



Community-Based Forest Management

**The Extent and Potential Scope of
Community and Smallholder Forest
Management and Enterprises**

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PURDY AND JONATHAN KARVER**

THE RIGHTS AND RESOURCES INITIATIVE

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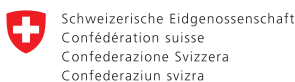
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Photography Credit: FAO/CFU000660/Roberto Faidutti. Processing logs (Pinus pinus) for sale, in the community of Atapo Quichalan (4000m), Ecuador.

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ACRONYMS AND ABBREVIATIONS

ASLs	agrupaciones sociales del lugar (local social groups)
CBFE	community-based forest enterprise
CBFM	community-based forest management
FAO	Food and Agriculture Organization of the United Nations
GDP	gross domestic product
ITTO	International Tropical Timber Organization
NGO	non-governmental organization
NWFP	non-wood forest product
PROCYMAF	National Mexico Community Forestry Project
REDD+	reduced emissions from deforestation and degradation plus
Rio +20	Meeting of the international environmental conventions, planned for 2012 in Brazil
SEMARNAP	Mexico Ministry of Environment, Natural Resources and Fisheries
SMFE	Small and medium-sized forest enterprise

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PREFACE

The renewed interest in forests and forest governance that has emerged amid worldwide concern about climate change has created impetus for reforms in the forest sector that address the drivers of degradation and deforestation. Not coincidentally, much more attention is also being paid to the role of community-managed forests as a protector of forests and a supplier of goods and services. There is ample evidence in developed and developing countries that, with the recognition of local forest tenure, forest production and processing by communities and other smallholders have, over time, become the predominant component of industry. In the European Union, North America, and more recently, China, the supply of industrial raw material is concentrated among small-scale forest owners, who occupy multiple niches in the forest economy. Such owners complement and participate in the productive chains of large, industrial-scale companies and operations, and diversify markets.

Smallholder and community-based forest enterprises are able to link to diverse industry players and markets at diverse scales. In Mexico, they have become major suppliers of the hundreds of thousands of small-scale carpenters who are upgrading and renovating houses with long-fiber pine and hardwoods found in community natural forests, and they supply furniture stores with finished products. In Guatemala and Honduras, such enterprises supply domestic markets with timber and non-timber forest products, and they export sawn-wood and finished wood products to Europe and ornamental non-wood forest products to the United States.

In Mexico, and a number of other developing countries, smallholder and community-based forest enterprises have created stronger local economies and provided multiple benefits for livelihoods and cultural well-being. They are also proving to be an equally or more effective approach to forest conservation than state-run national parks, and have now earned government support equal to that of public protected areas.

The persistence of antiquated approaches and regulatory frameworks in forest governance has been a major hindrance to the emergence and growth of smallholder and community-based forest enterprises and their integration into productive value chains and markets. With the recognition of human rights and the spread of democratic governance in forests, a different potential for growth and income emerges. Once a tenure transition takes place, communities and smallholders gain a political voice that can help to shape forest policies and the economy, and small and medium-sized enterprises start to thrive. It cannot be stated strongly enough: recognizing the tenure and rights of smallholders and communities is key to the development of sustainable enterprises capable of maximizing the potential of REDD+, forest conservation, and community well-being.

Measuring the economic impacts of a shift towards a diversified blend of forest enterprises, favoring smallholders and communities, has been difficult due in part to poor data collection by governments and the invisibility of many of the existing value chains and linkages. In the face of climate change, however, measurement is becoming increasingly important.

This paper presents evidence of the enormous potential benefits of a policy shift to favor small-scale and community-based forest management and enterprises. It also sets out the basic elements of an enabling environment, such as an appropriate policy, legal, and regulatory frameworks; supportive technical advisory services; access to financing and investment; the nurturing of community-based enterprise networks and organizations; and multiple options for horizontal learning and sharing.

SUMMARY

Historically, all forests were essentially owned by Indigenous Peoples, communities, and families. These rights were appropriated, however, in the face of an expansion of feudalism, colonialism, and imperialism in the last five centuries, until eventually almost all forests were claimed by the state. With popular revolt and democratic practice, there has been a slow move back to the recognition of local rights. Local customary claims remain on perhaps the majority of forests globally—although no sound data exist.

Some countries have formally recognized local rights. Worldwide, more than 430 million hectares of forests, or 11% of the total forest estate, are officially community owned or managed and another 13.8% are owned by smallholders and firms. Local rights are more marked in developing countries, where, in 2008, 27% of all forest lands were community owned or administered. Often, however, small and medium-sized forest enterprises (SMFEs), including community-based forest enterprises (CBFEs), are relegated by policy and regulatory frameworks to an informal sector—operating without a legal mandate, even when they are the providers of the bulk of forest products consumed and traded domestically. In those countries in which CBFEs have been successful, an additional 80 million hectares of forest under community-based forest management could support effective enterprises, given the right policy settings.

Tenure shapes a country's forest industry and economy. There is ample evidence in some developed forested countries—e.g. the United States, Sweden, and Finland—and developing countries—such as Mexico and China—that the recognition of local rights has a profound effect on the structure of industry and increases the potential for forestry to generate jobs and economic growth and contribute to good governance. Small-scale and community initiatives around forests can also provide invaluable ecosystem services, including climate change mitigation—given the necessary tenure reform.

When tenure and rights are recognized at the community and smallholder level, communities and smallholders are empowered to create and grow a range of forest-based livelihood and enterprise activities to improve their quality of life and raise their incomes. SMFEs can and do drive growth in the forest sector, as has been documented recently in China as a result of forest tenure reforms there in formerly collective lands with dramatic impact on incomes in smallholder households.

A tenure transition in developed countries introduced democratic governance to forests. Communities and smallholders became part of the political space, legitimized by recognition of their citizen and human rights; this had a positive impact on the potential for economic growth. The value proposition of the resulting diverse and multi-scale industry is quite different from that of a state-driven and elite-dominated forest sector. Globally, all types of SMFEs generate over 90% of forest revenues, account for 50–90% of forest-sector employment (40–70% of the US forest industry and over 90% of industry in the European Union). A significant share of these SMFEs are smallholder- and community-based.

In middle-income and developed countries, smallholder and community enterprises have been increasing in number and growing new markets and value chains, with some developing strong associations and alliances to foster and sustain their growth. There is evidence of similar potential in developing countries, such as Mexico, Central America, Nepal, and some other Asian and African communities, where secure forest tenure has seen the emergence of CBFEs.

Countries derive important benefits from community-based forest management beyond the support they give to local economies, including through the conservation of the forest resource and contributions to the equitable distribution of wealth and to social cohesion.

CBFEs are truly local institutions; this is one of the reasons for the diversity of models on which they are based. It is also a reason why, as a development strategy, they bypass many of the costs and hurdles other development initiatives face in implementation. Created on the ground by local actors, they are well adapted to local social, cultural, and economic conditions and landscapes. Unlike large export- and commodity-driven business models, CBFEs are intrinsically tied to the communities in which they operate. They therefore provide local communities with many vital opportunities: local employment and revenue, sustainable production and trade of required goods and services, and wealth that stays within the community.

To maximize the potential of community-based forest management and CBFEs, concerted action is needed on the part of governments to create a level playing field for communities and smallholders in fiscal policy and regulations, access to technical and financial services, and the marketplace. In many developing countries, CBFEs and other SMFEs are often relegated by statutory law and regulation to an informal economy and a ‘shadow’ marketplace in which they are unable to realize their natural competitiveness.

In countries like Ghana, the Democratic Republic of the Congo, and Cameroon, the employment generated by CBFEs in the informal forest sector is ten times that provided in the formal forest sector, even with an unlevel playing field. The commercial potential of enterprises based on non-wood forest products is also burgeoning, stimulated in part by demand from migrant diaspora in Europe and elsewhere for traditional products and by new demand for forest-based nutritional, ornamental, fiber, and food products. Few estimates exist for the future share that smallholders and communities could command in wood-based bioenergy production, but it is a fast-growing industry and the share is potentially large.

Historically, conventional industrial economic and administrative models for managing forests have been given favorable treatment by governments at the expense of CBFEs and other SMFEs—and to the detriment of local economies in general. In too many cases, in both colonial and imperial states, the allocation of industrial timber concessions and protected areas has ignored pre-existing tenure and rights; in effect, they were a land-grab by the state under the guise of national (or international) interest. The rules governing subsistence and commercial activities in forests and on other land claimed by the state, as well as on private or community land where the state established jurisdiction, have had little or nothing to do with fostering or sustaining community-based forest management and CBFEs.

Regulations have allowed access to forest and forest resources for a range of activities, but the overarching economic model has been geared to maximizing revenue and profit while controlling the short-term predatory behavior of companies, their political allies, and outsiders. In many countries, regulations have been developed for large-scale, capital-intensive operations and export markets, and are inappropriate for smaller-scale operations. Various initiatives, some linked to forest law enforcement, governance and trade processes to promote a legal timber supply, are now revisiting regulations which criminalize small-scale logging and timber harvesting with a view to developing new regulatory models that support sustainable forest management through a more diverse and socially-grounded supply chain.

The complex agroforestry and forest management systems practices of traditional communities, settler communities, and Indigenous Peoples have been undervalued, poorly understood, or actively discouraged, despite their contribution to landscape management, food security, cultural diversity, and their actual and potential linkages to domestic and regional markets. New studies of agroforestry and carbon stocks, and forest landscapes and conservation, show that these systems provide different flows of carbon benefits—they may be more cyclical but they are also more socially and politically sustainable in dynamic societies and economies.

Current initiatives to combat climate change bring risks of recentralization and the re-imposition or reinforcement of the inappropriate models of the past (e.g. conventional conservation and concessions). Insufficient attention is being paid in the climate change debate and emerging policy and funding instru-

ments to human rights that are protected under international, regional, and national laws and conventions. Dangerous misconceptions are being presented about the drivers of degradation and deforestation and about what constitute rightful and effective counter-measures. Mechanisms for climate change mitigation and adaptation around deforestation, forest degradation, and desertification will only be viable if the interventions they encourage recognize tenure and rights and local capacities.

This report outlines the status of and trends in tenure reform and the expansion of community-based forest management and related growth in SMFEs, and examines the economic and social benefits of CBFEs. It examines the economic potential of CBFEs to proliferate and grow, looks at lessons learned from past experience, canvasses the constraints and barriers, and presents recommendations for supporting community-based forest management and CBFEs. Given the almost complete lack of data on the extent of CBFEs and their economic returns, impacts on poverty and local economies, and multiple benefit streams, this report draws on existing studies of SMFEs more broadly, particularly from the European Union, the United States, and China, where smallholder and community enterprises have been flourishing for years on the basis of underlying legal tenure and rights and integration with forest industry and value chains. Finally, the report makes a case for community-based forest management as a major strategy for climate change adaptation and mitigation, including for REDD+.

The future of forests pivots on whether governments will bring rights and democratic practice to forests. Governments and donors can take several steps to transform the sector for people and forests. The first is to secure the tenure and rights of forest communities over their forest lands and resources, respecting gender, Indigenous Peoples' rights, and other vulnerable minorities. The second is to level the playing field by reforming policies and regulatory frameworks to support social enterprises at their own scale of operation while divesting of state-run enterprises. The third step is to provide technical and financial support, building on existing local organizations and respecting the multiple roles of CBFEs in resource conservation, the provision of social benefits, and building local economies.

1

Community-based Forest Management and Community-based Forest Enterprises: What Are We Talking About?

The terms and categories associated with community-based forest management (CBFM) and community-based forest enterprises (CBFEs) have been used in many ways, which has led to confusion about both the concepts themselves and the data associated with them. Below, definitions are given for some of the terms used in this paper.

Tenure: According to Sunderlin et al., “tenure systems define who owns and who can use what resources for how long, and under what conditions”.¹ *Customary* and *statutory* tenure and rights are different and often overlapping systems of rights over forest lands and resources. Customary tenure comprises systems of pre-existing, locally determined property rights, often based on oral agreements, whereas statutory tenure is the legal and formal property rights established, codified, and recognized by state law.²

Community based forest management is the management, by communities or smallholders, of forests and agroforests they own, as well as the management of state-owned forests (some of which share customary tenure and rights under traditional laws and practice) by communities. *Community-based forest enterprises* comprise smallholder and community-scale economic activities or collective enterprises based on wood and non-wood forest products and the provision of ecosystem services, including ecotourism. Given their local nature, the dynamics and models of CBFM and CBFE vary according to where they are located and by whom they are operated.³ CBFEs include enterprises within both the formal and

informal sectors of the economy. They also include smallholders involved in agroforestry and/or out-grower schemes for commercial forest products. The wide variation in size and structure of CBFM and CBFEs means that these definitions are necessarily broad.

CBFEs are a subset of *small and medium-sized forest enterprises* (SMFEs), which are a forest-sector-specific type of small and medium enterprise (SME). As Kozak notes in describing SMEs, including those based on a specific forest resource base and/or its management:

*there is no universally accepted definition of SMEs, other than to say that they are companies with metrics (usually number of employees or annual turnover) that fall below a certain threshold. It is in the delineation of these limits where definitions vary. Oftentimes, definitions also vary with the scale of respective economies. For instance, in developed economies where there is a larger variation in enterprise types, medium-sized companies would be considered large in less developed nations.*⁴

This paper has excluded discussion of and data on smallholders or community enterprises engaged in commercial monoculture perennial crops such as palm oil, cacao, coffee, fiber crops, silk and insect dyes, other biofuel seeds and fruits, or rubber. It does, however, take into account the smallholder on-farm production of non-wood forest products (NWFPs) found in the wild in diversified agrofor-

estry systems, such as the collection or cultivation of bush mango, kola nut, karité, and other forest fruits. This is often a difficult distinction to make,

particularly as countries track such economic activities through very diverse categorizations and compilations.

2

Status of Community-Based Forest Tenure, Management, and Enterprises

2.1 TENURE REFORMS AND THE GROWTH AND EMERGENCE OF TENURE AND CBFM

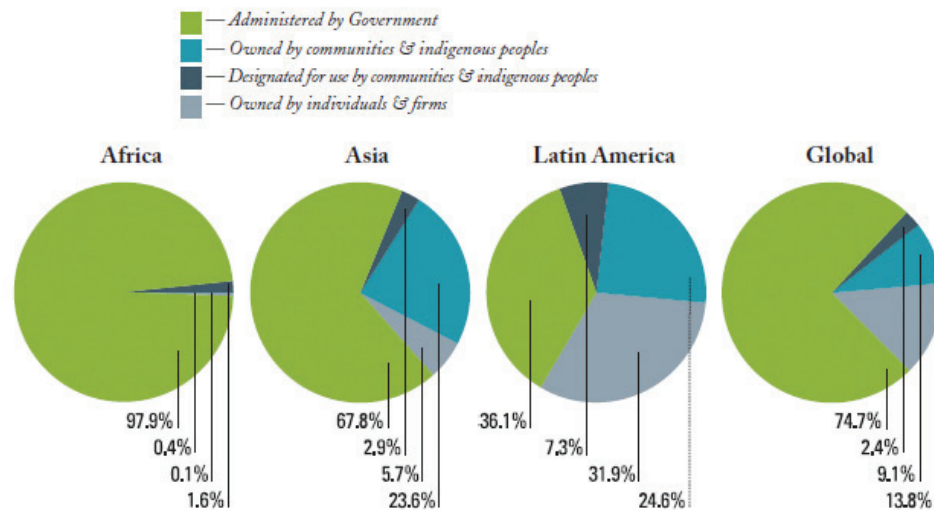
The world is experiencing a forest tenure transition that involves contestation and negotiation between two fundamentally different tenure systems: customary and statutory. Hundreds of millions of people live on forest lands, and a large but undetermined number of these people have no or weak land and resource tenure security. The reasons for this insecurity vary. Local people might enjoy rights under both customary and statutory tenure arrangements but be unable to oppose the claims made on land and resources by outsiders. In some cases, customary arrangements may be clear and well accepted at the local level, but be contradicted or nullified by statutory arrangements. In other cases, customary tenure arrangements are unable—for various reasons—to serve their function.

In the main, historic approaches to land tenure, the governance of the forest sector, and the design, establishment, and administration of protected areas have not moved toward more modern notions of rights and democratic processes. Both conventional forest industry models and conventional conservation models are products of political history and power imbalances and have sometimes justified predatory behavior on the part of governments, the private sector, and local elites. Governance failures include, in the case of logging concessions and plantations, limiting revenue-

earning to a small set of actors; and the poor administration of fiscal revenues; and, in the case of conservation, ignoring underlying or overlapping rights. Other problems include poorly audited and unjustly administered revenues and the imposition of regulations that are inconsistent with local governance and livelihood systems.

In many countries, forests are distinguished by the social and political underdevelopment of the people who live in them. Many forests have been areas of political and cultural refuge for ethnic peoples with diverging interests from those of the state, who may even pursue less lucrative livelihoods to stay beyond the long arm of government. Industrial timber and plantation contracts and protected area designations have invaded cultural spaces—often counter to human, citizen, and cultural rights, including those protected under the United Nations Declaration on the Rights of Indigenous Peoples. Urban-dwelling elites have maintained control of forest land and resources and exploited them for their own benefit through official public ownership. Social, economic, and environmental development programs have often fallen into the trap of impositions—treating forest areas as hinterlands to be exploited for the social and economic benefit of others, to be protected on another's behalf, or to provide ecosystem services on someone else's terms. For the most part, Indige-

FIGURE 1: FOREST TENURE BY REGION, 2010



Source: Rights and Resources Initiative. 2010. *The End of the Hinterland: Forests, Conflict, and Climate Change*. Washington, DC: Rights and Resources Initiative. p 6.

nous and non-Indigenous forest communities alike have been unable to use forests to pursue their own development.⁵ Yet forests managed under customary tenure today greatly exceed the area of community and Indigenous lands acknowledged by statutory tenure law.

There has been a dramatic shift in the past three decades in the tenure of forest lands and the share of forests that are community owned and administered. The shift has been most pronounced in Latin America: forest tenure reforms and the recognition of Indigenous Peoples' territories and native lands there has shifted forest land ownership significantly and the state now only owns or administers about one-third of forest land. There has been less shift in Asia but, even there, only two-thirds of forest lands are state owned and administered. In Africa, a large proportion of the forest remains under state ownership and administration, even though customary usage and rights apply to a high percentage of forest lands and despite complex webs of migration and the existence of significant mobile populations of herders and hunters and gatherers. Worldwide, more than 430 million hectares of forests, or 11% of the total forest

estate, are officially community owned or managed and another 13.8% are owned by smallholders and firms. Local rights are most marked in developing countries, where, according to 2008 official country statistics, 27% of all forest lands are community owned or administered. Data on forest land allocated by governments to commercial concessions, which are officially included within the public forest land category, are available for a much smaller set of countries and are not included here. *Figure 1* summarizes forest tenure by region and globally.

There is a direct link between tenure reform and the emergence and growth of CBFM and CBFES. The tenure transition in the tropics has created avenues for the creation and growth of enterprises based on community forest management. Lessons from Western Europe demonstrate this link. The governance of forests there has changed dramatically over the centuries, from well-recognized commons, to feudal claims and the control of forest lands by royalty and regional elites, to more democratic models of management and ownership. This latter change is instructive. After years of protest, conflict, and eventual reform, most forest lands in Western Europe are now owned by households and

communities, who enjoy the benefits of human, civil, and political rights (a similar transition is under way in some countries in Eastern Europe). As these rights became recognized, democratic institutions were able to emerge and rural economies began to develop and flourish. In Sweden, for example, land reforms in the early 19th century paved the way for the development of a forest industry based on smallholder supply. This has played a key role in rural employment and economic growth, and development has arguably been more equitable than it would have been had the land remained in the ownership of the crown.⁶

The majority of forest land is private (overwhelmingly owned by smallholders) in the United States, too. Although large multinational companies have tended to dominate forestry dialogue and lobbies, SMFEs currently contribute more than 37% of total employment in the solid wood products processing sector.⁷

China, Brazil, and Mexico are other examples of countries that have moved away from the state ownership model. As a result of promises made to rural fighters in the Mexican revolution, and radical reforms in the 1980s to give forest communities greater control, 80% of Mexico's forests are now in the hands of forest communities and land reform villages (*ejidos*). More than 2,400 forest enterprises are legally recognized by the government. A formal certification process was established in 2009 to recognize Indigenous and Community Conservation Areas in Mexico's national protected areas system; in September 2010, 221 such areas were certified covering 257,151 hectares in 15 states.⁸

Brazil, which also has a predominance of SMFEs in its forest industry, revised its policies and programs in 2008 to provide greater support for CBFM. The creation of the Federal Program for Community and Family Forests fosters the organization and sustainable management of forests by traditional communities, agro-extractivists, and those communities relocated because of agrarian reform.

China's recent forest land reform was initiated in the early 2000s but its impacts were not known

until 2009, when a national-level survey was completed. It was arguably the largest tenure reform in world history, affecting over 400 million landowners and 100 million hectares of forest. As a result of it, collective forest owners are able to either reallocate their use rights to households or keep them as collective. The reform precipitated a small but significant shift towards household tenure, although some communities have moved the other way, towards greater collective management. In seven of the eight provinces surveyed, individual tenure increased slightly, resulting in increased farmer income and tree-planting. Collectives are adjusting their property regimes to changing social and economic conditions, suggesting that the reform will enable local people to better adapt to climate change.⁹ There is clearly much more to do, including ensuring respect for ethnic land tenure and rights in traditional land-use systems, establishing mechanisms for legal redress and regulations to govern the land market, and guarding against elite capture within communities. Nevertheless, China's experiences with reform offer important lessons for other countries now considering the recognition of collective land rights.¹⁰

Globally, forest tenure continues to shift towards communities, with a large portion of tropical forests already subject to Indigenous and/or community tenure (or to the promise of such tenure). Recent research by Klaus Deininger, a land advisor at the World Bank, makes a strong case for strengthening land rights as a direct and powerful stimulus to economic growth.¹¹ His analysis of growth in 73 countries in the period 1960–2000 found that countries with relatively equitable initial land distribution achieved growth rates 2–3 times greater than those in which land distribution was less equitable. He concluded that secure property rights give landholders the confidence and motivation to make investments and enable them to obtain loans by using land titles as collateral, and they also encourage external investment.

Moreover, secure land tenure has a positive economic effect. It promotes faster economic growth (which accelerates when tenure is secure);

reduces inequality (growth is more beneficial when people have fair access to land); promotes sustainability (secure tenure motivates landholders to take a long-term view of resource management); and enhances mobility (landholders with secure tenure are able to rent land to others and

to seek more gainful income elsewhere).²² In short, increasing forest-based productivity, and thus economic growth, requires a much more equitable distribution of assets and opportunity than is currently the case in most forested developing countries.

2.2

THE CURRENT EXTENT AND ECONOMIC RETURNS OF CBFES

There is a wide range of CBFES characterized by a diverse range of stakeholders, actors, businesses, and structures. It includes:

- Legally constituted and managed CBFES that operate with the explicit consent of the state;
- Informal industries that, in aggregate, may generate more revenue and income than formal concessions;
- Enterprises based on non-wood forest products (NWFPs) that are growing in demand nationally and internationally;
- Smallholder production of timber and wood products in agroforestry systems, both on-farm and in commons and silvo-pastoral systems;
- Enterprises based on non-traditional products and services including ecotourism, water-bottling, carbon sequestration, and agroforestry; and
- Markets for traditional bioenergy resources that could generate a more sustainable supply consistent with environmental goals.³³

The available economic data for CBFES is almost always subsumed within statistical data for SMFES at the country and regional level, making it extremely difficult to track the incidence of CBFES and their contributions to revenue and other benefit streams. Forest enterprise and revenue data for different categories of raw material or end products are tracked by separate agencies and offices, making the national accounting data aggregated in the five-year Forest Resource Assessment (FRA) extremely skewed.³⁴ The data gap is further complicated by the fact that CBFES based on the

harvesting of resources owned or controlled by community members may be connected to a range of other community-based enterprises of smallholder or gender-specific subgroups—producing different forest products or finished products while drawing on the capital base or organization of the larger enterprise. Recent studies of trends in countries where the majority of timber producers are smallholders or cooperatives—e.g. Ghana, Sweden, and Finland—demonstrate a coincidence between the presence of CBFES and growth of SMFES in the local economy. A comparison of countries that have implemented nationwide tenure reform with those only beginning or considering implementation shows a strong correlation between smallholder and community forest ownership and tenure rights and the contribution of SMFES and CBFES to the share of forest industry and to employment (*Table 1* and *Table 2*).

CBFES operating in the informal economic sectors of forested developing countries can often generate more jobs, profits, and local incomes than do formal-sector timber, wood, and non-wood operations. Smallholders are increasing production of a range of NWFPs, such as rattan, bamboo, paper fibers, cloth fibers, traditional thatching materials, ethnic foodstuffs and spices, medicinal plants and herbs, fruits, seeds, and specialty products (e.g. honey, birds' nests, insect dyes, and resins). Interest in natural products among middle-income consumers and the use of natural products in tourism installations are two quickly growing markets.

TABLE 1. COUNTRIES/REGIONS THAT HAVE IMPLEMENTED NATIONWIDE TENURE REFORM, AND THE RESPECTIVE CONTRIBUTIONS OF SMALL-SCALE INDUSTRY TO EMPLOYMENT AND INDUSTRY

	Country/region	% of forests owned by/ reserved for communi- ties and individuals	% of employment in SMFES/CBFES	% of industry made up of SMFES/CBFES
Countries/regions with major nationwide tenure reform implemented	USA	70	>75	80*
	Mexico	72	90	>50
	European Union	50		90
	Brazil	79	49.5/70	98
	China	58	50	87

* Wood furniture market segment only.
Various sources.¹⁵

TABLE 2. COUNTRIES/REGIONS NOT IMPLEMENTING NATIONWIDE TENURE REFORM, AND RESPECTIVE CONTRIBUTIONS OF SMALL-SCALE INDUSTRY TO EMPLOYMENT AND INDUSTRY

	Country/region	% of forests owned by/ reserved for communi- ties and individuals	% of employment in SMFES/CBFES (if counting the informal sector)	% of industry made up of SMFES/CBFES
Countries/regions who have not implemented major nationwide reforms	Ghana	0	95	>60
	India	26	97	87–98
	Cameroon	5	30 (>50 if counting informal)	<50
	Central and West Africa	< 2	>85	>80

Various sources.¹⁶

The NWFP market is poorly understood. Statistics are available for only a small subset of non-traditional wood products and NWFPs—perhaps 6,000 of the 30,000 or more harvested commercially in producer member countries of the International Tropical Timber Organization (ITTO)—and are not collected consistently across countries. Nevertheless the market is known to be huge and diverse. In 2005, FAO estimated the import value of 34 NWFPs to be US\$7 billion¹⁷, yet over 90% of the NWFP trade takes place domestically, especially in developing regions.¹⁸ The total global value of medicinal plants (including cultivated plants) exceeds US\$100 billion.¹⁹

NWFPs are meeting growing markets for forest foods. For example, sales in 1999 of four nuts,

leaves, and fruits basic to West African cuisine generated US\$20 million in local market value and retailed at US\$220 million in Europe; at the time the market was growing at 5% a year and expanding towards the United States and the United Kingdom. Immigration and restaurant trends in Europe and the United States suggest that the market has probably increased dramatically since 1999. Evidence from the Yucatan Peninsula in Mexico shows that hotel and other tourist installations are creating new markets for traditional thatching and native timbers, even in high-end operations, due to their natural cooling properties and pleasant appearance. While some markets will be captured by large-scale producers and investors, there are many small-scale niches.

TABLE 3. CONTRIBUTION OF FORESTS TO GDP, UNITED STATES, 2006

Region	All forests	Privately owned	Publicly owned	Difference
	US\$/acre			
Northeast	169	159	10	150
Appalachia	365	324	40	284
South	286	277	9	268
Upper Midwest	447	318	130	188
Northwest	740	612	128	484

Source: Forest2Market, Inc. 2010. *The economic impact of privately-owned forests. Report prepared for the National Alliance of Forest Owners, September 2009. The Forestry Source 15 (2).*

The emergence of SMFEs in developing countries is not surprising, given the impressive contribution of SMFEs to forest economies in developed countries. In the European Union, for example, it is estimated that 90% of forestry-related firms employ fewer than 20 workers.²⁰ Interestingly, in the wake of globalization, intense competition, and ‘big business’ migrating to lower-cost regions of the world, it seems that SMFEs are becoming important in developed countries in mitigating overall declines in employment in some sectors of wood processing.²¹ Table 3 illustrates the contributions of forests to gross domestic product (GDP) in several regions of the United States.

CBFM and CBFEs make impressive contributions to long-term employment and economic conditions. In many countries, 50% or more of forest-related employment is directly attributable to CBFEs.²² Worldwide, forest-sector employment ranges between 20 million and 140 million, depending on whether the informal economy is considered.²³ The International Labor Organization estimates that the contribution of forestry to employment is likely to be three times that shown in global statistics.²⁴

In Cameroon, the small-scale (and informal) forest sector employs an estimated 100,000 people—compared with the 135,000 jobs provided by the formal forest sectors of all nine West and

Central African countries combined.²⁵ In West Africa, the production of fuelwood, small timber, and selected NWFPs provides 6,273 permanent and 60,000 temporary jobs in Burkina Faso; employs 33,662 people in Cote d’Ivoire; employs 768 people in the public sector and 7,710 people in the private sector in Niger; and provides employment for 12,700 people in Senegal. According to official data in Ghana, the wood sector provides 50,000 jobs, while Birikorang et al.²⁶ document at least another 54,000 in the informal sector, bringing the total to over 100,000 jobs.

Markets for ecosystem services are proliferating, with a myriad set of arrangements for watershed services, biodiversity, and carbon sequestration, posing both threats and opportunities. The rules for ecosystem services are still being formulated and the eventual nature of the markets will have a major impact on the role of CBFEs within them. In principle, markets for ecosystem services should be useful for enabling CBFEs to capture some of the currently non-economic or less tangible values of forests.

CBFEs can be very profitable where tenure is secure and they have an enabling environment in which to grow and mature. In a 2007 survey of 20 tropical-forest case studies, CBFEs showed returns of 10–50% from wood-based and NWFP activities. The survey also found that the more mature CBFEs

TABLE 4. CONTRIBUTION TO CONSERVATION FINANCE IN 2004

Government support for protected areas	Official development assistance (ODA) and foundation support	Community investment
<p>Stable</p> <p>US\$3 billion per year globally; comprising US\$1,000–3,000/ha in developed countries and US\$12–200/ha in lesser-developed countries</p>	<p>In decline</p> <p>US\$1.3 billion/year ODA; US\$200 million/year for others</p>	<p>Growing</p> <p>US\$1.5–2.5 billion+/year</p>

Note: Community investment is based on data from communities on average annual expenditure and in-kind labor associated with fire control, guarding, biological monitoring, and habitat restoration. Calculations based on 2004 data.

Source: Molnar, Augusta, Megan Liddle, Carina Bracer, Arvind Khare, Andy White, and Justin Bull. 2007. Community-Based Forest Enterprises: Their Status and Potential in Tropical Countries. Yokohama, Japan: International Tropical Timber Organization and Washington, DC: Rights and Resources Initiative.

invested in diversification, making greater use of their forest resources and thereby simultaneously managing risk and creating new sources of employment and community skills.²⁷ This tendency towards diversification points to the versatility and long-term viability of CBFEs. Additionally, rising prices for hardwoods and other natural-forest products and selected NWFPs, increasing consumption of foodstuffs and medicinal products, and the emerging markets for forest services, all favor CBFE economies.

CBFEs are valuable as complements to larger enterprises in creating robust economies. A multitude of CBFEs can generate a wider range of goods and services than a handful of large-scale industrial enterprises. CBFEs tend to invest more in local economies than do industrial-scale equivalents; they also foster social cohesion and greater equity. By their flexible and locally adapted structures they are able to switch among blends of products and to apply traditional knowledge to their operations. In this way they create innovative approaches and find new ways to increase employment and diversify income strategies.

Smallholder and community enterprises also make important contributions to conservation. The area of forest actively conserved by Indigenous

and local communities has been expanding. Such community-conserved forests are an important and growing complement to long-standing protected areas under government stewardship. A conservative initial estimate of the combined forest area in Africa, Asia, and Latin America under community protection is 370 million hectares—nearly as much as the 479 million hectares of forests estimated by FAO to be in public protected areas in 2000.²⁸

The financial contribution of communities to conservation efforts are also important and likely to rise (*Table 4*).

Beyond raw numbers, the social benefits of the employment generated by CBFEs can be enormous. In post-conflict countries, for example, where employment for ex-combatants in their home villages is scarce, CBFEs can perform a critical role, both economically and in terms of social reintegration. Women also particularly benefit from CBFE employment; it assists them in scaling up their own activities and organizing themselves into groups.²⁹ Mature CBFEs in Mexico, Nepal, Guatemala, Burkina Faso, Honduras, Bolivia, and Peru have been instrumental in providing funds for village roads, schools, health care, old-age pensions, and cultural events, and for fire protection and other conservation activities.

2.3 LINKS BETWEEN THE CBEF MODEL AND ECONOMIC GROWTH

There are strong correlations between economic growth and the proportion of the economy occupied by CBEFs; moreover, the share of exports and GDP commanded by smaller enterprises increases as living standards improve.³⁰ While conventional wisdom holds that the strongest economic growth is generated by large industrial champions, there is growing evidence that CBEFs engender greater improvements in governance, the broader sharing of economic growth, and long-term viability. Although they are perceived as less efficient than large operations in terms of labor productivity, they add more value while consuming fewer resources.³¹ For example, Mexican and Guatemalan CBEFs stand out because

they calculate a very conservative allowable cut, yet are commercially viable and contribute more jobs and revenue to local economies than do their larger competitors. In addition, the SMFE-dominated portion of the furniture industry in Indonesia delivers a much higher share of export value per m³ of logs than large-scale production of panels, sawnwood, pulp, or paper. If Indonesian SMFEs faced fewer regulatory barriers and could expand to meet their demand, it is estimated that they would extract only 3% of the log production but deliver 12% of total export value, producing three times as much export income as panels and sawnwood per processed log, and significantly more than pulp and paper.³²

2.4 IMPACT ON CONVERGENCE IN FOOD, FUEL AND FIBER MARKETS

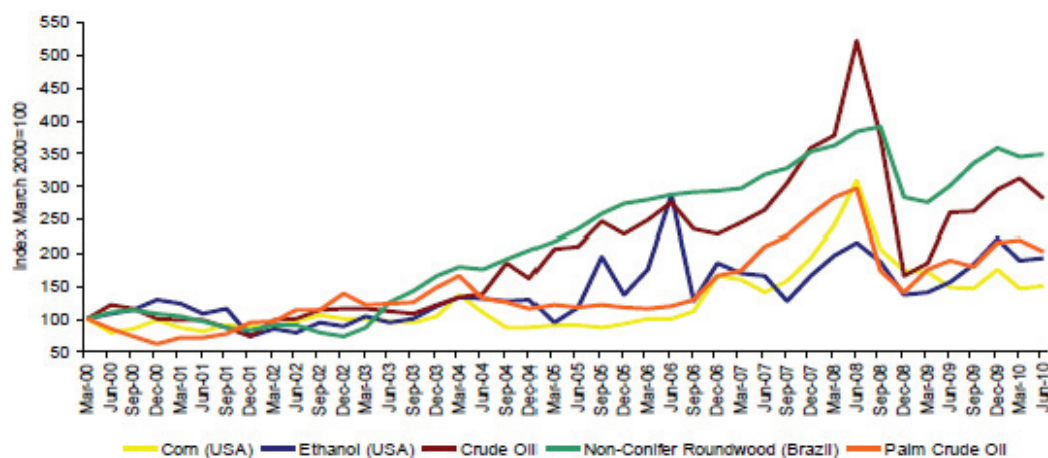
The convergence of food, fuel, and wood fiber markets is driving a new global land grab (*Figure 2*). These markets compete both for raw inputs (including maize, sugar cane, wood, and switch grass) and for the land on which to grow these commodities. This has negative implications for the emergence and growth of CBFM and CBEFs and for advancing the rights of forest communities and smallholders in these landscapes.

All three sectors—agriculture, energy, and forestry—need cropland and marginal land for expansion, especially in the South, but insufficient land is available. In the most extensive analysis to date, Nilsson et al. estimate that only 250–300 million hectares of land are available globally for the production of the three commodities.³³ This is insufficient: drawing on credible projections by experts in each sector, Nilsson et al. estimate that by 2030 at least 200 million hectares will be required for agricultural production, at least 25 million hectares

for industrial forest plantations for conventional forest products, and at least 290 million hectares for biofuels. Moreover, these estimates ignore the demands for land from the chemical industry and for tourism and fuelwood—any of which could take additional millions of hectares out of production.

Climate change and the implementation of REDD+³⁴ present another threat to CBFM. As Phelps et al.³⁵ note, funding and requirements for REDD+ may undermine decentralization by considerably reducing the financial burden for forest conservation and management which, in the past, has motivated decentralization. The market value of avoided deforestation has been estimated conservatively at \$1.2 billion per year, which exceeds current global investment in forest conservation. For example, the estimated market value of avoided deforestation in Indonesia in 2002 (US\$108 million per year³⁶) exceeded the entire budget of that country's Department of Forestry in that year.³⁷

FIGURE 2. FOOD, FUEL, AND FIBER PRICES



Source: Roberts, D., pers. comm., 2010. *The Global Competition for Land: The 4 Fs (Food, Feed, Fiber and Fuel)*. Presentation made at LATINA: 1st Latin American Forest Industry Conference, São Paulo, Brazil. http://www.rights-and-resources.org/documents/files/doc_1728.pdf

REDD+ implementation will place new demands on national forest managers: for example there will be a need for detailed carbon-oriented forest management plans; reliable baseline data and subsequent quantitative monitoring, reporting, and verification of emissions reductions at the national level; and resources for brokering deals between buyers and sellers.³⁸ These demands would impose prohibitive costs on small-scale initiatives³⁹, but a centralized system would benefit from economies of scale, coordination, and standardization.⁴⁰ Communities may participate in collecting forest-specific data, but carbon accounting, a major REDD+ component, will require centralized management.

By monetizing forest carbon, REDD+ will substantially increase the market value of forests,

including those previously considered marginal, incentivizing central governments to increase control. Under a performance-based payment mechanism, governments will be pressured to avoid the risk of nonpayment resulting from local-level failures. Evidence suggests that central governments already tend to affirm control over forests considered 'critical' for conservation, the protection of ecosystem services, or national economic interests.⁴¹ With billions of dollars at stake, governments could justify recentralization by portraying themselves as more capable and reliable than local communities at protecting the national interest. This could involve the imposition of excessive requirements on⁴² or even evictions of local users, as has happened in some national parks in the past.⁴³

3

Trends and Potential for the Expansion of CBFM and CBFEs

This section looks at the potential of CBFM and CBFEs to grow and expand. Over time, what happens in forests will be affected by shifts in other sectors as well as in forest-sector markets, production processes, and social expectations regarding the behavior of large industries. Most of the demand growth will be in domestic markets of low- and middle-income countries. Since poor households are typically large suppliers, this could generate important sources of income.

There is evidence that SMFEs, including CBFMs and CBFEs, are growing in both number and importance; they are crucial to production and employment in the United States, Europe, China, India, and Brazil. A strong niche market is emerging for ‘culturally differentiated’ wood products and NWFPs in both developed and developing country markets. There is also increasing divergence between international commodity wood markets and domestic markets.

A modest estimate based on available evidence and comparisons of the situation in long-developed forested countries like Sweden, Finland, Mexico, the United States, Canada, and Norway is that CBFM and related smallholder and community enterprises *could generate double the forest revenue and double the jobs and sustain or double the provision of ecosystem services that they generate today*. Ecosystem services include investments in forest conservation, adaptation to climatic shifts and erratic climate events, and the protection of important water resources and downstream ecosystems.

Such an estimate is contingent on the link between tenure security and CBFM success. Table 5 shows that in twelve countries in the tropics where the tenure transition is under way, community rights are recognized on 82 million hectares of community owned or managed forest lands; in such forests, robust CBFMs (the ‘case studies’ in Table 5) have already emerged. The potential scope for growth in these countries—and in others where the transition is nascent—is huge.

In countries where community or smallholder enterprises have already started to emerge there is the potential for a tenfold increase in CBFMs without any further tenure reform.⁴⁴ In addition, 100 million hectares of forest land in the Democratic Republic of the Congo alone are targeted in current policy dialogues for community administration or ownership, 140 million hectares in the Brazilian Amazon are newly owned or administered by communities and Indigenous Peoples, and several million hectares per year are being established as community forests or community plantations in Indonesia. The shifts away from public forest land ownership and administration in these three countries would result in a 20% decrease in public forest land administration since 2008. There is a deepening of tenure rights in South and Southeast Asia, where the potential for the growth of CBFMs is substantial. Countries with active CBFM, such as Nepal, Guatemala, and Bolivia, are re-examining their policies and forest economies, particularly in light of climate change, and reviewing regulatory frameworks that have prohibited the commercial

TABLE 5. POTENTIAL FOR EXPANSION OF ENTERPRISES IN FOREST AREAS WHERE COMMUNITIES AND SMALLHOLDERS HAVE TENURE RIGHTS

Country	Case-study area ('000 ha)	Key mechanisms	Area of similar forest resources/ownership transition (in '000 ha)
Colombia (1 case study)	20	Peace Accords: Hydropower watershed basin	400
Mexico (3 case studies)	100	Ejidos/communities with forest management plans	14,000
Central America (3 case studies)	500	Social forestry or community concessions	3,000
Amazon region (3 case studies)	100	Indigenous territories, associations or extractive reserves	30,000
Nepal (2 case studies)	3	Forest user groups	1,000
India (1 case study)	70	Joint forest management, community forestry/agroforestry	20,000
West/Central Africa (3 case studies)	53	Village forests	4,200
East Africa (1 case study)	2	Village forest reserves and joint forest management	3,342
China (1 case study)	0.3	Village bamboo forests	4,000
Philippines (1 case study)	10	CBFM plans	1,570
Papua New Guinea (1 case study)	10	Customary lands	1,000
TOTAL	868		82,512

Source: Molnar, Augusta, Megan Liddle, Carina Bracer, Arvind Khare, Andy White, and Justin Bull. 2007. *Community Forest Enterprises: Their Status and Potential in the Tropics*. Yokohama, Japan: International Tropical Timber Organization and Washington, DC: Rights and Resources Initiative. p 60.

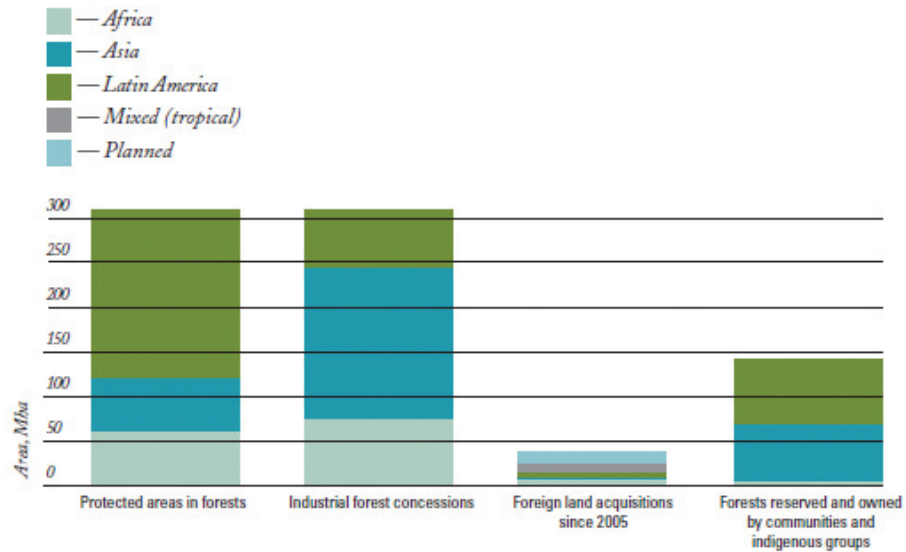
extraction or sale of forest products in large number of communities.

Nevertheless, competition for land is becoming increasingly intense. A recent report by the World Bank⁴⁵ examining large-scale acquisitions of forest and non-forest lands for food crops and commercial perennials concluded that many of the countries facing the greatest land acquisition pressures are those where smallholder and community agriculture and forestry have been under-supported and under-funded yet offer potentially equal or higher returns and multiplier effects. Compared with an average annual expansion of 4 million hectares before 2008, at least 45 million hectares of large-scale farmland deals were

announced in 2009, more than 70% of which were in Africa. Another 6 million hectares per year will be sought for agricultural plantations going forward, and possibly 18–44 million hectares of additional land will be required for biofuel by 2030.⁴⁶ Figure 3 shows the large area of forest land in the tropics already assigned by the state for industrial concessions and conservation, and the allocations that have been made to foreign companies and governments since 2005.

Only a fraction of villages in the fourteen tropical countries referred to in Figure 3 (or those in Table 5) have been empowered to formally assume management responsibilities and/or engage in commercial enterprises. In the cases of The Gambia

FIGURE 3. LAND DEDICATED TO CONSERVATION, INDUSTRY, AND FOREST COMMUNITIES IN FOURTEEN TROPICAL COUNTRIES



Source: Rights and Resources Initiative. 2010. *End of the Hinterland*. Washington, D.C.: Rights and Resources Initiative. p. 16.

and Cameroon, for instance, 170,000 hectares and 4 million hectares had been categorized, respectively, as community forests in 1995, yet only 13,000 hectares in Gambia and 40,000 hectares in Cameroon had government-approved handover plans enabling legal forest use. In Nepal and India, CBFM and joint forest management have been established on 1.4 million hectares and 18 million hectares, respectively, yet support for establishing value-added enterprises in the form of legal permits, technical assistance, or access to finance has been much more limited. In Orissa, a state where local Indigenous Peoples have taken a large area of forest land under their wing and played a major role in its restoration, the government continues to pressure them to join official government programs that grant them more limited control of the forest (Box 1). Ironically, in terms of markets for ecosystem services, communities with a long social history, such as many in South Asia, may be perceived as a less risky option for investment, if only they were empowered with the necessary rights.

The cost of securing tenure is well within reach. Based on data from Bolivia, Brazil, China, and Mozambique, the average cost associated with recognizing community tenure is estimated to be US\$3.31 per hectare, with a range of US\$0.05–9.96 per hectare. The average cost for the titling of household plots (based on data from Cambodia, Indonesia, Laos, and the Philippines) is US\$23.16 per hectare, with a range of US\$9.44–36.78 per hectare.⁴⁷ In contrast, the total costs for reduced emissions from deforestation and forest degradation (REDD) are significantly higher, ranging from US\$400 per hectare per year to US\$20,000 per hectare per year, with implementation costs alone in the range of US\$4–184 per hectare per year.⁴⁸

Regulatory reforms have an important role to play in scaling up CBFs and CBFMs. If countries with large domestic demand for commodity wood undertook reforms to enable private mills to link to smallholders and community commodity wood suppliers, rather than importing from other countries or supplying through industrial-scale

BOX 1. THE CASE OF ORISSA, INDIA

In Orissa, local communities, which are mainly Indigenous, have taken the lead in controlling forests, even though their management rights are yet to be legally recognized. Responding decades ago to forest degradation and deforestation, local communities organized thousands of village committees to restore their customary forest lands and resources.

Today, 17,000 village forest protection committees, dispersed in roughly 19,000 villages, protect 2 million hectares of forest. This means that local communities now manage one-third of Orissa's total forest area, although the forests officially remains state property.

While their control is not legally recognized, these communities have been tacitly left as de facto managers and they are able to benefit from the resources. The forests are used to generate multiple livelihood and income streams, including shifting agriculture, NWFPs, environmental services, and sacred sites.

Source: Subrat, S.K. Trees First. 2010. Infochange: News and analysis on social justice and development in India. <http://infochangeindia.org/environment/community-forests-of-orissa/trees-first.html>

plantations, they could see significant increases in widely-shared economic growth.⁴⁹

In many countries, the competitive advantage that industrial plantations possess as a result of economies of scale is artificial due to the subsidies they receive for plantation establishment. As larger operations begin to face scarcity in raw materials for production, SMFEs, including CBFEs, can start to play a larger role. The growing importance of domestic markets is a trend working in favor of low-income producers.

As Mayers and Macqueen point out, forest-based export markets in most countries are dominated by large-scale enterprises but, as shown in Table 6, domestic markets are dominated by SMFEs, which represent the overwhelming majority of enterprises and half of all employment and revenue in the forest sector.⁵⁰

Low-income producers are unlikely to be competitive in export markets for commodity-grade timber, especially against the low-cost wood derived from industrial plantations, agricultural

land clearing, and illegal logging. In any case, the international trade in tropical timber from natural forests has declined by almost 40% since 1990, and 80% of this trade is concentrated in just five countries: Indonesia, Malaysia, Brazil, Gabon, and Cameroon.⁵¹ The recent global financial crisis has had a further downturn impact on the export of tropical timber from Central Africa. Figure 4 shows that, in Cameroon, domestic informal timber harvesting overtook the officially legal export timber harvest in 2008 and continues to grow due to growing domestic and regional demand and increasing illegal exports.

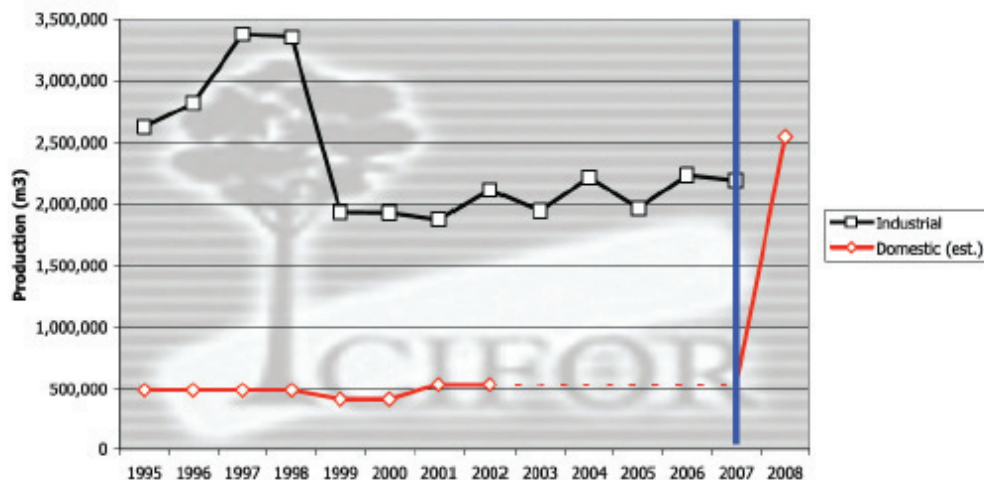
In most developing countries, domestic wood consumption accounts for more than 95% of total production, indicating a large potential market for low-income producers of commodity-grade products in segments of domestic markets that see less trade. This is another instance in which the flexible and diversified CBE model offers an advantage: commodity wood production may be especially profitable and lower-risk for small-scale

TABLE 6. POTENTIAL COMPETITIVE MARKETS FOR SFMEs/CBFEs

Market Segment	Market Potential for Low-Income Producers
Large-scale market potential	
Commodity wood	Farm foresters or out-growers in populated, forest-scarce inland regions
Pulpwood	Out-growers located near industrial mills
High-value timber	Communities with secure rights, organization, and partners
NWFPS	Forest communities and forest user groups with contracts to sell to processors, retailers, or collectives; organized farmers
Processing enterprises	Community or group enterprises near markets (pre-processing, products for regional demand)
Carbon offsets	Where transaction costs are low
Niche market potential	
High-value timber	Out-grower schemes; communities with secure rights
Pulpwood	Joint ventures, leasing
Certified wood	If good urban/export market linkages
NWFPS	Organized collectors with own intermediaries
Processing enterprises	Group enterprises with sawmills or finished processing, where there are good market linkages
Watershed biodiversity services	Business partnerships for nature tourism; payments for protection of high-value watersheds and wildlife habitats

Source: Scherr, Sara, Andy White and David Kaimowitz. 2004. *A New Agenda For Forest Conservation and Poverty Reduction: Making Markets Work for Low-Income Producers*. Washington, DC: Forest Trends. pp 46–52.

FIGURE 4. EXPORT-ORIENTED INDUSTRIAL SCALE TIMBER AND DOMESTIC TIMBER PRODUCTION, CAMEROON



Source: Seymour, Frances, pers. comm., 2010. *Research on forest governance: What's the state of the art? Presentation made at a meeting of the European Tropical Forestry Advisers' Group, Stockholm, Sweden, September 2010* (data available at www.cifor.org).

farmers engaged in other livelihood strategies such as agroforestry and timber byproducts.⁵² At the 45th session of the International Tropical Timber Council in 2009, a speaker from the Indian timber industry told governments of tropical timber-producing countries that demand in India for commodity

wood is expanding so fiercely that rather than worrying about high-quality hardwood exports they should be scrambling to supply the pole and construction market in India with any species they could muster.⁵³

4

Experiences and Lessons Learned

Several lessons can be drawn from the three-decade experiment with social, community, and participatory forestry worldwide.

In almost all cases, investments in such approaches have not been effective in re-orienting forest agencies to a more people-friendly approach—unless a broader reform of the public sector occurred, as happened in Mexico in the 1980s (see *Box 2*), or unless the country's leadership rethought the sector, as was the case in China and seems to be the case now in the Democratic Republic of the Congo. Such a fundamental reform of forest policy and property has generally only occurred where there has been a strong social consensus moving in that direction. Large-scale projects have often fallen prey to entrenched bureaucratic behaviors, incomplete reforms, and local power battles that impede goal attainment.⁵⁴

Attempts to develop local and more organic models outside the government bureaucracy have often fallen into a 'pilot model' trap in which a boutique solution has been invented that was unviable elsewhere. Interventions have rarely been made on the basis of a good understanding of the broader market and policy context, resulting in situations in which many poor people have invested their land and labor in producing trees but have been unable to benefit commercially from them. In most cases, opportunities were missed to scale up local innovations and to modify the subsidies, tax frameworks, and forest management and market regulations that were crippling local enterprises.⁵⁵

To move forward on enabling, and in many cases legalizing, CBFEs and CBFM, the link between CBFEs and tenure reform must be recognized.

BOX 2. THE SUCCESS OF COMMUNITY FORESTRY IN MEXICO

Mexico benefits from a strong historical precedent in community ownership and management. The Mexican revolution returned collective property rights to Indigenous communities and laid the groundwork for land reform. Reforms in 1986 made rights real, and CBFEs have proliferated since—Michoacan state has seen an increase from 120 jobs in vertically integrated CBFEs in 1981 to 800 today. Today, CBFEs are a mainstay of Mexican forestry.

In Mexico, 2,300 of the 9,000 forest communities have approved management plans and permits, 10% of which are vertically integrated operations generating a large number of jobs in multiple forest and agroforestry activities. As well as providing local employment, CBFEs with approved management plans have become engines of local economies and provide social goods.

It is also important to understand and maximize the competitive advantages of CBFM and CBFEs (some of which are set out in the *Table 5*). CBFEs have competitive advantages related to knowledge of local markets, supply flexibility, lower opportunity costs for land and labor, and complementarities. Small, localized niche markets should be given more attention, but they should also be understood in broad contexts (for example, as they relate to the politics of economic policy and institutional barriers).⁵⁶

While the elasticity of markets and the competitive edge of CBFEs are certainly issues, there is evidence of an adaptability and creative innovation among existing CBFEs that allow them to respond to new market challenges and options. CBFEs can find it hard to compete in undifferentiated market segments for commodity wood, but there are clearly many niches and there is plenty of room to expand.

Flexible CBFEs exploring multiple products and markets can find many ways to succeed, even if large numbers of them emerge under favorable policy and enabling conditions. Partnerships between the private sector and CBFEs will depend on secure tenure and use rights. CBFEs will also have a much greater chance to explore their comparative advantage if policies around plantation subsidies and infrastructure investments are modified to recognize the potential of CBFEs rather than focused on large-scale commercial activity. Women shea butter cooperatives in the Sahelian countries, for example, have renegotiated tree rights with male village leaders and entered into the dialogue for drafting local conventions for forest management and pressuring governments to recognize their legitimacy⁵⁷.

CBFEs are not mini-versions of the private sector. Treating them as such leads supporters—governments, donors, and non-governmental organizations (NGOs)—to undermine burgeoning social capital rather than enabling communities and smallholder associations to use financial capital to foster their social capital.

Unlike private-sector employment, employment in CBFEs can politically empower communi-

ties and their authorities. It can also validate social and cultural values that are important in the communities. Scaling up and advancing CBFM requires an understanding of the highly nuanced economic relationships between forestry, poverty alleviation, and development—in a context that bridges the gap between local concerns and national governance priorities.

Governments can be an important agent for fostering CBFEs on their own terms. For example, the Conservation and Sustainable Forest Management Project (PROCYMAF in Spanish) is an innovative project (begun in 1996) in Mexico operated by the World Bank in collaboration with the government agency SEMARNAP to support and promote community forestry. This project was geared toward encouraging and promoting community forestry in the state of Oaxaca, where a large number of communities won stronger tenure rights over their forests in reforms in the 1980s and 1990s. Over time, PROCYMAF has expanded to five other major timber-producing Mexican states. It works with interested communities to co-finance forest management plan preparation and other silvicultural, conservation, and market studies based on community demand, building the skills and capacity of community members and private-sector service providers so that communities can drive their own forest management and enterprises. PROCYMAF has collaborated with the World Wildlife Fund to cover the costs of forest certification for a subset of communities, and promoted a diversification of enterprises based on NWFPs, tourism, and cultural services, including traditional medical care. The government found that its support was quickly remunerated by increased economic activity and local job creation, with important conservation benefits and investments in other sectors.⁵⁸

The potential exists, therefore, for significant numbers of CBFEs to emerge and grow in tropical timber-producing countries where forest dependence and SMFEs are important parts of the economy. The situation is complex, however. In some countries, extensive experience in CBFEs exists; in others, the policy and regulatory envi-

ronments constitute major barriers against CBFE emergence. This makes it very difficult to assess the comparative or competitive advantages of CBFEs and other private-sector or joint arrangements. It is also difficult to separate problems of incipient enterprises and inherent problems that will limit CBFE success.

Certainly, the success of existing or new CBFEs is not guaranteed. As in the Amazon, Central America, Mexico, Nepal, and Papua New Guinea, many CBFEs will be unable to garner the needed internal social organization, develop the capacity to deliver quantity, quality, or variety to the marketplace, or create the needed alliances with other CBFEs or private-sector entities to establish a competitive niche or develop an appropriate business model. But experience indicates that many others will find success.

For CBFEs to emerge there generally needs to be political and social will, which can grow over time as society begins to demand greater equality and better governance. Starting a CBFE requires a strong commitment among stakeholders to weather long processes of approval, problems associated with production and marketing, and the social pains of organizational growth. NGOs can play a supportive role, but they can also be a block to the further development of CBFEs if they become prescriptive. Support from international and non-governmental actors for CBFE development has often been important for creating political space for innovation and for assisting CBFEs to weather instability in government policies towards them (e.g. in Guatemala, Honduras, Philippines, and Papua New Guinea).

Where positive support for market information, technical training, business and organizational capacity-building, horizontal exchange, and financing to fill gaps has been provided, a number of CBFEs have increased in their production efficiency. Where this support was in the form of projects, or provided without addressing underlying tenure and regulatory barriers, the picture has been less positive.

Another lesson is that policy and regulatory frameworks can be major barriers to the emergence

and growth of CBFEs, particularly when designed for industrial-scale operations or a small number of elites. Governments often make the mistake of applying rules that reduce future revenue streams. Taxation at the point of extraction and some value-added taxes can be counter-productive, reducing overall economic returns at higher points in the value chain. It is also counter-productive to assume that a CBFE should follow a project timeline rather than grow in accordance with its human and financial resources.

As CBFEs mature they tend to diversify into multiple income streams to create more employment and returns and to address social issues that are hard to tackle early on.

Inclusion is a complex and often long-term goal. CBFEs have mixed records in accommodating women and the very poor, although many of the CBFEs studied by Molnar et al. fostered inclusivity as CBFEs matured.⁵⁹ Women and youth tend to become more involved in CBFEs with the diversification of income streams and employment; this may include the production of NWFPs and non-traditional wood products, and ecotourism.

Horizontal learning is an effective way for enterprises to develop and grow. The sharing of experiences among CBFEs with similar product mixes and organizational types can be key to finding appropriate solutions to problems or identifying a new range of opportunities. This is particularly important for improving CBFM practices and in the creation and management of CBFEs based on ecosystem services. Some national forest policies (e.g. in Bolivia, Mexico, Guatemala, and Honduras) have provided explicit space for communities and groups of smallholders to associate with one another. In Liberia, a union of chainsaw loggers is growing in strength, lobbying for new policies, and building long-term relationships with forest communities on mutual terms.

Smallholders and communities naturally favor strong networking and social organization. Associations of CBFEs can be a powerful force; for example, they have played a positive role in the sharing of knowledge among enterprises and communities with similar interests and concerns.

BOX 3. BOLIVIA'S ASLs⁶⁰

In the 1990s, the Bolivian government enacted comprehensive policy reform which privatized state enterprises, decentralized regulation to local government entities, and introduced new land policy and environmental laws. In a series of laws and amendments, local grassroots organizations received legal recognition and a constitutional amendment recognized Indigenous land ownership. Most importantly, the 1996 forest law granted domestic user rights over renewable natural resources to all farmers or communities that hold forests as individual or collective property. The law grants commercial exploitation rights as long as it is done in compliance with regulations on sustainable forest management, and allows the formation of ASLs whereby local people (including former illegal timber traders) can legally obtain access to forest concessions for managed, sustainable extraction.

In 1997, a group of three friends involved in timber extraction in the Tumupasa region of Bolivia decided to organize themselves and other local workers and neighbors as an ASL in order to gain forest concessions for legal timber extraction under the new forest law. They formed the Agroforestry Association of Tumupasa (AGROFORT), which today is one of the most successful and well-functioning Indigenous forest management associations in Bolivia. AGROFORT accounts for 7% of all legally extracted timber sold in the province. From the very beginning AGROFORT members were beset with legal, regulatory, and logistical obstacles. AGROFORT members waited three years after applying for ASL status, only to be informed that they could not receive ASL concessions because their forests were located in an officially designated Indigenous territory and Indigenous groups have exclusive user rights in such areas. Most of the AGROFORT members are of Tacana origin, so AGROFORT began consulting with the Indigenous organization that holds legal claim to the lands and was eventually assigned a forest management area as an Indigenous group. Finally, by 2002, AGROFORT was able to begin operations with an approved forest management plan.

Along with these regulatory obstacles, AGROFORT has struggled with infrastructure and supply-chain limitations. Unable to obtain the capital necessary to purchase equipment for independent extraction and processing, AGROFORT had to contract other companies to extract felled timber and a nearby sawmill to process the logs. Both relationships were troubled by contract breaches and a lack of appropriate equipment and skills, resulting in delayed timber extraction and waste. In the past two years, re-organization of management structures within AGROFORT and the formation of a better relationship with a new timber extraction company have brightened the future for the enterprise. The group's leadership is an outstanding example of self-regulation and initiative in innovating new designs for group management and business structure. Through their self-initiated reforms, AGROFORT's timber extraction more than doubled in two years, growing from 2,366 m³ in 2002 to 5,628 m³ in 2004. Timber extraction and sales are expected to increase further as new relationships deepen and the enterprise continues to learn from past experience.

The connections that this sharing creates have helped smallholders and communities to lobby government and the private sector for changes to regulatory rules and frameworks, and provided a platform for conflict mediation. Associations have

also enabled smallholders to access forest lands for collective management and enterprise and to build capacity over time.

Box 3 documents the evolution of an association of local social associations (*agrupaciones*

sociales del lugar—ASLs) in Bolivia. ASLs have a mixed track record, but a study of 78 of them over time found that what seemed several years ago to be insurmountable problems associated with inefficiency or a lack of marketing power are being resolved as the ASLs mature.⁶¹

Associating with networks like the Global Alliance of Forest Communities (GACF), the Network of African Women for Community Management of Forests (REFACOF), the International Family Forest Alliance (IFFA), the National Federation of Forest Communities of Nepal (FECOFUN), and the Coordinating Association of Indigenous and Peasant

Forest Communities (ACICAFOC) enables CBFEs to share expertise and cross-learn. Through collective bargaining power, networks allow communities to position themselves in the policy dialogues on governance, climate, and economics that are taking place at the local, regional, and global levels.

Associations have proved particularly empowering for women. This is true for women as collectors and traders of NWFPs, women seeking to secure their tenure to trees in farm landscapes and in community owned or managed forests, and women dedicated to the trade of forest products harvested and processed in their communities.

5

Rethinking Business Models for Industrial Concessions and Conservation that Incorporate Rights and Livelihoods of Local People

The history of forest economies that pivot on industrial-scale concessions for export or for domestic and regional markets has been one of failure. Except in areas of low population density where other productive forest management alternatives are difficult, the concessions model has generally led to forest degradation and conversion. It has also institutionalized a web of elite vested interests and chains of corruption, created only limited jobs, and enabled a secondary flow of informal harvesting that has proved impossible to regulate or contain. Revenues have been largely short-term, with few operators moving to a sustainable, independently certified model. In addition, growing domestic and regional demand has made the export-oriented concessions model increasingly difficult to apply. New markets, such as those for wood-based energy, are also emerging. Where rights are recognized, and multiple scales of operation become legally recognized, the structure of industry and the market changes, in part because equipment providers, processing industries, investors, and traders find it possible to invest openly in multi-scale enterprises. There are proven business models of community and smallholder enterprises based on CBFM.

Nevertheless, CBFM and CBFEs face real constraints. To level the playing field for CBFEs, policymakers and enterprise supporters must tackle market constraints head on. Under most forest arrangements, markets have tended to bypass or hurt the poor due to a host of internal and external factors. Externally, politicized rules have enabled

the emergence of monopoly sellers and buyers. Subsidies for industrial-scale forestry and commercial plantations have combined with discriminatory market policies to limit community competitiveness. Regulations have criminalized large segments of the marketplace (e.g. fuel-burning industries, headloading, small-scale sawmilling, and NWFP collection in state forests), without governments finding a credible supply, or made compliance burdensome and costly.⁶²

Many of the reforms designed to favor communities have been only partially successful because governments have failed to provide secure tenure rights or access rights to the resource. This is the case in the Amazon, where Indigenous communities can only engage in commercial enterprises with special permits. In Central and West Africa, large areas have been designated as community forest, but only a fraction has actually been allocated to communities or permits approved for community use. Internal factors limiting market participation within communities include inadequate finance and poor information and technology flows. Community-based producers lack market links, are unable to exploit economies of scale due to their small size and organizational gaps, and lack business expertise.⁶³

Bringing CBFEs out of the informal economy and into the formal economy will enable CBF-private-sector partnerships. The potential for CBFEs is especially great where regulatory reforms empower smallholders to harvest and transport forest products to supply domestic markets for

commodity wood and high-quality wood products. Forest governance is also an important factor in enabling sustainability in CBFEs: in regions of weak governance, insecurity will stifle the potential for sustainably grown wood and ecosystem services, and the harvesting of wood and NWFPs is likely to continue on an unsustainable basis.

A more urgent problem is that the relegation of the informal sector severely limits the scope and potential of CBFM and CBFEs. Without clear rights and legal security to operate, and without legal access to markets, CBFEs are at a fundamental disad-

vantage. While legal CBFEs exist and even flourish, as an employment and production model their full potential is far from being realized because of the legal and practical hurdles they face. Partnerships with the private sector, which are crucial for the success of CBFEs, are possible only where tenure and use rights are secure.⁶⁴ Much progress remains to be made in creating enabling business conditions for small, community-based forest initiatives, and to better understand which policy interventions and reforms are most favorable to the success of CBFM and CBFEs.⁶⁵

5.1 SMALLHOLDER AGROFORESTRY AND OUT-GROWER SCHEMES

Out-grower schemes offer one of the most promising models for CBFEs, especially for plantations and the local supply of fuelwood, fodder, and sawnwood. Potential business models include:

- Agreements in which growers are largely responsible for production, with company assurances/guarantees that they will purchase the product;
- Agreements in which the company is largely responsible for production, paying landholders market prices for their wood allocation;
- Land lease agreements in which landholders have little involvement in plantation management beyond land rental and labor; and
- Land lease agreements with additional benefits for landholders.

Farmers near inland urban markets may be able to compete in commodity wood markets and for NWFPs.⁶⁶ Alternatively, buyers of forest products can help finance local businesses to improve their operations through investment partnerships. The company brings investment resources, business

management expertise, and market links. Local enterprises bring access to forest resources, established businesses, and local contacts. Some international furniture retailers have used such partnerships to help their suppliers obtain forest certification, and investment funds and conservation organizations have partnered with local producer organizations to develop carbon offset projects.⁶⁷

Log harvesting and forest processing companies and transport equipment suppliers can play important roles by providing operating capital to smallholder associations or CBFEs in developing countries. This happens in Mexico: traditional rural banks generally ignore SMFEs, including CBFEs, at forest-sector trade fairs and expositions, but equipment suppliers are highly visible and can connect with new and existing CBFEs. Given this close contact they can be effective partners, although individual CBFEs need to educate themselves about the costs of capital and risks.

5.2 THE ROLE OF APPROPRIATELY DESIGNED SUBSIDIES

There is debate as to whether SMFEs, including CBFEs, are best encouraged by creating an enabling business environment or through direct subsidization. In his analysis of the development of SMEs in Africa, Biggs⁶⁸ identified four reasons for subsidies:

- To stimulate the formation of SMEs in instances where policy-imposed distortions have reduced their number;
- To address market failures that are particular to smaller firms, such as a lack of information, and enforcement problems related to financing;
- To assist in the development of institutional structures that benefit SMEs, such as associations; and
- To improve the learning environments and mechanisms within SMEs so that they can make better-informed decisions related to improvements to strategies, structures, and technical capabilities.

Biggs also warned that subsidies must “go to projects that promote ‘additionality’ rather than funding something that SMEs would have done anyway.”⁶⁹

Payments for ecosystem services (PES) schemes present a particular challenge for governance structures and for CBFEs. Forests provide many services that could eventually find markets—especially with the emerging carbon market. If bundled, such schemes could reach economies of scale. Nevertheless, a key to the success of PES schemes lies in the proper recognition of property rights to land and to ecosystem services. Where these are unrecognized, governance tends to break down; thus, PES schemes are limited to places where tenure is secure and governance effective. In less secure areas, the narrow interests of the private sector, limited institutional capacity, a lack of demand, and the limited voice of poor and Indigenous populations in project and instrument design all tend to unravel even the best intentions.

There is no indication that payments for carbon sequestration and storage will depart from

this trend; indeed, carbon-offset schemes will inevitably seek the most competitive price with the lowest transaction costs and therefore will almost certainly favor large-scale projects in places where tenure is secure. The ability of PES schemes to scale up without excluding or undermining the rural poor will depend on the degree to which markets can be shaped to respect local rights and governance systems.

As the practice of and support for CBFM becomes more widespread, the difficulty in reaching market scale can be overcome by formal or informal integration with networks, clusters, or associations. The collective bargaining power of associations, drawing on the skills and voices of a community, can change the rules regarding CBFM and the national regulation of CBFEs. This occurred in Zimbabwe with the CAMPFIRE program, which focused on the community management of sport hunting by tourists. According to a recent study⁷⁰, a community in Masoka, Zimbabwe, that was providing over 50% of district council revenues threatened to withdraw from CAMPFIRE unless it received a more equitable share of the revenues. The district council had no alternative but to negotiate with the community, which resulted in the establishment of a community bank account, direct payments to the community, and a five-fold increase in revenue compared with the previous year (from US\$23,000 to US\$132,000). As a result of the success of these negotiations, the direct payment method has now been adopted country-wide in Zimbabwe, although it still meets with resistance from some district-level interests.⁷¹

The lesson is that communities can organize collectively to create leverage in negotiations. They can use this bargaining strength to stimulate the political will for reforms among higher-level decision-makers, which would be unlikely in the absence of such grassroots pressure.⁷²

6

Policy Recommendations

6.1 RECOMMENDATIONS FOR NATIONAL GOVERNMENTS

Climate change has shifted the focus of many in the development community to the global level. The most important place for action, however, remains at the country level—where decisions and investments are made that directly affect forests and people. From the perspective of developing countries, the potential value of investment in REDD+ is enormous. Climate change mitigation and the urgency of adaptation measures provide governments with political momentum for addressing rights and governance, rethinking policy and legal frameworks and public-sector roles and responsibilities, and mobilizing additional funds for this purpose. As well as facilitating investments in REDD+, such responses will help to reduce violent conflict, increase capacity for adapting to and mitigating climate change, generate returns from new productive activities, and assist the delivery of multiple ecosystem services from forest areas.

There is a moral imperative to include the poor and those without secure tenure in forest-based climate change mitigation schemes. But there are also practical reasons for doing so: vast areas of the forest landscape are inhabited by the poor; there are risks of moral hazard in rewarding landowners who do the most damage; and there is a risk that forest peoples will find ways to thwart the success of climate change mitigation schemes if they are excluded from the stream of benefits. This latter risk is

one of the reasons why Nepal's National Forest User Group Federation has redefined REDD—in hope—to mean 'rights, equity, democracy, and development'.⁷³

- Scale up efforts to recognize local rights and clarify forest ownership and access.

Many governments have made progress on issues of rights, forest ownership, and access, but many more are only now starting to consider them. Strengthening the ability of communities to protect their rights and to engage with governments and private-sector investors is a starting point. Rights granted on paper are insufficient on their own: communities need tools to monitor and defend them, both in situ and in court. Governments can legitimize and finance community mapping and related social processes for negotiating and identifying local rights of ownership, access, management, and use in forest areas. Effective ways should be found to reconcile agrarian reform, titling, adjudication, and the allocation of land for resource extraction with the effective recognition of forest tenure. Lessons can be learned from other countries and fed into national dialogues, whereby national constituencies become better informed about their options and associated tradeoffs.

- Encourage the spread of SMFEs, and associations with larger industry.

The provision of rights and tenure establishes the foundation for enterprises at various scales that enhance incomes and well-being. Leveling the playing field for SMFEs, including CBFEs, by eliminating direct and industry subsidies, such as tax concessions, special access to research and training, and favored access of large industry to infrastructure or energy subsidies, can provide space for growth and investment. Providing SMFEs with access to appropriate technical and financial support can enable them to thrive in markets in socially and culturally coherent ways while also increasing the participation of women and youth and generating a range of benefits that less socially grounded industry cannot provide. Associations and partnerships, both among SMFEs and with larger private industry, will enable them to reach scale and engage in new markets.

- Support diverse land use and management systems at varied scales.

The integrated and diversified management of the landscape by forest communities and forest dwellers in diverse ecological systems provides multiple streams of income and innovative conservation options, as well as experience in adapting to variations in climate. Recognizing this diversity of systems in customary tenure regimes and

customary governance institutions, reconciling them with statutory tenure and other formal legal systems, and providing technical and financial support, are important steps in developing resilient and affordable climate change adaptation strategies.

- Remove regulatory barriers and encourage voluntary compliance to support rights.

In many countries, restrictions on the commercial and subsistence use of forests, such as those posed by zoning, permit systems, management plan requirements, and the designation of species and areas that are off-limits to commercial harvests, result in an abrogation of recognized local forest use, access, and ownership rights. Overall, there is a need to move from command-and-control regulatory frameworks to systems that encourage best practice and compliance. Simplified regulations and minimum standards should be promoted, including those that govern harvesting, transport, and the legal establishment of enterprises. Incentives-based approaches for larger industry, coupled with enforcement targeted at the most egregious violators of the rules, would make it clear that responsible corporate behavior is also good business practice without disadvantaging operations at smaller scales.

6.2 RECOMMENDATIONS FOR COMMUNITIES AND CIVIL SOCIETY

Communities need tools for monitoring and defending their rights, both in situ and in court. Development agencies, extension agents, NGOs, and the private sector should help communities engage with those who wish to exploit their lands and, in so doing, help them to defend their rights and to benefit from the economic activities that are being pursued. Such actors should also support, at the national level, new cross-sectoral thinking regarding the optimal allocation of the public forest domain.

- Invest in community networks, longer-term training, and the professionalization of community members and leaders.

Technical service providers and intermediaries will always have a role to play, but communities and smallholders need much more expertise of their own. Networks and associations can also commission market and policy analyses, as large private-sector companies routinely do, adding to the ability of communities to plan and grow

both their enterprises and their advocacy initiatives.

- Build constituencies and alliances for reforming policies and regulations, including forest tenure and governance, and leveling the playing field for SMFEs and community scales of management.

Political alliances involving local producer networks, private industry, government agencies, and civil society will lead to greater transparency in forest markets.

- Lobby against climate change interventions that do not strengthen rights and tenure.

Communities and civil society should present a united, collective movement against climate interventions, including REDD+, that do not strengthen human rights and tenure. These demonstrations, both vocal and written, should be carried out at all levels of governance and dialogue—from local consultations to international climate fora.

6.3 RECOMMENDATIONS FOR PRIVATE SECTOR

The private sector plays a key role in socioeconomic development and an increasing number of companies already subscribe to guidelines of corporate social responsibility. Many would be willing to conform to new rights regimes—and to take advantage of new business opportunities arising from an expansion in the scope of rights and livelihood options for local people. Other companies, however, will strive to avoid or resist restraints that might be imposed on their investment opportunities by an expansion of local rights. The following recommendations are aimed at encouraging stronger contributions from all private-sector actors.

- Take a longer-term perspective and develop alliances with smallholder and community-based enterprises to lobby for responsible policy reforms.

Such alliances could help adapt existing sustainable forest management and certification standards so that they are more accessible to small-scale and community-based forest owners and enterprises. They could also help to educate the business and finance sectors on rights issues related to bioenergy, climate change mitigation, and other large-scale activities in the forest sector, and to disseminate experiences and lessons learned from regulatory and tenure reforms. Top-

quality market and policy analyses—the sort that large private-sector companies routinely commission—should assess the conditions necessary for encouraging the growth of alternative tenure and enterprise models.

The forest and agro-industrial sectors, in particular, need to better self-monitor and self-police in order to maintain their social license to operate in developing countries. Codes of conduct should be designed in a manner that ensures transparency and accountability. The World Business Council for Sustainable Development and related international industry associations are increasingly active in this arena. These codes should embrace the right of individual, communal, and minority landowners to give or withhold their free, prior, and informed consent to activities or actions that might affect their lands and livelihoods. Concession operators should be proactive in looking for ways to promote CBFEs and should readily accept corporate responsibility for forest residents rather than viewing social investments as a ‘gift’.

- Identify and support associations of producers, including smallholder growers and NWFP collectors, to foster relationships between private sector and CBFEs throughout the value chain.

There is a need for more vigorous analysis and promotion of business models that are pro-poor and that contribute to more widely-shared economic growth along the value chain. Similarly there is a growing need to connect investors with the commercial enterprises of small producers. Stronger and more equitable partnerships in developing countries can support the resolution of conflicts over Indigenous and community tenure, serve the mutual interests of communities and industry, and creatively leverage market forces for greater social

and economic development. The growing SMFE sector provides new business opportunities, including technical and marketing services, the transformation of new products, and links to international buyers. While some important research has been conducted on SMFEs in the developing world, especially in Africa, additional studies are required to better enumerate their potential impacts on employment creation. A major recommendation is to link future research to the work on small-scale rural enterprises.⁷⁴

7

Message to the Rio+20 Forum and other Political Processes on the Contribution of Forests to Achieving the MDGs

Many in the development community now realize that recognizing and securing land rights, strengthening civil rights, and introducing more democratic governance systems in forest areas is critical not just for moral reasons but also for achieving national and global social, economic, and environmental goals.⁷⁵ They recognize that fair and secure rights to natural resources, particularly land, are fundamental building blocks in any viable strategy for dealing with climate change, reducing poverty, achieving equitable economic growth, protecting the environment, and strengthening resilience in the face of unforeseen future shocks, crises, and opportunities.⁷⁶ Recent changes in the marketplace, both domestically and internationally, including the emergence of markets for ecosystem services, create new dynamics and expand the options for CBFEs.

Governmental, civil-society, and private-sector support can be instrumental in the emergence or development of viable and more equitable CBFM, but it can also distort and stifle. There are many models of success and CBFM is dynamic, changing in nature and structure over time. Success is not guaranteed, nor can it be reliably predicted in the early stages of development.

What is clear is that both internal community dynamics and external policies, regulations, and support are important in either stifling or nurturing the development of CBFM and the CBFEs that emerge as CBFM takes root. A long time horizon and flexibility are necessary. CBFEs have enormous potential to contribute to the poverty reduction

goals embodied in the MDGs by creating local jobs and fostering growth in the local economy, as well as by providing diverse income streams to different categories of community members and smallholders, specifically women and vulnerable minorities.

REDD+ is a potential catalyst through which CBFM could become politically entrenched and economically viable. Future policy development—at the global level through the United Nations Framework Convention on Climate Change and at the national level in climate mitigation and adaptation planning—should pay attention to CBFM as a cost-effective means for achieving REDD+. The cost of recognizing tenure is much lower than the cost of addressing the drivers of deforestation individually when tenure is unclear or inequitable.

A new vision is emerging of a more rights-based model for economic development and poverty reduction in forests and forested landscapes. A number of “what if?” scenarios are on the table in countries undergoing forest tenure reforms in favor of communities. For example, a report by Forest Monitor⁷⁷ to the Government of the Democratic Republic of the Congo on how to regulate the forest law in relation to forest communities describes a future for the country in which strong customary forest tenure and CBFM leads to sound conservation, sustainable livelihoods, and a diversified local and forest economy. Brazil has begun to envision a climate-sensitive development path in which tenure in the Amazon is more rightful and secure and in which SMFEs, including CBFEs, play an ever-increasing role. Indigenous Peoples are bringing

strong voices to negotiations on climate change and biodiversity and envision a major role for traditional forest peoples and communities in mitigating and adapting to climate change, building on local governance and knowledge bases. China is looking beyond its tenure reform in household forest plantations and the positive returns it has generated for incomes and forest industry, initiating reforms in natural forests as well.

Governments and the international community are at a crossroads in the development of the architecture around climate change and development. Either solutions will be further developed from above, with strongly centralized systems of planning and implementation, or the ‘what if?’ of CBFM and the diversification and strengthening of local economies will gain ground.

By and large the forestry and conservation communities have not yet adjusted, or rethought, their approach to development to reflect issues of rights or their global linkages. Nor do the development programs and approaches designed to deal with the broader set of global challenges now facing national and global leaders reflect the pivotal role of rights and governance in forests. As pressures on forests intensify, the effective mitigation of and adaptation to climate change is increasingly dependent on clear and strong property rights to protect forest dwellers, encourage adaptive land management, and provide a foundation for fair negotiation.

Current trends in negotiations related to REDD+ and other proposed climate change interventions, the drivers of degradation and deforestation, and desertification, natural disasters, and the loss of biodiversity pose serious challenges for the tenure and rights of communities throughout the developing world. A new international mobilization around climate change and the link to forests has combined with an increased centralization of government planning and control. This can be a force for positive policy reform and action, but equally it can be a dangerous threat to forest governance and land and forest tenure reform and human rights. Insufficient attention is being paid to

human rights in the climate change debate and in emerging policy and funding instruments. There are also dangerous misconceptions about the drivers of degradation and deforestation and rightful and effective counter-measures.

The lack of a vision in many countries regarding CBFs and other SMFEs is a loss for local people, forest communities, and national economies. This brief makes a case for investing in the future on the basis of equity, rights, and competitiveness. Developed-country consumers are increasingly purchasing and consuming a range of products that did not exist ten years ago: bamboo t-shirts, asahi sports drink powders, aveda creams with 30% shea butter, and wild new rattan-furniture designs. Developing-country consumers continue to purchase and consume the wide range of wood products and NWFPs they have always valued, and demand for such products from newly established middle classes and the diaspora of migrants in Europe, the United Kingdom, and the United States is also escalating. Tourists to the Mexican Caribbean laze under thatched, domed restaurant and lodging *palapas* designed in Mayan times; these now constitute 30% of sales by Chetumal state forest communities but three decades ago they were forgotten architectural designs. Community owners of safari lodges drive tourists to see the ‘big five’ in Madikwe in a park recreated out of land expropriated from them years ago by the South African government. Forest communities are developing better platforms and stronger alliances with change-makers in their counties and countries to defend their tenure and rights and myriad and rich forest-based cultures.

Some people are born entrepreneurs—Stephen Jobs and Bill Gates, for example, were both born to thrive and if they hadn’t developed and sold software it would have been something else. But others, like the Michoacan forest enterprise in Mexico recently reported in *The Economist*⁷⁸, had to learn their entrepreneurial skills over time and develop the social organizations that would adapt them to cultural and community interests and needs in order to grow and thrive. CBFs take time to develop. Countries must respond

urgently to climate change, but they and the international community also have time—time to create a vision of forest management and of the social, cultural, and economic institutions that will make it sustainable. Those who started early on community-based approaches—e.g. China,

Mexico, and Guatemala—have a head start. But there is no question that the potential is there elsewhere, or that there are enthusiastic CBFEs socially grounded in their communities throughout the tropics with interested consumers on the other end of the chain.

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