



Food and Agriculture
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Small-scale forest enterprises in Latin America

Unlocking their potential for sustainable livelihoods



FORESTRY
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Small-scale forest enterprises in Latin America

Unlocking their potential for sustainable livelihoods

Required citation: Del Gatto F., Mbairamadji J., Richards M. & Reeb D. 2018. *Small-scale forest enterprises in Latin America: unlocking their potential for sustainable livelihoods*. Forestry Working Paper No. 10. Rome, FAO. 86 pp. Licence: CC BY-NC-SA 3.0 IGO.

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ISBN 978-92-5-131119-6

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Acronyms and abbreviations

| | |
|-----------------|---|
| ACOFOP | Association of Forest Communities of the Peten |
| CBF | Community-based forestry |
| CBFE | Community-based forest enterprise |
| CBO | Community-based organization |
| CF | Community forestry |
| CFM | Community forest management |
| COATLAHL | Regional Agroforestry Cooperative “Colón, Atlántida, Honduras”, Ltd. |
| COINFO | Inter-Community Forestry Committee of the Velasco Province |
| FSC | Forest Stewardship Council |
| LAC | Latin America and the Caribbean |
| SFP | State Forest Permissions |
| SLA | Small Loggers Association |
| SSFE | Small-scale forest enterprise |
| TCO | Community Land of Origin |

Acknowledgements

This publication is part of FAO's work on forestry with focus on small-scale forest enterprise development and poverty reduction. This work was developed under FAO's Strategic Programme on Reducing Rural Poverty.

The publication revises and expands on a technical report written in 2014. The authors would like to thank the following persons who provided written contributions or helped with the case studies in that preliminary report: Evandro Araújo, Carlos Rico, Sergio Herrera, Eduardo Ramírez, Rolando Vargas, Renato Bezerra, Ricardo Brown, Jessyca Flor, Victoria Flores, Nubia Jaramillo, Juan Lira, Milton Reinoso and Damián Villacrés. A special thanks to Michael Richards whose help in writing the first draft with professionalism was extremely valuable.

The publication was prepared by Filippo Del Gatto with the contributions, supervision and technical guidance of Jeremie Mbairamadji and the overall coordination of Dominique Reeb, both from FAO. It benefited as well from the contributions of the participants from Latin American and Caribbean countries at the 2014 Regional Expert Meeting convened by FAO in Santiago, Chile. Thanks to Jorge Meza, Senior Forestry Officer and his team for their support and collaboration in the organization of the expert meeting in Santiago.

Thanks go also to Andrew Taber and Jeff Campbell of FAO for the review and technical clearance, Annie Hildebrand for copy-editing, James Varah for proofreading, Kate Ferrucci for graphic design and layout and Teresa Vereni for administrative support.

Executive summary

Latin America's experience in the development of small-scale forest enterprises (SSFEs) is both rich and unique. Mexico, which has had a vigorous SSFE sector since the 1970s, has been a pioneer in this regard and several other countries followed suit in subsequent decades. It is therefore no surprise that SSFEs are numerous and increasing in number in many Latin American countries. While some have developed strong associations and alliances to promote and sustain their growth, their potential has yet to be fully realized. Significant obstacles to their growth and expansion still exist in many countries.

In this context, this publication focuses on SSFE development in Latin America, documenting their current status and recent trends, identifying key challenges and opportunities and formulating a set of recommendations to strengthen the SSFE sector in the region.

The primary lessons drawn from the case studies examined and the literature reviewed are as follows:

- **Property rights:** Without secure, long-term tenure of land and/or forests, SSFEs have little incentive to make long-term investments. Major advances have been made in Latin America regarding securing or strengthening the property rights of forest-based communities. Yet many cases of insecure or short-term tenure and partial devolution of rights remain.
- **The regulatory framework:** Arguably second only to tenure in terms of importance, another primary challenge for SSFEs is the costs imposed by inappropriate regulatory frameworks originally designed to minimize the environmental costs of industrial forestry operations. Attempts to adapt these frameworks have struggled to escape some of the original design elements. These costs undermine the economic viability of SSFEs (see also final lesson below).
- **Institutional environment:** SSFE development initiatives face a persistently limiting institutional and political environment in all Latin America and the Caribbean (LAC) countries. This is the case with much of the legislation, policies and regulatory bodies affecting community forestry, but also those that affect forest product markets and access to and conditions of credit. Cumbersome regulatory frameworks tend to operate as institutional barriers and impose excessive transaction costs on local SSFEs.
- **Business development and marketing capacity:** Many SSFEs fail due to weak business organization. In Mexico and Central America, however, where most communities have a long history of market exposure, SSFEs have been able to develop market-oriented relationships and institutions. The “inclusive value chain” approach adopted by many SSFEs in Mexico, for example, has successfully built trusting relationships with timber companies.

- **Access to capital and finance:** Most financing mechanisms for SSFEs in Latin America contain significant subsidies. The “difficult economics” of community forest management make obtaining commercial loans unrealistic, particularly in the case of timber-based SSFEs. If subsidized finance is unavailable, SSFEs have little alternative but to accept funding from downstream value chain actors. Such relationships tend to be inequitable.
- **The challenge of economic viability:** Most of the challenges identified above are underlying factors that will determine the economic viability and sustainability of SSFEs. Those SSFEs that have demonstrated long-term economic viability have generally benefited from long-term, external financial and technical support. Viability is therefore conditional and rather precarious.

The publication concludes with the following key recommendations:

- Strengthen the bundle of property rights vested in SSFEs, including rights of access, rights to exclude outsiders, rights to establish and enforce rules, rights to harvest, transport and market products and rights to make management decisions.
- Develop appropriate regulations and procedures for SSFEs in order to ensure property rights, including commercialization rights, are fully exercised rather than undermined.
- Strengthen institutions and build business and governance capacity by:
 - strengthening existing institutions;
 - supporting community-driven planning processes and participatory community mapping;
 - supporting second-order SSFE service associations;
 - developing business and marketing capacity through “training the trainer” courses;
 - providing market information and marketing support to SSFEs;
 - developing information networks, alliances and learning opportunities; and
 - re-training government staff to adopt a more facilitative role.
- Strengthen law enforcement and governance in order to increase business confidence and ensure SSFEs avoid the common problem of “unfair competition” from cheap illegal forest products.
- Provide appropriate financial support/incentives, which requires undertaking country-level analysis and consultation to design appropriate financial incentives for SSFEs.
- Empower women, for example by monitoring female participation in SSFEs. This can be done by adapting tools developed in the agriculture sector to measure the roles and extent of women’s engagement.
- Carry out research to raise the policy profile and promote equity of SSFEs, including conducting longitudinal research on the outcomes of SSFE and gender-differentiated value chain analysis.



PART 1.

BACKGROUND AND MAIN TRENDS



1 Introduction

The United Nations Food and Agriculture Organization (FAO) estimates that in 2015 Latin America and the Caribbean (LAC) contained about 935 million hectares of forest, just under a quarter of the world's forest resources and about half its tropical forest area (FAO, 2016). Of this, 83 percent was in the Amazon sub-region, 9 percent in Mesoamerica, 7 percent in the “Southern Cone” countries and 1 percent in the Caribbean. Five countries account for four-fifths of total forest area: Brazil (53 percent), Peru (8 percent), Mexico (7 percent), Colombia (6 percent) and Bolivia (6 percent).

During the period 1990–2005, forest loss in the LAC region was about 4.5 million hectares per annum (about one-third of total global forest loss), but this has recently (2010–2015) fallen to 2.2 million hectares (FAO, 2016). This decreased rate of deforestation is mainly the result of reduced annual forest loss in Brazil, from 2.5 million hectares for the period 1990–2000 to just under 1 million hectares in 2010–2015. There was also a net increase in the forest area of the Caribbean sub-region during this period, mainly due to the abandonment of sugarcane plantations and other agricultural land. Chile, Costa Rica and Uruguay also experienced a net increase in forest area¹ during 2010–2015 (FAO, 2016).

There is no clear data on how many people depend on forests in the LAC region, although Mery *et al.* (2009) note that the livelihoods of over 100 million people in Latin America depend directly or indirectly on forests. According to data collated by the Forest Peoples Programme (Chao, 2012), there are about 40 million ‘forest peoples’ in Latin America, three quarters of whom probably live in the Amazon region. In addition, Molnar *et al.* (2011) estimate that small-scale producers supply over 95 percent of timber extracted from the Amazon.

Latin America has a rich and unique community forestry history, which existed prior to the colonial period. Prior to the 1500s, Latin American communities integrated agriculture and forests into managed landscapes. As in Asia and Africa, colonialism led to centralization of forest ownership and control, but local communities continued to exercise their rights over vast tracts of forest, often against the wishes of colonial rulers and subsequent postcolonial governments (Alcorn, 2014). Mexico has been a pioneer of community forestry. This is the result of agrarian policies originating from the Mexican Revolution (1910–1917) and the gradual recognition of community rights over lands and forests, which laid the foundations for the vigorous community forestry sector emerging in the 1970s (Bray *et al.*, 2006). More recently, several other countries have promoted

¹ While these countries have increased their forest plantation area, only 1.4 percent of total forest area in LAC comes in the form of plantations. While plantations are an increasingly important source of timber, plantation expansion is not a major factor in explaining changes in forest area compared to (for example) East Asia (FAO 2016).

community forestry and/or recognized indigenous and community property rights in forest areas, notably in the Amazon region (Brazil, Colombia, Bolivia, Ecuador and Peru) and in Central America (Nicaragua, Guatemala, Honduras and Panama).

It is widely accepted (Mery *et al.*, 2009) that the fate of the region's forests is closely associated with issues of poverty, population growth, farm productivity and expansion and the policies – especially those affecting tenure and governance – impacting on rural populations who live and work in and around forest areas. The premise of this paper is that strengthening the small-scale forest enterprise (SSFE) sector is central to reconciling two underlying and interdependent agendas: ensuring sustainable forest management (SFM) and contributing to the globally vital environmental values of the region; and meeting the development or poverty alleviation needs of the tens of millions of people whose livelihoods and welfare depend on LAC's forests and trees.

The primary objectives of this paper are: to document the current status and recent trends of SSFEs in LAC; identify key challenges and opportunities; and formulate a set of recommendations – particularly with regard to policy and governance – to strengthen the sector and generate positive social, environmental and economic outcomes.

This paper is divided into three parts. The first considers the contextual background and addresses the main trends and issues facing the SSFE sector in the region. The second describes six case studies, divided according to “more successful” and “more challenging” experiences. Using these case studies as a basis, the third part focuses on lessons learned and emerging issues for the development of enabling policy frameworks for SSFEs.



2 Definitions and terminology

Before providing our own SSFE definition for the purposes of this paper, it is important to define the forest management regimes governing forest resources.

- The terms “community forest management” (CFM) refers to formalized community forestry operating with *de jure* or at least legally recognized usufruct resource rights;
- “Community-based forestry” (CBF) is defined as those “initiatives, sciences, policies, institutions and processes that are intended to increase the role of local people in governing and managing forest resources”. It includes formalized customary and indigenous initiatives as well as government-led initiatives. It covers a range of activities with social, economic and conservation dimensions, including decentralized and devolved forest management, smallholder forestry schemes, community–company partnerships, small-scale forest-based enterprises and indigenous management of sacred sites of cultural importance (Gilmour, 2016). Community-based forestry has a broad meaning that includes formal and informal sector enterprises and smallholders. Gilmour (2016) also makes a strong distinction between formal sector enterprises in compliance with legal frameworks and with *de jure* resource rights, and those groups and individuals operating primarily in the informal sector with *de facto* resource rights.
- Pokorny *et al.* (2008) define “community forestry” (CF) as commercial local forestry promoted by external agents (thus emphasizing the protagonist role of NGOs, development agencies and government), as distinct from “locally developed forestry”, which is based mainly on traditional or indigenous forest management and practiced by smallholders, especially in the Amazon Region.²

Without explicitly referring to forest enterprises, the above forest management regimes (CFM, CBF) suggest the possibility of undertaking commercial activities either by communities or individuals involved in forest management.

The definitions related to forest enterprise and relevant to this paper derived from the literature review are:

- Spantigati and Springfors (2005) define “forest based small-scale enterprises” as “enterprises whose economic activities are undertaken mainly at the individual or household level, usually employing members of the family or close relatives and neighbors, and where salaried labor is negligible”.
- Molnar *et al.* (2011: 1) define “community-based forest enterprises” (CBFEs) as “smallholder and community-scale economic activities or collective enterprises

² “Locally developed forestry” often involves infrequent harvesting of forest products from small tree stands or single trees for consumption, sale or exchange. An important variant of this practice in the Amazon is “swidden management” practiced by indigenous peoples and *caboclos* (long-term settlers of mixed descent) (Pokorny *et al.*, 2008).

based on wood and non-wood forest products and the provision of ecosystem services”.

- “Locally developed forestry” refers to smallholders, family-run businesses and informal local groups involved in producing and/or processing forest products, while noting that smallholders can have *de jure* or *de facto* tenure (Pokorny *et al.*, 2008).
- “Small-scale processing enterprises” that acquire raw materials (logs, timber and NTFPs) and are found in a range of rural, urban and peri-urban settings operating in either the formal and informal sector.

Building on the above definitions of forest management regimes and forest enterprises, the use of the term “**small-scale forest enterprise**” (SSFE) in this paper encompasses community-based forest enterprises, individuals and forest smallholders involved in the production and/or processing and commercialization of forest products (e.g. timber, non-wood forest products).

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3 Key trends and issues for SSFE development in Latin America

3.1 LAND AND FOREST TENURE REFORM

The most important trend over the past two decades for SSFEs, and especially for CFM, has been land and forest tenure reform. As explained by Gilmour (2016), this has come about through a combination of grassroots social pressure (especially around ancestral land claims), global conservation concerns and shifting political views – linked to political decentralization – on forest governance.

A good understanding of CFM in Latin America requires some historical context. The agrarian structure inherited from the colonial period was dominated by large estates (*haciendas*) belonging to powerful elites and a labour force comprised of dispossessed small farmers (Kay, 1998). Equity problems with this model led to revolutions and subsequent land reforms in Mexico (1910-17), Bolivia (1951-52) and Cuba (1953-59). But these redistributive land reforms were also triggered by problems related to efficiency. With their extensive production systems, hacienda-based agrarian structures were inefficient producers of food, economic growth and balance of payments objectives. Land reforms also resulted from popular insurgencies and/or military regimes (e.g. in Peru, El Salvador and Honduras), as well as in democratic systems in which rural votes were important (e.g. Chile, Guatemala³ and Venezuela) (Barraclough, 1999).

Table 1 presents estimated forest areas under CFM and with *de jure* smallholder rights in selected Latin American countries (RRI, 2012). Based on data from ten countries, tenure reform has recognized community and smallholder land rights to about 270 million hectares, about a third of the forest area in these countries. It is estimated that about 216 million hectares are under community management (Hagen, 2014). Latin America's "new" (therefore excluding Mexico⁴) tenure regimes can be divided into five main types (Larson *et al.*, 2008):

³ In Guatemala and Chile, redistributive land reform programs were curtailed by US interventions. The 1954 coup in Guatemala and opposition to President Allende (1970-73) in Chile led to a reversal of earlier land reforms (Barraclough, 1999).

⁴ Mexico has the longest history of community forestry in Latin America and grants the strongest property rights, including with regard to commercial harvesting, which covers almost 40 million hectares of forest land or about 60 percent of the total forest area. In addition, over 3 000 communities have forest management plans in place (Gilmour, 2016).

- indigenous territories in Brazil, Bolivia, Colombia, Nicaragua and Panama;
- extractive reserves in Brazil and Bolivia;
- agro-extractive and forestry settlements in Brazil and Bolivia;
- community or social concessions in Guatemala (in the Peten region) and Bolivia;
- communal forests in the western highlands of Guatemala.

These tenure types are broadly similar regarding the rights bestowed on local communities. They include strong protections for the right to exclude outsiders and to harvest products for domestic consumption. But they place more restrictions on commercial extraction, requiring in all cases an approved forest management plan based on a forest inventory. Alienation (or land sale) rights remain with the state.

Tenure reform has been especially prominent in:

- Brazil: up to 150 million hectares, nearly one third of its national forest area, has been legally transferred to or designated for use by communities (about 125 million hectares) and smallholders (25 million hectares). Over 70 percent of this has been designated in the form of Indigenous Territories and 9 percent in extractive reserves (see Table 2). Tenure reforms include a new form of property right recognizing the traditional rights of descendants of escaped slaves (*quilombos*). Extensive smallholder land titles have been granted through formal land titling programs in colonization zones.
- Colombia: around 30 million hectares (about half the national forest area) is in the hands of communities, predominantly in the form of indigenous forest reserves (*resguardos*);

TABLE 1
Forest area with CFM and *de jure* smallholder tenure in Latin America
(selected countries)

| Country | Forest land (Million ha) | Forest land under CFM/ smallholders (<i>de jure</i>) (Million ha) | Percent forest land under CFM/smallholders (<i>de jure</i>) |
|---------------|-----------------------------|---|---|
| Bolivia | 57.2 | 14.8 | 25.9 |
| Brazil | 519.5 | 134.1 | 25.8 |
| Colombia | 60.5 | 29.9 | 49.4 |
| Ecuador | 9.9 | 7.6 | 76.8 |
| French Guiana | 8.1 | 0.7 | 8.6 |
| Guatemala | 3.7 | 0.5 | 13.5 |
| Mexico | 64.8 | 38.7 | 59.7 |
| Nicaragua | 3.1 | 3.0 | 96.8 |
| Peru | 68.0 | 13.1 | 19.3 |
| Venezuela | 46.3 | 30.6 | 66.1 |
| Total | 841.1 | 273.0 | 32.4 |

Source: Pacheco *et al.*, 2012; Gilmour, 2016

- Bolivia has undergone a major transition over the last 20 years regarding access by local people to forests, as described in Box 1. About 15 million hectares was under community tenure in 2008, but this figure could now be closer to 25 million hectares.⁵ According to Pacheco *et al.* (2016) indigenous and other communities now have rights to over 42 percent of the national forest area.
- Peru: about 15 million hectares are under community tenure, mostly in the form of “native community areas”.
- Ecuador: almost 70 percent of forest land is reported to be under community control (Pacheco *et al.*, 2016).
- Nicaragua: almost all forest land has been allocated to communities as part of the political decentralization process, mainly in the form of IP territories.

TABLE 2

Forest areas owned or administered by communities and smallholders in selected Latin American countries (2012)

| Country | Tenure regime | Million hectares |
|----------|---|------------------|
| Brazil | Indigenous Territories | 110.6 |
| | Extractive Reserves | 13.5 |
| | Sustainable Development Reserves | 10.6 |
| | Agro-Extractivist Settlement Projects | 7.4 |
| | Sustainable Development Projects | 2.7 |
| | <i>Quilombo</i> (escaped slave) Communities | 1.0 |
| | Forest Settlement Projects (northern region) | 0.2 |
| | Smallholders | 24.6 |
| | National Forests | n/a |
| Colombia | Indigenous Reserves (<i>Resguardos</i>) | 26.5 |
| | Afro-Colombian Community Lands | 3.4 |
| Mexico | <i>Ejid</i> os on Forest Lands and Indigenous Communities | 39 |
| Peru | Native Community Areas | 12.6 |
| | Community Management in State Reserves | 2.9 |
| Bolivia | Community Lands of Origin (TCOs) | 12.4 |
| | Communal Titles for Agro-extractivist Communities | 1.8 |
| | Communal Properties | 0.6 |
| | Local Social Associations (ASLs) | 0.5 |

Source: RRI, 2012; Madrid *et al.*, 2009 (for Mexico); SFB, 2010.

⁵ According to information obtained from Bolivia’s Center of Studies for Labor and Agrarian Development (CEDLA), between 10-15 million hectares was recognized during President Evo Morales’ first term (Janis Alcorn, personal communication, 2012).

BOX 1

Forest land tenure reform in Bolivia

The 1996 Land and Forestry Laws provided the legal basis for tenure reform in Bolivia. The Land Law, known as the INRA (National Agrarian Reform Institute) Law, aimed to remedy the country's inequitable property rights, prioritizing standardization of land titles based on the social and economic functions of the land in question. It established a basis for granting titles to collective community lands and introduced a common property regime for indigenous territories, known as the TCO (*Tierra Comunitaria de Origen*). As well as ratifying provisional land titles (in the form of TCOs) granted to indigenous groups in the early 1990s, the law approved 16 new TCO requests and opened the way for more in future.

Delineating and titling indigenous territories has, however, been slow, costly and bureaucratic and achievements have failed to meet the expectations of indigenous peoples. Despite these problems, about 22.5 million hectares had been titled as TCO by 2012, over half of which was located in the eastern lowlands. Titles to TCOs and community lands gave owners formal and exclusive rights to forests and trees on their land, including commercial rights.

The 1996 Forestry Law brought about a parallel change by devolving rights over forests to a range of stakeholders. It granted smallholders and indigenous communities exclusive rights to use their forests subject to an approved forest management plan. Prior to the passage of this law, indigenous peoples and peasant smallholders had no formal rights over forests. Commercial extraction, which lay in the hands of timber companies, was not officially permitted.

Sources: Assies, 2009; Müller *et al.*, 2014.

3.2 INCREASING POLICY SUPPORT FOR COMMUNITY FOREST MANAGEMENT

Another major trend has been increased policy support for CFM consistent with and in furtherance of the tenure advances presented in Section 3.1. This trend has, in part, been encouraged and sustained over time by the emergence of national and international federations of Community-based Organizations (CBOs) and/or SSFEs (see Box 2). However, despite increased policy support for reducing the constraints and costs imposed on SSFEs by regulatory frameworks, progress has been limited. An analysis of recent policy and regulatory CFM reforms (or lack thereof) in several countries illustrates this point.

BOX 2

Emergence of national and international federations of CBOs and/or SSFEs

Strong associations or federations of community-based organizations (CBOs) have emerged in many Latin American countries to represent the interests of local communities or SSFEs. These associations and federations have successfully lobbied for policy reforms balancing community and government interests.

A good example of this is Mexico's National Confederation of Silvicultural Organizations (CONOSIL). The confederation was formed in 2005 as a national federation of 32 state SSFE associations in turn representing 218 local associations and an estimated 600 000 households. It provides members with a range of services including technical assistance, market information and facilitation of low cost credit and has partnerships with several international and national organizations, including the National Forest Council (CNF). The CNF is a multi-stakeholder consultation body set up by the government in 2003 with the primary objective of providing policy recommendations.

The Mesoamerican Alliance of Peoples and Forests (AMPB) is another good example of a supra-national association. Established in 2010, the alliance consists primarily of local organizations preserving or managing forests under a communal property. Its main objectives are to promote the community-based forest governance model and to consolidate the property rights of Mesoamerica's local communities, in order to face challenges related to climate change and sustainable development. The network is structured entirely of territorial and community organizations. A key characteristic is the diversity of its members (peasant, forest and indigenous). Indeed, AMPB is composed of two stakeholder categories: community forestry and indigenous organizations.

Sources: Gilmour, 2016; FFF, 2016; Dupuits, 2015.

3.2.1 Brazil

A key policy development in Brazil was the 2009 Program of Community and Family Forest Management. This further strengthened the legal basis for CFM and provided incentives to local groups to develop forest management plans. The Program aimed to promote sustainable land use over two-fifths of Brazil's 210 million hectares of public forest land, estimated to include 512 000 indigenous people, 3 500 *quilombo* communities and 345 000 settler families. Many of these people lived on privately-owned 100-hectare plots, 20 percent of which could be cleared for farming, while the rest was conserved for forests and utilized according to established procedures (Gilmour, 2016). Recent studies reveal a sharp increase in CFM initiatives in the Brazilian Amazon. For example, a 2011 census (Pinto *et al.*, 2011) counted 127 such initiatives, with government agencies recording management plans in five Amazonian states (see Table 3).

TABLE 3
Timber-oriented CFM initiatives in five Amazonian states

| State | CBF initiatives |
|--------------|-----------------|
| Acre | 23 |
| Amapá | 4 |
| Amazonas | 36 |
| Pará | 48 |
| Rondônia | 17 |
| Total | 128 |

Source: Pinto *et al.*, 2011.

The Government of Acre State, for example, has developed several pioneering initiatives promoting a forest-based economy, partly in response to the decline of the extractivist economy based on rubber and Brazil nuts. Since 1999, the state has embraced small-scale SFM as part of a larger forest-based development plan to make forests more attractive than alternative land uses (Humphries and Kainer, 2006). The state government has also pledged to encourage Forest Stewardship Council (FSC) certification to help change social attitudes towards timber production and increase international market access.

Besides providing technical and monetary assistance to SSFEs, the State of Acre has introduced incentives to attract responsible timber processing industries in order to create demand for locally-sourced legal timber. Processing industries can receive land concessions in order to encourage the establishment of facilities. These industries also receive support for chain of custody certification and benefit from fiscal incentives that reduce their tax burden. Such incentives have helped develop a furniture industrial hub formed by 14 processing industries with FCS chain of custody certification in Rio Branco, the state capital (Evandro Araújo, personal communication, March 2014).

But policy support for Brazil's SSFEs varies significantly from state to state. In Para State, for instance, there have been few incentives for smallholders to evolve from supplying raw materials to adding value to their products and moving up the value chain (Molnar *et al.*, 2008a). Despite this lack of policy support, it was estimated that 30 percent of the state's timber supply derived from informal, family-run SSFEs (Verissimo *et al.*, 2002).

With regard to the regulatory framework, Decree 2788 in 1998 simplified Brazil's CFM norms (known as PMF Simples) and new timber permit mechanisms were introduced in 2002. Despite this, communities still faced significant bureaucratic hurdles to obtain approval for management plans (Larson *et al.*, 2008). According to Drigo *et al.* (2010), the management plan approval process can take two to three years, causing serious problems when it delays logging that can only be undertaken in the dry season. In addition, despite efforts by Brazilian authorities to improve forest control, illegal timber continues to depress prices. While estimates vary widely, it is commonly claimed that 40 percent of timber is illegally sourced (Humphries *et al.*, 2012).

3.2.2 Bolivia

One of the most dramatic transitions regarding government SSFE policy has been in Bolivia. While community management was not historically permitted, a series of policy reforms emphasizing participation and decentralization (Alcorn, 2014) have transformed the sector. New Land and Forestry Laws in 1996 opened the way for smallholders and indigenous communities to obtain strong and exclusive rights to commercial forest management (see Box 1). Once indigenous groups obtained legal titles or Community Land of Origin (TCOs), they began preparing forest management plans. As a result, timber supplied by indigenous territories has increased steadily and a significant indigenous, community-based commercial forestry sector has now emerged.

Thus, 111 approved management plans were distributed among 16 TCOs and ten indigenous community lands in 2013, totaling nearly 1.8 million hectares under forest management and an annual allowable cut (AAC) of over 800 000 m³ (see Table 4).

TABLE 4
Forest management plans in indigenous community lands

| TCO or community land | Number of management plans | Total area (ha) | Annual allowable cut (m ³) |
|-----------------------|----------------------------|------------------|--|
| Lomerío | 3 | 107 195 | 28 200 |
| Monte Verde | 18 | 229 586 | 61 350 |
| Guarayos | 48 | 835 377 | 615 590 |
| COINFO* | 11 | 61 172 | 38 060 |
| Chácobo – Pacahura | 2 | 52 583 | 11 220 |
| Tacana – Cavineño | 1 | 27 832 | 5 120 |
| Multiétnico I | 2 | 120 001 | 14 630 |
| Multiétnico II | 1 | 37 697 | 4 350 |
| Itonama | 1 | 10 000 | 4 350 |
| Ayoreo – Zapoco | 1 | 19 982 | 14 720 |
| Moxeño | 4 | 4 360 | / |
| Siriono | 2 | 47 836 | 11 580 |
| Tacana | 11 | 64 758 | 43 840 |
| Yuquis | 1 | 55 986 | 16 260 |
| Yuracare | 4 | 80 885 | 12 140 |
| Yaminahua | 1 | 16 326 | / |
| Total | 111 | 1 771 576 | 877 060 |

Source: Adapted based on Ortega & Rodríguez (2013)

* COINFO (Comité Intercomunal Forestal de la Provincia Velasco) is not a TCO, but an association of 17 communities located in the Province of Velasco. One of these communities belongs to a TCO, while the rest hold individual community land titles.

Over 50 new management plans were underway or waiting for approval over the same period (AFIN, 2014). These indigenous CFEs are generating substantial production and income: according to AFIN (2014), about 300 000 m³ (or 35 percent) of the AAC is harvested annually, generating about USD⁶ 7.5 million in gross income and benefiting some 6 000 indigenous households.

Despite tenure and policy advances, Bolivia's regulatory framework remains burdensome. A *Comité Intercomunal Forestal de la Provincia Velasco* (COINFO) case study (Del Gatto, 2016) covering six indigenous communities with forest management plans in eastern Bolivia is illustrative. Government procedures for preparing and approving forest management instruments (e.g. management and annual harvesting plans) were strict and time-consuming, while their implementation was excessively bureaucratic. There was growing grassroots frustration with a proliferation of new directives and norms designed with little or no participation by local forest users, which made it difficult for communities to understand and adapt to the legal and policy framework.

3.2.3 Mexico

Compared to other countries, Mexico has a more enabling policy and regulatory framework. This has come about gradually as a result of close collaboration between CFE leaders and government officials to solve administrative problems as they emerge. Transparency and accountability have also been prioritized during this process. For example, the National Confederation of Silvicultural Organizations (CONOSIL), formed in 2005 and representing some 600 000 forest-owning families across the country, has an active role on the National Forestry Council (see Section 3.4 below for further details).

The national system of payments for hydrological services (PSAH), established in 2003 with earmarked funds from national water fees, has given a boost to CFEs by providing a supplementary income source compatible with SFM objectives. An evaluation of 36 forested *ejidos*⁷ receiving PSAH (Shapiro, 2010), for example, found that the system of payments complemented the governance and tenure basis of the *ejidos*. The PSAH involves payments to *ejidos* and communities, as well as individual landowners, for forest maintenance in hydrologically important areas. In 2004 a second PES mechanism, the Payments for Carbon and Biodiversity Services Program (PSA-CABSA), which includes agroforestry systems, commenced. These programs, managed by the National Forest Commission (CONAFOR), have now been integrated into the Program of Payments for Environmental Services (PSAB), covering more than 2 million hectares of forest.

3.2.4 Honduras

In 1974, Honduras established a social forestry policy, one of the first countries in the region to do so. In contrast to other countries, however, Honduras has made little progress on land tenure, which remains problematic and quite fragile for SSFEs, especially

⁶ In this paper all monetary values are expressed as US dollars (USD).

⁷ A tract of land held in common by the inhabitants of a Mexican village and farmed cooperatively or individually.

smallholders. These SSFEs include some 230 CFEs, with over 9 000 members, some of which were established in the 1970s. Almost three-quarters of the cooperatives in Honduras are located in natural pine forest (*Pinus* spp.) areas. While timber is the main production activity, resin tapping is a prominent secondary livelihood activity in pine forest cooperatives (Del Gatto, 2016).

The 2007 Forest Law consolidated the legal basis for CFEs by bringing together previously dispersed legislation into a single legal instrument. It also eliminated restrictive timber harvest limits and established a legal process for long-term “community forest management contracts” (Del Gatto, 2016). At the same time, key regulatory instruments related to forest management and administration remained over-centralized and based on unrealistic assumptions about the capacity of the National Forestry Authority (Pellegrini, 2009). For example, Chavarría (2010) found that obtaining an approved management plan involved 20 actors and more than 40 procedures. In particular, transport permits necessitated several bureaucratic steps and timber trucks were often detained even when they had the correct transport authorizations.

3.3 INADEQUATE POLICY AND DONOR SUPPORT FOR LOCALLY DEVELOPED FORESTRY, ESPECIALLY SMALLHOLDERS

The primary focus of donors and governments in most countries has been the formal CFM sector, with much less attention given to smallholders and the locally developed forestry sector. This is despite the sector’s size – especially in the Amazon region – and potential for sustainable livelihood outcomes. This gap in understanding has, to some extent, been addressed by a set of studies and papers in a “special issue” of the International Forestry Review, entitled “Smallholders and forest landscape transitions: Locally devised development strategies of the Tropical Americas” (Pokorny and de Jong, 2015).

In the Amazon region, “smallholders” include river dwellers (*ribeirinhos*), *caboclos*, colonial farmers, residents of rural settlements and other types of smallholders (Pokorny and de Jong, 2015) relying heavily on forest products. Surveys by Hoch *et al.* (2009) found that most sampled smallholder families in Brazil, Bolivia, Ecuador and Peru included forestry activities in their livelihood strategies, including a wide range of forest and tree products to satisfy basic nutritional, construction, fodder, tool, fuel and medicinal needs. Although dependency levels varied greatly, forest and tree products were the primary source of income in some cases.

Evidence from Peru and Bolivia suggests forest dependency increases according to distance from urban centers (de Jong *et al.*, 2010). Smallholders in remote areas tend to be less market-oriented, especially given that most forestry-related activities involve swidden fallow management, extractive NTFPs, fishing and hunting. Forest products also tend to contribute more to household income when agricultural markets and other income earning opportunities are less available or attractive. When livelihoods and household incomes improve, smallholders tend to replace forestry activities with more specialized activities (de Jong *et al.*, 2010). This accords with the “coping strategy” role of low-return forestry activities found in the CIFOR Poverty and Environment Network (PEN) studies (Shackleton *et al.*, 2011).

The increased importance of smallholders to logging and timber supply has been a key trend in the Amazon region in the “post-logging boom era” (Sears *et al.*, 2007). Smallholders now supply a large portion of timber from the Amazon regions of Bolivia, Ecuador and Peru, much of which is illegal (Pacheco *et al.*, 2016). The timber is used mainly for construction and furniture and is exported to Argentina, Chile, the US and China. Smallholders have developed multiple strategies to integrate with actors and networks further along the value chain in both national and international markets. In Pucallpa (Peru), for example, a network of Chinese families buys timber from smallholders and logging companies for export to China (Pacheco *et al.*, 2016).

Smallhold timber production is mainly organized by middlemen with superior knowledge of markets and access to credit (Mejía *et al.*, 2013). Intermediaries have the resources and contacts to obtain necessary permits. While timber products are more likely to be legal when supplied by these intermediaries, they are likely to be less equitable in terms of the share of market value filtering down to smallholders. Conversely, timber marketed by smallholders, while more likely to be illegal, is more equitable, although illegal timber sale prices and margins tend to be low. Specialized chainsaw operators tend to be legal timber producers since they also have the resources to obtain permits.

But governments and development agencies have tended to ignore the potential to develop sustainable smallholder livelihoods and other forms of locally developed forestry (Pokorny and de Jong, 2015). Prevailing policy frameworks have made it difficult for smallholders to compete with other actors. Pacheco *et al.* (2016) note the governments of Bolivia and Ecuador began making policy changes to promote smallhold forest management in the late 2000s, including: new regulations over extraction permits aiming to increase smallholders’ bargaining power; a more integrated approach to SFM including agriculture; financial support for conservation and restoration; simplified regulations; and improved online systems for legality verification.

The impact of these policies has been mixed. Smallholders have had to struggle with a new policy and institutional landscape, which has increased the “asymmetric” information problem and perhaps weakened their market negotiation position (Pacheco *et al.*, 2016). Forest law enforcement has also remained weak, so illegal timber continues to be a disincentive for SFM. In general, policy reforms have not resolved the underlying weak economic incentives for smallholders to engage in SFM.

3.4 INCREASING EVIDENCE OF POSITIVE ENVIRONMENTAL OUTCOMES FROM COMMUNITY FOREST MANAGEMENT

It was hoped and expected that tenure reforms in Latin America would empower indigenous peoples and other local communities to conserve forests more effectively and efficiently than governments or the private sector. There is growing evidence that SSFEs involved in CFM have reduced or halted often severe deforestation on their land boundaries. This has not only been accomplished at relatively low cost compared to state forest management, but has also achieved more equitable outcomes (Cronkleton *et al.*, 2011). A snapshot of research supporting this evidence is detailed below.

- A comparison of 80 indigenous reserves and 19 federal reserves in Brazil by Woods Hole Research Institute found that indigenous reserves were more effective than national parks in colonization areas (Nepstad *et al.*, 2006).
- The World Bank undertook a global comparison (Nelson and Chomitz, 2011) of the incidence of fire in strict (and state managed) protected areas, “multiple-use” protected areas (some under community control) and indigenous territories (all of the latter were located in Latin America). After controlling for confounding variables, it was estimated that the incidence of fire was reduced by: 16 percent in indigenous territories; between 1.5 and 5.6 percent in multiple-use protected areas; and by 1-3.5 percent in strictly protected areas.
- Comparative studies in Mexico revealed that areas under CFM have performed comparably or better than protected areas in tropical and temperate areas (Bray, 2010). In the Yucatan Peninsula, for example, SSFEs dedicated to CFM have retained more forest cover than southern Mexico’s protected areas. In Oaxaca State, six SSFEs forming the Natural Resource Committee of the Upper Chinantla (CORENCHI) have set aside 27 000 hectares (79 percent of their total land) as community conservation areas, mainly in cloud and montane forests with high water and biodiversity values.
- In the Bosawas Biosphere Reserve in Nicaragua, the rate of deforestation from 1995 to 2004 was 16 times lower in indigenous territories compared with private property or areas without CFM (Stocks *et al.*, 2007). By comparison, 12 percent of a sub-region of the adjoining Rio Platano Biosphere Reserve in Honduras – where there was no CFM – was deforested in six years.
- In the Mayan Biosphere Reserve in Guatemala, a recent report (Hodgdon *et al.*, 2015) analyzing deforestation trends between 2000 and 2013 found that the Reserve as a whole was losing its forest at a rate of 1.2 percent annually, but significant differences in annual deforestation rates were present within the Reserve: 5.5 percent in the buffer zone, 1 percent in the core zone and only 0.4 percent in the multi-use zone, in which there are 12 community forest concessions and 2 private sector concessions.

3.5 WHY THESE POSITIVE ENVIRONMENTAL OUTCOMES ARE RELEVANT FOR SSFE DEVELOPMENT IN LATIN AMERICA

The positive environmental outcomes outlined above confirm the fundamental assumption at the heart of CFM and SSFE development: that people who live close to a resource and whose livelihoods directly depend upon it have more interest in its sustainable use and management than state authorities or distant corporations. Advocates therefore increasingly argue that CFM and SSFEs offer the best prospect for meeting conservation objectives while improving the position of impoverished rural communities. Arguments in favour of SSFEs thus combine environmental sustainability and social justice with assertions about economic efficiency.

Nonetheless, even in countries with a strong SSFE sector, only a fraction of rural villages have been empowered to formally assume management responsibilities and/or

engage in the development of viable SSFEs. There is therefore a pressing need to better understand the main factors that promote or undermine the successful emergence of SSFEs. The factors are explored in the following sections.

3.5.1 Institutional issues

A key challenge faced by SSFEs is the limiting institutional and political environments in which they operate. This applies not only to the legislation, policies and regulatory instruments affecting CFM and therefore SSFEs, but also those relating to forest product markets, as well as access to and conditions of credit. For the most part, regulations and policies have been designed with large corporate actors in mind. The progressive entrée of local producers into commercial forestry production has failed to trigger a commensurate adjustment of standards and subsequent modification of regulations.

This has led to calls to either level the playing field to allow smallholders and communities to better compete in timber markets or reduce the institutional barriers working against them. The conditions perceived as favouring small-scale producers and communities are: low regulatory costs of market entry and a low cost regulatory environment entailing limited harvest, transport and sales permits (Scherr *et al.*, 2004). Smallholders and communities that cannot adhere to forestry norms often engage in informal and illegal market practice.

Important institutional issues must also be addressed at the community level. Effective local institutions capable of establishing and enforcing rules governing access and use of forests and of equitably sharing the costs and benefits of community forestry are key to SSFE development. Experience from both the LAC region and other continents clearly indicates that self-generated community institutions appropriate to local cultural and ecological conditions, as well as national jurisdictional frameworks, are generally the most effective (Alcorn, 2014).

This is where the concept of **institutional incentives** becomes important. Rules create compelling incentives or motivations for certain types of behaviour while discouraging others. Depending on the incentives and disincentives they face, people will carry out activities that either protect and nurture or undermine and harm forest resources. Careful analysis of institutional incentives and disincentives can assist government officials and forestry project personnel to see beyond superficial and often misleading behavioural explanations in order to understand some of the underlying reasons behind the interaction between local populations and their environment. Such analysis can also help to identify local institutional incentives and disincentives for resource management practices.

In the past, however, government representatives and project managers have tended to avoid these institutional issues. In some cases, this was because they simply did not recognize their importance. In others, they had a vague idea of why they might be important, but had difficulty understanding how to approach a subject tending to be both complex and nebulous.

Indeed, while institutional issues are critically important to the success of forestry activities, the process of institutional analysis and change is never simple. Governance, by definition, involves the use of power to make and enforce decisions. When decisions

concerning access to and use of resources are made, they invariably affect a large number of stakeholders with different (and often conflicting) interests. The state may have different interests from those of local communities, while divergent interests may exist among different groups within these communities. In each case, certain interests will have more or less power to influence the decisions being made. Institutional analysis can help to clarify these different power dynamics and how they affect the use of resources. In some cases such analysis may even help to empower those who have been excluded from the debate as issues are explained and interests more clearly expressed.

3.5.2 Legal issues

There has long been a trend towards regulating access, management and use of forests. Land and forestry regulations have often imposed additional institutional barriers to SSFEs seeking to use and benefit from their forests. Unsurprisingly, a significant body of literature has developed regarding how regulations and other legal barriers constrain access to land and resources.

When access and management are strongly regulated – as tends to happen in the case of timber use – and the costs of regulation are restrictive, the main puzzle for SSFEs is often how to circumvent legal requirements so as not to be excluded from the market. It is therefore not surprising that many SSFEs are persistently involved (totally or partially) in informal operations, particularly since, in situations where SSFEs do not have the means to access markets through formal legal compliance, informal networks may constitute an effective mode of access.

According to Pulhin *et al.* (2010), land and forestry regulations impacting on SSFEs can be classified into three main types:

- land classification systems that limit access to forestland;
- conservation-inspired rules that limit activities in protected areas;
- permits, agreements, taxes, management plans and similar requirements that limit access to timber and other valuable forest products.

The first type limits the area available to communities in terms of size and/or quality of forests. Arguably this problem is less acute in Latin America than other regions. Latin America has, in fact, made significant progress in devolving tenure rights to local communities and indigenous peoples. Nevertheless, it remains a problem affecting the experiences of many SSFEs in Latin America. In Honduras, for example, access to high quality pine forests by community-based forestry cooperatives was constrained for a period of decades.

The second type of regulation emphasizes conservation by delineating conservation areas and imposing usage limits. The case of the Extractive Reserve in Porto de Moz, Brazil is frequently cited in this context. Even though the establishment of the reserve itself was the result of grassroots mobilization, the government's environmental and conservation objectives have since tended to prevail over the concerns and viability of local community-based enterprises.

The third regulation type imposes bureaucratic requirements that restrict the commercial value of community forest resources. Practically all SSFEs in Latin America

have confronted this problem, even in countries such as Ecuador and Costa Rica that have made significant progress simplifying their regulatory framework for forest extraction by smallholders (see Box 7, p. 50). A multitude of SSFE experiences demonstrate the complex processes and high transaction costs involved in the commercial use and marketing of valuable timber and NTFPs, sometimes even after SSFEs have satisfied regulatory requirements.

3.5.3 Issues related to commercialization and market access

Commercialization and market access require a number of adjustments from local communities. Most critically, local SSFEs must engage in market trade according to rules with which they are often unfamiliar. They also lack the necessary capacity to influence or take advantage of these processes. Commercialization applies a normative institutional framework to forestry activities that differs from the one with which they are familiar. This helps to explain why the vast majority of SSFEs continue to engage predominantly in primary production, with little connection to downstream chain actors beyond local intermediaries. As they often cannot supply the market with steady volumes or qualities, their participation in the supply or value chain may be sporadic (Pacheco and Paudel, 2010). This limits joint learning opportunities with other actors in the value chain and, by extension, prospects for strengthening their bargaining power.

In some countries, however – most notably Mexico and Guatemala – a growing number of SSFEs have become engaged in vertical integration. These relationships are often based on contracts with timber companies, sometimes involving community-based processing (Bray *et al.*, 2006). Value chain participation requires local producers to establish agreements with external actors, often in the form of written contracts. While establishing some kind of agreement with traders may not be uncommon for local producers, these formal agreements usually impose more rigid rules and substantial obligations on local SSFEs. For this reason, SSFEs frequently rely on assistance from NGOs, development projects or state programs to negotiate contracts, meet their terms and ensure reciprocal compliance by their trading partners. In addition, local producers must meet quality standards, produce minimum volumes and ensure timely delivery of raw materials or semi-finished products. These conditions contrast with the largely informal economies in which many rural producers operate, where agreements are predominantly verbal.

Small-scale forest enterprises can help local producers to overcome these challenges by providing the kind of business organization necessary to facilitate market access and participation in forest product value chains. The benefits of insertion into such value chains, however, will depend not only on the capacities of local communities and SSFEs, but also on their influence over other participants in the value chain.

Pacheco and Paudel (2010) developed a typology for assessing market engagement by smallholders and communities, distinguishing between four forms of market engagement:

- SSFEs with significant capabilities operating in well-developed markets;
- SSFEs with low capabilities engaging with relatively well-developed market networks;

- SSFEs with little capacity and engaging in poorly developed markets; and
- SSFEs with good capacities but marginal connections with markets.

Their analysis indicates that distortions in forest markets (monopsonic demand, asymmetric relationships, incomplete information, etc.) shape SSFE market interactions. Frequently, a small number of buyers will determine prices. Regulatory constraints tend to create incentives for informal logging, further undermining the process.

Therefore, enhancing the benefits SSFEs derive from commercial forest use requires a twofold process: enhancing their capacity to access markets and modifying the conditions under which such markets work in practice. Unfortunately, this second priority has often been neglected by government policies and donor agendas.

3.5.4 Issues related to incentives or emerging opportunities for SSFE development

Part 1 of this publication explored some of the key trends influencing the SSFE sector worldwide. This subsection expands this analysis, with a particular focus on the incentives or emerging opportunities these trends provide for SSFE development.

Changes in the wood trade and industry – In general, global market trends work against the interests of low-income producers in developing countries. Most SSFEs are relatively low efficiency firms struggling to confront the challenges created by international price competition, with inadequate scale efficiencies, financing, technology and management. There are, however, concurrent trends working in their favour, notably the growing importance of domestic markets. The vast majority of Latin America's wood-based production (more than 95 percent) is destined for domestic markets (Scherr *et al.*, 2004) and this is helping to sustain the growth of SSFEs. This trend is expected to continue as SSFEs find competitive advantage in lower transportation costs and higher degrees of supply flexibility. By concentrating on domestic markets, SSFEs are well positioned to capitalize on this trend. Proximity to the customer can turn the apparent disadvantage of their small size into an asset, including by customizing production and developing ties to local markets.

Payments for ecosystem or environmental services (PES) and REDD+ – Another trend has been the increased use of PES and other forms of incentive payments for communities and smallholders to promote forest conservation, most notably through PES programs. Alcorn (2014), for example, identifies and briefly reviews several types of incentive mechanisms: (i) direct payments for conservation as sometimes used by international environmental NGOs; (ii) payments for environmental/ecosystem services, including national programs in Costa Rica, Mexico and Ecuador (the Socio Bosque Program); and (iii) indirect non-cash benefits mediated by NGOs.

Over the last ten years, the REDD+ agenda has gathered momentum and could potentially exert an increased influence on the SSFE sector. In particular, there has been growing literature around the potential for REDD+ programs to build on successful CFM experiences. For example, Cronkleton *et al.* (2011) and Bray (2010) point out that CFM landscapes often resemble successful REDD+ projects (for both carbon and social outcomes). In Mexico, a comprehensive study of potential carbon capture/removal by

different land uses found that improved management of natural resources on communal land was most effective (de Jong *et al.*, 2010). Its capacity for adaptation also makes CFM preferable to other management models.

Changes to the social and political context – Social and political changes have caused a major shift in the CFE operating context. A key part of this is forest tenure. State forests and state protected areas were established under public ownership models whose historical dominance is beginning to wane. Social movements by indigenous and other forest-dependent peoples, combined with policy decisions to decentralize and devolve forest management responsibility, have had a dramatic impact. The total area controlled by indigenous peoples and communities in Latin America is 23 percent, of which 18 percent is owned outright, while an additional 5 percent is designated for community use (RRI, 2015). Compared to Asia and Africa, Latin America has the highest percentage of tenure regimes recognizing stronger forms of community ownership (RRI, 2015). As recognition of indigenous and other community land rights has increased, so too has the forest area actively conserved by communities.

These dramatic shifts in forest tenure have been accompanied by a corresponding political transition toward devolving government responsibilities to local governments. In some countries, this includes recognizing the authority of traditional, customary governance structures at the community level and their responsibility for administrative functions such as conservation and forest or watershed resource management.

Where this tenure shift has been genuine and accompanied by reduced regulation and decentralized decision-making and administration, the number of SSFEs has increased significantly, as for example in Mexico and Bolivia (Molnar *et al.*, 2008b).

3.5.5 Issues related to SSFE development capacity

During interviews carried out in 2014, SSFE members detailed the areas in which they need advice, information and capacity building. Technical assistance providers also identified the needs they perceived to be most important or under-served and listed those services and information most frequently requested by SSFEs.

Direct capacity building activities proven to be most effective include training in specific skills, such as bookkeeping, business management and developing forest management plans. Representatives also underscored the need for capacity building in business development and marketing, i.e. skills to assess private sector contract offers, including a better understanding of product pricing and contract obligations.

Capacity building is more effective if followed by actions that apply these new skills over the longer-term, for example by developing relationships with processing companies and suppliers based on mutually agreed terms and contracts.

Alcorn (2014) recommends developing the capacity of SSFE members, governments and other partners with a mix of technical skills (forest management, utilization and planning), enterprise development skills (financial management and bookkeeping) and governance capacities (accountability, communications and enforcement of rules governing access and use), to increase the likelihood of SSFE success. She also emphasizes that, while there are many approaches to capacity building, one option that has proved

particularly valuable has been structured cross-site exchanges between communities and SSFE members, including self-analysis. Two-way learning is particularly important for information exchanges and mutual understanding.

3.5.6 Issues related to access to capital and finance

Accessing finance is often difficult for SSFEs due to their location and the perception that they pose a high financial risk. These risks include a lack of access to risk insurance, weak business capacity, cumbersome legal framework and lack of collateral (Nhantumbo *et al.*, 2016; FAO, 2005). It could, in fact, be argued that the most important recommendation for forest finance is the establishment of an enabling policy and regulatory framework for SSFEs, since this would reduce risk, make the sector more attractive to lenders and lower interest rates. Given that weak SSFE business capacity represents a major risk factor, accessing finance is easier if SSFEs are organized into cooperatives or associations. This is strongly linked to capacity building, as financing options increase when business capacity improves (Nhantumbo *et al.*, 2016). There is also a strong link between finance and governance, since illegal logging and corruption increase risk.

While there are many potential public and private financing mechanisms for SSFEs, including outgrower schemes, PES and remittances, worldwide experience shows that microfinance is the most widespread and practical mechanism for the third type of SSFEs – those that buy raw material for processing and/or marketing (FAO, 2005). Microfinance can be provided in remote areas where low-return SSFEs are likely to predominate. In such areas, autonomous groups and savings-oriented cooperatives are likely to be most appropriate. Those SSFEs receiving microfinance also normally require capacity building support in record-keeping, accounting and business planning. But microfinance is less appropriate for tree planting and natural forest management; longer term investment is needed in these cases.

Box 3 describes an innovative tool developed in Guatemala to confront the “difficult economics” of timber-based CFM (Kaimowitz, 2000).

BOX 3

Grants and accessible credit for SSFEs in Guatemala

Guatemala’s Incentive Program for Small-Scale Holders of Forestry and Agroforestry Land (PINPEP) provides grants to smallholders with fewer than 15 hectares who do not have legal titles. It is estimated that the program channels USD 20 million per annum to about 400 000 beneficiaries. The incentive program was established following grassroots lobbying that resulted in the allocation of 1 percent of the state budget for sustainable land and forest use. The government also has agreements in place with commercial banks for complementary financing of small and medium scale enterprises, including SSFEs.

Source: Nhantumbo *et al.*, 2016.

3.5.7 Issues related to community forest management regimes (CFM, CBF and CF) conducive for SSFE development

Many of the world's developing countries are pursuing some form of decentralized forest management involving local people. As described in Section 2, different terms are used to indicate involvement by communities in forest management, including "community forest management" (CFM), "community-based forestry" (CBF), and "community forestry" (CF).

Two main conclusions can be drawn from an analysis of the impact of these regimes on SSFE development. First, the three regimes tend to require compliance with planning and implementation provisions established by government authorities. These do not work well in local conditions in furtherance of local objectives. While these regimes often acknowledge self-generated local forestry models, they fail to interpret them accurately to propose community forest management regimes that are acceptable to local stakeholders.

Second, the insights from this review suggest only those small number of SSFEs receiving adequate support have any real prospect of economic success under prevailing community forest management regimes, while many others will continue to operate in the margins and thus require significant assistance to access alternative development pathways. Policy frameworks that recognize and are better adapted to the interests and capacities of "locally developed forestry" – based mainly on traditional or indigenous forest management – will help SSFEs to play a more active role in local development.

Box 4 discusses a third issue related to weak or unrecognized local governance institutions.

BOX 4

The importance of multiple community governance institutions

Major progress has been made in Brazil and Bolivia towards recognizing the property rights of indigenous peoples (TCOs in Bolivia) and NTFP extractors (extractive reserves in Brazil). Less progress has been made in the development of effective territorial or extractive reserve-level management institutions able to manage vast areas encompassing dozens and sometimes hundreds of communities. A particular problem is encountered where community-level institutions helping to govern resource use through customary rules are not recognized, creating a governance vacuum.

Very few representative indigenous organizations in Bolivia's TCOs have been organized or trained for territorial administration or management and obvious problems also exist regarding management or control of non-indigenous groups located in the TCOs. In extractive reserves, strict conservation rules and competing interests also result in weak incentives to collaborate. By contrast the "multi-scaled governance" capacity of many *ejidos* and indigenous communities in Mexico has developed gradually over time.

Source: Cronkleton *et al.*, 2011.

PART 2.

CASE STUDIES



4 Case studies: more successful SSFE experiences

CASE STUDY 1: COOPERFLORESTA, ACRE, BRAZIL⁸

Since 1999, the government of Acre in the western Brazilian Amazon has implemented policies to promote forestry-based development. Given the decline in the traditional extractivist economy based on rubber and Brazil nuts, these policies have a particular focus on timber. The Acre government has also encouraged FSC certification in order to change social perspectives around timber harvesting and improve market access (Humphries and Kainer, 2006). The Cooperative of Community Forest Producers (COOPERFLORESTA) emerged in 2001 as part of these broader efforts.

The cooperative was founded by six local associations (forest dwellers, producers and workers), five of which were from “agro-extractive” settlement projects and one from the Chico Mendes Extractive Reserve. These “social institutions” had a focus on local governance and development, but no mandate to produce or market timber.

In 2014, COOPERFLORESTA had 201 members drawn from the six original associations and other local associations, managing a combined area of 52 650 hectares, about half of which was FSC-certified. Timber is produced from individual members’ forest plots, but extraction and marketing is undertaken collectively. Following donor support to obtain machinery and a sawmill, harvesting became mechanized, and significant vertical integration has since been achieved. Timber extraction services are provided at cost to members and at full market price to non-members. Additional equipment, if needed, is also available from local government agencies at no charge.

Annual roundwood production was over 9 000 m³ in 2011 and 2012, but dropped to 4 000 m³ in 2013 due to a delay in obtaining harvest permits. Most timber is sold to the plywood industry. The healthy profit margins reported are partly due to a significant donor subsidy element, but also the profitable forestry services (e.g. preparation of forest management plans) provided to non-members; the latter comprised over half the annual turnover in 2013. Profits, which in 2013 averaged USD 27 per m³ (roundwood), were distributed in accordance with individual members’ output, except in the case of one association, which allocated profits equally regardless of relative production volumes.

The existence of COOPERFLORESTA can be seen as a direct result of the Acre government’s efforts to support community and family-based forest management, establish favourable policies and invest heavily in technical and monetary assistance. The cooperative itself represents an important enabling condition for its member

⁸ Sources: Araújo *et al.* 2013; Evandro Araújo, personal communication, March 2014.

associations, providing a forum to discuss problems and propose change as a group and, most importantly, facilitate wood sales.

Policies and regulations in place at the federal level, however, remain a big challenge. In 1998, Decree 2788 established simplified norms for community forestry management in Brazil (known as PMFSimples) and in 2002 a scheme introducing three different permit mechanisms was established. Nevertheless, communities still face significant bureaucratic hurdles in order to obtain approval for their management plans (Larson *et al.*, 2008) which, according to Drigo *et al.* (2010), can often take two to three years. The experience of COOPERFLORESTA in 2013 (when its production was less than half of the previous year) shows that even shorter delays in obtaining annual harvesting authorization⁹ can be extremely damaging, because logging operations can only be carried out during the dry season. In addition, while Brazilian authorities may have gone to great efforts to improve forest control, it remains relatively easy to find illegal timber in the local market, which pushes down timber prices (Drigo *et al.*, 2010).

COOPERFLORESTA has tried to confront these challenges by developing larger economies of scale. It has also sought to maintain and strengthen its close working relationship with the Acre Government to facilitate a joint approach to dealings with federal government agencies.

The following two boxes present complementary case studies from Acre State in Brazil and neighbouring Bolivia respectively.

BOX 5

Horizontal and vertical integration of extractive NTFPs: Cooperacre, Brazil

Cooperacre is a second-tier cooperative composed of numerous rural cooperatives in Acre State. Likely the largest cooperative in the Amazon region, it has played an important role in strengthening regional market systems for rubber and Brazil nuts. Established in 2001 with state support, Cooperacre is heavily involved in the Brazil nut trade through nut purchase and processing (selling over 4 000 tons in 2011), as well as managing a Brazil nut processing plant.

Cooperacre also manages logistics related to the supply and transport of liquid rubber (latex) sold to Natex, a condom factory located in the municipality of Xapuri, while also developing new products made from chemically processed rubber. Opened in 2008, Natex is a public-private-community partnership that purchases latex from hundreds of households. The state supports the latex trade by providing a subsidy of USD 2.10 per liter to households. Natex is selling about 100 million condoms per year through a contract with the National Health Agency of Brazil. Cooperacre also begins processing diverse regional fruits into pulp, including açai (*Euterpe precatoria*) and cajá (*Spondias mombin*) at a small plant located in Rio Branco.

Sources: Schmink *et al.*, 2014.

⁹ AUTEX (*Autorização de Exploração Florestal*).

BOX 6

The Inter-Community Forestry Committee (COINFO), Bolivia

COINFO (*Comité Intercomunal Forestal de la Provincia Velasco*) is a second-tier non-profit association in eastern Bolivia's Chiquitania region. It was established in 2005 by six indigenous communities with forest management plans in place, but little market negotiation power or policy support. In 2014 there were 17 indigenous community-based SSFEs in COINFO, 11 of which had approved management plans covering an area of 61 712 hectares. COINFO is one of 11 regional indigenous associations comprising the National Indigenous Forestry Association (AFIN), which advocates for indigenous rights and CFM.

The main roles of COINFO are: assisting members to prepare forest management instruments (management plans, annual cutting plans, etc.), which involves working closely with the forest authority; finding buyers for their products; and training. Unlike COOPERFLORESTA, COINFO does not have the requisite capital assets for timber extraction and processing, but has built a strong network of relationships and alliances with public institutions (e.g. the national forest authority, regional government and local municipalities), the private sector (e.g. Forest Chamber and Exporters Chamber) and donors (such as GIZ and SNV).

Sources: AFIN, 2014; Pawlowski, 2006.

CASE STUDY 2: COMMUNITY-BASED SSFEs IN CHIAPAS AND OAXACA STATES, SOUTHERN MEXICO¹⁰

The *Ejido*¹¹ *Monte Sinaí* in the State of Chiapas is a recently-established *ejido*. It was formed in 2001 with an area of 1 080 hectares collectively owned by 56 indigenous families. About half of this is classified as high-production pine-oak forest. Logging activities commenced in 2007. Based on their early experiences, *ejido* members established the “*Empresa de Productos Forestales Maderables del Ejido Monte Sinaí*” in 2010 to differentiate the *ejido* forest production role from its processing and marketing of forest products.

The relationship between the community and the enterprise is regulated by a special agreement (*Convenio de Comodato*) through which the community delegates processing and marketing responsibilities (including equipment management) for the forest enterprise. In practical terms, the *ejido* sells timber logs to the community's enterprise, which processes the timber and sells the products to local or national buyers. Both administration levels report back to their respective assemblies, ensuring transparency and accountability.

The current forest management plan has an annual allowable cut of 3 500 m³ of pine timber and 1 000 m³ of oak. Pine timber is processed by the enterprise sawmill

¹⁰ Sources: Bray, 2010; Zuñiga *et al.*, 2012; Ramírez Segura, 2015.

¹¹ The term *ejido* in Mexico refers to a tract of land held in common by the inhabitants of a Mexican village and farmed cooperatively or individually.

and sold as sawnwood, while the oak is used to produce and sell charcoal, generating an annual gross profit of USD 30 000. Products are sold in local and regional markets of southern Mexico. The sawnwood generated an average gross profit of USD 140/m³. Gross profits range from USD 100 000–150 000 per annum, most of which is reinvested into new equipment and buildings. In 2015, more than half its capital asset value (more than USD 500 000) was vested in logging equipment. Part of the profits are invested in social projects such as schools and rural roads, while forest production activities have generated about 50 jobs. All the *ejido*'s families, as well as those from nearby communities, are direct beneficiaries of these activities. In 2013, the *ejido*'s forest obtained FSC certification.

Ninety percent of the forest area in Oaxaca State is owned by communities, including 16 indigenous groups. Various studies note the combination of strong governance with secure tenure and supportive policies in this region. For example, the Union of Zapotecas-Chinantecas Forest Producers (UZACHI) manages a forest area of 20 000 hectares belonging to four indigenous communities. Each community has established governance procedures, officers and assemblies to investigate and resolve problems, represent the community enterprise to outsiders and monitor financial accountability. Communal traditions, like the annual rotation of posts, consensual decision-making and non-differentiated salaries have encouraged social cohesion. Another key strategy has been economic diversification: timber income is supplemented by ecotourism, the sale of bottled water and PES.

From 1997, UZACHI and other CFEs in Oaxaca State benefited from a World Bank program that encouraged an innovative and diversified approach to natural resource management, especially through the development of eco-tourism, commercialization of NTFPs, training and community biodiversity initiatives.

It is important to note that Mexico has a long history of community forestry and a more enabling institutional and policy environment for community-based forest enterprises than other Latin American countries. The *ejidos* and their enterprises are officially recognized by the country's forest authorities. Their leaders work closely with governmental forest officials in order to ensure transparency and accountability from both sides and to solve forest administration hurdles when they occur.

CASE STUDY 3: COMMUNITY FORESTRY CONCESSIONS, GUATEMALA¹²

In 1990, the Government of Guatemala established the Maya Biosphere Reserve to protect Guatemala's portion of Central America's largest tropical forest, which also stretches over parts of Mexico and Belize. The Reserve covers an area of 21 600 km² and is divided into three zones: nuclear protected areas where no harvesting of trees or other resources is permitted; multiple-use zones (450 000 hectares) that allow SFM; and buffer zones to prevent human encroachment. Communities living in the multiple-use zones, who argued they could manage the forest more effectively than private sector concessionaires, formed the Association of Forest Communities of the Peten (ACOFOP)

¹² Sources: Hodgson *et al.*, 2015 ; FFF, 2016; Radachowsky *et al.*, 2012.

in 1996. The association has been instrumental in consolidating 12 community forestry concessions granted in the multiple-use zones between 1994 and 2002.

The CFM concessions confer withdrawal, management and exclusion rights, although their impermanence (25 years) has created some uncertainty. Economic analysis suggests that timber alone has provided only marginal incomes to SSFE members (except those who are employed); in some forest concessions (those used by immigrants) cattle farming and other forms of agriculture are more important income sources. But SSFEs have been able to supplement their timber income with high value NTFPs, especially *Xate* (an ornamental palm exported to the US and other countries), *chiclé* (chewing gum) and ramon nuts.

The association has provided extensive training and support to SSFEs, especially in developing forest management plans, obtaining FSC certification (in several cases) and developing ecotourism projects. A major development was the establishment of the Community Enterprise of Forest Services (FORESCOM) in 2003, which includes professional staff who provide extensive support to SSFEs. It also has a sawmill capable of producing tongue and groove and decking products and drying kilns, allowing SSFEs to add value to their products.

Guatemala's community forestry concession experience is widely considered one of the most successful examples of SSFE development in Latin America. Nevertheless, the country's SSFEs still confront significant challenges. As a result of increasing drug trafficking and money laundering in the region, one major challenge has been effective control and protection against the unauthorized use of forest resources by outsiders. One method employed by SSFEs to tackle this challenge has been to communicate their experience worldwide and generate international support for their efforts and achievements, putting pressure on government agencies to act. But the challenge is far from over. Compounding existing problems is the government's hesitation in renewing community concessions following their 25-year expiration date due to pressure from competing interests. This problem is yet to be resolved and its outcome remains uncertain.

CASE STUDY 4: SAN JOSÉ DE PROTECCIÓN AGROFORESTRY COOPERATIVE, HONDURAS¹³

San José de Protección, formed in 1973 in the central highlands of Honduras, was one of the country's first agroforestry cooperatives (just pre-dating the national social forestry policy). Established by resin tappers, resin continues to be the primary income source of its 46 members (including 11 women). Timber production was introduced more recently, initially limited to logs, which are now processed in the cooperative sawmill.

The cooperative has usufruct rights over 1 526 hectares of public forest – about 90 percent of which is pine – owned by the local municipality. Before the cooperative was established, the forest was divided among community households for resin extraction. Resin tapping is therefore carried out on the basis of individually appointed plots, but

¹³ Source: Del Gatto 2016.

commercialization takes place through the cooperative. Owning a parcel of the forest for resin production is a precondition for cooperative membership.

All forestry-related activities are undertaken directly by members; professional foresters are only called upon to draw up annual cutting plans and renew the forest management plan every five years. Technical assistance is usually paid for by the cooperative or provided by close partners such as the municipality. When management for timber production commenced, it was agreed there would be a single management plan, with logging on individual parcels based on the understanding that parcel holders would be treated as private owners, receiving a stumpage payment of about USD 4 per m³. Therefore, the forest stock is privatized as it pertains to resin, but collectively managed with regard to timber.

The cooperative has its own resin storage and sawmill. Unlike other agroforestry cooperatives in Honduras, capital assets have been acquired mainly through loans rather than donor grants. Limiting external assistance has been an important cooperative policy, motivated in part by a desire to avoid excessive external interference in its management and decision-making process.

In 2012 and 2013, the cooperative was unable to harvest timber due to delays in renewing its management plan. The last timber harvest was therefore in 2011, when about 1 000 m³ of roundwood was extracted and 520 m³ of sawnwood was sold at an average price of USD 220 per m³. The gross profit margin in 2011 for both timber and resin was about 40 percent, but net profit margins were 21 percent for resin and about 5 percent for timber. This outcome reflects the high cost of timber production and marketing and appears to confirm what has at times been called the “anti-poor” characteristics of timber (Larson *et al.*, 2008; Pacheco, 2012). Until 2014, the cooperative’s entire net income was reinvested in capital assets or used to repay loans. Employment has, however, generated substantial benefits, including an annual wage bill of USD 54 000, corresponding to 5 400 workdays, as well as 1 500 days of indirect employment associated with timber transport, input supply, food services, etc. But the cooperative’s influence is wider still: in 2007 it was a founding member of the Honduran Federation of Agroforestry Producers (FEPROAH), which has a critical role in strengthening the voice of community-based producers in policy discussions.

Unlike COATLAHL (see case study below), the San José Cooperative has secure tenure rights and does not face land disputes with outside claimants. It has, however, been constrained by regulations on forest resource use and management, particularly because it has always striven to limit its reliance on outside support from development projects or timber companies. Indeed, in 2012 and 2013 the cooperative did not carry out logging operations due to delays in the lengthy process for renewal of its five-year forest management plan. Without external help, the preparation or renewal of a management plan is a huge task and the upfront drafting and approval costs – in terms of both time and money – impose a major burden.

Even after the plan has been approved, the cooperative faces additional hurdles to cut the timber and transport its products to market, as other paperwork is required that must be authorized by understaffed offices located far away from the community. These bureaucratic obstacles help to explain why the cooperative has never been able to cut and sell its entire annual allowable cut.

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5 Case studies: more challenging SSFE experiences

CASE STUDY 5: SMALL LOGGERS ASSOCIATIONS (SLAs) IN GUYANA¹⁴

Most land in Guyana is public: state forests administered by the Guyana Forestry Commission (GFC) cover 13.7 million ha or 63 percent of the country's total land area. Indigenous communities now legally own 3 million ha, an area that has doubled in size since 2000.

Under the 2009 Forests Act there is explicit provision for communities to have long-term, clear and secure rights. But in practice two-year State Forest Permissions (SFPs) are allocated to eligible Small Loggers Associations (SLAs), renewable at the discretion of the GFC. The long-term concessions are only held by large companies. In 2013, 70 SLAs held 128 SFPs over an area of 488 000 hectares.

In Guyana, SLAs supply an estimated 80 percent of national domestic timber demand. Each SLA has 20-90 members, who act as contractors for a larger number of chainsaw millers. It is estimated that some 18 500 people are employed in the chainsaw milling sector (Clarke, 2009). A strong local multiplier effect means that an estimated 70 percent of SLA income is returned to communities.

Various studies have, however, revealed the following problems:

- Two-thirds of SLAs do not have a legal identity, and so cannot obtain commercial bank accounts, negotiate contracts or receive donor money.
- The centralized concession allocation system means that even small-scale SLAs must make frequent trips to the capital, Georgetown.
- The forest fiscal system is highly regressive, imposing the same per hectare fee for small-scale licenses on degraded forest as for concessions of over 300 000 hectares in less logged areas.

Another major challenge faced by SLAs is gaining access to funding from lending agencies in order to improve their equipment pool. These agencies do not recognize the land tenure period of two years as sufficient collateral for loans.

In addition, while SLAs have the right to use forests for timber production, the public at large is also permitted to use these areas for subsistence purposes. Therefore SLAs are responsible for collaborating with other users to avoid conflicts. There are cases of farmers obtaining legal rights to sections of the same land under the jurisdiction of separate agencies, which often results in SLAs being unable to use the land in question.

¹⁴ Sources: Bulkan 2015; Palmer & Bulkan 2007; Thomas *et al.* 2003.

CASE STUDY 6: COATLAHL, HONDURAS¹⁵

The *Cooperativa Regional Agroforestal “Colón, Atlántida, Honduras” Ltda.* (COATLAHL) is a second-tier regional cooperative partnering with local community-based groups. Located in the northern Caribbean region of Honduras, COATAHL was established in 1977 and was one of more than 120 cooperatives promoted by the government-run Social Forestry System during the 1970s.

The cooperative’s central facility in the city of La Ceiba handles timber processing and marketing. Four community-based group members jointly manage approximately 5 450 hectares of FSC-certified and state-owned forest land, for which they hold officially granted usufruct rights.

COATLAHL has undergone an intense vertical integration transition. In its early years it marketed only a small number of high-value species such as mahogany (*Swietenia macrophylla*), cedar (*Cedrela odorata*) and rosewood (*Dalbergia tucurensis*), selling the rough, pit-sawn blocks of timber produced by its groups.

Since that time, market interactions have changed dramatically. Nowadays, COATLAHL trades more than 25 commercial species and sells a range of products. Four forms of market engagement can be identified based on its products and primary marketplaces:

- chain-sawn timber blocks traded on the local market;
- kiln-dried sawn boards sold on the local market;
- finished products (e.g. mouldings, furniture and doors) sold on the national market; and
- finished products (e.g. doormats and stools) exported internationally.

Over the past 15 years, the cooperative has invested significantly in establishing a commercial relationship with a retail chain in Denmark called COOP Denmark, which has been importing FSC-certified finished products from COATLAHL since 2004.

A clear challenge for COATAHL is the high costs associated with export production. This was exacerbated by a change in COOP Denmark’s policy in 2013, which resulted in a decision to stop paying a premium price for FSC-certified goods supplied by community-based producers. A related factor has been a 30 percent increase in the costs of packaging its exported goods (Herrera, 2014).

By contrast, a persistent challenge in the local and national markets is competition from cheaper products produced from illegally sourced timber. The cooperative has tried to respond by investing in quality and diversifying its product base, but illegal logging continues to distort timber markets by depressing timber prices.

The members of COATLAHL argue that regulatory instruments remain overly bureaucratic, imposing direct barriers to the cooperative’s commercialization activities. Such arguments are confirmed by several studies. For example, Chavarría (2010) found that obtaining an approved management plan involves 20 actors and more than 40 procedures. Additional burdens hinder the transport and marketing of the cooperative’s products, particularly because transport permits also require several bureaucratic steps and policy

¹⁵ Source: Del Gatto, 2016.

controls along the main roads often detain trucks loaded with timber, even if they have obtained transport authorization. This causes delays and increases transport costs.

Tenure insecurity is a major threat to COATLAHL's producer groups. All have a "community forest management contract" granted by the forest authority. However, these contracts do not always guarantee respect for the rights therein. The forest areas of its constituent member groups have been subject to recurrent competing claims involving poor peasants, wealthy ranchers and even businesses interested in developing hydropower generation or tourism. The forest authority and other state institutions have consistently failed to support COATLAHL and its member to defend their exclusion rights.

**PART 3.
LESSONS LEARNED AND EMERGING
ISSUES FOR SSFE DEVELOPMENT
IN LATIN AMERICA**



6 Key lessons and issues for sustainable SSFEs

6.1 PROPERTY RIGHTS

In the absence of long-term tenure there is little incentive for SSFEs to make long-term investments. To the contrary, the incentive is to degrade the resource and move on after a few years. Tenure security is a major determinant of human welfare, conflict and violence levels, environmental degradation and the cultural integrity of indigenous societies. The issue of property rights is, therefore, a moral as well as practical one (Sunderlin *et al.*, 2008).

As discussed in Section 3, there have been major advances towards securing or strengthening the property rights of forest-based communities and, to a lesser extent, smallholders in most countries in the region. Many cases of insecure or short-term tenure and partial devolution of rights do, however, exist as demonstrated in several case studies (3, 5, 6).

6.2 THE REGULATORY FRAMEWORK

The second major challenge for SSFEs after tenure is arguably the costs imposed by inappropriate regulatory frameworks originally designed to minimize the environmental costs of industrial forestry operations. Even attempted modifications of these frameworks struggle to escape some of the original design elements. These costs undermine economic viability and, for SSFEs in the informal sector (or illegal operators), represent a barrier to legality.

Regulations and procedures generally cover a range of issues, including forest use and management, land tenure, environmental safeguards, business registration and operations and the transport and marketing of forest products. Each regulation generates procedures and costs – especially transaction costs involving visits to remote offices – and reduces the flow of benefits to communities and smallholders (de Jong *et al.*, 2010). As observed by Molnar *et al.* (2008a), multiple requirements and procedures are associated with the “additive nature” of regulatory frameworks (not limited to the forest sector): new rules and procedures are established without eliminating those previous regulations that no longer fit changing realities and often contradict subsequent regulations.

In particular, the preparation of forest management plans (and sometimes operational plans) requires a specialized skills set that must be hired or contracted out. Undertaking a forest inventory, for example, is often a major cost. As shown in case study 4, the complexity involved in renewing its forest management plan meant the San José Cooperative lost at least two years of timber production. Even after the plan itself was approved, the cooperative required harvesting and transport authorization from understaffed and remote

offices. Problems with this process have prevented the cooperative from harvesting and selling most of its annual allowable cut (Del Gatto, 2016). A recent study by Piketty *et al.* (2016) found that even in Brazil – arguably second only to Mexico in terms of policy support for SSFEs – timber producing SSFEs were being undermined by a combination of cumbersome regulations, private sector competition and illegal timber.

Formalization also usually means paying taxes. For some SSFEs these high costs result in a dependence on financial and technical support from NGOs, government and/or donors. Where such support is unavailable, there is little alternative to securing forward financing from timber companies keen to obtain low cost raw materials. Recognizing these problems, some governments have attempted to introduce simplified regulations for the small-scale sector (Box 7). These have been met with mixed success. While simplified management plans and other reforms have reduced some costs, the costs of compliance remain much too high for most SSFEs (de Jong *et al.*, 2010). In some cases, simplified forest norms were revoked due to perverse or unintended consequences. In Bolivia from 2003–2006, for example, a provision granting smallholders permission to log areas under three hectares without a management plan was revoked after its systematic exploitation by intermediaries seeking to access low cost timber (Pacheco, 2012). This illustrates the tendency of simplified timber regulations to favour actors further along the value chain due to market imperfections such as patron–client relationships and asymmetric information. This shapes how smallholders and communities interact with intermediaries, sawmill owners and the formal industrial sector (Pacheco and Paudel, 2010).

BOX 7

Simplifying forest norms in Ecuador

Millions of hectares of Ecuador’s forest land are owned by tens of thousands of settler and indigenous smallholders. The abundance of forest resources and low opportunity cost of labour mean that even low timber prices are sufficient to encourage small-scale, labour-intensive logging by small producers. Small-scale timber harvesting is therefore widespread, accounting for most of the country’s timber extraction from natural forests and agroforestry systems.

In response, Ecuador has implemented multiple reforms since the early 2000s, aimed at adapting the regulatory framework to the needs and capacities of forest smallholders. These have included introducing minimum management standards for logging operations. While other countries penalized the on-site conversion of logs into lumber using chainsaws, Ecuador established simplified rules for small-scale logging based on chainsaw milling. Less demanding permit requirements were also introduced for wood extracted from agroforestry systems and pasture land. Since 2009, these reforms have been strengthened by an online Forestry Administration System (SAF), which fast-tracks the approval of management plans and issue of logging licenses and transport permits.

Sources: Messina *et al.*, 2006; Sierra, 2001; and Wunder, 2000.

6.3 INSTITUTIONAL ENVIRONMENT AND CAPACITY DEVELOPMENT ASSISTANCE

A key institutional challenge highlighted by the above case studies relates to the difficulties SSFEs experience in generating profitable incomes in many parts of tropical America. As noted in the previous section, SSFE development initiatives in LAC countries occur in a persistently limiting institutional and political environment. This is not only the case with regard to legislation, policies and regulations affecting community forestry, but also the impact those policies and legal instruments have on forest product markets and access to credit. As the two case studies from Honduras (4 and 6) particularly illustrate, burdensome regulatory frameworks tend to operate as institutional barriers imposing excessive transaction costs on local forestry producers.

All six case studies show that most regulations and policies have been designed with large corporate actors in mind. The progressive entrance of local producers into commercial forestry production has not led to a substantive adjustment of standards and subsequent modification of regulations. In cases where adjustments have been made, they are quite regularly abused by non-local producers. As a consequence, legal simplifications benefiting local producers are often revoked.

Proponents of SSFE development have suggested that SSFEs represent a means to overcome these barriers. Hodgdon et al. (2013) make this argument for SSFEs in Mexico (case study 2). However, SSFE development requires local adaptation to a set of practices and rules that local participants often find difficult to absorb and comprehend. Their successful insertion into forest product value chains requires even deeper organizational adaptations (de Jong *et al.*, 2010).

Other constraining conditions, such as those detailed in the case studies, contribute to the difficulties SSFEs encounter. These include the weak capacity of most government agencies to provide adequate technical assistance for SSFE development. Government support initiatives suffer from inadequate funding, poorly trained technical staff and the requirement to comply with planning and implementation regimes that often are not tailored to local objectives and conditions (cases studies 5 and 6 are a case in point in this regard). Suggestions for overcoming these problems include: adjusting the goals and objectives of assistance initiatives during their lifetime; more flexible implementation processes; using multidisciplinary teams to address problems; and ensuring local ownership over initiatives (Sayer and Campbell, 2004).

The case studies also show the frequent mismatch between the business requirements for SSFE development and the practices, values and priorities that shape the functioning of local forest-based communities. For example, community governance bodies may not understand the technical, financial and management issues related to SSFE development, yet they intervene by reserving the right to make key decisions. Similarly, community members who participate in SSFE management do not always appreciate the demands of the job (Antinori and Bray, 2005). These factors have presented significant obstacles in several case studies, particularly in some Mexican SSFEs (case study 2) and COATLAHL (case study 6).

Another problem is that internal SSFE managerial positions often change every two or three years. This is usually a requirement established by internal bylaws or customary rules. While short terms can help to reduce corruption risk and provide opportunities for new leaders, they also have corporate knowledge implications when experienced managers depart and are replaced by individuals lacking skills and experience (case studies 2 and 6). Limited knowledge and lack of training can lead to poor bookkeeping and money management, creating confusion and suspicion even where mismanagement has not occurred, as transpired in several case studies (Guyana SLAs, COATLAHL and Mexican SSFEs).

6.3.1 Business development and marketing capacity

Many SSFEs fail due to weak business organization. The case studies show that most SSFEs fail to pay sufficient attention to the importance of business organization, value chain analysis and product development. Few SSFEs have the capacity to supply consistent volumes and quality to national and international markets (Pacheco and Paudel, 2010). Business capacity tends to be weakest in cases where there has been least market exposure. This is because business and marketing skills develop over time as a result of interaction with downstream value chain actors (Pokorny and de Jong, 2015). In the Amazon region, most forest producers have had little integration with market structures and sell to local middlemen for minimal prices; few have successfully established trusting relationships with non-local market actors.

The situation is different in Mexico and Central America, where most communities have a longer history of market exposure and have been able to develop market-oriented relationships and institutions (Stoain, 2005. See also case studies 2, 3, 4 and 6). Mexico's "inclusive value chain" approach has been successful for many SSFEs, which have managed to build trusting relationships with timber companies (Bray et al., 2006). The case studies from Guatemala (3) and Honduras (6) provide examples of local communities producing certified timber for international markets. But this takes time and prolonged external support. Success also depends on maintaining robust management and production systems, quality control schedules, etc. These concepts are often culturally challenging for many SSFEs, especially in more remote areas.

Due to this gradual process of learning from market exposure, SSFEs tend to start as primary producers and move down the supply chain as their experience grows. This has been the development path of COATLAHL (case study 6) over a 40-year period. Molnar *et al.* (2011: ix) note that:

In Mexico, [smallholder and community-based forest enterprises] 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 sawnwood and finished wood products to Europe and ornamental non-wood forest products to the United States.

Those SSFEs lacking experience in marketing timber usually depend on intermediaries who tend to receive a disproportionately large portion of the final sale price. On the other hand, intermediaries play key roles such as sorting out paperwork and linking SSFEs with the processing industry (Pretzsch *et al.*, 2014). This frequently involves a degree of rent-seeking along the value chain. Business capacity is often weak among indigenous groups that for millennia have based their socio-economic relationships on the “gift economy” underpinned by cosmological belief systems. Pokorny and de Jong (2015) point out that the “value inclusion approach” makes assumptions about value systems and argue that, for some cultures, reciprocity and solidarity may be more important than profit maximization and capital accumulation. Similarly, Stoian and Donovan (2008) point out the challenges of social reorganization necessary to become effective SSFEs, especially the challenge of reconciling social and economic objectives.

Antinori (2005) and others have argued for joint ventures between community and private sector groups as one way to overcome low business capacity. An analysis of 14 community–company case studies in Latin America (Hewitt and Castro Delgado, 2009) found that while results were mixed in terms of benefits for both communities and companies, the benefits to communities were such that they could not afford to ignore them. The main factors affecting the success of the partnerships were:

- the level of business skills, financial management and human capacity of communities;
- the prevailing business and political environment;
- the level of trust established between the company and community, including through shared goals, e.g. long-term supply continuity;
- efforts to strengthen internal community structures;
- clear and consistent economic benefits, with effective distribution within the community;
- pricing systems incorporating real costs;
- financial support for communities through credit or loans rather than project subsidies or company advances;
- written agreements, clear rules and transparent negotiations;
- presence of company representatives in the field;
- third-party facilitation enabling the relationship;
- provision of equipment and training by the company.

6.3.2 Community governance capacity

All communities have some form of community governance. In Latin America, some communities have adopted traditional authoritarian or inherited leadership models, while others elect officials in accordance with current laws and regulations. These two systems are often combined: in many cases formalized SSFEs apply informal rules (embedded in cultural norms) for resource access and use (Alcorn, 2014). A review by Alcorn (2014) found that self-organized institutions tended to be more effective than those designed or facilitated by external agents, at least in regard to governing common property resources. This is because governance is more likely to be effective when based

on shared traditions, values and accumulated experience than imported governance models. While the latter may seem more democratic, it can often erode social capital and customary authority. This element of self-organization results in a great diversity of CFM institutions.

Communities in Latin America generally govern themselves by means of a formal Assembly authorized by national and customary law and comprised of household heads or all community members above a certain age. The Assembly reaches decisions through consensus rather than formal voting. In indigenous communities, an elders' advisory council is often consulted to guide deliberations and approve decisions (Alcorn, 2014).

Stronger enterprise organizations are critical for market access because they create the scale efficiencies and networks that bring significant product volumes of reliable quality to markets. The SSFE experiences reviewed by Del Gatto (2016) shared similarities in their organization and operation, although their size, structure and dynamics varied greatly depending on context. All had a structure integrating (in varying degree) community governance elements with enterprise forms of organization. None had professional managers, but were instead governed by management committees formed by members and elected by a general assembly, with a mandate to make operational decisions and administer the organization. The president of the organization, who chaired the management committee, acted as general manager.

6.3.3 Technical assistance capacity

As briefly mentioned in Section 6.3, the capacity of state extension or outreach staff – often the main service providers – strongly correlates to the capacity problems experienced by SSFEs. Government forestry agencies tend to lack sufficient budgets and well-trained staff, particularly in the decentralized offices where most SSFEs operate. Forestry education curricula have also been slow to adapt to working with SSFEs. When curricula are based on traditional forestry models, graduates may lack the requisite social, mediation and enterprise development skills and find it difficult to understand local SSFE realities and market situations, often preferring to work with imported models or paradigms. As stated by de Jong et al. (2010: 310), “externally proposed forestry development models do not last unless they are rooted in the local social structures, economies and value systems”.

6.4 ACCESS TO CAPITAL AND FINANCE

Difficulty accessing capital and finance is another issue linked to high costs resulting from an obstructive regulatory framework and dependence on external support (Sections 6.2 and 6.3). Most of Latin America's SSFE financing mechanisms or programs contain a significant subsidy element since the prospect of commercial loans is unrealistic. This is the result of the so-called “difficult economics” (Kaimowitz, 2000) of community forest management (particularly timber-based SSFEs), as demonstrated in Guatemala (Box 3) and in Brazil's PRONAF-Florestal rural credit program for the regeneration of deforested areas (Humphries *et al.*, 2012). If subsidized finance is unavailable, SSFEs have little alternative but to accept funding from downstream value chain actors. As already discussed, this tends to be an inequitable relationship.

Lenders also look to minimize risk by requiring borrowers to use their land (if they own it) as collateral, but SSFEs are naturally hesitant to do this. Group borrowing and solidarity can, however, act as substitute collateral, since the group applies peer screening and repayment pressure on individual borrowers. Group borrowing also reduces transaction costs when compared with individual borrowers and is a means of achieving economies of scale (FAO, 2005).

6.5 EQUITY ISSUES

As pointed out by Alcorn (2014), vulnerable groups generally benefit from locally developed forestry settings in which social and cultural values tend to be central. By contrast, they are generally at greater risk of losing out in more market-oriented contexts. In general, there seems to be limited analysis of social and gender equity issues in the Latin American literature on SSFEs. For example, the section on “equity and poverty alleviation” in the FAO review paper of 40 years of community forestry (Gilmour, 2016) draws on analysis from Africa and Asia, but not Latin America. It is well established, however, that elite capture and other equity factors in CFM situations are strongly related to governance, especially accountability and transparency (Larson and Petkova, 2011). It is also recognized that women and the poor are more dependent on forests in remote areas, especially as forest resources contribute to their “coping strategies” and at times of shocks (Shackleton *et al.*, 2011).

It is clear that strong equity issues surround NTFPs, especially those involving the commercialization of a hitherto subsistence product and/or domestication of an extractive NTFP product. These processes change the availability of products for subsistence and create new sets of beneficiaries, predominantly those best placed to benefit (Belcher and Schreckenberg, 2007).

6.6 THE CHALLENGE OF ECONOMIC VIABILITY

Most of the challenges outlined above are factors that will fundamentally determine the economic viability and sustainability of SSFEs. According to the literature, several types of SSFEs have demonstrated long-term economic viability, including:

- smallholder-based forestry and agroforestry systems in the Amazon, such as swidden management in more remote areas where demographic and commercial pressures are lower (Pinedo-Vasquez *et al.*, 2001);
- collective and individual management of a range of NTFPs, e.g. *açaí* palm hearts and fruit (Shanley *et al.*, 2008), although questions remain about the long-term viability of extractive reserves given their restrictive regulations and institutional management challenges (see Box 5);
- CFM for timber production in situations where: tenure and governance are strong; forests are accessible and not badly degraded; and there is strong business capacity and significant vertical integration, as in many Mexican forest *ejidos* and communities (case study 2);
- CFM and other types of SSFEs where two or more significant and marketable forest products are combined, most commonly timber and NTFPs, as for example

in the Peten region in Guatemala (case study 6) and/or other forest-based income flows such as PES supplementing net incomes derived from timber;

- where SSFE timber producers undertake strategic partnerships with commercial stakeholders further along the value chain with access to higher value markets. One such partnership that began quite well but encountered increasing difficulties over time is the relationship between COATLAHL and COOP Denmark, as outlined in case study 6.

In most “successful” market-oriented CFM case studies, long-term external financial and technical support from donors, NGOs and/or governments has been critical. This is especially the case where dependence on timber is high. Such support has helped SSFEs to access niche export markets, often with certified products. Viability is therefore conditional and rather precarious.

Since not all SSFEs can access such support (the quality or type of support is often deficient or inappropriate generating low or marginal incomes, making forests vulnerable to alternative economic activities (most obviously agricultural) offering higher returns on land, labour and capital. While smallholder timber production has proved quite resilient in the Amazon region, data reported by de Jong *et al.* (2010) indicates net incomes from timber tend to be very low. In southern Ecuador, for example, smallholder timber producers rarely earn more than USD 15 per annum per hectare, even with short distances to market and abundant timber stocks.¹⁶ Low profitability from timber production in the Amazon region is ascribed to low productivity and high production costs.

Conversely, Pacheco (2012) reports much higher profit margins from logging by smallholders and communities. In case studies from Bolivia, Brazil, Guatemala and Nicaragua, the net income of log or timber production ranged from USD 177–1 014 per family. According to Pacheco (2012), this was the result of two main factors: the capacity of communities to interact with intermediaries and companies in timber markets; and the specific market conditions. Interactions between these two factors “shape the ways in which smallholders and communities engage with timber markets, thereby influencing the benefits they can obtain from commercial use of their timber forests” (Pacheco, 2012: 114).

A review of several timber-based SSFEs in Brazil (Humphries *et al.*, 2012) also found high variability in their respective economic performance. Viability was higher where a cluster of vertically integrated small-scale SSFEs (e.g., in the Mamirauá Sustainable Development Reserve, where a high-value community-based fishery also contributes) were able to spread transaction costs and negotiate sales. Viability was reduced in smaller, isolated log-producing SSFEs (e.g. ACAF CFE). Extent of illegal logging was another key factor.

Even Mexico’s SSFEs, which have the greatest experience and strongest property rights in the region, often face some challenges with their medium value timber species and to get advantage of PES. A study in the south-east state of Quintana Roo (Ellis,

¹⁶ This amount may seem low, but can be significant for local households both in absolute terms (when they own significant patches of forests) and in relative terms (when they have little or no alternative income generating opportunities).

2015) is illustrative. In recent years, timber producing *ejidos* have been subjected to various changes and threats, including cheap timber imports as a result of the North American Free Trade Agreement (NAFTA), changes to national agricultural and forestry policies and hurricanes. As a result, “only a few SSFEs are profitable”. But the study also observed that the *ejidos* seem to have an inherent resilience, enabling them to adapt reasonably well to change.

A general conclusion is that in most situations the net value of timber production alone is rarely sufficient to sustain SSFEs and will require a complementary income sources (e.g. from marketable NTFPs, PES, etc.) and/or external financial and technical assistance, at least in the formative years.



7 Synthesis discussion

Various sources (Gilmour, 2016; Pokorny and de Jong, 2015) concur that while CBF based on formally-established SSFEs has received the most international and government support, it has not met expectations. By comparison, the individual smallholder sector and other informal groups have been largely ignored. Before considering potential remedies, the reasons for these disappointing outcomes must be clearly understood. Where SSFEs have underperformed, the causes can usually be attributed to one or more of the following:

- attenuated property rights regarding both tenure and commercialization, including a failure to recognize local decision-making authority in some cases (Gilmour, 2016). In general, Latin America governments have failed to back up tenure reform with effective implementation and supportive policies¹⁷. Instead, they have tended to impose use and marketing restrictions, resulting in attenuated property rights (Larson *et al.*, 2010);
- high costs imposed by the regulatory framework (e.g. business registration, forest management plans, transport and marketing procedures), again causing attenuated property rights;
- weak administrative or business development capacity, often linked to limited experience and market exposure, as well as cultural factors (raising questions regarding the value assumptions made by market-oriented SSFEs on behalf of some forest peoples) and the corresponding failure of governments, donors and NGOs to provide effective business, market and technical support services;
- competition from illegal timber and other problems in unstable frontier regions associated with weak governance and the breakdown of law and order;
- institutional weaknesses regarding territorial or multiple community governance capacity (in indigenous territories and extractive reserves), especially in complex governance situations;
- low stumpage values for forest products due to prior forest degradation, distance and/or accessibility. For example, Pokorny and de Jong (2015) point out that the “value chain inclusion” approach is often unrealistic in terms of the marginal forest product values at stake;
- the failure of governments and donors to provide effective financial incentives for SFM and the policy and market failures reduce SSFEs’ economic viability (see below).

¹⁷ It should be noted that stronger property rights, including secure tenure, are a necessary but not sufficient condition for sustainable livelihood and environmental benefits. For example, a strong land title does not automatically stop land invasions, and it can also lead to forest clearance for agriculture and/or sale (Larson *et al.* 2010).

The failure of SSFEs to meet expectations must be placed in a broader context. As already noted, a fundamental problem, especially when SSFEs are managed primarily for timber, is the “difficult economics” of SFM (Kaimowitz, 2000). Sustainable forest management has high costs, including transaction and opportunity costs, while market and policy/governance failures imply that forest managers are not compensated for the public goods generated.¹⁸ Moreover, in many cases the prices secured by producers are depressed as a result of illegal production, lack of market information, lack of entrepreneurial skills, and weak negotiating capacity with other value chain actors, etc.

This suggests that expectations for SSFEs have been unrealistic. Viewed from a more realistic perspective, the outcomes in many countries have been quite encouraging, especially with regard to the environment (see Section 3.4). Local development outcomes associated with employment and the local economic multiplier effect have also been positive (although equity outcomes related to elite capture and gender are less clear due to a lack of empirical evidence). While long-term sustainability may still be in doubt, in most cases SSFEs survive with limited profitability, albeit with the help of outside support, thereby preventing the inevitable deforestation and forest degradation that would take place in their absence (except in the case of remote or low-value forests).

Arguably, external support (including financial) for SSFEs is both inevitable and justified. The “public goods” argument is particularly strong given prevailing policy and governance failures in many areas where SSFEs are located and where alternative management models (public or private) are likely to have severe environmental and social impacts. The debate is therefore not about whether to support SSFEs (at least those that do not rely on resource degrading practices), but how best to support them.

Another finding is that market-oriented capacity building is not always appropriate for SSFEs. Indigenous groups and smallholders in remote areas of the Amazon region with limited market exposure and experience who may hold different value systems are illustrative of this (Pokorny and de Jong, 2015). Market-oriented models may not work since (a) profit maximization may be less important than other objectives such as group solidarity or reciprocity; (b) their lack of market experience makes it unlikely these groups will effectively adopt market-oriented systems and procedures; and (c) the “inclusive value chain” approach may be inappropriate considering the low market values (stumpage values) of forest products in many cases. Alternative models and approaches building on successful, locally-developed forestry are therefore needed.

¹⁸ It should be flagged that community and smallholder managed lands are contributing major co-benefits in global public goods such as biodiversity conservation, ecosystems services (including carbon capture and storage), and cultural heritage protection for which they are poorly compensated.



8 Policy recommendations

8.1 STRENGTHEN SSFE PROPERTY RIGHTS

A review by Alcorn (2014: 7) found that:

The most significant community forestry project interventions in Latin America have focused on policy reforms that strengthen rights and support decentralization to improve community forestry management and marketing of community forestry products.

The whole bundle of property rights relevant to SSFEs must be strengthened, including rights of access, rights of exclusion of outsiders, rights to establish and enforce rules, rights to harvest, market and transport products and rights to make management decisions (Schlager and Ostrom, 1992). Usufruct or time limited tenure should be avoided, and commercialization rights should not be attenuated by complex regulatory procedures. As described above, incomplete or attenuated rights increase costs, disempower local producers, reduce their bargaining power and reduce incentives for long-term investment.

8.2 DEVELOP APPROPRIATE REGULATIONS AND PROCEDURES FOR SSFEs

Appropriate regulations and procedures are vital for the economic viability of SSFEs and the full exercise of their property rights, including rights related to commercialization. Previous attempts at simplification have, however, met with mixed success, including some perverse outcomes. Approaches to rationalization and simplification of regulations and procedures relating to SSFEs must be guided by lessons learnt from these experiences (see Section 6.2 and Box 7). A key lesson is that regulatory simplification must be complemented by policy measures tackling structural market distortions, particularly those favouring downstream value chain actors with better access to information and resources (Pacheco and Paudel, 2010).

8.3 STRENGTHEN INSTITUTIONS AND BUILD BUSINESS AND GOVERNANCE CAPACITY

Strengthen existing institutions

Institutional strengthening and other capacity building efforts to support SSFE development in the LAC region should focus on existing and locally developed institutions, since these are most likely to be effective. This means supporting a diversity of institutional and organizational forms and avoiding blueprint approaches (Alcorn, 2014). Capacity building activities should be identified through careful stakeholder consultation, including with

women and vulnerable groups. An interesting case briefly discussed in this document is the example of COINFO (see Box 6).

Support community-driven planning processes and participatory community mapping

Community-driven planning processes such as “life plans” or “territorial management plans” increasingly being used by indigenous groups are a priority area of support. Participatory community mapping is a complementary tool that has proved empowering and helped resolve land conflicts. (Alcorn, 2014). The LAC region can also draw on the success of “community tenure mapping” in the Congo Region using handheld GPS devices (www.MappingForRights.org).

Support second-order CBE service associations

Technical, business and marketing support is most effective when delivered by personnel answerable to grassroots or member-based organizations, since this is most likely to respond to their needs. A priority is therefore to further strengthen the capacity of second-order associations or federations to deliver services to their members, drawing on multiple good practice experiences (e.g. UZACHI, Mexico; COOPERFLORESTA, Brazil; COINFO, Bolivia, etc.). Second-order associations’ policy lobbying efforts should also be supported, along with attempts to build political space for SSFEs, for example by fostering alliances with appropriate national and international bodies such as the Mesoamerican Alliance of People and Forests (AMPB).

Develop business and marketing capacity through “training the trainers” courses

A cost-effective method of building SSFEs’ business development and marketing capacity is through “training the trainers” courses provided to members of associations to be able to train others, state agencies and NGOs working with local communities. Skills training could include: bookkeeping; financial management and governance (downwards financial accountability and transparency with SSFE members, etc.); enterprise development using the FAO Market Analysis and Development (MA&D) tool; and participatory value chain analysis. A clear example of this approach is the work carried out for more than two decades by ACOFOP in Guatemala’s Peten region, now with the support of FORESCOM (see case study 3).

Provide SSFEs with market information and marketing support

Governments, with donor and NGO support, should improve or provide market information, market infrastructure, links between buyers and sellers and market opportunities for legal and sustainable SSFE products (e.g. through public procurement). Specific measures could include:

- establishment of, or support for, existing market information systems geared to support SSFE development, taking advantage of information, communication and technology (ICT) tools and increasing levels of mobile phone use;

- support for trade fairs, which can be important for SSFEs based on NTFPs (there have been several positive examples of this in the Amazon region, including the annual FLORA fair held in Rio Blanco from 1994 to 2005 (Schmink *et al.*, 2014));
- support for horizontal integration (or development of marketing cooperatives) and community–company partnerships;
- public procurement policies prioritizing legal SSFE products that meet quality standards.

Strengthen the capacity of government staff to adopt a more facilitating role

The capacity of government forestry staff should be increased in many countries to develop the skills and attitudes required for a more consultative, participatory and facilitative approach to supporting CFM and SSFEs (many staff have instead been trained to adopt a more controlling or enforcement role in line with the “control and command” approach and in a number of cases this requires an “institutional cultural change”). This type of capacity building has, for example, been undertaken in Ecuador (Box 7).

8.4 STRENGTHEN LAW ENFORCEMENT AND GOVERNANCE

Forest law enforcement and improved governance are essential for business confidence, including ensuring SSFEs avoid unfair competition from cheap and illegal forest products. Many SSFEs in LAC operate in frontier areas characterized by severe instability, illegal logging, land grabbing, violence, corruption, drug dealing and money laundering. Improving law enforcement and governance in such areas will therefore require political will and international support.

8.5 PROVIDE APPROPRIATE FINANCIAL SUPPORT/INCENTIVES

Undertake country-level analysis and consultation for the design of appropriate financial incentives for SSFEs.

Each country in the LAC should undertake a review of experiences and impacts resulting from the provision of direct and indirect financial incentives for CFM and other types of SSFEs in a way that promotes economic, social and environmental sustainability (and focusing on the efficiency, effectiveness and equity of existing or proposed mechanisms). This review should explore how existing financial schemes (PES, carbon finance, low cost credit, fiscal incentives, forest fees, free or low cost technical assistance, etc.) could be used to support SSFE development in LAC.

8.6 EMPOWER WOMEN

It is widely acknowledged that empowering women is an effective means of alleviating poverty. Many obstacles to increasing women’s participation in management and decision-making exist, but one potential approach to increasing gender mainstreaming and raising its profile in LAC would be to adapt a tool such as the Women’s Empowerment in Agriculture Index (WEAI) to monitor female participation (IFPRI, 2012). The tool was designed to measure the roles and extent of women’s engagement in the agriculture sector in five main “domains”: decisions about agricultural production; access to and

decision-making power over productive resources; control over use of income; community leadership; and use of time. Indicators are identified for each domain and data is collected to track progress.

8.7 RESEARCH TO PROMOTE EQUITY AND RAISE THE SSFE POLICY PROFILE

Conduct longitudinal research on the outcomes of SSFEs

As observed by Alcorn (2014), there is a lack of literature containing robust and reliable data (social, economic, biophysical) on the outcomes of community forestry in LAC. Methodologically sound longitudinal research (e.g. using a statistically representative sample) should be undertaken to measure SSFE progress and outcomes against alternative forest management and conservation models (government and private sector). Sound data collection methods including gender differentiation (e.g. drawing on the CIFOR PEN methodology and/or the World Bank (2012) Poverty-Forests Linkages Toolkit) and building on robust baselines, etc. Such data and analysis could be used to justify increased policy support for the SSFE sector and help to identify appropriate policies and interventions.



Conclusion

Latin America is a world leader in community forestry and has a variety of experiences and lessons to offer on smallholder and SSFE business models. Part 1 of this publication examined key trends and concerns for SSFE development in Latin America, including increasing policy support for community forest management in four countries (Brazil, Bolivia, Mexico and Honduras). Part 2 discussed six SSFE case studies involving timber commercialization. Drawing on the findings from these two parts, Part 3 focused on lessons learned and emerging challenges for supporting SSFEs in Latin America.

In Brazil and Bolivia, social movements by indigenous peoples and other rural populations agitating for greater forest rights have led to the transfer of large areas to communities. These local people now have the opportunity to manage their forests (either collectively or individually) for their multiple benefits, including commercial timber production and processing.

In Honduras, government recognition and support for community forestry began much earlier, but communities have not been granted the extensive tenure rights obtained in Brazil and Bolivia. Official procedures for gaining more substantial rights exist, but they are complex, costly and largely ineffective, and only provide limited benefits. Even in cases where communities do have commercial exclusion rights to forests, government agencies have been reluctant or unable to help them to defend them.

The Mexican experience – particularly the *ejidos* – is worth considering as a good model and it highlights as well the opportunities being missed in other parts of the region to do more to recognize formal community ownership of forests, enhance community management powers and amplify the benefits communities can derive from them. In addition, the experience of Mexico underscores the substantial opportunities that exist for the State, together with NGOs and other actors, to promote local management capacity through appropriate extension strategies.

The literature review and findings in the six case studies indicate that in some circumstances the development of SSFEs represents an opportunity to strengthen local livelihoods and fight poverty while conserving the natural resource base. As clearly demonstrated in Mexico and Guatemala, local benefits resulting from SSFE development may include wages and employment, profit sharing, capital accumulation, cultural and political empowerment, investment in public goods and increased conservation of forest ecosystems.

On the other hand, all six case studies faced significant challenges. First, SSFEs find it difficult to generate profitable incomes through forestry activities under the ecological and economic circumstances prevailing in many parts of tropical America. If they wish to participate in forest product value chains, local forest producers must undergo substantial organizational adaptation, which they often find hard to comprehend and carry out.

While new market trends have opened up new commercial opportunities, producers face more competition in their traditional markets and a number of restrictions to comply with quality standards and requirements to commercialize their products overseas.

One additional challenge faced by SSFEs is a persistently limiting institutional and political environment in most, if not all, LAC countries. This applies not only to the legislation, policies and regulatory bodies directly affecting community forestry, but also those that impact forest product markets and access to and conditions of credit.

Other constraining conditions include the limited capacity of government agencies to provide adequate training and technical assistance. This is largely the result of inadequate funding and a limited pool of capable technical staff.

Proponents of SSFE development rightly argue that the formation of SSFEs is itself a response to these challenges and their existence increases opportunities for successful outcomes. This has been demonstrated time and again in several countries. At the same time, the SSFE model has not achieved anticipated outcomes in an important number of cases, at least in the Amazon region. This is partly due to the significant hurdles SSFEs must overcome to establish themselves effectively.

This suggests that SSFE proponents must observe the experiences of self-generated forestry models more carefully and interpret them more effectively in order to propose forestry development models that are acceptable to local forestry protagonists.

Finally, this study has contributed to mapping the key challenges hindering the development of small-scale forest enterprises in Latin America, as well as the opportunities that exist and the huge potential of SSFE to deliver against multiple Sustainable Development Goals. These include those for relieving poverty, providing decent work, reducing inequality, addressing climate change, providing a conducive policy, legal and institutional environment, building entrepreneurship capacity and facilitating access to funding and markets for SSFE and their products.

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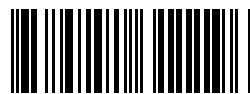
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ISBN 978-92-5-131119-6



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CA2431EN/1/11.18