

# Chapter 13

## Forest Management by Local Communities: Evolution and Current Trends Since the 1970s

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**Abstract** Communities can be good stewards of forest lands as well as providers of forest products and environmental services. For many years most developing countries followed colonial policies claiming ownership and control of forests as national assets. In the early 1970s, sectoral strategies promoted by many governments and donors started to stimulate a dialogue where communities would have statutory rights over land and forests. Community-based forest management is now expanding, underpinned by a very different body of law, policy, and regulation. Many developing countries now recognize this form of management as an economic engine, providing multiple economic, social and environmental benefits. What has contributed to this policy shift and endorsement of collective rights? What has made many community forestry enterprises (CFE) successful? What are the expectations regarding the potential of CFE to contribute to the delivery of sustainable development goals? What is the intersection of CFEs with commercial value chains for forest resources and environmental services? This chapter explores answers to these questions, and discusses the challenges currently faced by CFEs, and the options governments and donors have to help them succeed.

**Keywords** Community-based forest management · Community forestry enterprises · Community governance · Locally controlled forests · Tenure security

### 13.1 Introduction

The role of forests and forestry in rural development continues to be as relevant as it was in the late 1970s. The WB strategy aimed at moving away from an exclusive focus on forestry as an economic sector, recognizing forestry's potential to

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contribute to development in a much broader sense, particularly in poor, rural areas. Development strategies recognized the multifunctional role that forest ecosystems have in generating goods and services at different geographical and temporal scales, and the benefits they provide to different segments of society. Many initiatives also recognized the importance of forests to food production and food security, and the fact that the most affected and vulnerable of all stakeholders to misguided and inefficient forest policies were the local, in the majority poor, communities in these areas. In response to this growing awareness, a new paradigm began to emerge that would increase the share of forest benefits accruing to local communities and small farmers. This shift has sought to put into place a more equitable rural development process in forest landscapes, generating goods and services for the nation.

Many challenges of the 70s not only continue to be valid these days, but many have sharpened, particularly those affecting the rural poor. In 2014, an estimated 1.3 billion people depended on forests for some of their livelihoods (FAO 2014). Many forest landscapes inhabited by communities in the developing world coincide geographically with areas afflicted by high and extreme poverty (Sunderlin et al. 2005, 2007) and in 2008 an estimated 1.2 billion forest-dependent people were living in extreme poverty (World Bank 2008a, b). This correlation has continued to increase, as rural populations grow with a continued dependency on wood products for their needs, including wood for fuel and house building materials.

Forest landscapes are inhabited by many local communities and are prominently governed through community-based tenure systems. This form of tenure is estimated broadly to involve approximately 3 billion people globally, mainly in developing countries (Alden Wily 2018). Tenure security in these areas is uncertain, characterized by limited legal recognition and weak support for community-based tenure rights. In the last three decades, however, several factors have converged to prompt a shift in the legal ownership and control of forest lands, favouring local communities under community-based tenure arrangements. These shifts in tenure paradigms have resulted in significant changes to legal frameworks and the area of land formally held by peoples and local communities under collective tenure (Alden Wily 2018). As a result, the land area held by Indigenous Peoples and Local Communities (IPLC) under statutory laws was estimated at 18% of the world's land in 2015 (RRI 2015). The comparable figure for forest lands held by local communities under statutory laws is less about 16% of the world's forests (RRI 2014).

Although this positive trend in tenure recognition is expected to continue, issues of competing interests, lack of political will for reforms, limited government capacity, and/or lack of coordination across Land and other ministries hinder the consolidation of effective protection of tenure rights held by local communities (Segura Warnholtz et al. 2017). At the same time, global demand for agricultural commodities and natural resources has prompted governments to allocate land to large-scale industrial concessions, including in places where smallholders and communities maintain customary claims (Roth 2013), thus increasing pressures on land across the rural, forested landscapes of many developing countries. Despite significant progress, gaps remain both in the extent and reach of legal reforms and



in their effective implementation. The combination of unfinished tenure reforms and these new pressures risks undermining progress towards human rights, rural development, and environmental objectives that have motivated many of these initiatives to date.

The role of governments, development partners and conservation organizations continue to be highly relevant in this emerging paradigm to promote rural development among local stakeholders in forest landscapes. For this paradigm to succeed, a different approach of how governments and development partners interact and negotiate with local communities and their organizations is needed. Local communities need to be recognized as the key players in their rural space, and the support brought to them must respond to their local conditions, needs and traditional forms of government. Communities undertaking forestry activities will also require assistance to ensure fair access to markets. In the case of forests lacking commercial potential, alternatives can be found to compensate communities for their efforts to conserve biodiversity and other environmental services. This chapter explores many issues and challenges associated with the social dimension of community-based forestry around the globe.

## 13.2 Trends in Forest Tenure

Significant changes in land and forest ownership have occurred in the last 60 years. While most forest continue to be in the hands of government, formal, customary and modified customary systems of land tenure prevail in most developing countries. Estimates range widely, but perhaps as much as 65% of the world's total land area is managed under some form of these systems, while less than 15% is formally recognized by governments (RRI 2015).

Customary rights can extend across many categories of land but are difficult to assess properly due to poor reporting, lack of legal recognition, and lack of access to reporting systems by indigenous and rural peoples (RRI 2018). As evidence of the positive outcomes of supporting community-based tenure and empowering local communities as forest stewards continues to increase, it is expected that this shift in tenure will continue to expand in many developing countries.

Customary tenure systems involve an estimated 2 billion people across Africa, Asia, and Latin America (Alden Wily 2012). Within specific regions, over 90% of Africa's rural populations access land through customary institutions, and a quarter of the continent's land area—some 740 million hectares—is made up of communal property, such as forests and rangelands (Blomley 2013). Approximately 40% of Amazonian forests fall within customary lands of indigenous peoples (Alcorn 2014). Across the Asia region, an estimated 34% of total forest area under community forestry schemes offers one point of insight into the possible extent of community-based tenure systems (Gilmour 2016). A study focusing on the extent of lands under customary ownership of indigenous peoples (rather than indigenous and



community) concludes that they have rights to and/or *de facto* manage over 25% of the world's land surface (Garnett et al. 2018).

In practical reality, government's reach in developing countries is often on paper and most world forest landscapes continue to be governed through formal or informal customary systems, whereby many smallholders across forest and agricultural lands hold their territories within community-based tenure regimes (Agrawal 2007; Robinson et al. 2017). In many developing countries statutory recognition is now becoming an accepted element of property relations where communal lands are formally recognized as a lawful class of property. There can be considerable confusion on the ground where customary systems are the *de facto* reality, but where there is an overlay of rules, regulations and intermittent engagement by central and local government that continue to claim public ownership and fail to recognize or support customary actors in their forest management and conservation decisions and actions.

Around 521 million hectares of forest land is estimated to be legally owned, recognized, or designated for use by Indigenous Peoples and Local Communities (IPLC) as of 2017 (RRI 2018), predominantly in Latin America, followed by Asia and Africa. In the 41 most forested countries of the world, two-thirds of the shift in community tenure between 2013–2017 was related to increases in community ownership, with over 90% of this progress taking place in developing countries. Of the global forest estate, governments have legally designated rights over 80 million hectares (2.2%) to IPLC. In contrast, 1911 million hectares (65%) continue to be formally administrated by governments, and approximately 140 million hectares (5.1%) privately owned by individuals and firms.

International processes have also played an important role in promoting recognition of customary rights. The International Labour Organization, Indigenous and Tribal Peoples Convention (ILO No. 169 adopted in 1989), followed by the United Nations Permanent Forum on Indigenous Issues (UNPFII) established in 2000; and culminating with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) of 2007 have been key milestones and guides for advocacy. The global fight against poverty and for equity in the Millennium Development Goals of 2000, and their inclusion in the current 17 goals of the Sustainable Development Agenda of 2015, have contributed to the recognition of customary systems. Tenure security is increasingly recognized as a basic human right. The Sustainable Development Goals (SDGs) have provided a sound framework to better understand and address the role of forest lands and their tenure in targets for poverty reduction, food security, inclusive and sustainable economic growth, gender equality, forest sustainability, and combating climate change.

A 2018 study found that 73 of 100 countries surveyed had adopted legislation permitting the formal recognition of community-based land rights (Alden Wily 2018). Several governments now recognize ancestral or traditional communal property rights, without requiring formal registration; and others have devised new registration processes for formalizing existing rights (Alden Wily et al. 2016). Together, these advances point the way for future recognition, showing a growing trend towards new provisions for communities to be considered legitimate owners.



Multiple interests and land uses across the forest and agricultural landscapes will continue to take place on customary lands held by IPLC. These may include concessions for various types of commercial investment (extractives, forest, agribusiness, infrastructure, etc.) and state-designated protected areas for conservation. Historically, commercial and state interests have often expropriated community land and/or severely restricted resource use and to the present continue generating competing pressures on lands and resources. Without high standards respecting existing rights, states will further displace rights-holders, undermining a key foundation for livelihoods, development and environmental protection.

Future attention will need to be paid as to how reforms are conceived, what rights are being transferred, and what development outcomes are expected. Where outside actors seek to make (economic or conservation-related) investments potentially affecting customary lands, effective *Free, Prior and Informed Consent (FPIC)* is essential to avoid and reduce conflict and enable, where appropriate, the development of community-company partnerships or community-based approaches to conservation (Segura Warnholtz et al. 2017). Legal provisions should also guide equitable sharing of benefits arising from forest and land uses (Kishor and Rosenbaum 2012). Benefit-sharing measures should be freely negotiated and clearly documented (World Bank 2013).

The agricultural literature lends credence to the assertion that recognizing property rights of communities and smallholders can be an effective measure to further agricultural growth, structural transformation, and poverty reduction (de Janvry et al. 2018). These desirable outcomes, however, require that land reform be complete; both providing access to secure property titles, and to opportunities to use assets productively and competitively (Warriner 1969). A similar finding is true for community forests: that the natural capital – forest assets –, and access that communities must have to markets (together with other rights in the *bundle of rights*) are crucial for successful forest communities and their productive enterprises (Ostrom and Schlager 1992). Reforms that result in the transfer of primarily degraded lands and forests, or that limit the management decision-making and control of outsiders, can hardly contribute to reduce poverty or conserve biodiversity.

### 13.3 Locally Controlled Forest Management and Conservation

The current trends of recognition and devolution of tenure rights to IPLC had a modest start in the early 1970s – or even earlier in some countries like Mexico. What was not well-known at that time by many governments was the extent to which locally-controlled forestry was already the backbone of forest industry in higher-income countries – e.g., USA and northern Europe – nor that this trend would grow.



Small is indeed big, as some authors have often noted (Mayers et al. 2016; Verdone 2018). Forests generating commercial products in the USA are owned in their bulk by smallholder farmers, as well as private individuals or corporations that do not operate wood-processing plants (i.e. considered non-industrial) (Indufor Group 2017). As noted by these authors, non-industrial private forests (NIPFs) make up 59% of the total timberland in the USA and contribute nearly 50% of US timber. There are 7 million non-industrial forest owners, though only about 600,000 with holdings larger than 40 ha (contributing 80% of the non-industrial harvest). Their productivity is impressive. A study by the US Forest Service found that these private forests contributed US\$277/per acre more to GDP than public lands (US\$318 vs US\$41) in 2009 (Forest2Market 2016).

Small private or family forestry business are a major supplier of commercial forest products in Europe. In Finland, Sweden and Norway private ownership covers 60–70% of the land. Outgrower and government-incentivized schemes are also expanding in Asia, Latin America, and East Africa – where there has long been a tradition of tree farming adapted to market opportunities. Forest tenure reform in China has devolved vast government forest plantations areas to collective responsibility forests (managed by individuals within the collective unit) that can more efficiently supply the pulp, paper and wood industry than the state plantations they replaced (Xie et al. 2016).

The potential benefits of giving communities a more prominent role in forest management and conservation is better documented, including the ability of local communities to utilize tropical forests for desired ends while conserving the forest and their fewer tangible benefits (Garnett et al. 2018). Effective decentralization promoting community management also show increased local benefits in the form of better biodiversity conservation and reduced protection costs especially in budget constrained countries. A recent analysis of 80 forest commons across 10 countries associates rule-making autonomy at the local level with greater forest carbon storage and higher livelihoods benefits (Hayes and Persha 2010; Persha et al. 2011).

There are also new insights into the role of indigenous communities in shaping biodiversity outcomes in tropical forests. Many forests, presumed to be the result of isolation from human activity and natural processes, were heavily modified through history by communities, changing the composition and structure of ecosystems for multiple ends, but over time creating and shaping many of the areas currently being designated as pristine and kept from human interaction (Peters 2018).

Local forest enterprises continue to expand into new countries and sub-regions and to gain efficiencies in some countries that pioneered support for such enterprises. Some expansion stems from decentralization processes whereby forest authority and responsibility has been decentralized to local governments (Hajjar and Molnar 2016). Pioneering experiences include Mexico, Central America, Bolivia, Nepal, Tanzania, Zambia, and the Philippines. Community-managed forests have expanded in China, Indonesia, the Mekong region, Mali and Canada. Local-controlled forestry is also evolving as part of broader territorial management by indigenous peoples in the tropics of Central Africa, Central America, South America, and Southeast Asia (Larson and Dahal 2012); e.g. Indonesia's recent



constitutional reform is now a major impetus for community forestry despite continued challenges (Savitri 2016).

### 13.4 The Role of Governments

National governments, while claiming ownership rights over vast forest lands, have repeatedly failed to manage and conserve these resources sustainably, including the biodiversity they contain and the goods and services they provide to rural inhabitants and societies at large. They have also failed, to a large degree, to recognize traditional tenure and use rights and develop appropriate livelihood opportunities for the local communities that live there and depend on these resources for their subsistence. Although some governments are recognizing their own limitations and are willing to transfer or devolve forests to local communities for management, more awareness raising and coordinated actions are needed to confront the rapid forest deterioration and inbred poverty that challenge many forest landscapes.

Many governments, particularly during the colonial era, asserted legal ownership over forests and other lands that were traditionally held by IPLC – wishing to control forest revenues, unaware of customary tenure systems, and/or viewing customary, collective management as backward or inefficient (Larson and Springer 2016). State legal control over forest landscapes often failed in replacing traditional tenure systems with more effective institutions (Bromley and Cernea 1989). Instead, state agencies allocated extensive forest lands to private interests for timber and/or agricultural production, creating widespread deforestation and forest degradation as well as social conflict (Poffenberger 2001; Hecht and Cockburn 1990).

Insufficient attention to customary rights of IPLC in the establishment of protected areas has further contributed to displacement of people in forest landscapes (Colchester 2003). Where IPLC have maintained attachments to and governance of ancestral lands, there is a resulting overlap of systems (Freudenberger 2013). While in some regions, e.g., most of Europe, tenure is relatively uncontested, this overlap of customary and statutory tenure creates conflicts across large areas of forest land in lower-income countries, as well as in some middle- and high-income countries (Gilmour 2016).

Governments continue to be the largest statutory forest owner in most developing countries. More than two-thirds of forest lands are formally administered by governments, while 5.1% are privately owned by individuals and firms (RRI 2018). Although private ownership increased by about 113 Mha between 1990 and 2005, most transfers have occurred in a handful of countries (e.g., China, Colombia) and primarily benefitting individuals or private corporations (RRI 2018). Central governments therefore continue to drive development decisions over a vast rural area; the question arises whether government agencies are equipped to take on and succeed in overcoming the resulting challenges.

Since the early 1970s government forestry agencies have been expected to play a greater role in developing policies and programs to improve rural livelihoods –



moving from a model of command-and-control to collaborate-and-connect. Many institutions were of recent origin in the then lower-income countries and modelled on German and American agencies that were strongly timber- and industry-centric. It was assumed that state control was best. The new institutions lacked experience, were constrained by restricted budgets, and carried out limited training. In many developing countries, the political influence of forest agencies has been directly dependent upon their revenue stream and territory, encouraging state ownership and control rather than building the capacity of citizens and communities as stewards and beneficiaries.

The limitations and poor performance of forestry agencies have still not changed significantly in most countries during the last two decades. Hierarchical structures continue, with too-limited budgets and capacities for planning and regulation of forest management, limited experience in economic planning and land use strategies, and consequently a marginal influence on broader rural and agriculture sector policy (Larson and Pulhin 2012; Smyle et al. 2016). Between 1990–2015, for example, public expenditure in forestry increased dramatically, while income grew marginally, and employment remained constant at about 12.7 million jobs (Whiteman et al. 2015).

These limitations are exacerbated by the silo nature of government agencies, whereby coordination with other rural authorities is made impossible by strongly centralized mandates. Overlapping policies and institutions foster competing economic interests in land administration and territorial planning, environmental management and conservation, agriculture, transport, and development of energy and extractives. Such inter-institutional conflict creates incentives for corruption as well. Creation of parallel power structures with overlapping forestry management functions in rural forest landscapes, such as in India, fosters administrative conflicts at the village level (Ahuja 2014). This also marginalizes local stakeholders, including district and municipal governments, both in decision-making and access to benefits.

Restricting governance of forest lands and public protected areas to forestry, environmental and conservation agencies have allowed deforestation and degradation pressures to build while missing clear opportunities to build on local peoples' positive contributions. Tenure reform and recognition of customary rights constitutes an important step toward better management of forests, as well to enhance the livelihoods of local people. Without commensurate reform of outdated regulations, countries miss opportunities to adapt IPLC traditional resource knowledge for blended systems that are more sustainable and cost effective (Pacheco et al. 2012).

Even when communities are mandated to regulate commercial logging, central agencies often continue to prescribe complex and counterproductive, top-down solutions. In India, for instance, communities prepare micro-plans for Joint Forest Management (JFM) areas, but these micro-plans must comply with competing working plans of the state's Forest Department. While under the JFM regime the legal status of JFM Committees or groups and their autonomy from forest department varies by state (Sarin et al. 2003), overall tenure insecurity in JFM lands is relatively high. The JFM regime itself is a product of incomplete reform



based on a government-issued 1990 circular, an executive order that can be rescinded anytime at the discretion of government (Government of India 2010). Further, state-level JFM resolutions based on the 1990 circular lack the force of law, perpetuating continued authority of forest departments over community-level groups and undermining their incentives for participation or corrections (Upadhyay 2003). Forest department strictures also skew timber benefits away from JFM communities, with a lion's share to contractors or departments themselves (Murali et al. 2003).

Conservation approaches, often overlaid on regulations prescribed by forest management agencies, have historically ignored local tenure rights and established community access and use in favour of conservation set-asides for which governments commonly have limited funds for consistent protection and management. By contrast, good practice in countries with successful locally controlled forestry, such as Sweden, applies a model of accountability combined with regulations that are better focus on desired outcomes, rather than prescribed inputs (Elson 2012). Government investment in research and development, often in partnership with associations and the industrial private sector, and emphasis on training and smallholder capacity, can have better positive results (Segura Warnholtz 2014).

Decentralization of forestry and conservation related responsibilities to regional and local elected officials and forest tenure holders is, of course, not without challenges (Segura Warnholtz 2017). There is often a lag in clarifying authorities between central and local government levels, persisting, outmoded regulations, and a lag in organizational and technical capacity-building for both district or municipal governments and community organizations. Where these issues are addressed more systematically, assessing local capacities, financial needs, inter-sectoral coordination, and management scales, the results can be impressive.

On a positive note, the last two decades have seen a growing trend to empower local stakeholders in their role of tenure holders and managers of forest lands. Several factors are converging to prompt a shift in the legal ownership and control of forest lands back to IPLC under community-based tenure arrangements. One factor has been the mobilization of social justice movements for the recognition of customary land rights, movements that have been particularly prominent in Latin America (Gonçalves and Telles do Valle 2014; Yashar 1998). Another factor has been the experience and broader awareness, as noted above, of negative forest and poverty outcomes under state control, and concern to ensure that local people can generate livelihoods benefits from land and forest resources. A third factor has been the increasing knowledge and understanding of collective tenure and governance systems. As brought to prominence by Elinor Ostrom's work on governance of the commons (Ostrom 1990), lands and resources are often governed effectively by local institutions for collective action. Finally, another positive trend has been the international and regional initiatives for sustainable wood supply and for mitigation of climate change by forest carbon sequestration. These pressure governments to control illegal logging and trade and deforestation from large-scale agriculture. The REDD+ forest climate initiative also generates new public and private finance flows



apt for communities and farmers and making more community-friendly laws and policies attractive to governments.

While governments are moving in the direction of transferring rights and the control of forest resources to local communities, the final outcomes will be limited if use and management rights continue to be constrained by limited tenure and over-regulation. In moving forward, governments need smarter, more creative solutions that empower local forestry stakeholders and encourage them to manage the consequences of their own decisions (Larson and Pulhin 2012; Macqueen et al. 2018; Porter-Bolland et al. 2012; Seymour et al. 2014). It is time for this alternative model of rural development, already providing a diversity of environmental and socio-economic benefits, to expand at scale and more quickly.

### 13.5 Community Governance and the Forest Commons

A substantial proportion of forest areas is governed through community-based tenure systems whereby the total land area of the community is held collectively, often with rights derived from governance through custom and customary institutions (Agrawal 2007; Robinson et al. 2017). For success, these institutions need to operate and evolve in an environment of collective action that is inclusive, transparent and accountable. Governments and development partners have often poorly understood, ignored, or undermined the role of these institutions, missing opportunities to strengthen social capital, particularly when formal tenure security remains precarious.

The options are multiple. Collective forest lands may be managed as commons and/or allocated to individual households. Many community lands combine both common, collective property with secured, individual landholdings (Alden Wily 2018; Fitzpatrick 2005; RRI 2015). In fact, many smallholders across forest and agricultural landscapes hold their lands within community-based tenure systems because of the significant economic and social advantages derived from participating in a collective (de Janvry et al. 2018). Existing customary institutions may need new structures or capacities to better serve the interests of marginalized groups or deal with new pressures and challenges. Structures such as community assemblies with representation of all members of the community can enable inclusive and effective, democratic decision making.

Community institutions must also have the autonomy to make locally appropriate decisions about allocation and management of lands and resources, productive use, management rules and sanctions, and benefit-sharing. With broader involvement of all members, locally appropriate decision making can avoid elite capture and negative impacts on vulnerable groups, as well as to engage all resource users in defining resource management rules and monitoring systems that are sustained over time. Inclusion of women in governance and decision-making processes is critical for sound rule-making and social inclusiveness and enabling wider development benefits. Social norms more often underrepresent women in the governance systems,



but women's groups have come together and notably increased their participation over time. Sometimes government law or policy mandates have strengthened women's membership in community institutions. A growing body of literature shows a strong link between gender equity, particularly women's land rights and their power to shape household decision making on food, education, and family investment (Meinzen-Dick et al. 2017). However, the weakness of rural women's tenure rights over those of men have multiple causes and implications. There are often strong gender biases against women's land holding and participation, and an over-emphasis on commercial forest activities at the cost of women's use common property resources, many of which are significant for household and community well-being but invisible or poorly understood by other stakeholders (FAO 2011). Land rights empower women to participate more actively in community institutions, generating positive returns for them and their families (FAO 2012; IDLO 2013; Ingram et al. 2015).

Stronger community governance helps address the wider social and political dimensions of poverty. Joint decision-making on natural resource governance also strengthens grassroots democracy (RECOFTC 2013), and builds social cohesion needed for resilience in the face of natural and human-induced disturbances (Gilmour 2016). For both governance and livelihoods benefits to reach the poor or those at risk of marginalization, community institutions and decision-making processes must be set up by governments and donors to represent and respect their interests (Blomley 2013; RECOFTC 2013).

Research networks such as the International Association for the Study of the Commons and the International Forestry Resources and Institutions network have documented the knowledge and practices used by customary tenure systems and their effectiveness over time. Effective collective action can enable communities to protect local interests in their engagement with outsiders, even in the face of higher land values and increased land and resource demands (Byamughisha 2013; Deininger et al. 2011; FAO 2016). Sound consultation processes for investments on or affecting community lands (Anaya 2013; Feiring 2013) and dispute resolution processes for tenure conflicts and capacity to access legal counsel and courts (Byamugisha 2013; FAO 2016) are also facilitated when communities have strong, internal, social cohesion.

Community-defined rules and/or plans for land governance with the flexibility to set locally adapted rules for land and resource management are associated with positive outcomes for the forest and for local livelihoods (Persha et al. 2011). Many communities also choose to develop holistic land or territorial governance plans, such as the life plans developed by many indigenous communities in South America. These plans articulate the vision of the community for the stewardship and use of their lands, territories, and resources in accordance with community values. Participation by all members of the community in the definition of local uses and rules foster better outcomes. Community land governance rules or plans also provide grounding for monitoring and enforcement of agreed uses, both within the community and in relation to outsiders. Maps and spatial plans often form a central



part of governance plans, enabling visualization of the geographical distribution of resources, uses, and management activities.

As communities move forward in the establishment and empowerment of their governance systems, new challenges will be faced, particularly when dealing with outsiders to protect their rights and negotiate with private investors. Governments and development partners can and should play a role in helping communities confront these challenges. Their facilitation will have to start with the formal recognition of community institutions, their governance systems and their rules. Other actions can include the documentation of tenure rights, community plans for sustainable use, tools for negotiation with outsiders, internal benefit sharing arrangements, and standards and tools for monitoring the status of natural assets, and sanctions for violation of rules (World Bank 2019).

### **13.6 Community Forestry Enterprises – New Players in the Rural Landscape?**

Transferring forest rights to communities is a very important step towards the sustainable use and conservation of forest resources, but as known, this element alone is not enough. Community Forestry Enterprises (CFE) create incentives and enabling conditions for sustainable use and conservation of forest resources and have proven to be an important economic sector in rural areas. To succeed and reach their full potential, several key challenges must be overcome. As with any other private enterprise, the inherent commercial value of forest, the capacity of its managers to access markets successfully, the technical capacities of right-holders to manage forests sustainably, and their access to financial services are some of the most common constraints that communities confront. Assistance to address these challenges is probably the most important role that governments and donors can provide to improve the social, economic and conservation outcomes of forest communities' management of forest landscapes.

Most of the forest estate with inherent commercial value in developing countries (82%) is still formally in the public domain. Approximately 1.2 billion ha of the 2.5 billion ha, are under production forestry (mainly in concessions to corporations). A significant percentage of these forests, however, are managed by local communities through established but informal, customary systems. An assessment in 48 developing countries representing over 93% of their forest cover, local communities legally own at least 418 Mha (15.2%), and another 70 Mha (2.5%) has been legally designated for their use (RRI 2018). Locally controlled forest businesses, either formal or informal, have been largely invisible as an economic player until recently, despite their significance in numerous countries.

The value of the forest assets and the opportunities to improve productivity and competitiveness are key factors determining the viability of a CFEs. This will determine if and how communities engage in commercial activities, develop higher



value wood processing and move up the value chain. Wood processing is a capital-intensive enterprise and only some communities find the returns worth the concentrated investment and management requirements. The most successful timber enterprises have evolved in areas where natural capital is high to start with, and where there is enough road infrastructure to reach markets, or local markets with enough demand. Some communities have developed clusters as cooperatives with neighbours to reach economies of scale. Second generation enterprises have developed in communities in Mexico and Central America diversifying incomes with finished wood products, industrial grade resins, bottled spring water, foods or condiments from non-timber forest products, fibre handicrafts, and forest tourism. Diversification of enterprises favours involvement of women in administration roles and income-generating activities – increasing job opportunities and their presence in decision-making as well (Bray et al. 2003).

Even when natural capital has enough commercial value, communities will also be faced with the decision to invest or not in a medium or larger scale operation, either to satisfy local community needs and/or to engage with outside markets. Commercial operations need more specialized technical, administrative and marketing abilities which some communities have addressed by creating CFEs as specialized administrative units, which have a certain degree of governance and financial independence, but which report to the main governing body of the right-holding community. Competing in a crowded marketplace, CFEs are presented with challenges like those of a private enterprise – to perfect production, access appropriate markets, and remain competitive. The high transaction costs associated with the small scale of operations, the limited access to financial capital, and the more complicated administration of common pool resources, where multiple interests must be satisfied and few employees are highly skilled, puts an added burden on many of these CFEs.

A comparative analysis of 286 Mexican forest communities—those provided with support to strengthen their social capital and other forms of capacity building<sup>1</sup> and those simply provided with enterprise financing or basic forest technical assistance shows a clear difference in enterprise performance controlling for forest type and quality—those benefitting from capacity building have been better able to develop profitable business accepted by the rest of the community, better able to weather market conditions and develop additional streams of income, and incorporate women into the enterprises in a traditional male-controlled sector (Merino-Pérez and Segura-Warnholtz 2005; Segura Warnholtz 2014; Torres-Rojo et al. 2019).

Another form of social capital of great importance for small and medium enterprises is that associated with the role of second and third level organizations. In a complex market environment these organizations have adopted a polycentric

<sup>1</sup> Capacity building included support to establish and strengthen both social (e.g. support to community governance institutions for improving planning, developing community rules, monitoring and evaluation of community plans, development and enforcement of community rules) and human capital (e.g. specialized technical assistance and training, including community-to-community exchanges).



structure that facilitates benefits at multiple scales and reduces risks (Ostrom 2010). The role of producer alliances, associations and federations have been one means of addressing the issues of small-scale and access to learning about one another, increasing their political and economic influence, and attracting outside finance, market and brand recognition, and, for some, providing shared infrastructure, equipment and business support (MacQueen et al. 2018). Smallholder and community forest organizations are found at all levels. The Food and Agriculture Organization of the UN's Farm, Forest Facility works with five global and regional associations: the International Family Forestry alliance (iFFa), the *Alianza Mesoamericana de Pueblos y Bosques/* Mesoamerican Alliance of People and Forests (ampb), the Asian Farmers' Association for Sustainable Rural Development (aFa), the Global alliance for Community Forestry (GacF), the International Alliance of indigenous and Tribal peoples of the Tropical Forests (iaiTpTF). National and sub-national federations exist in many countries including Canada, Finland, Sweden, Austria, Norway, Nepal, countries in Central America and Mexico. Governments can and should play a more active role in promoting and supporting these organizations, particularly in regions where they are most needed, where demand for forest products and markets are growing and where small and medium enterprises have a competitive advantage.

Another lesson from Mexico is that it is impossible to predict success of community forestry over the short term. Communities will change and adapt, and those predicted to be the most successful may fail to sustain enterprises, while those facing challenges may find creative solutions to organizational or operational constraints and reach a long-term success (Segura Warnholtz 2014). Developing a mature enterprise model compatible with community governance takes time and trial and error. This lesson is mirrored in the experience of communities in Central America who are members of the Mesoamerican Forest Communities Alliance – another set of communities developing community forestry models over more than 20 years (Stoian et al. 2018).

In a significant number of cases, commercial forest and non-timber operations will not be a viable option for local communities, either because the value of their natural capital is too low or because of structural constraints to access markets (e.g. limited access to forests, distance to consumer markets, limited access financial capital). Many forest areas that fall into these categories are precisely those that possess high biodiversity value, and which provide important ecosystem services, including water and carbon retention. These values from forest ecosystems are an important positive externality provided, in its majority, by local communities. Community lands with these conditions are the most vulnerable to problems of open access, deforestation and degradation. It is prominently in these areas where government attention and support are most needed, mainly because the opportunity costs for conversion to non-forest uses will tend to be low, and because the communities living there are usually the most marginalized.

Environmental and conservation policies in many of these areas, unfortunately, continue to be heavily influenced by conceptions of the western international conservation community regarding forest ecosystems. A general premise has been that the best way to ensure the preservation of these areas is to exclude people,



stopping the harvest of forest products, gazettement more protected areas, and hiring more guards. Forest and environmental agencies need to move away from this paradigm and invest in identifying high biodiversity and environmental value areas and work directly with communities to implement schemes that generate income and employment opportunities from conservation.

Payment for environmental services (PES) systems, and to a lesser extent, biocarbon financing through REDD+ are beginning to show promising results as alternative incentive-based schemes which address both conservation and poverty reduction goals. Both Costa Rica and Mexico, two of the few countries that have pioneered national PES programs for almost two decades, are showing encouraging results in reducing deforestation, protecting natural habitats, and maintaining carbon sinks. PES as an instrument for conservation has shown to reduce both forest cover loss and forest fragmentation (Ramirez-Reyes et al. 2018). When compared with protected areas, PES schemes show equivalent conservation outcomes but better impacts on livelihoods (Sims and Aixa-Garcia 2017). In addition, PES programs have significantly increased the social capital of community governance institutions in their efforts to manage their common pool resources sustainably (Alix-Garcia et al. 2018).

### 13.7 Conclusions

As forest communities benefit from the increasing recognition of rights to own forest lands and their self determination to manage resources, a new paradigm is emerging on how governments and development organizations perceive them and provide the support required to undertake challenging endeavours. Recognizing the potential of locally controlled forestry to improve development outcomes has been an important first step. Outsiders, governments, donors and practitioners must strive to understand how these emerging players operate and the constraints and challenges they must overcome to achieve sustainable environmental and economic outcomes. The recognition and support of customary institutions and their forms for governing forest resources as commons, and the challenges that small, medium and community forestry enterprises face to access and successfully compete in the marketplace will continue to be key factors to address. For those communities where commercial activities are not viable, governments will need to develop alternative livelihood options and schemes to compensate their contributions to maintain environmental and conservation values.

The last 60 years have seen an increasing acknowledgement of the potential of locally controlled forestry organizations and a substantial recognition of the forest tenure and rights of millions of IPLC, whether statutory ownership rights, rights of management and use, or recognition of informal customary tenure systems. Although such formal recognition continues to be a small fraction of the extent of forest areas estimated to be under customary tenure systems, regions where formal



recognition is greater, such as Latin America, have had an important influence on countries from Africa and Asia, which still lag in recognition.

There is also stronger evidence regarding the multiple benefits of community and social forestry, particularly where local autonomy and community ownership link to formal participation in rulemaking (Chhatre and Agrawal 2008). Documented benefits include carbon storage, biodiversity conservation, contributions to GDP and local livelihoods, protection of water flow and quality in a world of increasing water scarcity, reduction of social and civil conflict where rights are recognized and secure, opportunities for gender equity and income improvements, and access to forest-derived medicinals, herbaceuticals, seasonings, fuel, fodder, and foodstuffs.

A promising trend, difficult to predict even as of a few years ago, is the emergence of a rich community of second and third level producer organizations. These include forest associations and federations of smallholders and forest communities, which operate at different geographical scales. They work with small producers with a polycentric approach, which facilitates benefits and reduces risks of at different scales. Their support to CFEs include political cover and advocacy at a scale often needed by development partners and governments to address needs of local communities, particularly when scattered in remote areas. They can also support producers to advocate with governments or can be an effective interphase with the private sector, as well as provide capacity building and financial assistance. As more is learned about the key role that these organizations can play – as legitimate intermediaries and partners – to develop a more effective CFE sector, governments should provide more recognition and better support and capacity building.

Governments in their role as owners or regulators of commercial, environmental and conservation activities in forest landscapes have often not been effective in fulfilling their mandates. This has repeatedly resulted in forest degradation and an increased poverty and marginalization of forest dwellers. Regulatory frameworks in many countries continue to be derived from a model of state forest management and control. Rather than being smart regulations, tailored to varied local conditions, governments have created unnecessary barriers to the competitiveness of community and small-scale enterprises. They have also missed important lessons learned on smart, bottom-up regulations developed for private and public forests by some high-income countries dealing with similar scenarios (e.g. Scandinavia, USA).

The role of governments will continue to be highly relevant in forest landscapes. Trends in tenure recognition and devolution of rights to local communities need to parallel shifts away from vesting management and control authority over forests by the State. New paradigms are needed by public institutions to recognize and respond to local conditions and needs. In moving forward, forest and conservation agencies will need to regulate and design support programs that more directly address the challenges of locally controlled forestry organizations and recognize their true links to constituents. They will increasingly demand these roles from government and expect them to conduct these based on the principles of a more legitimate and inclusive collective action process.



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