor to participate in economic growth must be enhanced if they are to share in its benefits.

PAST ACTIVITIES

Between 2002 and 2005, 28 World Bank forestry projects had components focused on poverty reduction. Poverty alleviation activities included in the project portfolio varied from strengthening of land tenure rights, reform of policies and discrimination against the poor and Indigenous Peoples, development of community fuelwood plantations, increased productivity of pastures and forest lands, erosion control, and training in ecotourism, to promotion of fuel-efficient technologies for households. Investments in these projects were approximately US\$130 million. See boxes 1.2 and 1.3 for successful examples.

The design of poverty reduction activities in forest projects tends to be difficult, and mixed results ensue because of the complexity of the issues involved. Of a set of 40 projects

that were examined for the “World Bank Forest Strategy: Review of Implementation” (Contreras-Hermosilla and Simula 2007), it was found that 16 contained activities that were highly relevant to poverty alleviation, while 12 had activities that were substantially relevant. Eight other projects were moderately relevant in their consideration of forests and poverty alleviation; in three projects the consideration was negligible.

KEY ISSUES

Donor engagement in forestry with a direct or indirect aim of alleviating poverty concentrates mainly in three areas:

- Increasing local users’ participation in forest management to make management more responsive to their needs, and to increase benefits flowing to them
- Supporting management strategies that include growing trees on farms
- Exploiting income-generating opportunities from production and trade in forest products in the nonfarm rural economy

Activities in these areas have had mixed results. Much donor attention has been placed on local participation—often resulting in false perceptions of participation rather than true participation. Tree-growing schemes have resulted in little additional planting taking place, in some cases

Box 1.2 The Role of Forests in Benefiting the Rural Poor: An Example from the World Bank’s China Loess Plateau Watershed Rehabilitation Project

This watershed rehabilitation project included activities in the forest sector among its several project components. More than 1 million farmers in the project area directly benefited from the project, with annual grain output raised from 427,000 tons to 698,600 tons and fruit production from 80,000 tons to 345,000 tons. Farmers’ annual incomes per capita also increased from 360 Chinese yuan to 1,263 Chinese yuan (about US\$43 to US\$152).

The various project components contributed to the significant reduction of poverty and tripling of net incomes by addressing a range of short-, medium-, and long-term income-generating and income-stabilizing measures. The project supported diversification of

production to reduce variability in income. For example, trees were used to provide an income buffer during difficult times.

Large tracts of land in the project area were severely degraded and past agricultural practices were clearly unsustainable as a result of uncontrolled grazing, fuelwood gathering, and cropping on slopes that were too steep for sustainable farming. The project succeeded in taking a large proportion of these areas entirely out of production for natural regeneration and in planting trees and shrubs on unstable slopes to protect soils and provide sustainable returns. This practice secured long-term productivity of those areas and raised incomes for the local people.

Source: World Bank Loess Plateau Watershed Rehabilitation Project (P003540). Board approval: May 26, 1994; closed: December 31, 2002.

Box 1.3 Forests for Poverty Alleviation: World Bank Albania Forestry Project

Direct short-term poverty alleviation impacts were substantial in this project, which financed approximately 5,000 person-years of local villager employment to implement many field interventions. The budgets of households participating in project activities increased by an estimated 30 percent annually.

The quality and productivity of forest and pasture land managed under the new plans by the newly created resource user associations improved to such an extent that commune families quickly began deriving income from forest and pastures (including fuelwood, fodder, nontimber forest products, some grazing, and the like) that had been seriously degraded bush before project-supported investments.

Of significance is evidence that some commune

and family investments in resource management (for example, active protection of areas from grazing, fencing, tree planting, and erosion control intervention) continued even after project support ceased, indicating that the shift to improved land-use practice brought about by the project is likely to be sustainable. This unexpected level of success led to identification of the need for the Albanian government to further develop its skills and capacity to provide communes with silvicultural and other technical guidance that will be necessary as their forests mature, and to approach the World Bank with a request for a follow-up project that would scale up and expand the coverage of communal forest and pasture management throughout the country.

Source: World Bank Albania Forestry Project (P008271). Board approval: April 16, 1996; closed: June 30, 2004.

because communities have their own strategies for coping with wood shortages. Activities focused on processing and trade often proved to be susceptible to changes in market requirements, to domination by intermediaries, and to shifts to domesticated or synthetic sources of supply, and few proved to be sustainable. Considerable room remains for improving the contribution of forests to poverty alleviation.

IMPROVED PERFORMANCE FRAMEWORK FOR FOREST INTERVENTIONS. An improved performance framework is necessary to enhance pro-poor benefits. A clear understanding of what forestry can and cannot do to alleviate poverty is essential to enhancing effectiveness of poverty-related interventions at all levels within the forest sector. To give greater emphasis to poverty alleviation within forestry, it is necessary to acknowledge that the greater part of the rural populations that benefit from forest products are located outside forests as normally defined. Thus, forestry interventions need to encompass all tree stocks and activities based on them to contribute significantly to poverty alleviation, rather than be confined to forests and forest-dwelling households. Forest sector interventions also need to recognize the different wealth levels among rural poor households and need to be appropriately structured to target the population of concern (see note 1.3, Indigenous Peoples and Forests).

HARMONIZATION OF ACTIVITIES WITH OTHER SECTORS. Harmonizing poverty alleviation activities in the forest sector with what is happening in other sectors is equally

important. This harmonization requires recognizing and considering the implications of broader changes, such as market liberalization and structural adjustment for rural development (additional discussion on this is found in chapter 6, Mainstreaming Forests into Development Policy and Planning: Assessing Cross-Sectoral Impacts).

TRANSPARENCY AND ACCOUNTABILITY IN GOVERNANCE. Transparent and accountable governance is critical to fostering pro-poor growth and essential to ensuring that this natural resource wealth is managed wisely (see chapter 5, Improving Forest Governance). A pro-poor growth strategy for rural areas must build on natural resources and facilitate management of these resources for the long term to provide the fuel for economic development to relieve poverty. It also must grant secure and equitable access to assets—which requires development of property rights (see note 1.4, Property and Access Rights) and efficient land administration.

PROPERTY RIGHTS AND LAND ADMINISTRATION. Allocation of property rights and efficient land administration are critical to pro-poor growth in rural areas. The process of developing statutory property rights influences the pro-poor potential of forest activities (see note 1.4, Property and Access Rights, and note 1.3, Indigenous Peoples and Forests). Customary rights over forest resources often exist, and where these are codified and made statutory, they are seldom causes for conflict. However, in areas where customary systems of

forest management and ownership have been disregarded or overruled, many local communities, poor households, and women have lost access to forest resources. In these cases, government policies have awarded favored groups concessions, licenses, and permits, limiting (or in some cases denying) the rights of poor local inhabitants. This is evident in places where creation of government forest reserves and protected areas have reduced households' access to common property resources. The need of the poor for continued access to a common pool biomass resource to sustain predominantly subsistence-based coping strategies can also increasingly conflict with the interests of better-off households and outsiders (Arnold 2001).

The transition to pro-poor forest tenure and property rights occurs through a combination of strategies—both reforms fostered by political elites and reforms demanded by civil society and community organizations. These efforts should, to the extent possible, move beyond transferring limited rights to forest resources to communities. For example, in India participatory forestry is restricted to degraded or poorer areas of forests, and there are widespread restrictions regarding rights over timber and other commercially valuable forest products.

POTENTIAL OF COMMUNITY-BASED FOREST MANAGEMENT. Community-Based Forest Management (CBFM) offers a vehicle for reducing poverty among forest-dependent households (see note 1.2, Community-Based Forest Management, and note 1.3, Indigenous Peoples and Forests). Commonly, forest-dependent people who live in or near forests tend to be politically weak or powerless. Formally recognized forms of CBFM can empower these households and individuals through recognition of their rights to sustainably manage, control, use, and benefit from forest resources. CBFM can also offer a competitive advantage for unorganized producers through economies of scale. Community engagement in forest management has been increasing as forest sector policy reforms give greater weight to participation of communities in forest management. Examples of CBFM are found in joint forest management, participatory forest management, community forestry, and other similar schemes in numerous Bank client countries. The performance of CBFM initiatives has been mixed, revealing the importance of the political, institutional, governance, and capacity elements in such initiatives. There are, however, several successful examples of communities that organized and thus gained financially and politically (for example, Mexico and Nepal; see boxes 1.11 and 1.13 in note 1.2, Community-Based Forest Management).

ENGAGEMENT OF THE PRIVATE SECTOR. Private sector engagement in forest activities is increasing (see chapter 2, Engaging the Private Sector in Forest Sector Development). Communities need to link with the private sector in forest activities to further enhance forests' contribution to poverty reduction. The growing demand for timber for processing into pulp and paper as well as for fuelwood (for example, from tea companies in Kenya) creates opportunities for communities to benefit from these private investments. Community-company partnerships can take various forms, including outgrower schemes or arrangements for community provision of management services (such as thinning, pruning, fire maintenance, and the like). Community-company partnerships are distinct from arrangements in which private entities (normally concessionaires) compensate communities for the use of forests. In partnerships, communities enter into legal contracts with companies and provide specific services.

POTENTIAL FOR FOREST-BASED SMALL AND MEDIUM ENTERPRISES. Small and medium forest enterprises (SMFEs) make up a large percentage of forest enterprises, with far-reaching poverty-alleviation potential. In many forest countries, forest-based SMFEs account for 80–90 percent of all national forest enterprises. Approximately 20 million people worldwide are employed in SMFEs. These enterprises generate a gross value added of about US\$130 billion per year (Macqueen, Armitage and Jaecky, 2006). In countries with SMFEs, often more than 50 percent of total forest-related employment is in these enterprises. Numerous factors influence the feasibility, appropriate structure, and suitable direction of an SMFE program (see note 2.2, Small and Medium Forest Enterprises). Moreover, in many countries policies need to be developed to create an enabling framework for SMFEs. Nevertheless, where there is demand and potential, these enterprises offer room for managing forests and alleviating poverty.

ACCESS TO MICROFINANCE SCHEMES. Access to microfinance schemes can help small-scale forest enterprises build material goods, increase income, and reduce vulnerability to economic stresses and external shocks. Microfinance can assist in covering capital costs to improve productivity and quality as well as working capital to purchase equipment and materials. Access to credit and other microenterprise supporting services are often limited for poor, forest-dependent households. Commercial financiers seldom lend money to the rural poor because of the associated transaction costs, and the limited collateral, especially when

rural poor households do not have secure tenure and access rights. Often poor households borrow from private lenders at unreasonably high interest rates to obtain money they urgently need. This often results in households having to exploit resources unsustainably to pay interest charges. The high interest rates often result in households either never repaying or slowly paying back the capital.

ACCESS TO TECHNICAL AND MARKETING SERVICES. Small-scale enterprises also need access to technical and marketing services. Given the low incomes of households involved and the low unit value of fuelwood and nontimber products, provision of conventional technical services may not be feasible. In such cases, facilitating the exchange of information among villagers through various channels can be beneficial.

GREATER MARKET ACCESS FOR FOREST PRODUCTS. Increasing market access for forest products can enhance forests' contribution to alleviating poverty. Small timber producers need to be more competitive with large timber companies, both in niche and domestic markets. This requires small timber producers to address challenges, such as lack of economies of scale. Creating arrangements that would facilitate smallholder marketing of timber would enhance that sector's contribution to income generation. Some simple changes include reversing the existing forestry regulations that tend to discriminate against small farmers and microenterprises by having fewer and simpler regulations and less paper work (see note 1.5, Making Markets Work for the Forest-Dependent Poor).

In some countries and regions, aggregate demand for fuelwood, wood for charcoal, and for commercially valuable nontimber forest products (for example, bushmeat) is growing. These are often peri-urban markets that can be profitable, making it economically attractive for farmers to plant trees and produce or harvest the needed commodities. There are also growing markets for furniture and housing materials, including construction timber and poles. Support for producing and marketing better quality products as well as improved infrastructure for accessing these markets could provide more employment and better remuneration, particularly if domestic per capita income grows. Such support can be provided through microenterprise development activities that provide attention to the associated natural resource issues and ensure a sustainable supply of raw material.

Another rapidly expanding market is that of environmental services provided by forests (see note 2.3, Innovative Marketing Arrangements for Environmental Services),

including carbon sequestration (see the World Bank's Carbon Finance Unit Operations Handbook at <http://carbonfinance.org/Router.cfm?Page=DocLib&ht=34&dl=1>). These markets need to be accessible to forest-dependent households if they are to serve the purpose of engendering sustainable resource use and land-use practices. Creating the enabling conditions will require, among other things, clear and secure rights over forests and woodlands.

IMPORTANCE OF FOREST AND TREE COMPONENTS IN AGROFORESTRY. Forest and tree components will often become more important where there is greater reliance on agroforestry. This can happen in the following instances:

- where changes in the availability of land, labor, and capital favor tree crops as low-input land uses where labor is the limiting factor (for example, in multistory "home gardens" that increase land productivity), or as low-cost inputs into farm systems (for example, in place of purchased fertilizer)
- where growth in agricultural incomes can lead to increasing local commercialization of subsistence goods, such as fuelwood and other forest products
- where improved rural infrastructure gives farmers greater access to markets for forest fruits and other products of trees that can be grown as part of farm systems

REVERSING EXISTING TOP-DOWN APPROACHES. The contribution forests could make to rural development, forest conservation, and economic growth has been undermined by conventional top-down approaches to forestry. Transparent and accountable governance is critical to fostering pro-poor growth and essential to ensuring that this natural resource wealth is managed wisely. There is also a need to remove or relax regulatory provisions that reinforce the structural and scale advantages that the state possesses as producer of many forest products. The relationship between the forest department and small local producers would also benefit from separation of the regulatory function of the former from involvement in forest management and delivery of support services (see note 5.2, Reforming Forest Institutions).

IMPORTANCE OF LOCAL LEADERSHIP, INSTITUTIONAL CAPACITY, AND HUMAN RESOURCES. Activities oriented toward poverty reduction call for exceptional local leadership, institutional capacity, and adequate human resources in implementing agencies. These are not always available on the sustained basis required for operations that typically span several years.

Institutional development of capacity takes time. Thus, long-term technical assistance appears to be an indispensable part of future poverty-oriented interventions. Experiences in Brazil and Mexico suggest that options for the delivery of technical assistance should include consideration of training of rural producers and careful exploration of the tradeoffs involved in privatizing technical assistance because the latter can reduce the possibility of building up institutional capacity of government agencies.

Often, investments by national governments in rural areas are low. This is partly due to an inadequate understanding of poverty rates and poverty density in forest areas. Poverty Reduction Strategy Papers (PRSPs) have become the main mechanism for governments in developing countries and some middle-income countries to define their budget and policy priorities and discuss those priorities with the international community. Unfortunately, however, in the initial PRSPs, interim PRSPs, and National Forest Programs (NFPs), the pivotal role of forests in sustaining rural livelihoods, especially those of the poor and marginalized, has been neglected. There has been relatively little analysis of the contribution of forests to rural livelihoods, nor of the measures required to capture or expand the potential. Forest and tree products, particularly nontimber forest products, often fall between sectors with neither forestry nor agricultural agencies collecting data on household collection, use, and sales (see note 1.1, Mainstreaming the Role of Forests in Poverty Alleviation: Measuring Poverty-Forest Linkages).

FUTURE PRIORITIES AND SCALING-UP ACTIVITIES

In many regions the issues of natural resource management, poverty reduction, and local empowerment are loosely intertwined and cannot be tackled in isolation. Most of the linkages between forestry and rural poverty are also closely associated with what is happening in agriculture and the rural economy. For example, conversion of forests to either temporary or permanent agriculture can contribute to poverty alleviation. Forestry and agriculture activities need to be closely aligned with components of rural development strategies and programs.

This could be done through the following:

- Adapting forestry and agriculture interventions to changes being introduced in forestry, agriculture, and rural economies. For example, agroforestry, tree crop plantations, and scattered trees on farmland can potentially assist

with poverty alleviation while conserving forests. Forest and tree components will be more important where changes in agriculture result in greater reliance on agroforestry; this could occur as a result of the availability of land, labor, or capital favoring tree crops; agricultural income increasing local commercialization of subsistence goods such as fuelwood; or improved rural infrastructure providing farmers with greater access to markets.

- Exploiting opportunities that rural development interventions create for forest-based activities. The growing importance of nonfarm rural activities as a source of rural household income and the share of nonfarm total income accounted for by forest product activities make this an important avenue by which forests can contribute to poverty alleviation.
- Understanding and taking into account information on cross-sectoral impacts of forest-based poverty situations.

For forest activities to have pro-poor impacts and reduce poverty, future activities must focus on better distribution of resource rights, both property and procedural. Control over and access to resources critical to growth and livelihoods is the main governance issue for rural people, including Indigenous Peoples and other communities with customary rights. There is a need for greater commitment to ensure that the rights of communities and forest-dependent households are entrenched in appropriate legislation and regulations, that mechanisms exist to implement them, and that these mechanisms are functioning properly. This includes establishing ownership and precisely defining rights, which will provide incentives for the poor to invest in forest management. Equally important is the need for forms of governance for common pool resources that can address the weaknesses in many existing comanagement systems (see note 1.3, Indigenous Peoples and Forests, and note 1.4, Property and Access Rights).

Timber harvesting must become more pro-poor. Local access to and management of natural forests, smallholder tree growing, and small-scale enterprise development as strategies to avoid capture by local elites in CBFM are central to a more pro-poor use of timber (see note 1.2, Community-Based Forest Management). There is a need to remove regulatory barriers and excessive state regulation to facilitate CBFM in areas other than degraded forests and enable management of forests for multiple purposes. From an analytical standpoint, there is a need for more research into pluralistic systems of comanagement that really do function effectively and equitably and for pilot testing of those models that show promise.

Frameworks, regulations, and encouragement are needed to make natural resource markets work for the poor. This requires responding to market failures and imperfect competition and identifying new opportunities that allow the poor to take advantage of their available assets. The collection and sale of timber and nontimber forest products are important for the poor. There is a need to look into their value-added potential and improved marketing strategies. Additionally, strategies need to ensure that the poor are not negatively affected by increasing commercialization (see note 1.5, Making Forests Work for the Forest-Dependent Poor). Studies should also be undertaken to determine whether growing urban domestic markets for forest products have significantly benefited the poor.

Similarly, payment for environmental services, such as carbon sequestration, biodiversity conservation, hydrological benefits, and forest-based tourism, is a potentially important source of revenue. It is important for the structure of such payments to allow for benefits to flow to the poor as well as for maintenance of services (see note 2.3, Innovative Marketing Arrangements for Environmental Services).

There is a need to create and enhance the role of forest-dependent communities and households in SMFEs and to foster forest partnerships between communities and the private sector. This will require incentives, regulations, and actions at the national level that facilitate these arrangements. Technical support must be provided to communities, and private entities must be required to look beyond logging and the timber processing industry to the long-term sustainability of forest resources (see chapter 2, Engaging the Private Sector in Forest Sector Development).

To promote forest uses for poverty alleviation, forest activities that primarily address biodiversity conservation need to be refocused to take a balanced approach that includes poverty alleviation. Conservation objectives for forests of value to local people will need to be revised from being predominantly protection oriented to encouraging sustainable systems that produce livelihood benefits. The increased recognition of Indigenous Peoples rights to their land and natural resources should also be further enhanced in biodiversity conservation activities (see note 1.3, Indigenous Peoples and Forests).

National forest programs can provide a broad platform with which to engage in a poverty reduction agenda by working toward coherent sector policies—and forests need to be integrated into a comprehensive rural development strategy (see note 6.4, Assessing Cross-Sectoral Impacts: Use of CEAs and SEAs). Such integration will be facilitated by improved knowledge and understanding of the extent to

which the very large numbers of poor people living in or near forests depend upon those forests for their livelihood—a matter of significance to poverty alleviation outcomes in general in some countries (see note 1.1, Mainstreaming the Role of Forests in Poverty Alleviation: Measuring Poverty-Forest Linkages). It is important to gather information on whether the depletion of forest resources has had a negative impact on poor people, and whether the poor have been able to find alternatives to forest safety nets and gap fillers (see also note 1.3 on the particular risks and impacts to Indigenous Peoples). Equally important is a comprehensive examination of how existing World Bank data systems and records could be used to improve knowledge about the forest dependency of people dwelling in or near large natural forest resources in World Bank client countries. This needs to be developed through the appropriate networks of the World Bank in collaboration with Country Departments.

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CROSS-REFERENCED CHAPTERS AND NOTES

- All notes in Chapter 1: Forests for Poverty Reduction
- Chapter 2: Engaging the Private Sector in Forest Sector Development
 - Note 2.2: Small- and Medium-Scale Enterprises
 - Note 2.3: Innovative Marketing Arrangements for Environmental Services
 - Note 5.2: Reforming Forest Institutions
 - Note 6.4: Assessing Cross-Sectoral Impacts: Use of CEAs and SEAs

Mainstreaming the Role of Forests in Poverty Alleviation: Measuring Poverty-Forest Linkages

Forests provide a significant portion of forest dwellers' subsistence goods and services, and income. Yet the contribution of forests to income and the level of forest dependence are seldom systematically documented. Income streams from forests and the role of forests as safety nets are underestimated and the potential of forests to alleviate poverty is often unexploited. The lack of quantitative and readily available information on the role of forests in contributing to poverty reduction is a major constraint to mainstreaming the use of forests in poverty alleviation. A consequence is that the role of forests in poverty reduction is not reflected in any significant way in national-level strategies, such as the Poverty Reduction Strategy (PRS) process. In the same way, those countries that have been developing NFPs (NFPs; see note 6.1, Using National Forest Programs to Mainstream Forest Issues) have not tended to explicitly link forest issues to poverty reduction or to the achievement of the MDGs. If PRSPs fail to incorporate forestry, national efforts to reduce poverty and vulnerability will undercount the critical role that forest resources currently play—and the potentially greater role they could play—in the livelihoods of the poor.

There are two constraints to improving measurement and mainstreaming of linkages between forests and poverty. First, most countries have little data available to illustrate how forests contribute to the livelihoods of poor households. The Living Standards Measurement Surveys (LSMS; www.worldbank.org/lsm) have a variable on fuelwood consumption, but owing to the logistical and cultural challenges of surveying forest-dwelling and forest-reliant households in remote areas, the data associated with this variable are limited. It also is difficult to accurately measure and attribute the cash value of extracted forest products to households residing in high-population-density areas and forest-agriculture mosaics (Chomitz et al. 2006).

The second challenge is that the data that do exist are

rarely presented in ways that are meaningful to those designing PRSPs and NFPs. Forest specialists are more familiar with reporting forest information about physical resources (trees planted, forest cover improved, or timber sold) than livelihoods, with the exception of quantifying the number of people employed in the forest sector. Poverty experts and macroeconomists are unfamiliar with the use of forests and NFPs and tend to underestimate the contribution of forests and off-farm natural resources to livelihoods.

OPERATIONAL ASPECTS

There is little knowledge about how rural households depend on forest and tree resources to meet their daily needs—and even less about the potential of these resources to reduce poverty. This failure stems in part from the fact that forest products, especially nontimber forest products, fall through the cracks of sector-specific data collection, with neither forestry nor agricultural agencies collecting data on household collection, use, and sale of forest products. A simple methodology is needed to capture this contribution and to demonstrate its ultimate relevance to many of the MDGs. This is what the Poverty-Forest Linkages Toolkit offers (box 1.4). This section provides a summary of key steps for measuring poverty-forest linkages and mainstreaming this information, based on the approach detailed in the toolkit.

Only at the national level can current country processes for poverty data gathering be identified and understood and effort invested in enabling these to take forest data into account. And only through local enquiry can a picture be developed of the two key ways in which forests have an impact on the lives of the poor—positively through livelihood support, and negatively if use of forests is formally illegal. To this end, the toolkit lays out a step-by-step process to gather and analyze the necessary information, detailing

Box 1.4 Poverty-Forest Linkages Toolkit

The Poverty-Forest Linkages Toolkit^a is designed to meet two objectives. First, it aims to increase knowledge about how rural households depend on forest and tree resources to meet their daily need, and the potential of this resource to reduce poverty. Second, the Toolkit assists in engaging in a process of mainstreaming this information into national planning processes, including PRSPs. The Toolkit provides a framework for gathering and analyzing information to provide a clear understanding of the current and potential role of forest and tree products for poverty reduction. It includes social, institutional, and environmental concerns, in the context of local and national planning processes. An integral part is the identification of the most forest-dependent communities, and the impact of current and potential policies and programs.

The Poverty-Forest Linkages Toolkit may be used by forestry departments, local governments, and non-governmental organization (NGO) facilitators to deliver the following:

- Local-level “snapshot data” on forest reliance and the livelihood and poverty reduction contribution of forests
- A documented case for the contribution of forests to the livelihoods of the poor
- Analyses of how forestry regulations promote or hinder the livelihoods of the rural poor
- Strengthened agency and institutional capacity to identify opportunities and constraints
- An assessment of issues (for example, inappropriate regulations) that need to be resolved if poverty

Source: Authors’ compilation using PROFOR forthcoming a.

a. In May 2004, with PROFOR support, the World Conservation Union (IUCN), Overseas Development Institute, Centre for International Forestry Research (CIFOR), PROFOR, and Winrock International formed a working group partnership with the intent of consolidating and building upon the growing knowledge base from fieldwork and research efforts on the different ways in which forests can benefit the poor. The result was the draft Poverty-Forest Linkages Toolkit, which was piloted in four countries prior to finalization.

reduction is to be effectively addressed by forestry officials

The toolkit provides a complete set of tools, methods, examples, and case studies for the task, including the following:

- An explanation of the PRSP process and identification of the strategies needed for influencing it (including potential entry points for forestry)
- A set of rapid appraisal methods to gather information on cash and subsistence contributions from forests to households, particularly the poor
- Methods for analyzing field data for the potential role of forests in reducing poverty and vulnerability, and policy options for improving the contribution of forests to rural livelihoods
- Suggestions for how to frame the results, so as to be relevant to the planners, government agencies, and other institutions and organizations at both local and national levels
- A series of case studies that illustrate the contribution of forest resources to households and an analysis of the impact of forestry policies and programs

Included are annexes on the tools, with instruction for their use; a series of examples of all the tools, illustrating the data they generate; an explanation of how to analyze documents collected; and an example of a short document that might be written for distribution to government officials when explaining the purpose of the toolkit.

activities to be undertaken at the national, district, and local levels.

UNDERTAKING A NATIONAL-LEVEL ANALYSIS. The purpose of a national-level analysis is to find out whether the contribution of forests to poverty reduction is already being mainstreamed into current national policies, programs, and laws, and whether poverty issues are being taken into

account in forest sector processes. If they are, the aim is to understand how, and if not, to identify country-specific pathways by which they could be.

The toolkit explains how the relevant natural resources ministries need to be involved and how to find out what the relevant entry points might be for more focus on the contribution of forests to the livelihoods of the poor (box 1.5). Tasks include identifying the main ministry hosting the PRS

Box 1.5 Entry Points for Reassessing Poverty-Forest Linkages: The Example of Indonesia

In testing the toolkit in Indonesia, key informant interviews conducted in the capital revealed that the entry points offered by the Ministry of Forests and other national-level institutions were limited for reassessing the relationship between forests and the poor. Instead, other pathways were found. Work was undertaken in one province at the district and provincial levels, and a series of mini forest-focused participatory poverty assessments made their mark at lower levels. Commitment and enthusiasm were generated, and, in due course, provincial-level actors began to be able to drive national-level change from below.

Source: PROFOR forthcoming b.

process, the main donors to the process, other important players (civil society groups, NGOs, and so forth), and the key documents that have been produced. These might include household, rural, or living standard surveys; a national census; or the drafting of an NFP. National-level analysis makes it clear whether the efforts to measure poverty-forest linkages can proceed with the support of the forest ministry or those responsible for the PRS.

GATHERING INFORMATION AT THE VILLAGE OR COMMUNITY LEVEL. After the national-level analysis has been completed, the next step is to collect data to identify forest-household use linkages at the local level. The results generated will be used at both the district and field levels and at higher (provincial and national) levels to underline the contribution of forests and trees to the livelihoods of the poor, and sometimes to highlight ways in which the presence of anachronistic, anti-poor forest policies or laws are an impediment to poverty reduction. The toolkit details several tools for identifying users (and nonusers) of forest resources, the level of dependency on and contribution of forest and tree products, existing resources and products, and key constraints of the existing system (see boxes 1.6 and 1.7).

PREPARING AND PRESENTING DATA FOR DIFFERENT AUDIENCES. Data gathered need to be analyzed and prepared in different formats for presentation to district and higher levels. Information should be presented in user-friendly forms (for example, diagrams and charts) that

accurately represent what is occurring at the local level, highlight essential livelihood information and critical factors (such as access and tenure, markets, and status of resources), and satisfy the needs of users of the data. The information should be debated at the district level and reframed, with the assistance of local officials, to fit with district-to-national reporting requirements. District officials' views on the incorporation of forest contributions to incomes into data-gathering systems should be written up and submitted to the national-level body responsible for collecting poverty data or to the forest ministry, or to both. At the national level, this information is further streamlined to fit with the formats needed for the PRSP process, the NFP process, and others as relevant (see box 1.8). Furthermore, many countries have found that disseminating a simple guide to the results of the assessment makes a large difference to the extent to which ideas are understood and acted upon.

The progress a country has already made in drafting its PRS and developing data-gathering and monitoring instruments should inform the planning of analysis and data gathering of poverty-forest linkages. If a country already has data-gathering systems in place at the local level and collates the data at the national level, the focus of the exercise will be on linking forest and poverty data by, among other processes, learning whether forest product contribution is recorded and integrated into income and livelihood assessments and, subsequently, discussing with the appropriate bodies ways of inserting forest data into national poverty data collection systems and poverty data into national forest data collection systems. If, however, no such national data-gathering systems exist, the Toolkit outlines forest-focused participatory poverty assessments to generate a national-level picture of the contribution of forests to poverty through “snapshots” from different forest contexts around the country. The Toolkit further describes how to collate collected data for discussion and planning purposes within the PRS process.

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

A participatory approach to measuring poverty could provide more detailed information on the informal and formal uses of forest resources. Informal uses are often overlooked because they are not easily valued—but these uses reflect the important role of forests as safety nets.

Without a comprehensive understanding of forest dependency, policies and investments may discriminate

Box 1.6 An Overview of the Tools for Gathering Information at the Village or Community Level

1. Wealth Ranking (village leadership).
Aim: to select participants who are representative of the local population for the Toolkit exercises
2. Local Landscape Situation Analysis (toolkit team plus selected villagers)
Aim: to understand the way in which local resources are used by members of the village.
3. Timeline and Trends (village plenary)
Aim: to record a short history of the community against which to project a picture of changes in forest resources, in agriculture, in local livelihood strategies and sources of income. This tool can also be used at the district and national levels.
4. Livelihood Analysis (in groups selected by gender and wealth category)
Aim: to discover the extent of cash and subsistence reliance on forest resources and the proportion of the total annual livelihood (from all sources) from forest resources. This tool can also be used at the district and national levels.
5. Tree and Forest Product Importance (in groups selected by gender and wealth category)
Aim: to rank forest products by importance for cash and subsistence uses. This tool can also be used at the national level. If time is limited, information
6. Users, User Rights, User Responsibilities, and User Benefits (in groups selected by gender and wealth category)
Aim: to have local people list all forest stakeholders, the benefits they derive from the forest, and the rights and responsibilities they exercise.
7. Forest Problem and Solution Matrix (in groups selected by gender and wealth category)
Aim: to identify and rank the main forest problems, and suggest potential solutions. Problems include those related to policy, rules and regulations, tenure, and access. This tool can also be used at the district and national levels to focus on higher-level issues.
8. Final Plenary
Aim: to present the main findings from the subgroups in plenary so that key emerging issues can be summarized.

Source: PROFOR forthcoming a.

Note: People from whom information is sought are listed in parentheses.

Box 1.7 Livelihood Analysis in Busongo, Tanzania

Livelihood analysis can be used to discover the extent of reliance on forest resources and the proportion of their contribution to annual cash and noncash incomes. In groups selected by gender and wealth category, participants are asked to distribute beans or stones across a list of forest products (for example, gum, charcoal, timber), allocating more where cash income sources are more important. The exercise is repeated for farm produce (crops and livestock), other sources, such as petty trade, and for noncash income

sources. Participants are then asked to list sources of cash for different kinds of expenditures and identify whether the forest is used for investment. This exercise can show forest contributions to the achievement of the MDGs. For example, in eradicating extreme poverty and hunger (goal 1), villagers in Busongo cite 20–29 percent of livelihoods comes from forest contributions and that charcoal, fuelwood, ghee and milk, livestock, gum, thatch, and fodder grass contribute directly and indirectly to the meeting of these goals.

Source: PROFOR forthcoming b.

Box 1.8 Identifying Opportunities for Getting Poverty-Forest Linkages into Data-Collection Systems: Example from Tanzania

A variety of opportunities for including the contribution of forests to livelihoods in current data gathering may present themselves. In Tanzania, the staff of the Ministry of Planning and Empowerment were convinced by the toolkit-produced data that forestry should be included in the Household Budget Survey.

Source: PROFOR forthcoming b.

against the forest-dependent rural poor. A lack of understanding of the scale and scope of forest dependence can result in governments giving private companies and large farmers preferential access to publicly owned forest resources, conservation policies that deprive poor families access to forest resources, or governments expropriating villagers' rights over local forests.

Communities often invest the income generated from formal and informal uses of forest resources. Detailed information on forest resource use and how it is invested can provide insight into community priorities (for example, in Busongo, Tanzania, communities used cash revenue from forest resources, including gum and charcoal, to help primary-age children access schools, and village forests were used to construct staff housing and extra classrooms for primary schools).

When proposing a forest-related action in a PRSP, it is important to have a clear rationale for selecting the action as a priority. Integration of forest issues into PRSPs will require a quantitative causal link between forests and poverty. It is therefore crucial to include important forest environmental income sources in poverty assessments and PRSPs.

To effectively integrate forest-poverty information into PRSPs, it is useful to be familiar with the poverty analysis process used in PRSPs (available in the Poverty Reduction Strategies Sourcebook).

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CROSS-REFERENCED CHAPTERS AND NOTES

- Note 6.1: Using National Forest Programs to Mainstream Forest Issues

Community-Based Forest Management

An often overlooked trend in the world is a doubling of community tenure in the past 15 years. During this time, the area under private but collective ownership has increased from 143.3 million to 246.3 million hectares of forests. Similarly, the estimated area under public but collective administration has increased from 18.5 million to 131.4 million hectares. In sum, community-owned and administered forest totals at least 377 million hectares, or at least 22 percent of all forests in developing countries and three times as much forest as is owned by industry or individuals (White and Martin 2002). Poverty alleviation strategies in the forestry sector have emphasized local participation to make forest management more responsive to local needs and to increase benefits flowing to forest users. As more of the world's forests come under community tenure, community-based forest management (CBFM) practices are continually being promoted as playing an important role in poverty alleviation, good governance, and sustainable use of the environment.

Involving communities in sustainable forest resource use is not a new concept. In 1977, the World Bank Forestry Sector Review (World Bank 1977) noted that many forestry projects failed without the collaboration of local residents and that their collaboration improved environmental outcomes. It stressed the need to learn more about how to support policies that successfully give management and benefits to smallholders and the need to better understand local use, forestry-related practices, and traditional institutions. Learning from these lessons and the growing evidence of positive outcomes of CBFM, the current World Bank strategy focuses on, among other goals, using forests for poverty alleviation and strengthening local governance and transparency to address corruption. CBFM can be an important entry point for achieving these goals. It can also be an outcome of good policy related to poverty, governance, and the environment.

CBFM includes the empowerment of, or in some cases, the recognition of the rights of, local communities to sustainably manage, control, use, and benefit from local forest resources (see boxes 1.9 and 1.10). It implies a legal, political, and economic framework that puts local people at the center of forestry. Community objectives for managing forest land can include conservation, sustainable use, local control, economic development, and mixes of these objectives. While the state and large private operators have a role to play in the management of forests, in many instances, improved effectiveness, equity, and efficiency are outcomes of community-based approaches.

Community management of forests and other lands is larger in scale and more intensely linked to other sectors than is commonly acknowledged. From a management and use perspective, essentially all forests, however remote and seemingly physically unoccupied, have traditional owners and users. The assumption should not be a need to impose outside management over “unmanaged” or vacant lands but a need to carefully assess traditional systems, owners, and users of forests. Recent work in Gabon, a highly forested and lightly populated country, shows that even there traditional use zones abut one another and there is no “unclaimed” forest land. Frequently, the issue is recognition of existing or traditional local rights rather than transfer of new rights to the local level, as is illustrated in the India case study (see box 1.12; also note 1.3, Indigenous Peoples and Forests).

A variety of outside interventions can be used to support CBFM, including grants and loans, policy support programs and projects, global environment funds, and biodiversity conservation activities. However, CBFM is *not* the use of communities to achieve the objectives of outsiders, no matter how laudable these objectives may be. CBFM is the empowerment of communities to use and manage forests to achieve their own objectives.

Box 1.9 Community Forestry Models around the World

Many types of community forestry have been implemented in different parts of the world. In Latin America, there have been three main types:

- Communities with clear rights given by their national governments to participate in commercial timber harvesting, such as in Bolivia, Guatemala, Honduras, and Mexico.
- Communities that manage extractive reserves, such as in Brazil, where the government gives them clear rights over the land and forests, while limiting the amount of forest to be cleared for agriculture and prohibiting commercial logging. Communities earn money by selling nontimber forest products.
- Countries where the territorial rights of Indigenous Peoples over the areas that they have traditionally managed have been recognized.

In China, villagers are being given more control over heavily degraded lands if they agree with local forestry officials on how to rehabilitate the forests while also using them for their own subsistence. In India and Nepal, limited rights to what are still officially considered public lands have been devolved to

Source: Kaimowitz 2005.

local communities to manage and benefit from forests. Revenues from commercial forestry activities are shared with the government.

In Southeast Asia and the Pacific, partnerships are developed between communities and logging companies to ensure that the communities share in the benefits and that logging companies do not damage the resources the communities would like to protect.

Several models exist in Africa:

- Community forest programs that protect wildlife for tourism and sport hunting in return for a share of the fees paid by the tourists and hunters. Examples of this model can be found in Zimbabwe and Botswana.
- Projects focused on increasing villagers' incomes through sale of their fuelwood and charcoal, as in Mali and Niger.
- Programs designed to recognize the rights of communities over their forests, as in Tanzania and Mozambique.
- Programs designed to allow communities to sell timber commercially, if supported by a logging company or donor project. In Cameroon, this has greatly limited the number of communities involved.

OPERATIONAL ASPECTS

THE ROLE OF NATURAL RESOURCES IN ECONOMIC GROWTH AND GOOD GOVERNANCE. Natural resources play a fundamental role in the economic growth of poor countries and poor populations and in the development of democracies and good governance. Some specific steps for consideration include the following:

- Understand the different perspectives that government, communities, private operators, and other stakeholders have of devolution and its mode of implementation. A shared framework, more accountable to local livelihood needs and peoples' rights to self-determination, is required. Redefining issues of wider "public interest" forms part of this process, as does a careful analysis of the motivations and the negative incentives.
- Consider and support, if appropriate, the shift of priorities in programs, budgets, and plans toward greater

investment and integration of natural resources across the board in agricultural and poverty reduction programs, in national and donor budgets, in decentralization programs, and in other initiatives, at the policy, national planning, and forestry project levels.

- Develop pathways for more transparent information and communication that are locally accepted and that are adaptable for community through national political and donor levels.
- Create a baseline of biophysical and socioeconomic factors. There are several methodologies, including those detailed in the Poverty-Forest Linkages Toolkit (see note 1.1, Mainstreaming the Role of Forests in Poverty Alleviation: Measuring Poverty-Forest Linkages) and through CIFOR's Poverty Environment Network (<http://www.cifor.cgiar.org/pen/>). In addition, the International Forest Resources and Institutions (IFRI) Research Program describes a comprehensive methodology for measuring

the biophysical resource through forest plots and overall forest condition, as well as for developing data on local use, economic and market value, rules of use, and all levels of relevant institutional arrangements (for more information, see Clay, Alcorn, and Butler 2000).

DISTRIBUTION OF RESOURCE RIGHTS. Better distribution of resource rights, both property and procedural, is needed. Common attempts at decentralization of forest resources (see note 5.1, Decentralized Forest Management) are often compromised; they often do not go far enough in the recognition of the rights of, or transfer of rights to, local people, or if appropriate policy exists, it often is not implemented or implementation is skewed toward specific groups (see boxes 1.10 and 1.14). Furthermore, in many cases, effective handover has been either limited to badly degraded forests or under institutional arrangements that are impractical or conflict with local organization. Organizational models that devolve authority directly to disadvantaged resource users are more embracing of local interests and priorities than those that allocate control to higher levels of political or social organization. An equally important outcome is the decreased inequality and improved political and social articulation of local people.

Potential specific steps to enhance devolution of resource rights include the following:

- Understand motives for participation by identifying incentives and constraints in CBFM at community and national levels. Many more forestry projects fail as a result of negative incentives for community members than as a result of lack of education on how to manage forest resources (see box 1.12). It is important to understand who will foster and who will block an initiative and how to create a supportive environment for the required changes.
- Support strong local organizational capacity and enhance political capital outcomes for local people by enabling them to mobilize resources and negotiate for better benefits. NGOs, donors, federations, and other external actors have a key role in moving devolution policy and practice toward local interests.
- Identify traditional institutions and rules influencing property and use of resources and endogenous pathways for resolving conflicts and their effects on formal land rights. Allow communities to handle these issues and to propose mechanisms accepted by all key stakeholders that foster sustainable management and conflict resolution.

Box 1.10 Different Degrees of Devolution of Forest Management to Communities

Some countries, including India and Nepal, have devolved limited rights to local communities to manage and benefit from forests that are still officially considered public land. This process is also under way in most of the African continent, with more complete transfer of rights present in Cameroon, The Gambia, and Tanzania. These arrangements, known by such terms as “joint forest management” and “comanagement” do not alter state ownership and can be revoked by the state at any time, making them a much weaker form of property rights than the rights provided by private community-based ownership. In Brazil, for example, where some 75 million hectares of state-owned lands have been set aside for indigenous communities, the communities have no right to harvest their timber, even under sustainable management regimes. Some other countries are beginning to adjust traditional industrial logging concession arrangements to include indigenous and other local communities. In British Columbia, Canada, the provincial government recently agreed to allow Weyerhaeuser Limited to transfer its concession rights to a new business venture with a coalition of indigenous groups as the lead partner. The coalition now has majority ownership of use rights to a portion of its ancestral homelands—but not to the land itself. The Guatemalan government has granted timber concessions to local communities rather than to large industries, and the early experience is positive. In the Lao People’s Democratic Republic (Lao PDR), the government has launched a similar participatory management pilot program involving 60 villages under 50-year management contracts.

Source: IUCN and World Wildlife Fund 2004.

- Consider the need for a special good governance program at the community level to address such issues as elite capture and increased transparency (see box 1.11).

FRAMEWORK AND REGULATION FOR NATURAL RESOURCE MARKETS TO BENEFIT THE POOR. Natural resource markets will work for the poor only with the development of frameworks, regulations, and enforcement. If commodity chains are biased against the poor (and remain so), increasing

Nepal has a great deal of experience to offer in understanding the benefits and concerns of locally managed forests. It was the first country to have a national forestry policy allowing communities to form forest user groups (FUGs) that, after they elect leaders and develop a constitution and management plan, can be assigned control of and benefits from specific forest plots. To strengthen their groups against potential challenges as forest productivity and value increase through management, the groups have formed a federation.

Elite capture is a key issue to be addressed during decentralization, as was the case in some situations in Nepal. How local control impacts equity in asset distribution, and whether local groups can develop the transparency and other mechanisms necessary to avoid corruption, are important considerations.

An NGO, Women Acting Together for Change, worked closely with the FUGs on equity, democracy, and transparency through a process that included household visits to FUG members to discuss good governance of forest resources. The community then carried out community resource, social, and economic

assessments, and workshops in which the leaders and members identified what good governance would mean in their group and identified very specific goals with clear indicators that they designed into posters to monitor progress. An evaluation of this project found that many groups rewrote their constitutions and management plans giving special advantages to poorer members, and established open group audits. They elected lower caste and women members to some of the leadership positions, often for the first time, and identified totally new goals.

At the Fourth National Community Forestry Workshop in Nepal (2004), regional directors and researchers noted that at that time leadership in the FUGs and their federation were the only democratically elected bodies in the country, forming a basis for future democracy.

Lessons from this example include that in a country with very stratified social traditions, even when there is positive legal support, it takes skilled facilitators and group analysis with democratic approaches to mitigate elite capture and lack of transparency and to create positive outcomes for the poor.

Source: Women Acting Together for Change 2004.

the poor's market integration may increase poverty, not reduce it (see box 1.13). This issue is further discussed in note 1.5, Making Markets Work for the Forest-Dependent Poor.

Some specific steps for consideration include the following:

- Facilitate the organization and legal recognition of local groups for collecting, processing, transporting, and marketing natural resources.
- Analyze commodity chains and market weakness and develop strategies that benefit the poor.
- Support market studies and locally managed market information systems so that the full range of forest products and outputs are considered.
- Create simple management plans in which local users make at least some of their own rules related to use of forest products.
- Support systems of regular user monitoring, and sanction rule conformance of other users backed by the government.

USE OF SCIENCE AND TECHNOLOGY TO SUPPORT AND EMPOWER LOCAL FOREST MANAGEMENT INITIATIVES AND OBJECTIVES. Too often, an unintended consequence of using complex scientific and technical plans and institutions has been the exclusion of local people from planning and managing, or marginalization of local technical, social, and institutional knowledge. This is evident in the common practice of demanding complex, costly, and sophisticated forest management plans from local communities. Such misuse of science and technology should be reversed.

Some specific steps that can be taken include the following:

- Develop minimum management standards directly related to forest and poverty outcomes rather than abstract management procedures.
- Develop locally adapted tools that are understood and manageable by local actors themselves regarding evaluation and quantification of natural resources and shared use by communities.

India is a leader in involving communities in tree planting and forest improvement on state-owned forest land through a strategy called Joint Forest Management (JFM), with a portion of the benefits from community collaboration going back to participating communities. JFM has taken different forms and has had contrasting outcomes in the 27 states of India where it has been applied. Its methods and biophysical and social impacts have interested policy makers from around the world. The World Bank has encouraged expanding JFM and moving it toward community forestry.

In 2001, the World Bank supported taking a step further toward community forestry to better address the Bank's antipoverty, anticorruption, and improved governance goals. The Community Forestry Management Project in Andhra Pradesh stressed that the primary focus would be on improving the livelihoods and the physical, social, and financial assets of rural communities through sustainable tree and forest management. Increased benefits from the improved resource were to go to strengthening communities in a pro-poor strategy. Local community groups were to be legally supported to take over control, their institutions were to be strengthened, and the processes made more transparent. It was recognized that success could be reached only with changes in forestry institutions, laws, and regulations and the recognition of tribal land rights. In early discussions, the government and other partners indicated their willingness to support such changes.

Source: Authors' compilation from World Bank 2002a.

The project has made good progress on technical matters and needs to further advance institutional improvements. Additional training is needed for service providers, including NGOs, support agencies, and front-line staff to enhance their ability to work effectively with local groups in a participatory manner. Community user groups need to strengthen and form federations and partnerships to gain power.

A number of nontimber forest products (NTFPs) provided small increases in incomes to some communities, and where past plantings were ready for harvesting, some communities reinvested in the resource. However, the government has yet to make the required legal amendments to the Forest Code; liberalize trade regulations for NTFP harvesting, processing, and marketing; simplify procedures; require more transparent audits; or make conflict resolution procedures more balanced. The government of Andhra Pradesh withdrew resources previously allocated to the project. The World Bank reviews stressed the need to address the above issues and to continue to focus on livelihoods and pro-poor approaches.

The World Bank Report on India (World Bank 2005) noted the handicap to improving local incomes when forest resource rights are held by the government in spite of proposed legislation to return land that had been taken from tribal groups. The legislation has since been approved in Parliament, opening opportunities for increasing the contribution of forests to local incomes.

- Elaborate appropriate tools for continual follow-up on how the management system works and the effects of management by communities.
 - Identify different user groups in each area and their interactions under the participatory development framework.
 - Use simpler management plans in which local users make at least some of their own rules related to use of forest products and control over encroachment.
- CBFM is complex, can be costly, and involves many stakeholders and vested interests that may support or oppose CBFM activities. (See, for example, Clay, Alcorn, and Butler 2000; Borrini-Feyerabend and others 2004.) The following should be noted:
- Successful CBFM is a slow process and needs to be based on informed participation, capacity building, and trust.
 - Enhancement of land and resource tenure of Indigenous Peoples tends to improve CBFM and sustainable management of forests (see note 1.4, Property and Access Rights).
 - Without addressing overt as well as hidden power relations and vested interests through clear roles and responsibilities, availability of information, transparent and equitable decision-making processes, and monitoring, Indigenous Peoples and other forest-dependent communities may be worse off as a result of project activities (for example, access to natural resources in their areas may have been opened up to other stakeholders, but they do not share in the benefits).

The World Bank has been involved in the forest sector in Cameroon since 1982, and has helped put forest sector issues at the center of policy debates and encouraged a multisectoral approach. A review of the World Bank's engagement between 1982 and 1999 found that interventions have appropriately focused on policy and institutional issues, and some forest product marketing has been liberalized. However, overall the results of the interventions have not been up to expectations. At the time, the establishment of a transparent, efficient, and equitable forest management system was compromised by lack of government commitment and capacity, the resistance of key actors in the sector (including logging companies and parliament), implementation strategies that were not compatible with the underlying political and socioeconomic dynamics, and lack of policy implementation. In addition, forestry interventions were isolated from broader rural development concerns (agriculture, for example), and permanent mechanisms for local participation in decision making were not developed.

In Cameroon, tropical timber wealth is concentrated in a small group of economic agents. The sustainability and equity of the sector is largely deter-

Source: World Bank OED 2000.

mined by the structure of the industry, ownership patterns, industry investment, employment, and linkages with the rest of the economy. The structural underpinnings of the sector have been little affected and local communities have been left out of the reform process despite a declared objective to include them. The World Bank recommended that communities be actively involved in forest management and in 1994 a law was passed to this effect. However, because rights and responsibilities have not been specified, there are no clear mechanisms for limiting elite capture and the sharing of taxes has not been fully implemented. Results, therefore, have been mixed.

Some lessons learned include (i) the need for broadly based government support and avoiding relying solely on the executive branch to deliver on reforms because other powerful individuals or institutions may have motivation to block changes; (ii) knowledge and information are essential for policy making and implementation, as are clarity and specificity of terms and mechanisms for implementing laws and regulations; (iii) local institutions are needed for success and sustainability; and (iv) overdependence on technical assistance does not always overcome institutional weakness.

- Methods to enhance communities' ownership and active collaboration should be assessed for the given project context. Participatory mapping exercises, using mapping tools appropriate for the local communities, should be included.
- Capacity building is needed for local communities, government staff, and other involved stakeholders.
- Efforts to combine local practices (bottom-up) and government or private approaches (top-down) are essential.

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

Task managers need to keep in mind not only the technical aspects of forest management but the dangers and limitations of a top-down technical approach, the complexity of forest dynamics, as well as local use and rights (both formal and informal). In all cases, an understanding of the motivations of the different actors to support or block the desired changes is helpful in knowing if the donor-facilitated changes will actually take place.

Control over and access to forests not only facilitate economic growth and poverty reduction but also empower local people to articulate themselves socially and politically. The spillover effects of local control over forests, as in India, Mexico, and Nepal, can be quite large and impact a range of sectors and decision-making arenas. Because forests can be such an important share of a poor community's asset portfolio, control over and access to forests is not a trivial governance concern.

At the same time, it should be noted that not all community management results in positive outcomes. There are areas with strong migration where transfer of rights to communities has not resulted in sustainable management of forest resources (for example, Ghana and Côte d'Ivoire). In other countries there is a need to revisit the definition of community and distinguish between traditional communities managing forests and management of forests by more recently formed communities.

In many developing countries, significant attempts at decentralization have taken place, which, in theory, could greatly facilitate CBFM, local benefits, and empowerment

Mexican community forestry has perhaps reached a scale and level of maturity unmatched anywhere else in the world. It has demonstrated that where there has been greater community power over forest management there has been greater transparency and less corruption, better forest use and protection, and improved livelihoods for local people. Regions of greatest deforestation are where traditional social structures have been seriously weakened (Bray, Merino-Perez, and Barry 2005).

An estimated three-fourths of Mexican forests are communally owned either by *ejidos* (agrarian reform communities) or indigenous communities. Mexican forest management is rich in indigenous forms of common property management overlaid by massive agricultural reforms from the violent Mexican revolution in the second decade of the 20th century. However, across the country there is great contrast in resource quality; indigenous groups and their approaches to organization, equity, and resource use; as well as in state and local leadership. Efforts to support local management have met with mixed results. The World Bank has worked to improve forest management for environmental protection and quality of life for local people, starting with pilot activities in 1990 and then redesigning a project expanding to other regions, many of which have needed specially crafted approaches.

The Project for Conservation and Sustainable Management of Forest Resources (PROCYMAF) aimed to support community forest development, with a primary focus on Oaxaca but with some program work in Guerrero and Michoacan. PROCYMAF was a

Source: Authors' compilation using World Bank 2003.

community-driven development project. PROCYMAF II retained the environmental and economic aims but focused on (i) strengthening local capacity and management; (ii) strengthening capacity of the local private sector to provide forestry services; (iii) promoting timber, nontimber, and nontraditional products; and (iv) strengthening federal and state institutions working in forestry conservation and development.

A more diverse and multisectoral staff supported existing or new community management groups to expand social capital and helped form federations to be able to carry more weight in addressing local issues, including increased transparency and fair returns. Community members as well as professional foresters were trained so that technical issues could become understood locally, putting communities in a better position to negotiate and understand what to require of specialists and, in some cases, become specialists themselves. The project initiated community-to-community extension and, because there are areas in which there are either inter- or intra-community conflicts, promoters were trained in conflict management. The projects did studies on expanding the options and markets for economic use of forest products, including such items as mushrooms, bottled water, and resin as well as timber. Communities selected activities they found promising.

Devolution of public and private forestlands to local communities with common pool resource regimes and clear tenure status can create economic equality, social peace, and democratization of power, addressing corruption and at the same time improving the forest ecosystem (Bray, Merino-Perez, and Barry 2005).

(see note 1.4, Property and Access Rights). However, the ways in which local people realize the benefits of devolution differ widely, and the negative tradeoffs are most commonly borne by the poor. Community control and management over natural resources is often limited by continual government intervention and the government's insistence on complex management plans.

It is extremely important to facilitate a change in paradigm among forest officials and extension service providers. This can help in transforming the forest department culture and can be brought about by providing capacity building in participatory and community forest management and for provision of formal services. Such paradigm changes should

be accompanied by appropriate incentives to forest staff and adequate budget.

In many cases, CBFM can be a lever for wider pro-poor change and reform; in others, basic conditions must be present for it to flourish. The following elements should be considered in community forestry programs:

- Bureaucracy and paper work necessary for communities to have the right to manage their forests should be limited. Communities often do not have the money or the skills required to produce professional management plans, resulting in overdependence on donors and logging companies.

- Community forestry programs should make rich forest resources available to communities for their use, not just heavily degraded forests (see box 1.14).
- Transparency in payments to communities is critical. Governments or companies should make sure that villagers are informed of payments made to traditional village leaders, of amounts paid, and of the intended use for the payments, to limit corruption.
- Both communities and government should benefit from community forestry projects. Community benefits are more likely to accrue in situations where commercially viable forest resources, including NTFPs, are available. Governments benefit from expanded collection of taxes and forest fees and from cost savings resulting from a reduction in enforcement.
- Solid feasibility studies and business plans need to be in place, and communities should be familiar with market conditions. While financial returns should be quick to materialize, this should be balanced with longer-term needs of investing in infrastructure, natural resource conservation, and at times primary and secondary processing of wood and marketing of end products. Local knowledge, science, and institutions are often ignored or treated with derision by outsiders, making it difficult to incorporate local knowledge into activity design.
- It is essential that markets be made to work for the poor and that market failures, such as monopolies, collusion, segmentation, asymmetrical information, and power, are overcome. This means responding to market failures and imperfect competition and identifying new opportunities that take advantage of the assets of the poor, such as labor and natural resources.
- Project support should include management capacity building for the community administration. In addition to technical skills, training should cover participatory planning, monitoring, and periodic updating of community development plans.
- Individual families should be supported. Collective activities are not always the best approach for community forestry, especially tree planting activities—smallholder farmers should be supported in this process.
- In addition to traditional management of highly stocked forests, secondary forests and low-density woodlands offer good opportunities for community management, because they offer multiple agroforestry services and higher flexibility for forest management.
- Customary claims and particular rights of Indigenous Peoples and other forest-dependent communities should be addressed.

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CROSS-REFERENCED CHAPTERS AND NOTES

Note 1.1: Mainstreaming the Role of Forests in Poverty Alleviation: Measuring Poverty-Forest Linkages

Note 1.3: Indigenous Peoples and Forests

Note 1.4: Property and Access Rights

Note 1.5: Making Markets Work for the Forest-Dependent Poor

Note 5.1: Decentralized Forest Management

Indigenous Peoples and Forests

It is estimated that worldwide 60 million Indigenous Peoples are highly dependent on forest resources for their livelihoods. Forests and other natural resources are the foundation for most Indigenous Peoples' livelihoods, social organization, identities, and cultural survival, which are based on a strong and deeply rooted historic relationship with their ancestral lands and natural resources. This relationship has cultural, socioeconomic, and spiritual dimensions and has influenced customary institutions and practices for managing land and resources.

The identities and cultures of Indigenous Peoples are inextricably linked to the lands on which they live and the natural resources on which they depend. This deeply rooted link informs their livelihoods, social organization, identities, and cultural survival. It also informs their perceptions of poverty, well-being, and "the good life," which often differ from those of mainstream society as well as of other rural communities. Their patterns of land use and relationship with land and resources may also translate into different goals and models for development—for example, developers may want to extract natural resources for economic gain, while indigenous communities may want to leave the environment and resources intact, providing them with their livelihoods and spiritual links to their ancestors.

Indigenous Peoples have specific rights relevant for forest-based projects. The rights and concerns of Indigenous Peoples have been internationally recognized, foremost through International Labour Organization (ILO) Convention 169. The convention affirms the way of life of indigenous and tribal peoples, recognizes the need to safeguard their customary rights to land and natural resources, and stresses that they should benefit equally from economic and social development and that they and their traditional organizations should be closely involved in the planning and implementation of development projects that affect them.

Specifically concerning biodiversity and sustainable natural resource management, Agenda 21, adopted by the United Nations Conference on Environment and Development (UNCED) in 1992, as well as the Rio Declaration, recognize the actual and potential contributions of indigenous and tribal peoples to sustainable development. The 1992 Convention on Biological Diversity (CBD) calls on contracting parties to respect traditional indigenous knowledge with regard to the preservation of biodiversity and its sustainable use. The CBD has been a key vehicle for enhancing Indigenous Peoples' rights to their resources and their participation in biodiversity conservation and management. Indigenous Peoples are represented in the Conference of Parties of the CBD, which recognizes traditional knowledge and cultural heritage as conservation values.

In October 2007, the United Nations' General Assembly adopted the UN Declaration on the Rights of Indigenous Peoples. The declaration, while nonbinding, sets international standards for the protection and promotion of the individual and collective rights of Indigenous Peoples, including their rights to land and natural resources, and advocates a human rights-based approach to development as it applies to Indigenous Peoples.

These and other international conventions and agreements, along with the World Bank's Indigenous Peoples policy (OP 4.10), provide an important context for World Bank-assisted, forest-related projects affecting Indigenous Peoples. Through OP 4.10, the World Bank recognizes the rights of Indigenous Peoples as addressed in international and national law and agreements. The policy acknowledges the vital role that Indigenous Peoples play in sustainable development, and calls for special considerations when projects affect the close ties that they have to land, forests, water, wildlife, and other natural resources. Specifically for projects supporting parks and protected areas, the policy states that the World Bank "recognizes the significance of

[Indigenous Peoples’] rights of ownership, occupation, or usage, as well as the need for long-term sustainable management of critical ecosystems” (OP 4.10 paragraph 21). OP 4.12 on Involuntary Resettlement also includes provisions for participatory natural resource management as well as mitigation measures for impacts from involuntary restrictions of access to legally designated parks and protected areas. (See section II of this sourcebook for more guidance on application of the World Bank’s safeguard policies.)

Forestry projects, including policy-based lending, investment projects, and other types of projects affecting forest areas where Indigenous Peoples live, are particularly sensitive given the special relationship between Indigenous Peoples and their lands and natural resources. Forests can play a vital role in relation to livelihoods, sustainability of cultures, and development of Indigenous Peoples. In turn, Indigenous Peoples represent important stakeholders in the sustainable management of forest areas, and their involvement entails a range of challenges and opportunities that need careful assessment, often in a site-specific context. Finally, forest projects, if not properly designed and implemented, can have a variety of adverse impacts on the livelihoods and cultures of Indigenous Peoples. It is thus essential that any forest-related project in areas with Indigenous Peoples thoroughly assess and address any issues pertaining to them and involve consultation with these communities.

OPERATIONAL ASPECTS

A key aspect of forest activities involving Indigenous Peoples is to acknowledge that development practitioners should not assume that indigenous world views about land and natural resources, as well as development priorities, are the same as those that may be commonly held by government and development agencies. The analysis of and approach to development in indigenous contexts must, therefore, take into consideration the specific understanding of the natural world among Indigenous Peoples and be based on meaningful consultation with, and participation of, local communities.

INDIGENOUS PEOPLES’ RELATIONSHIP TO LAND AND NATURAL RESOURCES. Indigenous Peoples’ special relationship with their lands and natural resources often makes them vulnerable to development efforts. The special relationship that Indigenous Peoples have with their land and natural resources, along with their historical marginalization, may also result in significant impacts from development activities, which, again, may vary substantially

from those on other rural communities. Indigenous Peoples historically have experienced unequal and inequitable development and have frequently been economically, politically, and socially marginalized. They often lack entitlements in national legislation and development processes as well as respect for their cultures, lifestyles, livelihood models, and natural resource management practices.

Moreover, Indigenous Peoples are often present in, and claim ownership of, areas with rich forest and other natural resources, leading to potential conflicts over such resources. They may endure proportionally high impacts from increased pressures on the land and resources as a result of development interventions as well as from general trends of agricultural expansion and resource extraction. In addition to the risk of losing land and access to natural resources, the languages, world views, social organization, cultures, and values of Indigenous Peoples are in danger of further erosion or disappearance when development interventions fail to recognize the close link between Indigenous Peoples and their lands and natural resources.

Forest-based projects and programs should be planned with these opportunities, differences, and risks in mind. They require special attention and measures to ensure that the unique ties between Indigenous Peoples and their lands are given full weight in the design of projects and programs. This may result in specific activities to support and protect Indigenous Peoples’ rights and well-being, developed in consultation with the affected communities.

USE OF POLICY ANALYSIS IN INVESTMENT AND POLICY LENDING. World Bank operations, both investment and policy lending, involving forests and Indigenous Peoples require careful policy analysis. This analysis frequently identifies reform initiatives that would improve the overall policy framework. Key policy issues for Indigenous Peoples include tenure, harvest and marketing policies, governance issues, fiscal policies, decentralization, attitudes of the dominant culture toward forest uses, environmental and social policies, and technical guidelines. Some of these are discussed below (see also chapter 6, Mainstreaming Forests into Development Policy and Planning: Assessing Cross-Sectoral Impacts).

- *Tenure not only of forest land but also of rights to the use of forest products.* Indigenous Peoples’ cultural attitudes toward claims of natural resource ownership and associated stewardship responsibilities are important, as are considerations involving individual versus community forms of tenure, and existence of and requirements for

tenure adjudication and documentation. Policy analysis of tenure issues also needs to take into consideration the broader political economy and phasing of policies or institutions affecting the sector (see further discussion on tenure below).

- *Harvesting and marketing of forest products.* Where communities in forest areas are interested in economic use of forest products, the objective of harvest and marketing policies should be to maximize returns from forest products to Indigenous Peoples and other forest-dependent communities on an environmentally and fiscally sustainable basis (see note 1.5, Making Markets Work for the Forest-Dependent Poor, for points on what policy reform should address).
- *Governance.* Governance policies on transparency, accountability, grievance mechanisms, and independent review modalities are important to forest operations involving Indigenous Peoples. Forest-rich countries, where forest resources are being “mined” or exploited extensively and exported, often involve significant rent-seeking and revenue leakage. Efforts to address these challenging governance issues and associated vested interests can be especially beneficial to most Indigenous Peoples in forest areas, and inattention to these issues can be especially harmful (see chapter 5, Improving Forest Governance).
- *Fiscal policies.* Government services and programs targeting Indigenous Peoples in remote forest areas are often poorly funded. In addition, the unit cost of service provision is frequently higher, and there is limited availability of expertise tailored for Indigenous Peoples contexts. Public expenditure review and reform should address these problems caused by market and policy distortions, streamlining fund flow mechanisms, adjusting budget parameters, providing incentive payments, and correcting incentive distortions where necessary (see note 5.4, Strengthening Fiscal Systems in the Forest Sector).
- *Community institutions and decentralization.* Policies on indigenous community institutions are important to CBFM. Where indigenous communities are culturally homogeneous with strong social cohesion, key issues usually involve the extent to which the official structure reflects and acknowledges traditional decision-making systems and the extent of delegated authority and autonomy. Where they involve heterogeneous groups and interests, institutional systems and decentralization efforts also need to include effective modalities to negotiate the differing perspectives and relative levels of empowerment.

- *Values and attitudes of mainstream culture.* Some countries regulate forest use based on the attitudes and values of the mainstream culture in ways that do not accommodate traditional uses by Indigenous Peoples. Typical issues of contention include communal ownership, recognition or nonrecognition of sacred sites in forest areas, regulation or prohibition of hunting, and prohibition of shifting cultivation. Policy reforms may be needed to recognize, and improve the level of understanding by the majority culture of, Indigenous Peoples’ resource use and management practices. Improvements in traditional practices that enhance sustainability and natural resources while still recognizing Indigenous Peoples’ rights and cultures may be contemplated.

USE OF SECTOR ANALYSIS IN INVESTMENT AND POLICY LENDING. Sector analysis on Indigenous Peoples and forests may provide useful information and dialogue opportunities to inform investment and policy lending. The interactions of Indigenous Peoples and forests have been increasingly taken into consideration as part of broader country economic and sector analysis and the development of country assistance strategies. The Independent Evaluation Group (IEG, formerly the Operations Evaluation Department) has included Indigenous Peoples issues in forest sector country case studies for Brazil (Uma and others 2000), India (Kumar and others 2000), and Indonesia (Gautam and others 2000), all noting the importance of access to land and natural resources for Indigenous Peoples. More recently, analytical efforts have also been associated with poverty reduction strategies, as well as World Bank–wide reviews and formulations of strategies on forests, rural development, environment, and Indigenous Peoples. The degree of focus on forests and Indigenous Peoples has varied considerably across countries, depending on their relative extent and importance, the receptivity of governments to policy dialogue on these issues, World Bank staff expertise and capacity, and the concern and commitment of regional Bank management relative to other development issues. However, given the important role that Indigenous Peoples can play in the forest sector, and the risks to which they may be exposed, it is essential that forest sector analysis include analysis of Indigenous Peoples for countries where they are present.

INFORMED PARTICIPATION OF INDIGENOUS PEOPLES. Informed consultation with and participation of Indigenous Peoples are essential for successful forest-based activities. Their particular rights, circumstances, and needs often render standard development approaches and assumptions inadequate or

inappropriate. Thus, development projects affecting Indigenous Peoples need to be prepared in full consultation with affected communities and their informed participation should be ensured during project implementation (see OP 4.10, paragraph 1, and chapter 12, Applying OP 4.10 on Indigenous Peoples, in section II of this sourcebook).

IEG evaluations of community participation in World Bank–assisted projects have found that when primary stakeholders—individuals and community-based organizations—participate in World Bank activities, development relevance and outcomes improve. Project-supported activities tend to be more sustainable, and there is less corruption because processes are more transparent and government officials are held accountable to the people they serve (World Bank OED 2001, 2005). Specific benefits concerning Indigenous Peoples include the following:

- Project development recognizes Indigenous Peoples’ rights to be consulted on, and participate in, development efforts that affect them, whether positively or adversely.
- Participation increases the likelihood of active engagement by affected communities and community ownership of project activities.
- Indigenous Peoples are enabled to make informed decisions on projects that will affect them.
- Project design and implementation are based on the realities of particular communities and their involvement with forest-related project activities, and the project is more likely to provide culturally appropriate benefits.

Consulting with Indigenous Peoples can be demanding and time consuming. The consultation process should include participatory methodologies to ensure participation and voice of marginalized social groups within affected communities, to build community consensus, to enhance transparency, and to ensure local ownership of the process (see box 1.15). Use of traditional decision-making processes that are familiar to local communities, along with skilled facilitation and capacity-building activities, will usually enhance the process and outcome (see chapter 10, Consultation and Communications in Forest Activities, in section II of this sourcebook).

MECHANISMS FOR ONGOING PARTICIPATION OF INDIGENOUS PEOPLES. Detailed arrangements for ongoing participation of Indigenous Peoples and OP 4.10 complaint mechanisms should be included in project design. Local communities’ participation must be clearly spelled out in project preparation and implementation plans, describing the roles

Box 1.15 Brazil Santa Catarina Natural Resource Management and Rural Poverty Reduction Project

This project, aiming to empower local communities to better manage their natural resources, used innovative methods to consult with affected Indigenous Peoples during project preparation. Initially, an interinstitutional committee, including representatives from government, NGOs, and academia began working on project design with Indigenous Peoples. A two-phased approach was developed to carry out consultations in a way that facilitated the communities’ informed participation in designing the project. For the first phase, expert facilitators already familiar with the specific indigenous groups were contracted to develop dissemination materials together with indigenous students and to visit villages to present the project and the ideas for working with Indigenous Peoples. This laid a solid foundation for understanding the proposed project and activities specifically for Indigenous Peoples.

The second phase of the consultations was a series of larger formal meetings between representatives selected by the Indigenous Peoples, in the location of their choice, with representatives of the project staff. Thanks to the initial field work that disseminated project information using culturally appropriate methods, including indigenous languages and specially designed graphics, the formal meetings were very productive. The Indigenous Peoples’ representatives had had information and time needed to better understand the project, to form their opinions, and to make suggestions and recommendations for project design. As a result, the Indigenous Peoples felt their voices had been heard, and project staff received detailed feedback on how best to reflect Indigenous Peoples’ concerns in the project design and Indigenous Peoples Development Plan (the project was prepared under OD 4.20).

Source: Authors’ compilation using World Bank 2002a.

and responsibilities of various stakeholders (see chapter 12, Applying OP 4.10 on Indigenous Peoples, in section II of this sourcebook). Activities to build the capacity of local communities to participate may be necessary. In projects involving Indigenous Peoples and forests, communication and conflict management measures help to build understanding,

manage expectations, and address grievances. Given the range and variation of stakeholders, this frequently involves the development and implementation of a communication strategy that takes into account various audiences, culturally appropriate forms of communication, and provisions for two-way communication flows. Conflict management involves capacity and skill development. Grievance procedures frequently build on existing mechanisms and consideration of informal customary mechanisms is particularly important.

Indigenous Peoples' organizations, NGOs, academics, and others with appropriate experience and skills may play an important facilitation role in developing participatory processes and addressing social and environmental concerns related to Indigenous Peoples. If appropriate Indigenous Peoples' organizations or local NGOs cannot be identified, it may be necessary to consider arranging for services from national or international Indigenous Peoples' organizations or NGOs, building the capacity of existing local Indigenous Peoples' organizations and NGOs, or hiring consultants with comparable skills. It is important to be aware of external organizations that may claim to represent Indigenous Peoples and to confirm their legitimacy and acceptance by the affected communities. Irrespective of the entity contracted, it is important that it is acceptable to the affected communities, and is able to facilitate trust and cooperation. Good communication, coordination arrangements, and strategies that encourage ongoing learning and evolution in relationships will be key to successful partnerships with Indigenous Peoples' organizations, NGOs, and other civil society institutions.

SOCIAL ASSESSMENTS IN PROJECT DESIGN FOR INDIGENOUS PEOPLES AND FORESTS. Detailed social assessment of issues pertaining to Indigenous Peoples and forests is needed to inform project design. Forest projects provide opportunities as well as risks for Indigenous Peoples. These should be assessed thoroughly during project preparation, as part of the social assessment and as part of free, prior, and informed consultation processes, and addressed in project design and the design and implementation instruments used to address Indigenous Peoples' concerns. The specific relationship between Indigenous Peoples and the environment in the project area should be investigated, including aspects of natural resource use practices that may enhance or diminish biodiversity and natural resources, keeping in mind that sometimes assumptions about such practices can be misguided, politically motivated, or based on values of the dominant cultural model rather than the reality in specific situations. It is important that interventions be based on reliable facts obtained with the participation of local

communities and through field-based biological and social assessments.

The social issues concerning Indigenous Peoples and forests are extensive and complex. Key issues include rights to, and conflicts over, forest resources, local livelihoods and natural resource management practices, social organization and sociocultural diversity, indigenous knowledge, gender and intergenerational issues, social and political risks, and vulnerabilities of local communities. (See World Bank 1997, World Bank 2005, and section II of this Sourcebook for more details on social analysis in natural resource management projects.)

INSTITUTIONAL AND STAKEHOLDER ANALYSIS. Institutional and stakeholder analysis helps identify opponents and proponents of project activities. It also identifies norms, rules, and behavior that may enhance or hinder successful project implementation. Forest management involves multiple stakeholder interests. In most countries, balancing competing interests and objectives is and will remain a constant challenge in forest management. While often one can find "win-win" solutions, at other times addressing these various interests involves inherent tradeoffs and significant risks to project outcomes.

The interests, values, capacities, and dependency on forest resources of Indigenous Peoples' communities vary. There can be a variety of indigenous groups or subgroups that have different experiences and capabilities in forest management. Levels of cultural homogeneity, social cohesion, social inclusion, familiarity with and management skills in a cash economy, ability to defend interests in forests, and forest management practices may vary. All these differences lead to different priorities regarding forest management that have to be negotiated and addressed in project design and implementation. Adding to this complexity, many Indigenous Peoples today live in mixed communities together with, or in close proximity to, other social groups.

RECOGNIZING CUSTOMARY TENURE SYSTEMS. Community resource management mechanisms under customary tenure systems are recognized as having great potential in helping mitigate negative social and environmental impacts of development. Customary tenure is supported through growing recognition of legitimate rights to land and natural resources of Indigenous Peoples and other forest-dependent communities (see also note 1.4, Property and Access Rights).

Indigenous customary tenure structures are generally communal, indigenous rights are usually collective rights, and Indigenous Peoples more often than not claim some form of collective tenure. Separating indigenous commu-

nity territory into individual plots, which may be attempted through forest and land use planning exercises, runs the risk of adversely affecting the livelihoods and social cohesion of indigenous communities. (See, for example, the Asian Development Bank-financed poverty assessment for Lao PDR [State Planning Committee 2000].) Individual tenure arrangements should be developed with care and only with the informed participation of the local communities.

IMPORTANCE OF LAND AND LONG-TERM RESOURCE USE RIGHTS. Most Indigenous Peoples see resource use tenure as essential for their livelihoods and cultural survival. Land tenure and long-term access to natural resources are essential for forest-related projects that affect Indigenous Peoples. Lack of, or insecure, tenure or short-term tenure or use rights arrangements are likely to prevent positive project outcomes and intensify degradation of forests. In contrast, secure land tenure and long-term tenure arrangements are likely to empower local communities to manage forests in sustainable ways.

While international law recognizes Indigenous Peoples' rights to ancestral land and natural resources, and some countries have begun to recognize these rights in national law, the situation is far from uniform. Many countries in Latin America (for example, Bolivia, Brazil, Colombia, Mexico, and Nicaragua) and the Philippines have assigned Indigenous Peoples large territories or enacted legislation recognizing their rights. Most other countries do not legally recognize indigenous land and resource use rights, and those that do, do not always protect such rights in practice. The situation is compounded by the fact that most indigenous areas have never been demarcated or titled, or lack documentation of such official conventions. Accordingly, ancestral lands as well as areas of current occupation and resource use (if these differ) are often without legal recognition or protection.

Forest-based projects should support land and long-term resource use rights of Indigenous Peoples where relevant. In countries with legislation supporting Indigenous Peoples' land and resource use rights, projects should incorporate activities that formalize and regularize them. Where the customary lands of Indigenous Peoples are legally under the domain of the state, or where it is otherwise inappropriate to convert traditional rights into those of legal ownership, alternative arrangements should be implemented to grant long-term, renewable rights of custodianship and use of forest areas to Indigenous Peoples (see OP 4.10 for more details). Where Indigenous Peoples are weak relative to private commercial interests, it may be useful to combine government ownership of forests with use rights to forest products for Indigenous

Peoples. Such a combination could help to protect Indigenous Peoples' interests as well as prevent conversion of forest land to nonforest uses in the short term. As needed, legal reforms should also be supported to enhance the recognition of land and resource use rights of Indigenous Peoples.

HISTORICAL AND POLITICAL CONTEXT TO ADDRESSING RIGHTS. To address the land and resource use rights of Indigenous Peoples, it is important to understand the historical and political context in the country and local area. Indigenous Peoples have varying cultural values regarding tenure over forest land and forest products that need to be understood and addressed in project design. The belief system of some Indigenous Peoples does not encompass the concept of natural resource "ownership" at all, which can affect the way they address customary tenure claims and rights as well as daily management of resources. Views on individual and collective tenure also vary. The extent to which tenure rights are linked to stewardship responsibilities also varies from group to group.

Historical, cultural, and socioeconomic studies combined with participatory methods and community mapping exercises can help build a good understanding of local communities, their cultures, resource use, and customary land and resource tenure arrangements. They may also help to build trust and avoid conflicts over land and resource use, provided that findings are incorporated into project design, including measures that recognize Indigenous Peoples' customary rights and continued access to sustainable resource use.

USE OF PARTNERSHIPS FOR ENHANCING PROTECTION AND SUSTAINABILITY. In the context of CBFM, work with Indigenous Peoples to enhance efforts to manage forest resources. Building efforts on current relationships between the environment and Indigenous Peoples can lead to win-win situations that enhance the protection of biodiversity and natural resources and at the same time support the cultures and sustainable livelihoods of local communities (see chapter 9, Applying Forests Policy OP 4.36, and chapter 12, Applying OP 4.10 on Indigenous Peoples, in section II of this sourcebook, and note 1.2, Community-Based Forest Management).

Experience has shown that true partnerships are difficult to attain for various reasons, such as continued focus on top-down approaches, conflicting interests, corruption, and limited capacity. Despite such difficulties, however, collaborative arrangements are gaining ground quickly because they can help resolve conflicts, foster learning during implementation, enhance management of forest resources and biodiversity, and support the livelihoods and cultures of

local communities. They require time, resources, and a flexible approach that recognizes that while consensus is a useful goal, conflicts are likely to occur and management arrangements and grievance procedures should be enabled to address such conflicts. Collaborative arrangements and enhanced participation of local communities require capacity building as well as arrangements that institutionalize participation and representation of local communities in decision-making processes and bodies.

INDIGENOUS KNOWLEDGE AS A BASIS FOR CBFM. Indigenous knowledge and management practices should be the starting point for CBFM where appropriate. Indigenous Peoples' forest and natural resource management approaches vary in methods, complexity, and quality. Most often, though, Indigenous Peoples have managed natural resources soundly, providing their communities with food and other products without depleting the resource base. Their knowledge and practices should be the starting point for project activities, in combination with modern approaches appropriate for the local context. (See box 1.16.)

HUMAN RIGHTS IN FOREST CERTIFICATION. Certification schemes should include, in addition to sustainability principles, the rights of Indigenous Peoples. The voluntary forest certification system should cover human rights, including rights of Indigenous Peoples to land, resources, and cultural sites as well as their free, prior, and informed consent. This often goes beyond national forest regulations. (See chapter 11, Forest Certification Assessment Guide: Summary on Use, in section II of this sourcebook.)

IMPORTANCE OF SHORT-TERM AND EQUITABLE BENEFITS. Indigenous Peoples and other forest-dependent communities are likely to benefit from forest-related projects that address the issues discussed in this note. However, these benefits may materialize only in the long term if forestry production or improved natural resource management practices are implemented. In many cases, activities are needed to improve the livelihoods of local communities and ensure equitable benefits in the short term.

These activities commonly consist of culturally appropriate assistance in improving agricultural production, sustainable harvesting and processing (including organization and legal recognition), market access, and the value of forest products (for example, market studies, strategy development, and organization); and support to small businesses and to joint ventures selling cultural products or forest-

Box 1.16 India Andhra Pradesh Community Forestry Management Project

This project aims to reduce rural poverty through improved forest management, with specific community participation by tribal forest-dependent communities to assume full responsibility for the development of forest areas. One of the three main components is community development to improve village infrastructure and livelihoods, through forest- and nonforest-based income-generation activities. A tribal development plan is an integral sub-component in preparing investment proposals. The tribal development plan includes activities to narrow the gap in the levels of tribal and nontribal development through deliberate actions for tribal socioeconomic development. This includes community investments (for example, community halls, wells) and creation of wage labor, both for work within the protected area (fire management, habitat restoration) and other conservation activities. At several other protected areas in the country, specific programs target tribal and special-needs groups: a tribal trekkers program at Periyar, ropemaking skills at Pench, and community agriculture at Gir.

Source: World Bank 2002.

based products, through employment in conservation activities and through ecotourism.

Improving forest-based livelihoods through better multicropping in swidden cultivation fields and sustainable use of nontimber forest products are useful approaches to providing benefits to Indigenous Peoples. Experiments in markets for environmental services are under way and should be extended to include Indigenous Peoples. The World Bank's BioCarbon Fund (BiCF) may support forest-dependent communities in earning revenues through carbon credits for planting and managing forests.

Work is ongoing to extend the benefits to Indigenous Peoples of the newly established Forest Carbon Partnership Facility (FCPF), which will support policy approaches and programs with positive incentives for reducing emissions from deforestation and degradation. The facility will also develop concrete activities to reach out to poor people who depend on forests to improve their livelihoods. Ongoing efforts and consultations with Indigenous Peoples and forest-dependent communities are developing appropriate mechanisms to ensure that these communities benefit from the FCPE.

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

The following summarizes lessons learned to date:¹

- Tenure over land and resources is the most important element of Indigenous Peoples' survival and needs to be assessed and addressed in forest projects. Indigenous Peoples' rights to land and resources should be recognized and, if needed, appropriate legal frameworks should be developed to guarantee such rights.
- Effective management of forest resources is best accomplished through local participation. It should be built on finding common ground, allowing sufficient time for mutual understanding and acceptance of goals and strategies, creating and maintaining transparency throughout the process, and recognizing that goals will change and that collaboration does not mean consensus.
- For Indigenous Peoples, survival is cultural survival. Forestry activities are a means toward that end, not an end in themselves. For example, the survival of local languages is key to the maintenance of local ecological knowledge and values. Indigenous Peoples should participate in activities supporting their intellectual property rights and bioprospecting.
- Too often, Indigenous Peoples have been seen only as laborers, park guards, or gatherers or producers of raw materials. Small businesses and joint ventures in which Indigenous Peoples retain an equity share in products as they move through the market chain should be supported.
- Efforts should be focused on sustainable timber management because ecotourism, nontimber forest products, bioprospecting, the sale of intellectual property, or even the sale of carbon rights will not generate the same levels of income for Indigenous Peoples in the short to medium term as logging.
- Alternative development efforts need to be designed to match or complement local skills. These efforts need to place equal emphasis on income generation and sustainable resource use in addition to addressing the steep learning curves of groups that are often only now entering the market economy.

Lessons have also been learned from Inspection Panel cases involving forest activities affecting Indigenous Peoples in Cambodia and Democratic Republic of Congo. These include the need to (i) analyze the current situation of Indigenous Peoples, not only in project areas, but in the country as a whole, to assess ongoing support and outreach efforts, as well as to undertake dialogue on any policy or legal reforms that

affect them; (ii) identify early on any potential impacts on, and benefits to, Indigenous Peoples, including any special needs and targeted poverty reduction activities; (iii) ensure a well-developed plan for consultation and participation of affected Indigenous Peoples and other forest-dependent communities; (iv) address adverse impacts from forest activities (for example, restrictions of access to, or logging in, areas of indigenous resource use and cultural sites), which may result equally from investment and policy lending activities; (v) undertake capacity-building activities in traditional and other sectors that are relevant to and that engage Indigenous Peoples.

A number of Bank-assisted projects have supported forest-based activities with Indigenous Peoples' communities. The Brazil Indigenous Lands Project supported the conservation of natural resources in indigenous areas and the well-being of Indigenous Peoples through regularization of indigenous lands in the Legal Amazon, and improved protection of Indigenous Peoples and their land. It has been innovative in improving technical quality and Indigenous Peoples' participation in and control of the processes of regularizing, protecting, and managing their lands. A methodology for ethno-ecological assessments of indigenous lands was developed to combine traditional knowledge with scientific information and provide a practical and flexible tool for investigating human-environment interactions. Some of the challenges the project confronted included securing involvement of the right experts; difficulties of organizing work in remote locations and timing it with seasonal conditions; and institutional weaknesses of Brazil's National Indian Foundation (FUNAI), the agency responsible for Indigenous Peoples. Involvement of multiple agencies, uncertainties concerning the legal aspects of natural resource use in Indigenous Peoples' areas, and conflicts between Indigenous Peoples and local and national stakeholders (for example, neighboring ranchers and conservation organizations) hampered progress on protecting Indigenous Peoples' lands and limited sustainable development efforts to enhance Indigenous Peoples' well-being (see World Bank 2007 and Lisansky 2004).

Lessons from the Colombia Natural Resource Management (NRM) Program, supporting improved natural resource management through CBFM and land titling activities, include local participation in NRM activities takes time, often requiring changes in the overall climate between different groups; Indigenous Peoples' organizations can play a significant role in monitoring the actions of government agencies; and collective land titling often faces resistance from government and other stakeholders (see Clay, Alcorn, and Butler 2000).

The Mexico Community Forestry Projects are excellent examples of the benefits that supporting CBFM activities

with Indigenous Peoples can offer. Sophisticated forest management, product processing, and marketing have enhanced participating communities' livelihoods and improved natural resource management (box 1.17).

RECOMMENDATIONS FOR FUTURE ACTIVITIES. This note has discussed some of the operational aspects and lessons learned concerning forest-based projects affecting Indigenous Peoples. These can be summarized into the following key recommendations for future forestry activities involving Indigenous Peoples:

- Recognize Indigenous Peoples' rights to their land and natural resources, and to benefits from development activities, as well as the need for consultation and participation throughout the planning, implementation, monitoring, and evaluation processes.
- Base project preparation and implementation on well-prepared and well-executed consultations with Indigenous Peoples and sound social and institutional analysis providing a thorough understanding of the local context and affected communities.
- Ensure that project activities affecting Indigenous Peoples are based on a sound process of free, prior, and informed consultations with affected communities leading to broad community support.

- Support CBFM, emphasizing community ownership and collaborative arrangements (see note 1.2, Community-Based Forest Management).
- Support livelihood activities and ensure equitable benefits to affected Indigenous Peoples.
- Pay attention to the requirements of the Bank's Indigenous Peoples policy (OP 4.10) early on in project preparation, and make clear agreements with the borrower well before project appraisal.

NOTE

1. To inform the World Bank's Forest Policy Implementation Review and Strategy Development Framework, an independent study was undertaken to assess how the Bank has addressed the issue of Indigenous Peoples in selected World Bank and GEF-funded forestry and biodiversity conservation projects in Colombia, Indonesia, Mexico, Papua New Guinea, and Siberia (Clay, Alcorn, and Butler 2000). The lessons learned and recommendations are drawn from that study.

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Box 1.17 Mexico First and Second Community Forestry Projects

The objectives of these two Community Forestry Projects (also titled PROCYMAF I and II) are to assist Indigenous Peoples' communities and *ejidos* (communal land owning units) in different priority regions of Mexico to improve the management and conservation of their forest resources and to generate alternative sources of income in a sustainable manner. Lessons from these projects suggest that community forestry is an effective instrument for sustainable rural development, building on existing local economic, social, and biophysical conditions and encompassing the development of social capital (based on traditional forms of governance), a minimum base of natural capital (forest resources with commercial value), and the development of technical and administrative capacity (human capital) at the community level to enhance decision-making powers.

The first project focused its community forestry activ-

ities on diagnostics and participatory planning aimed at self-management, including the financing of Participatory Rural Appraisals, enabling indigenous communities to take a more active role in natural resource management decisions based on an improved understanding of their needs, capabilities, and interests. In this way the project was successful in empowering local communities to improve management of their forest resources and expanding their options for income generation.

While the first project helped increase the competitiveness of community forest enterprises and opened up new markets for certified forest products from Mexico, a key lesson learned was the need to include significant funding for productive activities, particularly for processes that add market value to forest products and achieve economies of scale through community associations and strategic partnerships with the private sector.

Source: World Bank 2004. See also box 1.13 for discussion of the Community Forestry Project in Mexico (Project for Conservation and Sustainable Management of Forest Resources).

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CROSS-REFERENCED CHAPTERS AND NOTES

- Note 1.2: Community-Based Forest Management
- Note 1.4: Property and Access Rights
- Note 1.5: Making Markets Work for the Forest-Dependent Poor
- Chapter 5: Improving Forest Governance
- Note 5.4: Strengthening Fiscal Systems in the Forest Sector
- Chapter 6: Mainstreaming Forests into Development Policy: Assessing Cross-Sectoral Impacts
- Section II: Guide to Implementing Forests Policy OP 4.36

Property and Access Rights

In many countries, most of the forest estate remains publicly owned and managed, despite legitimate local claims to the forests, extensive occupation by agrarian people, and the limited ability of governments to protect these vast resources. Legal frameworks and rural land-use policies often discourage or deny local people's rights to own, use, and trade their forest products and services. A current dilemma is the complementarity between these frameworks and policies and environmental laws and regulations, which may evolve with limited attention to tenure and rights implications.

Development projects promoting agriculture expansion, large-scale irrigation, and industrial (and mining) development have often impinged on forest areas and forest inhabitants. Often, indigenous and forest-dependent communities do not directly benefit from these activities. Similarly, forestry projects that deal with industrial and logging concessions, government-controlled logging quotas, protected area enlargements, and plantation developments can, if not appropriately designed and planned, affect tenure and customary rights of indigenous and other forest communities. Most of these forestry projects affect traditional forest users, those with ancestral forest rights, shifting cultivators, and NTFP gatherers (such as in Cambodia, Lao PDR, and Vietnam). Operationally, it is difficult to avoid these undesirable impacts in absence of clarity on tenure and property rights (see note 1.3, Indigenous Peoples and Forests).

Emerging payment schemes and markets for ecosystem services, such as water flow and biodiversity conservation, present both similar and special sets of issues for forest tenure and property rights. Unless done properly, poor people are less likely to participate in these markets because of their inability to assume risk, the lack of organization to create economies of scale, limited land and investment capital, and often unclear property and use rights. These emerging markets can be a means for government and local commu-

nities to enhance forest rights in a pilot watershed credits or a carbon credits scheme and provide complementary technical support, as well as providing additional returns to poor producers managing forests on the margin. If not done sensitively, they can, however, also set dangerous precedents by introducing new uncertainties—deeming shifting cultivation or other traditional practices unacceptable, establishing long-term contracts in regions where forest tenure is contested, extinguishing traditional use and access, and raising the price of forests beyond the reach of local people.

Clearly defined rights are essential if the forest-dependent poor are to improve their income and well-being. If individuals, communities, and businesses are to invest in forest resources, take responsibility for their conservation, and participate regularly and openly in the marketplace, they need to be confident of their property rights. Growing evidence from around the world demonstrates that recognizing local rights and improving local governance is politically feasible. It is also a cost-effective strategy for rural poverty alleviation.

Emerging trends show that more countries are now actively engaged in reforming their forest land and management practices. Many communities and Indigenous Peoples are asserting their rights to manage their forests, and some governments are introducing substantive changes to forest tenure and to policies and rules governing markets, and linking these to agrarian and related sector policies. The forest sector is now undergoing important reforms, arguably the most important set of policy and market shifts since the end of the colonial era, and these present historic opportunities for, and sometimes threats to, the well-being—livelihoods, rights, freedom and choices, and culture—of the 1.6 billion poor people who live in and around forests. These reforms affect the way in which forest people manage and conserve forests and affect the provisioning of forest environmental goods and services that benefit society as a whole.

In what are considered public forest lands, there has been recognition of community or collective and individual property rights in some forests, including special rights of Indigenous Peoples, and elaboration of comanagement arrangements for other public forests. Complementary to introducing reforms in forest and land tenure, governments across the world are now beginning to reassess legal and regulatory frameworks and the way in which they allocate subsidies, provide privileged access to publicly owned forests, and monitor the resulting impacts. Many countries are also engaged in a process of decentralization.

In Canada, India, Indonesia, Malaysia, Nicaragua, and the Philippines, recognition of indigenous and community rights has at times been the subject of major national debate and conflict, though each country has also had examples of notable progress in dealing with these issues. Similar issues have occurred in Bolivia, Brazil, Chile, Ecuador, Guatemala, Honduras, and Peru. In many of these countries significant forest areas have been recognized as indigenous territories or reserves, and increasing areas of public forest are considered for community concessions. One of the most recent notable advances can be found in Guatemala.

Designation of public forests as community forest is expanding in Africa—as in Burkina Faso, Cameroon, The Gambia, Mozambique, Rwanda, Senegal, Tanzania, Uganda, and Zimbabwe—but effective handover has been extremely limited, either by severely degraded forests or under institutional arrangements that are impractical or conflict with local organization. Even in countries with the most extensive forest areas in public concessions—Canada, Cambodia, Democratic Republic of Congo, Republic of Congo, Lao PDR, and the Russian Federation—tenure shifts are under discussion. China’s allocation of more than 100 million hectares of collective forests, and plantation success in these forests, supports deepening of collective rights and extending favorable policies to local communities.

OPERATIONAL ASPECTS

There are multiple dimensions to tenure security, which go beyond the simple recognition of property rights. Policies have failed to differentiate between tenure to recognize the nuances of private, public, collective, and common property, and open access (see box 1.18). Often, government statistics on land ownership mask or distort reality, leading to disregard for important property and use rights and tenure patterns, or poorly designed regulatory frameworks and permit controls.

DEVOLUTION OF RIGHTS. Devolution of rights to forest land and resources is severely impeded in many places by the remnants of colonial legal frameworks and by a system of subsidies and incentives; these need serious reform if tenure rights are to become meaningful to poor forest communities. Some operational steps to consider in cooperation with client governments include the following:

- reforming models of forest conservation to genuinely include populations living in and around protected areas
- considering and recognizing grazing rights and other agropastoral systems in forested landscapes
- reforming adverse systems of direct and indirect subsidies to plantations, industry, and intermediate marketing agents, which have adversely affected local producers and community enterprises
- reconsidering regulations that impede forest smallholders’ entry into markets and that impose costly procedures (see note 1.5, Making Markets Work for the Forest-Dependent Poor)

MULTIPLE CHARACTERISTICS OF TENURE SECURITY. Tenure security has multiple characteristics, especially in the case of common property (see box 1.19). Institutional gaps can undo otherwise positive tenure reform (as was seen in Cameroon and Ghana) if permitted legal forms of community forests are complex, and customary or informal arrangements are seldom recognized, resulting in few communities effectively taking over management.

ANALYSIS OF TENURE STATUS, ACCESS RIGHTS, AND USE RIGHTS. Tenure is in transition in many developing countries. Particularly where land administration reform and land reform are ongoing, a gap can develop between the forest tenure dialogue and the overall land administration dialogue. Effective projects in such situations must be based on analysis of tenure status, access rights, and use rights. Such an analysis must be sensitive to the variety of tenure arrangements that exist between the two extremes of pure public property and pure private property. For example, a number of indigenous use arrangements and rights regimes coexist with the total state ownership of forest resources on paper. In a number of places the state has devolved partial to substantial use rights to communities without changing the status of property ownership, while in others communities exercise substantial control of the resource without state recognition. Each of these variations in tenure offers a

Box 1.18 Typology of Property Rights

Property rights can be viewed as reflective of social relations. Property rights are rules that govern relations between individuals with respect to property and they should therefore be defined by the community or the state to which such individuals belong. Property rights need to be clearly defined, well understood, and accepted by those who have to abide by them—and strictly enforced. Property rights need not always confer full “ownership” and be individual; depending on the circumstances it may be best if they are bestowed on the individual, in common, or to the general public. Most important for sustainable development is that property rights are deemed secure (van den Brink et al. 2006).

No single typology of tenure or property rights is universally accepted. Some typologies distinguish between legal tenure and customary tenure, others between *de facto* and *de jure* rights, while others distinguish among property regimes. Property rights are also often seen as a bundle of rights that include the right to access and withdraw, manage, exclude, and alienate (Schlager and Ostrom 1992).

Legal tenure is recognized as legitimate under the policies and laws of the state, while customary tenure is recognized as legitimate by the traditions and customs of a society but has not been formally codified in the law. Customary tenure systems exist in many countries with significant populations of rural poor, where land allocation and use are determined through long-standing “customary” methods that, in many countries, operate outside the formal legal system. Such customary tenure systems are dominant in many indigenous areas where traditional social structures are largely intact. Customary systems are associated with traditional land administration institutions and customary laws that define how rights are governed, allocated, and preserved. The systems are effective because they respond to a community’s social, cultural, and economic needs and because they are enforced by local

leadership. Customary tenure systems typically possess both collective and individual dimensions. In part, the collective aspect relates to the community as compared with outsiders. Internally, the collective element relates to community land and resources, while the individual dimension concerns transactions, successions, and exchanges of family plots between community members. While it is reasonable to consider that both collective and individual tenure have their place in forest activities, introducing individual tenure from outside includes risks.

There are cases where customary rights have been legitimized but are still identified as customary rights. In such cases, the term “customary” helps identify the origin of the right. *De jure* rights are given lawful recognition by formal, legal instrumentalities, while *de facto* rights are rights that resource users continuously work cooperatively to design and enforce.

A common typology of property rights distinguishes among private, common, and public or state property rights:

- Private property rights
 - individual or “legal individual” holds most if not all the rights
 - property can be leased under a contract to a third party
- Common property rights
 - group (for example, community) holds rights
 - group can manage property and exclude others
 - rules are important to manage and distribute resource
- Public property or state property rights
- State holds the bundle of rights

Open access results from the ineffective exclusion of nonowners by the entity assigned formal rights of ownership.

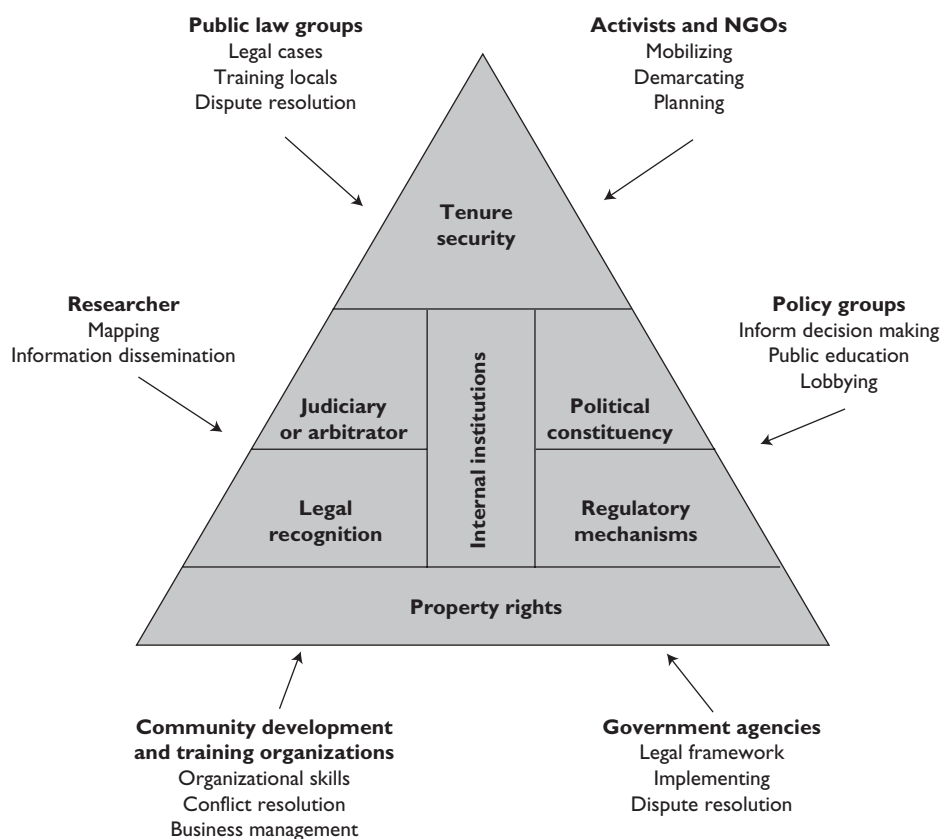
Source: Authors’ compilation using Molnar and Khare (2006) and Jensby (2007).

different set of opportunities for communities to use and protect their resources with varying outcomes (figure 1.1).

While government statistics and information available from land administrations are usually a good starting point, greater insights concerning evidence of historical use and dependence, as well as customary laws and rights, are often gathered through participatory mapping.

IMPORTANCE OF PILOTS. Pilot activities can be important to expanding the range of possibilities, demonstrating the viability of rights-based forestry approaches to improve livelihoods, generate income, or advance conservation. The objective is to build on a multisectoral analysis of forest tenure and access without limiting the recognition or devolution of rights where reform is ongoing.

Figure 1.1 Toward Tenure Security: Actors and Actions



Source: Ellsworth and White 2004, Ellsworth 2004.

PARTICIPATION IN COMMERCIAL MARKETS. The ability of forest rights holders to manage and make use of their resources is linked to their level of, and opportunities for, participation in commercial markets (see note 1.5, Making Markets Work for the Forest-Dependent Poor). Forest tenure cannot be analyzed in isolation from world market trends, which both drive demand and create pressures on existing forest regimes. Newly created market opportunities for poor forest producers and forest owners can only be realized if the blend of tenure and other policies and regulations create the enabling environment. Changing long-established patterns of governance and industrial behavior inevitably entails a degree of political, economic, and environmental risk and adjustments in forest product supply and demand. Clear and secure tenure rights are necessary but not sufficient to engender these changes. Experience in Papua New Guinea shows that local landowners failed to manage enterprises for the long term when short-term returns were not high enough to encourage a change in behavior. Furthermore, technical and organizational support in early stages is

essential. Mexican *ejidos* and communities have faced strong market competition from imports and subsidies to private plantations, requiring stronger enterprises and more flexible forest regulations to survive. Assistance in meeting these challenges will determine whether development and forest investments have pro-poor outcomes (box 1.20).

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

The transition to greater forest tenure and property rights occurs through a varied combination of strategies—both reforms fostered by political elites and bottom-up reforms demanded by civil society and community organizations. Development organizations have enabled reform processes through PRSP dialogue, but unless well linked to organic processes of civil society and empowered decentralization, these usually fail to make timely changes. Lessons from a variety of countries on successful strategies for change are listed in box 1.21.

Box 1.19 Characteristics of Secure Community Tenure

Security of community tenure encompasses a number of characteristics:

1. *Requires that there is clarity as to what the rights are.* Confusion about one's rights can significantly undermine the effectiveness and enthusiasm with which rights are exercised.
2. *Requires certainty that rights cannot be taken away or changed unilaterally and unfairly.* In almost any situation, of course, there are circumstances where it may be appropriate for rights to be taken away or diminished, but conditions for doing so need to be fair and clearly spelled out, the procedures fair and transparent, and compensation addressed.
3. *Is enhanced if the duration of rights is either in perpetuity or for a clearly spelled-out period that is long enough for the benefits of participation to be fully realized.* If rights are to be in force only temporarily—as in some comanagement arrangements or community forestry leases—care should be taken to ensure that agreements are at least as long as is realistically required to reap the appropriate degree of benefits.
4. *Means that rights need to be enforceable against the state* (including local government institutions)—that is, the legal system has to recognize an obligation of the state to respect those rights.
5. *Requires that the rights be exclusive.* The holders of rights need to be able to exclude outsiders or control the access of outsiders to the resource over which they have “rights.” A corollary to exclusivity is that there must be certainty both about the boundaries of the resources to which rights apply and about who is entitled to claim group membership. A second corollary to exclusivity where comanagement concerns government land is that the government entity entering into the agreement must have clear authority to do so, authority that the responsible entity is empowered to fulfill.
6. *Requires that the law recognizes the holder of the rights.* The law should provide a way for the holder of the rights to acquire a legal personality, with the capacity to apply for credits and subsidies, enter into contracts with outsiders, collect fees, and so forth.
7. *Requires accessible, affordable, and fair avenues for seeking protection* of the rights, for solving disputes, and for appealing decisions of government officials.

Source: Lindsay 1998.

Box 1.20 Examples of Potentially Pro-Poor Approaches to Tenure Reform in Forests

- Overarching forest sector reform programs (Uganda, Ghana, Guyana, and South Africa)
- Titling of indigenous territories in Latin America and the Philippines
- Collectively managed community forests in Latin America—from extractive reserves to social forestry, to *ejidos* (Brazil, Guatemala, and Mexico)
- Recognition of community rights in Africa (The Gambia and Tanzania)
- Devolution of state and collectively owned forests to individual households (China and Vietnam)
- Joint forest management and collaborative management, where communities are given greater control over degraded resources, with the purpose of rehabilitating the resource (Cambodia, India, and Nepal)
- Decentralization of some decision making over forests (Indonesia) opening political spaces for local communities
- Some ethnic minority control over forests through peace negotiations (Myanmar, the Philippines, and Northeast India)
- Outgrower schemes where large-scale plantations have become politically untenable (Indonesia and South Africa)
- Comanagement in protected areas

Source: D. Kaimowitz, personal communication, in Hobley 2005.

Box 1.21 Opportunities to Advance Community Tenure Security: A Summary

- Support anticorruption and justice reform activities at national levels, through local and national legal groups.
- Nurture local organizations to help them act more effectively as advocates, while helping them to develop legal and mapping tools to better stake their claims.
- Support workshops on tenure where ideas are exchanged, and where lessons learned from the field can be translated into ministerial priorities.
- Strengthen emerging leaders and organizations who represent communities or indigenous peoples by fostering learning and opportunities to discuss their issues directly with the government.
- Build successful field models, recognizing these require time and patience. Avoid promoting pilot models that represent the lowest common denominator acceptable to government and undermine efforts at more meaningful reform.
- Mobilize civil society through effective activist and grassroots organizations with the capacity and will to champion a cause.
- Create linkages between local leaders at the global level, helping to sharpen their advocacy strategies.
- Support federations and associations in communities that are attempting to exercise their tenure rights, and support NGOs to build informed grassroots organizations.

Source: Ellsworth and White 2004.

The following topics should be considered in PRSPs and in project identification and design:

Overall land tenure, zoning, and land use arrangements have an impact on sound forest management and forest access for the poor. Particular attention should be paid to overlapping areas for private land adjudication and public or communal forests in frontier regions, and overlapping rights to Indigenous Peoples' lands and territories for above-soil and subsoil resources. Patterns of ownership should be mapped before project implementation, and instruments for resolving conflicts extra-legally or legally should be considered.

Tenure and policy frameworks create incentives or disincentives for forestry management, and control forest and forest market access for low-income producers. To minimize the harmful consequences of these frameworks on the forest-dependent poor, interventions should avoid regulatory frameworks that inadvertently place high burdens on the poor; tax and tariff policies that distort market participation; environmental regulations that low-income producers cannot afford to comply with, and therefore become "criminals" by ignoring; and barriers to low-income producers from outside the sector, such as small business regulations and lack of access to technical training or financial support. Existing and proposed protected-area regimes can support local rights and livelihoods by zoning for co-management and protecting local residents from incursions

by outsiders or extractive activities. They can hamper rights if overly restrictive or if they cause overlapping claims.

Industrial and infrastructure subsidies, and indirect subsidies, to processing industries, plantations, and transport create an unequal playing field for small and medium enterprises that do not qualify for such subsidies. Tax and tariff policies that affect domestic industry, imports, and exports can also be key drivers of distortions. These and other market and trade trends should be analyzed, with special consideration for the overlap of informal markets and trade and conflicted forest resources claims, as well as the impacts of commercial-scale plantations on land ownership patterns.

Ecosystem service payments or market schemes can offer opportunities to secure tenure for low-income producers as a reward for sustainable resource management. However, payment schemes must be carefully reviewed to ensure that existing local tenure and resource use rights are not threatened.

There are multiple mechanisms to monitor progress and influence the pace and quality of implementation of tenure reforms. These range from participatory monitoring to independent outside review, and should assist in adjusting processes (through changes either in projects or in project designs) to changing conditions over time.

With devolution of responsibility to communities and low-income producers, dependency on outside professionals must be reduced and local institutions and capacity for forest management must be strengthened.

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CROSS-REFERENCED CHAPTERS AND NOTES

- Note 1.3: Indigenous Peoples and Forests
- Note 1.5: Making Markets Work for the Forest-Dependent Poor

Making Markets Work for the Forest-Dependent Poor

Improving market access of forest-dependent communities could enhance the contribution of forests to rural livelihoods. With 25 percent of the world's forests currently under community control, the expansion of agroforestry, and the development of community forest plantations, indigenous and other small communities own more than three times as much forest in developing countries as do private firms and individuals (see chapter 3, Meeting the Growing Demand for Forest Products). This creates new opportunities in commercial forestry that could serve a broader vision of meeting demand for forest products and forest conservation in ways that also address the livelihood needs of rural poor low-income producers (see note 1.2, Community-Based Forest Management, and note 1.3, Indigenous Peoples and Forests). Furthermore, changes in market structure, new market instruments, and forest companies' new interests in business partnerships with local people are opening market niches for which local producers have or could develop a competitive advantage. Environmental sustainability concerns are also creating new markets for certified forest products and environmental services.

Low-income forest producers¹ have potential competitive advantages for important segments of commercial forest markets. Forest dwellers located near population centers have lower transport costs, are more familiar with local preferences, and have the flexibility to supply small quantities of forest products as needed by local traders. Furthermore, they have an advantage in branding for specialty markets, enabling them to target socially responsible market niches. For example, the Rainforest Alliance supports Brazil nut-product organizations to enable them to access such market niches.

Community forest owners, comanagers of public forests, and farmers in forest-scarce locations near rapidly growing inland population centers can be competitive suppliers of commodity wood for construction and fuelwood. Further-

more, community forest owners with high-quality, accessible timber, strong community organization, and good marketing and management skills can profitably sell tropical hardwoods as well, such as that sold from community forests in certain regions of Mexico. High-value timber can also be profitably sold by farmers from agroforestry systems. Benefits can also be gained from certified wood markets if there are established contracts or agreements with certified wood users or market intermediaries. For example, in Brazil a pulp and paper company assists small-scale farmer producer groups to obtain certification and to supply the local furniture company demand (Scherr, White, and Kaimowitz 2003, 2004).

Many local producers will benefit from preprocessing of forest products to reduce waste, increase quality, or reduce transportation costs, as well as from production of furniture and commodities for poor consumers in growing rural or urban markets. Small-scale sawmilling will also be viable in markets where there is no competition with high-efficiency, industrial mills. Additionally, in densely settled, forest-scarce countries with large markets for pulp, farmers or communities near mills could supply industrial pulpwood, especially on lower quality lands. Mondi Ltd. pulp and paper company in South Africa's Eastern Cape provides technical assistance and start-up capital to communities organized in common property associations.

NTFPs represent economic potential for those low-income producers or collectors of products with inelastic demand. In Cameroon, the demand for some NTFPs has grown dramatically in the past two decades as a result of increasing urbanization and a growing international market. Innovative marketing arrangements for environmental services also offer a market niche for those forest dwellers in areas with high levels of biodiversity or other values such as watershed protection or carbon sequestration (Scherr, White, and Kaimowitz 2003, 2004; also see note 2.3, Innovative Marketing Arrangements for Environmental Services).

Historically, low-income producers have been at a disadvantage in accessing markets, leading to a need to address this issue by jointly building on local human and natural capital assets, and building the institutional framework for good governance and distributive aspects of growth over time (see figure 1.2; Dürr 2002; Scherr, White, and Kaimowitz 2003, 2004; Sunderlin, Dewi, and Puntodewo 2006).

OPERATIONAL ASPECTS

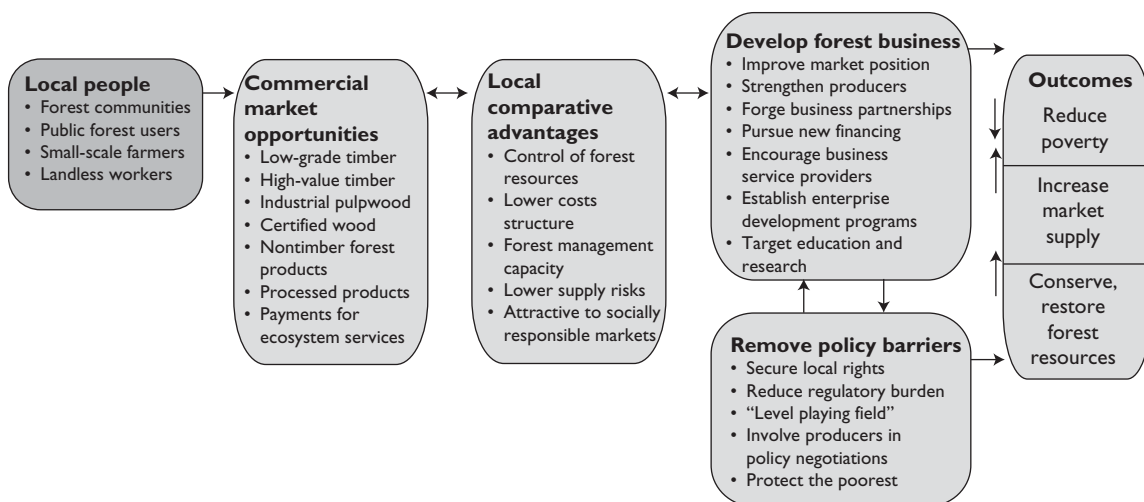
There are many opportunities for forest management models to scale up the benefits they deliver for forest conservation and the rural poor or low-income producers. However, large gaps exist in information and experience and there are major challenges in finding the right market niches, supporting local forest businesses, and reforming policies to enable profitable market participation by local people. Addressing these challenges will require coordinated action by governments, international institutions, conservation and development organizations, and community producer organizations. Such action is necessary to level the playing field for low-income producers and give them a real chance to succeed.

Two areas that would benefit from interventions in collaboration with client governments are removal of policy barriers and development of forest businesses.

Potential measures for removing policy barriers include the following (based on Scherr, White, and Kaimowitz 2003, 2004; Sunderlin, Dewi, and Puntodewo 2006):

- Secure forest access and tenure rights of local people (see note 1.4, Property and Access Rights).
- Remove state monopolies and other controls on harvest and marketing that are common in several Bank client countries. However, decisions on the extent and phasing of deregulation need to carefully consider potential impacts on Indigenous Peoples and other forest-dependent communities and provide for capacity-building initiatives to avoid adverse effects and enhance their benefits from deregulation.
- Remove or revise regulatory barriers and excessive regulation that limits local forest producers from using their own or public forests. For example, in some regions of India, 10 separate permits are required for community forest producers to complete a timber sale. In other countries, indigenous communities have long-term rights to extensive tracts of natural forest, but they do not have the right to commercially exploit them.
- Revoke policies that discriminate against small producers (see box 1.22). For example, in Bolivia forest policy reforms have included formal recognition of indigenous groups' forest rights, lowered concession fees for small-scale forest producers, and simplified the process for accessing municipal forests.
- Facilitate the creation of forest user associations or producer groups to create economies of scale and to increase bargaining power (see note 2.2, Small and Medium Enterprises).
- Actively involve local producers in forest policy negotiations with private industry, government agencies, and

Figure 1.2 Forest Market Development Strategy for Low-Income Producers



Source: Scherr, White, and Kaimowitz 2004.

environmental groups to produce more practical, realistic, and lower cost laws, market regulations, and development plans.

- Create mechanisms that protect the poorest by, for example, ensuring that local forests retain their diverse cultural roles and their safety net functions without sacrificing others' potential income gains from commercialization of public forests.

Potential measures for developing forest enterprises include the following (based on Scherr, White, and Kaimowitz 2003, 2004; Sunderlin, Dewi, and Puntodewo 2006; USAID 2004):

- Improve the market position of small producers by enabling them to respond to consumer preferences and to develop market strategies. This may mean improving production and marketing technology, product quality, or reliability of supply. Examples include drying forest fruits to improve product quality or chemically treating rattan to prevent fungal damage and staining.
- Strengthen producer organizations through technical support and capacity building so that they can make capital investments, pursue new sources of financing, engage in value-added processing, negotiate deals, and establish product-quality or conservation controls.
- Increase the contribution of commercially valuable NTFPs by enhancing community organization to increase the market power of NTFP producers and processors and decrease their vulnerability to external shocks (see box 1.23); build capacity in the areas of technical knowledge and organizational skills to ensure resource management and harvesting, domestication where appropriate, and improved product processing; and build business capacity of potential entrepreneurs and develop links between producer communities and fair trade organizations to improve marketing and add value to the products.
- Promote strategic partnerships between communities and businesses (see box 1.24 and note 2.1, Community-Private Partnerships).
- Adapt certification of forest products for small-scale and indigenous forestry (see note 1.3, Indigenous Peoples and Forests, and note 3.2, Forest Certification Systems).
- Establish business services through NGOs or government extension for low-income producers that include

Box 1.22 Overcoming Barriers to Pro-Poor Forestry in Honduras

In Honduras, a number of factors, including excessive regulation, disadvantage small-scale forest producers, forcing many into illegality. An estimated 80 percent of the timber trade in Honduras is illicit. Securing management plans, harvesting permits, and commercial licenses is costly. In addition to formal charges, applicants may need to make informal payments for officials to facilitate the process. These, plus the costs of production and transportation, mean that local producers might make a profit of only 15 percent on the factory gate price for raw mahogany. Some of this profit may go toward debt repayments to local intermediaries, given the lack of liquidity to meet up-front production costs. But even discounting the costs of compliance, the returns to small-scale forest producers are limited by the small volumes they are permitted to harvest. And, because of insufficient capacity to produce high-quality timber and the lack of alternative marketing channels, many are locked into the domestic market—already saturated with cheap, illegal timber.

Source: Brown and others 2002.

There is, however, growing political recognition of the role of forests in rural poverty alleviation and of the need to provide equal opportunities for community-based forest producers. In 2000, Honduras launched a review of its forest sector through the Honduran Forest Agenda (AFH). The AFH is a forum established by the government and NGOs in 1996 for dialogue and coordination among a broad range of stakeholders, including producer groups, industry representatives, and indigenous peoples. The AFH review process secured a new national forest policy and law. At the time of drafting this note, the law was still being finalized for submission to Congress, but one of its main objectives was to secure a more equitable basis for community participation in forest management, including support for small enterprise development. In addition, the AFH is framing a new National Forest Plan, which will include a Community Development Program. The PRSP, which was jointly formulated with civil society, also makes provisions for participatory forest management.

Box 1.23 Market Analysis and Development in Community Forests of The Gambia

The Gambia has 264 Community Forest Committees (CFCs), 22 of which are developing their markets and managing their forests using the Market Analysis and Development (MA&D) methodology through a joint project of the Gambian government and the Food and Agriculture Organization. The MA&D program is a three-phase program that trains and empowers community members to identify and develop successful forest enterprises and learn to manage them independently. MA&D enables communities to link forest management and conservation activities directly to income-generating opportunities, and in the Gambian case it has also encouraged substantial diversification of marketable forest products. The program emphasizes sustainable institutional development for the community enterprises and extensive networking between businesses and local organizations. In The Gambia, 22 CFCs

Source: Molnar and others 2006.

have used MA&D methodology to develop 72 community enterprises.

Some of the communities now involved in successful enterprises have been entitled to commercialize community forest products since 1992 but, before the MA&D training, were hesitant to do anything other than protect their forests, or were repeatedly cheated by middlemen or Forestry Department staff.

The communities produce 11 different products from their forests, including fuelwood, logs and timber, honey, palm handicrafts, Netto fruits, oil palm fruits, and tree nurseries. Through program-sponsored artisan workshops, community members have learned skills to craft new products from their forests, especially beds, sofas, and chairs that are then sold to local ecotourism lodges and hotels in the coastal tourism area. Profits from beekeeping are expected to account for 15 percent of their total yearly profits.

management services, organizational support, and technical assistance, to link conservation of forest resources with processing of forest products (see box 1.23), market information, insurance, and marketing and financial assistance (see box 1.25).

- Conduct research, education, and training so that community forestry enterprises can better adapt to new trends in production, processing, and management.
- Improve government support and extension services for forest smallholders.

Box 1.24 Strategic Partnerships in Southern Africa

In the remote district of Rushinga in northeastern Zimbabwe, an individual runs a company called Creative Oils that produces oil from the seeds of the baobab. Creative Oils currently purchases six tons of seed per month from 60 rural producers. Rural producers can earn as much as \$180 in a season, which is double their income from cotton, the staple cash crop. The owner of Creative Oils earns nearly \$9,000 a season from the 360 liters of oil the company produces a month.

This success is due largely to an involvement with PhytoTrade Africa, the Southern African Natural Products Trade Association. In 2003, PhytoTrade Africa signed a joint venture agreement with a French company specializing in the production of derivatives from

Source: Campbell and others 2004.

natural plant oils for sale as cosmetic ingredients. The French company purchases baobab oil from Creative Oils, which it then processes and sells to the multinational company Bergasol, for incorporation into a new sunscreen for sale in Europe.

There are many products like baobab oil, derived from indigenous plant species in rural Africa and having significant commercial potential. For small-scale producers, however, the barriers to developing markets for these products are formidable. The owner of Creative Oils has successfully overcome these barriers by pooling resources with producers from across southern Africa and helping create a powerful trade association to represent their interests.

Box 1.25 Medicinal Plants as NTFPs in India and Nepal

The Pangi Valley is a remote, high-altitude area in the Chamba district, in northwest Himachal Pradesh. Most of the residents in the region subsist on single-season cash cropping, animal herding, road building, and most recently, collection and sale of medicinal plants and herbs from the region's forests.

More than 86 percent of residents surveyed in the Pangi Valley collected some medicinal plants and herbs from the forest during the collecting season of mid-June to mid-October. In most villages, income from medicinal herbs is between 10 and 20 percent of total cash income per household. Generally, those who engage in the most medicinal herb collection are individuals with fewer opportunities for income, less land available for cultivation, and fewer local labor opportunities.

This case contrasts with the situation in far western Nepal, also in the Himalayas, where multidonor support to a market and technical network organization, Asia Network for Sustainable Agriculture and Bioresources, and Nepali forest user groups led to better markets for essential oils and medicinals, investment in a NTFP paper-processing enterprise, and better resource extraction and management.

Source: Molnar and others 2006.

LESSONS LEARNED AND RECOMMENDATIONS FOR PRACTITIONERS

Potential actions that can be taken by international institutions, such as the World Bank, in partnership with government and other stakeholders, include the following:

- Organize global and national initiatives to promote market and institutional reforms to enable greater participation of low-income producers in international trade and to protect their interests against trade rules and initiatives that would create unfair competition against them.
- Develop new financial mechanisms to promote forestry investment for low-income producers, using domestic investment protocols and export guarantee systems to favor forest businesses that adopt business models supportive of low-income producers. Develop global norms

of behavior for international companies who partner with local communities.

- Generate the research and information needed to understand present levels of market participation by different groups of low-income producers, incomes generated, business profitability, and actual competitive advantages. Also develop partnerships with others who will enable the development of institutions to achieve these goals (Scherr, White, and Kaimowitz 2004).

Improved commercial markets may not improve the livelihoods of rural communities and farmers with low-quality forest resources and poorly developed market infrastructure. In these situations it remains important to focus on the subsistence and environmental values of forestry development.

Small-scale producers must be able to compete with low-cost industrial producers, as well as with producers who clear land or illegally extract forest products. The marketing strategy should complement the comparative advantages of the different forest "zones." (For example, people in remote areas may be able to make money from harvesting high-value timber, which compensates for high transportation costs. Closer to urban areas where forests are scarce, low-income producers who plant trees in agroforestry systems can benefit from the proximity to urban markets when selling their timber.)

Many attempts at NTFP commercialization from natural forests and agroforestry systems have failed to deliver the expected benefits because marketing and trading strategies for NTFPs have been neglected.

It is essential that opportunities are provided for women to be more involved in strategies to improve the successful commercialization of NTFPs because women often depend on NTFP sales as a source of household income. A study in West Bengal, India, reported that three times as many women as men were involved in gathering NTFPs, which accounted for 20 percent of household income (Scherr, White, and Kaimowitz 2004).

NOTE

1. Low-income forest producers include indigenous and other community groups who manage collectively owned forest resources; local individuals or groups who manage or harvest products from the forest; smallholder farmers who manage remnant natural forests or plant trees in or around their crop fields and pastures; individuals or groups who engage in small-scale forest product processing; and employees of forest production and processing enterprises

(Scherr, White, and Kaimowitz 2003). This note focuses on markets for low-income producers.

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CROSS-REFERENCED CHAPTERS AND NOTES

- Note 1.2: Community-Based Forest Management
- Note 1.3: Indigenous Peoples and Forests
- Note 1.4: Property and Access Rights
- Note 2.1: Community-Private Partnerships
- Note 2.2: Small and Medium Enterprises
- Note 2.3: Innovative Marketing Arrangements for Environmental Services
- Chapter 3: Meeting the Growing Demand for Forest Products
- Note 3.2: Forest Certification Systems

