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Routledge Handbook of Community Forestry

Edited by Janette Bulkan, John Palmer, Anne M. Larson, and Mary Hobley

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ROUTLEDGE HANDBOOK OF COMMUNITY FORESTRY

This handbook provides a comprehensive overview and cutting-edge assessment of community forestry.

Containing contributions from academics, practitioners, and professionals, the *Routledge Handbook of Community Forestry* presents a truly global overview with case studies drawn from across Africa, Asia, Europe, and the Americas. The *Handbook* begins with an overview of the chapters and a discussion of the concept of community forestry and the key issues. Topics as wide-ranging as Indigenous forestry, conservation and ecosystem management, relationships with industrial forestry, trade and supply systems, land tenure and land grabbing, and climate change are addressed. The *Handbook* also focuses on governance, looking at the range of approaches employed, including multi-level governance and rights-based approaches, and the principal actors involved from local communities and Indigenous Peoples to governments and national and international non-governmental organisations. The *Handbook* reveals the importance of the historical context to community forestry and the effects of power and politics. Importantly, the *Handbook* not only focuses on successful examples of community forestry, but also addresses failures in order to highlight the key challenges we are still facing and potential solutions.

The *Routledge Handbook of Community Forestry* is essential reading for academics, professionals, and practitioners interested in forestry, natural resource management, conservation, and sustainable development.

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INTRODUCTION

Janette Bulkan, John Palmer, Anne M. Larson, and Mary Hobley

After centuries as a recognised and documented means of livelihood and sustained forest production in many regions, community forestry (CF) took the international stage in the 1980s. But two decades later it had largely faded from global discourse. Perhaps this was due to the scholars who declared it a 'failure' (Blaikie, 2006), or perhaps it simply followed the traditional ups and downs of global trends in forests, as new ideas, or at least new labels, arose in its place. Interestingly, however, CF has in practice continued to grow and to change shape, and even to re-emerge in relation to new global priorities in light of climate heating, such as REDD+ (reducing emissions from deforestation and forest degradation). We might even say that growing concerns over climate change and catastrophic biodiversity losses have dovetailed – with some success (Block, 2021) – with the growing demand for formal recognition of land and resource rights by Indigenous peoples and local communities (IPLC), potentially giving community forestry new life and new meaning.

The case studies presented in the 31 chapters of this *Handbook* are drawn from all the continents excepting Antarctica. The *Handbook* is not a conspectus of current projects or of formal statistically designed trials of CF. While several chapters take note of the International Institute for Environment and Development's (IIED) focus on markets to make community and smallholder forestry a viable source of local livelihoods, the *Handbook* does not duplicate the long-running series of studies by the IIED on community-managed forests. Instead, the *Handbook* offers a broad overview of many variations of CF, each embedded in distinct governance structures. Some chapters present case studies (both successful and unsuccessful in terms of their original goals), while others show how evolution in national and international environmental politics shapes the ways in which Indigenous, forest-dependent people(s) and 'communities of interest' present themselves to the dominant governance structures, and how such re-envisioning in turn contributes to political evolution, redress of historic injustices and marginalisation and ecosystem resilience.

Geopolitical and economic contexts influence local outcomes

The resurgence of CF from the 1980s globally is told from distinct points of view in several of the case studies, providing a record of differences in national interpretation and an update of international and national policies. The case studies reflect both their own history and those of

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the legal, institutional, and governance processes in which they are embedded. CF has grown and flourished when official policies are buttressed with institutional, financial, and technical support. In cases where governments and/or non-governmental organisations (NGOs) remain supportive, robust community forest enterprises (CFE) have endured. Conversely, community forestry has diminished when external support, whether governmental or non-governmental, is reduced or withdrawn unless the CF is linked closely with agricultural support systems.

The human population of the world is growing, human aspirations to greater material comfort and better food are increasing, and demand for industrial wood fibre to manufacture products in support of a better life is rising. The wood fibre is increasingly produced by large-scale forest plantations run as single-minded commercial businesses. While some of these businesses have accepted the need to integrate environmental sustainability and social obligations into their industrial planning, others seek to shed such concerns through offsetting contracts with third parties. This still leaves large areas of forest, especially natural forest ecosystems, where there are multiple categories of legitimate stakeholders with interests in a wide range of material products and environmental services from the forests, and thus a single-product factory style of management is neither appropriate nor workable. Several chapters in this *Handbook* delve into contemporary examples of such CF on several continents.

Forests managed by communities whose livelihoods are more or less dependent on the continued existence of a productive forest ought to demonstrate the benefits of short decision chains and geographical proximity to the target forest. Monitoring by a variety of concerned stakeholders should be more frequent, and a variety of perspectives about desired outcomes should be more articulated than in forests managed by (remote) governments or single-minded commercial companies. Some chapters examine the costs and consequences of monitoring, from local to global levels, including by independent third-party certification schemes.

The case studies of resilient CFEs, described in some of the chapters, demonstrate the interlocking roles of actors, institutions, supportive public policies and good governance. In contrast, other chapters illustrate the reversal of earlier gains and progressive re-centralisation of government control in several countries – e.g., in the global North (Chapter 2, Bouthillier, Chiasson & Beaulieu) and South (Chapter 26, Ramcilovic-Suominen & Mustalahti). Even the term 'community forestry' was disallowed by the government of Laos in the 1990s when international donors were negotiating support for Laotian forest policy reform: the government 'associate it with an overly progressive socio-economic and political agenda in terms of villagers' rights and ownership … which the government perceives as politically disruptive'. Instead, the Laotian government decreed the use of two alternative terms: 'participatory sustainable forest management' (PSFM) and 'village forest management' (or 'village forestry'). Chapter 26 chronicles the Laotian government's erosion of customary rights to forests as one undesirable aspect of the REDD+ programme, which it signed up to in 2008, and the acquiescence of international donors in that erosion.

Stakeholders

A common thread in case studies of genuine community forestry are the relationships that link groups of people – in a geographic community or distinct constituencies in communities of interest – with each other and in the stewardship of specific forest or urban 'green space' (Chapter 32, Arts, Mattijssen & Wiersum). Stakeholders ('actors', 'constituents') are categorised as 'affected' or 'interested' in a range of international processes. The insistence of Indigenous communities that they are 'rightsholders', and not stakeholders, is grounded in their relationship to their ancestral territory from time immemorial. In contrast, non-Indigenous persons or

communities have rights that are contingent on codified law and policy (Booth & Muir, 2013). An affected stakeholder(s) is/are a person, group of persons or entity whose long-term welfare is/are likely to be dependent or subject to the effects of the activities or who has/have an emotional/lived connection (care or shared identity) in a locally important or customarily claimed forest area. An 'interested' stakeholder is any person, group of persons or entity that is linked in a transaction or an activity relating to a forest area, but who does/do not have a long-term dependency on that forest area.

Long-term dependency on a forest area, wholly or partly for income and livelihood, is generally directly impacted by forest management; hence the increasing insistence by local communities, however constituted, to have a say in decisions taken regarding their local forests. The terms *care* or *shared identity* have to do with perspective and intrinsic values. In practice, as several of the chapters illustrate, lasting community forest management (CFM) or CFEs generally depend on both affected and interested stakeholders working together in the core group, and serving as a bridge, across scale (geographic) and levels (institutional and jurisdictional), to personnel, resources, skills, and information.

The roles of 'interested' foreign stakeholders are considered critically in some CF examples. Ece et al. examined a range of externally driven forestry programmes in Africa, including REDD+ and the World Bank's Forest Carbon Partnership Facility (FCPF). They assert that

> participatory and 'free, prior and informed consent' processes rarely reflect local needs and aspirations, they are rarely democratic and they do not permit participants to make significant decisions – such as whether or how the project will take place. The intervening agents' choices of local partners are based on expedience, naïve notions of who can speak for local people, anti-government and pro-market ideologies informed by a comfort with expert rule. Although elected local governments are present in all cases in our study, they are systematically circumvented. Instead, project committees, non-governmental organisations, customary authorities, and local forestry department offices are recognised as representatives and technical project objectives are favoured over the democratic representation
>
> *(Chapter 24, Ece, Murombedzi & Ribot).*

One response from donors is that this is often a matter of compliance with accounting rules biasing connections towards the stakeholders who understand the need for monitoring of financial indicators or means of verification.

The expanded scope of 'community'

The emergence of new thinking on what constitutes a 'community' is examined in several chapters. Turning to the global North, a number of chapters explore the promise held out by CF led by 'communities of interest', rather than the more traditional geographic or place-based communities. Arts et al. argue that 'while pertinent to the Dutch context … our proposed reconceptualisation of community forestry to community-based green space management characterised by a sense of shared identity may offer value for cases in other economically developed countries too' (Chapter 32).

In Scotland (Chapter 31, Lawrence), legislation is based on the idea of the community body, often a non-profit company. The concepts of equality of access (to membership and decision-making) and community empowerment are built into the legal definitions, including the notion of a 'community of interest' rather than just a community based on geography. This more inclu-

sive sense of community broadens the scope of what legally constitutes a community to include groups of people that share a common interest, and not just the place where they live. Canadian civil courts likewise increasingly admit communities of interest to have formal 'intervenor' status in legal cases around planning decisions for resource exploitation. Community forestry has benefited from all these changes, transitioning and diversifying from an initial focus on partnership between communities and government to community ownership. The case studies illustrate the potential of community forests as assets that both empower communities and create significant economic opportunity.

In the USA, in the wake of the decline of the timber industry in the 1990s, community-based interest groups were formed – Chapters 10 (McGinley et al.), 11 (Danks & Everett), 12 (Frost & Sheen) and 13 (Wilkinson & Sahara). Many

> incorporated as NGOs … to apply for government and philanthropic grants. From 1994–1999 the federal Northwest Economic Adjustment Initiative (NEAI) provided support for communities to build capacity, envision projects, write proposals, manage contracts and implement work on the ground … Federal and state agencies offered competitive contracts and grants for work on public lands, including contracts for forest inventory and restoration, fuel reduction and use of prescribed fire. Philanthropic foundations also provided capacity-building and networking grants … A new community-based restoration economy emerged.
>
> *(Chapter 11)*

Ancestral ties in the case of Indigenous communities or aesthetic or cultural benefits of a CF provide a strong incentive for community cohesion, beliefs, and wishes, and are more easily accommodated in CF than in commercial forestry (Chapters 12 and 13, USA; Chapter 19, Gabay & Apaza). These aesthetic benefits are valued by both Indigenous and local communities and can, but do not need to be, monetised but may reinforce monetised aspects of ecosystem services (ES); e.g., management of forest water sources probably enhances cultural benefits. Chapters 9 (Bulkan et al.), 11, and 13 include vignettes on Native Nations in northern California who work to recover control of their ancestral forests through outright purchases or contractual arrangements with government owners. Some forests are managed for timber, while others are treasured for their intrinsic and relational values.

Tenure

The Rights and Resources Initiative (RRI) compared data across 64 countries constituting 82 per cent of global land area, aiming to establish a baseline of data on the status of IPLC land rights (Rights and Resources Initiative, 2015). For RRI, the most 'complete' bundle of rights consists of

> rights of access, the right to withdraw natural resources, management rights, the right of exclusion, the right to due process and compensation in the event of government expropriation, and the right to hold tenure rights for an unlimited span of time.
>
> *(RRI, 2015, p. 4)*

Native title and community forestry

The inherent or pre-existing rights of Indigenous and traditional peoples to traditional ('ancestral', 'customary') land, territory, and resources (LTR) is a concept of very long standing that is

now enshrined in the United Nations Declaration on the Rights of Indigenous Peoples (United Nations Declaration, 2008), as well as other international and national processes. 'Native title' is an underlying proprietary right in their common property that is held collectively by a defined Indigenous community, and which derives from their continued use and occupation of certain areas from time immemorial.

Some chapters trace the slow pace of legal reform, from non-recognition to recognition of the rights of Indigenous peoples to legal title to (usually only some portions of) their traditional territory. The Argentinian case study documents the damage inflicted by predatory logging on ancestral forests as a consequence of State inaction: 'After almost 30 years of the constitutional reform in 1994, the legal title of Indigenous communities to their ancestral land has not yet been secured' (Chapter 19).

The chapters on Australia (Chapter 8, Cruzado Melendez & Kanowski), Canada (Chapter 20, Gunter) and the USA (Chapters 10–13) document a variety of contracts between, on the one hand, Indigenous communities and, on the other, federal agencies (USA) or provincial/state governments (Australia, Canada) that transfer substantive management authority to the Indigenous communities. The 'Mistik story' (Chapter 17, Andrews-Key et al.) is about nine Indigenous communities in Saskatchewan, Canada, that manage a large-scale forest concession and mill, in collaboration with outside partners. Rather than hold out for legal title, and meanwhile watch helplessly as outside loggers secure concessions to their territory, in 1988 the Meadow Lake Tribal Council (representing nine Indigenous Nations) signed a long-term logging contract over 3.3 million hectares (Mha) of their traditional territory with the legal provincial government owners. Two years later, they joined with a company formed of mill employees to purchase a sawmill. 'Since 1992, NorSask has remained the largest Indigenous-owned sawmill in Canada (and possibly the world)' (Chapter 17). In California, tribal forest management represents only a small part of forestry in the State. But, in the primacy it gives to all forest values, CF offers an alternative vision.

Doyle-Yamaguchi and Smith (Chapter 18) reflect on their experiences with an Indigenous-led research process, carried out in conformance with the S7ístken L'ílwat Research Protocol, a guide for non-L'ílwat researchers. They share some highlights of their work to earn the trust of their collaborators and explain how understanding of nearly two centuries of colonial and post-colonial settler domination 'can enhance the research process and outcomes, and to bring light to the often-intangible benefits for researchers in following community-led processes'.

Tenure rights of local communities, both self-identified Indigenous and non-Indigenous

Globally, on paper, legal recognition of the tenure rights of Indigenous peoples and local communities (IPLCs) has increased compared to a baseline established in 2002 (White & Martin, 2002). Currently up to 2 billion IPLCs have historic rights to 50 per cent of all land but legally own about 10 per cent. In addition there is increasing evidence that IP territories overlap with the world's remaining high value biodiversity (Fa et al., 2020; Garnett et al., 2018). At the same time, there is increasing attention to gender injustice in land laws and governance from national to community levels (Jhaveri, 2021; Rights and Resources Initiative, 2017); see also Chapter 21, Bolaños Cárdenas and Monterroso. Migrant and transhumant communities also face challenges for the recognition of their tenure rights. Nevertheless, several of this *Handbook*'s chapters, including Chapters 3 (Miranda et al.), 5 (Humphries et al.), 7 (Tshidzumba), and 14 (Flanagan), attest to the reality that legal recognition of rights in itself can be insufficient in the absence of other enabling factors, such as the ability to benefit from tenure rights because of lack of repre-

sentation, capacity, and knowledge; lack of access to technology, capital, markets, and labour; and lack of access to authority (Ribot & Peluso, 2003).

Distinct forms of co-management are documented in the chapters: devolution to community groups – Indigenous or local community – of some strands in the bundle of rights, while ownership of the forestland – usually by a national or sub-national State body – remains unchanged. The evolution in Joint Forest Management (JFM) in Uttarakhand State, India (Chapter 23, Stevens & Krishnamurthy) and in Nepal (Chapter 29, Hobley & Malla) illustrates both the gains and challenges of collaborative management with State agencies.

Safitri (Chapter 6) documents the glacial pace at which legal land rights are granted to communities in Indonesia, in contrast with land concessions secured by large-scale companies: 'until 2014, the legal rights of all communities in forest areas reached only 455,000 hectares or 0.4 per cent of the national forest area. In comparison, forestry concessions granted to companies up to 2020 cover 34.18 Mha' (Chapter 6). Between 2015 and 2021, 4.7 Mha out of the agreed target of 12.7 Mha were issued under 7,228 social forestry permits, providing access to an average of 5 hectares each to a million households. Indonesian social forestry licences are time-limited to 35 years, can be extended, and are subject to 5-yearly inspection. See also Notess et al., 2020.

Governance

The chapters on community forestry in the USA and in California in particular (9–13) illustrate the dense webs of collaboration involving local communities (divided into many constituency groups) on the one hand and federal, state, county, and local district authorities; potential funders; environmental organisations; consultants; buyers; etc. on the other. Potential funders can be governmental or philanthropic. Agencies and NGOs have distinct roles – land managers or regulators of different laws, some forestry, others environmental, etc. At the centre of these community forests is generally a core group of stakeholders who act as both binding agent and the bridge to other players. In those cases where the community forest is successful and/or lasting, this core group comes to hold institutional memory. Some of the chapters point out the need for succession planning as the founders age and livelihoods change to become less forest-dependent (e.g., Chapters 12, 23, and 29).

Multi-level and multi-scale

Many of the chapters illustrate the importance of scale and power in national and sub-national contexts. In Chapters 8 (Australia) and 2 (Canada), the experiences of CF on public forests (State lands, Crown lands) are shown to vary across time, in reaction to official policies. In cases where local-level institutions are supported at higher levels, and particularly by State agencies, the chances of success are higher. Community forestry is weakened in contexts where State agencies are indifferent or actively hostile. None of the examples featured in this *Handbook* stands isolated; each is enmeshed in, and impacted by, regional, national, and/or international processes.

Vital support services are often provided by persons or institutions in the 'interested stakeholders' category who serve as CF managers, trainers, sales representatives, and other vital intermediaries. The chapters on plantation forestry in South Africa (Chapter 7) and the field and commercial management of *xate* palms in Guatemala (Chapter 4, Butler et al.) underline the key role of these connectors into global value chains.

Chapter 11 recounts the intertwining of local-to-national organisations in support of community forestry organisations in northern California in the context of a shift from log-

ging on federal forests to conservation-oriented ecosystem management. The departure of logging companies from rural, forest-dependent communities in this region, in response to endangered species protection and timber 'falldown', led to economic decline and conflict. The 'falldown effect … occur[s] when remaining old growth forests have been depleted and cut levels must be reduced to reflect the actual volume of wood that can be sustainably produced from second growth forests' (Clogg, 1999). In some communities, however, residents came together in community-based forestry organisations to reinvent their forest-based economies. One, the Watershed Center in Hayfork, became a leader among CF organisations, from local to national scales. With the motto 'healthy forests, healthy communities', they focused on workforce development, job creation, and, initially, value-added processing for forest products. Not everything was successful. They found a niche in wildfire management and related capacity building and networking that launched them onto the national stage. The authors argue that it was social entrepreneurship – the central goal of creating 'social value' – that made this CF organisation uncommonly successful, through collaborative leadership that focused on trust-building, action, problem solving (framing challenges as opportunities), and peer learning.

Key support services

A common finding in the case studies is that community forest enterprises are much more likely to need ancillary support services than managers of commercial forestry. The technical forestry systems (harvesting/silvicultural) are easier to manage compared with the configuration of CF institutional management and decision-making and business aspects (identifying markets, organising sales, collecting and allocating income equitably, providing for forest maintenance and improvement). Some examples of the benefits of having a CF association or club to centralise the provision of services, share costs, and spread workloads are the British Columbia Community Forestry Association (BCCFA) (Chapter 20); and, in the cases of Brazil and Mexico, the sustained multi-European country support for CF and for local CFE partner organisations (Chapter 5). Bray and Durán (Chapter 30) provide independent confirmation of sustained government support: 'While governments have continued to back CFEs, support in Mexico has been much more substantial and consistent than in Brazil' (Chapter 5). As in the California case studies, the National Forestry Commission (CONAFOR) in Mexico funded third-party forest certification and related costs through competitive grants.

In cases where levels of formal literacy/numeracy are low and/or where there may be cultural barriers against entry into commercial markets, the support of agricultural extension and marketing services, training in money management, and banking/saving systems have proved essential. Partners have provided assistance in estimating if value-addition is socially feasible and worth the technical and financial effort. Project-based support services are less likely to survive the required extended period than established rural development banks and agricultural training schools. Chapter 3 documents the challenges faced by Community and Family Forest Management (CFFM) in the vast Verde para Sempre Extractive Reserve in the State of Pará, Brazil, which was created by a federal decree in 2004. To counter the pervasive illegal logging in their midst (up to 80 per cent of all logging in the State in 2015), seven rural communities, organised into associations and co-operatives, have drawn up and are implementing sustainable forest management plans. Similar to the South African case study (Chapter 7), these CFEs need the hand-holding provided by Brazilian NGOs and the funding from a combination of timber sales, rural credit from the Bank of the Amazon, and international co-operation projects.

Contrasts with industrial-scale forestry

A recurring theme concerns the relationships of CFEs with industrial forestry, in some cases collaborative (Chapter 20), in others not so much (Chapters 2 and 7). Less than 200 years, or perhaps four sawtimber rotations, have passed since mechanised industrial forestry took over from community and smallholder forestry as the supplier of wood products and services to local and urban processors and consumers. Before then, almost all forestry was 'local' in the sense of geographical scope and managerial control and clientele.

Community forestry examples can differ from industrial forestry in such terms as scale, a larger number of stakeholders, more forms of tenure, a focus on a broader suite of values, and so on. Government support for community forestry varies, as does the enabling environment in many countries. Some community forestry enterprises benefit from existing national or international value chains; others struggle with economies of scale. Examples of community forestry include managing habitat for various purposes, including biodiversity conservation; as an activity demonstrating resource rights; as a source of income from the harvest, sale, and/or transformation of tangible products; and as a source of income from the sale of ecosystem services.

The challenges facing communities operating in business/market environments and/or communities as exporters include such factors as getting collateral for bank loans; government bureaucracies in multiple and often overlapping agencies; and time as a factor for community forestry as compared with industrial or family forestry.

Community forestry also encompasses assessments of its present and potential roles in addressing issues from global climate heating, habitat and biodiversity losses to local concerns over access and benefit sharing (ABS), strengthened tenure rights, distributive equity, transparency, and good governance.

Table 1.1 contrasts some core characteristics of industrial, individual private and communal forestry.

Politics and power in community forestry

Community forestry mirrors the power relationships of a country, as so clearly demonstrated in Myanmar (Chapter 25, Springate-Baginski), Laos (Chapter 26), Cambodia (Chapter 27, Williamson et al.), Liberia (Chapter 28, Young et al.), and Nepal (Chapter 29). Both contemporary and historic narratives show how governments may use community forestry to assert state control over land and communities where customary management previously functioned. At the heart of all the aforementioned chapters is the interplay between devolving power and rights to local communities versus retaining and strengthening the penetration of the state into community-managed forest areas. In Cambodia (Chapter 27), the role of the donors in the 1990s and early 2000s allowed the political elites to decouple forestry reform from decentralisation reform and develop a legal framework for community forestry that further centralised control over forest resources. In Nepal (Chapter 29), the new federal system provides an important opportunity to redefine the relationships between the State and local forest users. However, the future of community forestry is less clear as it is caught up in the power play between local and provincial governments with the federal government. Again, we see the centralising tendencies of the state asserting themselves with a consolidation of power in the hands of the federal government forest service, framing and shaping the legal framework and controlling the community forests.

A similar story is seen in Myanmar (Chapter 25) with the powerful conjunction of the military and the state using their power to centralise control over forest resources and timber

Table 1.1 Core characteristics of industrial, individual private, and communal forestry

Aspect of CF	*Industrial forestry*	*Privately owned forestry*	*Communal forestry*
Land/resource ownership	Private or public registered company	Individual or family	Social group
Duration of forestry operation and planning horizon	Usual industrial time frame or length of government concession	Multi-generational if family, one lifetime if individual	Often depends on links to other social structures
Interactions with government agencies	Via industry association or parliamentary lobby	Via individual or group lobby	Via local office of agencies
Decisions on policy	Board of directors or owners	Owner	Social group or committee
Decisions on operational management	Executives of the company	Owner or employed staff	Committee and/or members
Suite of values	Narrow	Selective	Broad
Marketing of outputs	Company or contracted specialists, industry association	Owner or group of owners	Depending on level of trust, manager or committee or member
Benefits – money, goods, (environmental) services	Money from sale of products and/or services	Often a mix	Usually a mix, plus the spiritual/ancestral conservation aspects
Benefits – who gains?	Paid staff, shareholders	Individual or family	Members of the social group
Costs – who pays?	Direct costs as company expenses, socio-environmental costs may be externalised by public subsidies	Most costs as business expenses	Most costs borne by individual members

extraction for revenue and reward to favoured business partners. Under these conditions, 'community forestry' is a misnomer and is seen as another means to extend the reach of the State and to control and prevent the recognition of customary tenure systems, although initially it did appear to be a State policy that could offer some tenure security under conditions of high levels of land grab.

Liberia (Chapter 28) shows what goes wrong if elites are allowed to set the terms in advance of either the rules and regulations or of the capacity to nurture genuine community forestry. Logging companies have been able to take advantage of the incomplete legislation on community forests to co-opt local elites to access timber.

Tsanga et al. (Chapter 16) describe the evolution of community forestry in Cameroon and compare it to small-scale logging and their respective contributions to sustainable forest management. The chapter challenges the concept of CF as a system for local development, with evidence showing that the original intentions of community forestry to deliver social and economic ben-

efits to communities have largely been captured by private operators, mirroring the experiences described in Liberia. Small-scale logging by individual entrepreneurs on the other hand is shown to deliver much wider benefits to the communities, including a source of much-needed local employment. Overall, the authors find that for both systems, 'long-term impacts are mixed, with economic returns sustained by degradation of the resource base and largely captured downstream'. The complexity of the regulatory framework for CF, the high levels of revenue capture by political and administrative elite, and the rapidly increasing domestic and regional demand for timber all contribute to the failure of both CF and small-scale logging to deliver sustainable management.

These chapters highlight the complex power relations that determine the future of genuine community forestry and force us to ask some major questions about the assumptions underpinning community forestry. In Nepal (Chapter 29), there are multiple dimensions to the problem: the struggle for power between different governments, and the major social changes induced by migration. Both of these factors cast doubt on the viability of a model of community forestry developed in a period when people were heavily dependent on forests for their livelihoods, within a political construct where a powerful central government could control forest use and management through centralised structures. Similarly in Myanmar (Chapter 25) and Cambodia (Chapter 27), positive transformation for local communities will come from a recognition of customary tenure systems and the devolved authority to determine their own resource use systems rather than an imposed and imported model of community forest. It must be asked whether community forestry should continue to be supported by donors if it is blocking a more transformative system of land and forest tenure. The traditional models that were so successful in developing community forestry across Nepal and were exported to Cambodia and Myanmar and separately to Liberia are now challenged. The model no longer fits in any of these countries, and it is used by elites to maintain access and control over forests to the detriment of local forest users.

Voluntary third-party forest certification schemes

Karmann and colleagues, all of whom are Forest Stewardship Council (FSC) staff, provide in Chapter 15 a chronological overview of the different FSC efforts and initiatives developed for small-scale forest owners, including a Policy on Group Certification (1998), the Small and Low Intensity Managed Forests (SLIMF in 2004), New Approaches for Smallholders and Communities Certification (2016 to 2020), and, in 2021, the Community and Family Forests (CFF) program.

Flanagan et al. assessed the experiences of smallholders with certification schemes in Laos, Thailand, and Vietnam and found them not fit for purpose, 'inappropriate … and have provided minimal (although frequently exaggerated) benefits to smallholders and others in the supply chain' (Chapter 14). They found that

> across Southeast Asia, the acceptance of these [certification] systems is undermined by complex obligations; the absence of local technical, administrative, management and governance capacity; poor transfer of knowledge; and a general aversion to formal, government-supported processes that are administratively complex, inconsistently applied or have the potential to be corrupted. Consequently, the certification of smaller-scale operations often fails or lapses at a local level when external technical and financial support ceases.

Community forestry in the 21st century

There is increasing legal acknowledgement of Indigenous land rights in the USA, Canada, and Australia and that equitable forms of collaborative management are and will continue to be

'significant for the achievement of national forest-related goals such as those for biodiversity conservation and carbon sequestration' (Chapter 8). REDD+ and other environmental services –varieties of payments for ecosystem services (PES) – are often frustrated by demands for costly baseline/monitoring data. As Flanagan et al. note in their assessment of third-party forest certification, prescriptions devised for large- or industrial-scale forestry are not necessary in low-risk community forestry. The value to CF members of some PES schemes is greatly diminished by greedy or inefficient layers of international and national government bureaucracies, resulting in trickle-down income that is much smaller than advertised and often much delayed. Reform should be for a more risk-based system, backed by insurance against accidental or deliberate default, as in the previous Clean Development Mechanism (CDM) schemes (Fiske & Paladino, 2017). Fraudulent REDD+ schemes may be more easily hidden in CF than in data-driven commercial forestry.

Bray and Duran (Chapter 30) examine the well-known history of Mexico's community forestry social enterprises from this new perspective: biodiversity conservation and climate change. The detailed history demonstrates the important role of the state in providing the legal foundation for CFM, including land and forest tenure rights, rules regarding biodiversity conservation, market incentives, capacity, and social capital. Tenure rights and management protocols protected natural capital, and support for collective action fostered community action for new conservation areas. Mexico provides a unique example of both profitable community timber management and biodiversity conservation/mitigation of climate heating, with community collective action around common property forests as a frontline adaptation to modifying the rate and direction of forest ecosystem response to climate change.

Chapter 21 analyses gender in CFM through the lens of Indigenous and Afrodescendant women's struggles for collective land rights in Latin America. The political and governance processes behind women's constraints in CFM and in decision making are explored, focussing on the mobilisation of Indigenous peoples (IPs) and Afrodescendants for collective land tenure, women's contributions to those struggles, and women's own struggles. The chapter shows that the mobilisation of Indigenous and Afrodescendant women goes far beyond the demand for recognition and formalisation of collective tenure rights. For women, it ensures their recognition as political subjects at different levels and guarantees their ability to exercise collective rights while enhancing individual and collective livelihoods. This political process is key to understanding the constraints women face in benefiting from community forestry initiatives.

Turning to landscape-level considerations, German (Chapter 22) reminds us that 'community' is problematic and that trees can be beneficial to some and harmful to others. This is particularly timely in relation to the global emphasis on forest and landscape restoration and new attention to agroforestry – but particularly the emphasis on tree planting, which was also central to the origins of CF. She demonstrates, from literature as well as interventions in Tanzania and Ethiopia, that trees are not neutral but, rather, that there are winners and losers and that these 'stakes' need to be identified and detailed. The chapter presents lessons from experiences organising negotiations between these directly affected stakeholders to negotiate trade-offs for socially optimal outcomes.

In sum, this *Handbook* presents a timely and up-to-date introduction to the history and evolution of community forestry globally. Readers will learn about multi-stakeholder processes, forms of tenure, institutions, governance, and access and benefit sharing (ABS) arrangements in a range of case studies and about the implications of these processes for the relative success or failure of specific examples of community forestry. Readers will consider examples of co-management with different actors (constituency groups) for a range of outcomes. Readers can also explore the linkages between community forestry and national and international networks and

the current environmental politics of land use, examining issues such as common pool resources, legal and customary rights, and traditional ecological knowledge (TEK) in relation to traditional natural resource management and community forestry. Readers will gain understanding and appreciation of the local-to-international, and vice-versa, driving forces for resource management and ecological change in community forests and community forestry.

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PART I

Spaces for community forestry in State- and timber-dominated landscapes



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2

THE DIFFICULT ART OF CARVING SPACE(S) FOR COMMUNITY FORESTRY IN THE QUEBEC REGIME

Luc Bouthillier, Guy Chiasson, and Hanneke Beaulieu

Introduction

At the turn of the century, Michael Howlett and Jeremy Rayner (2001, p. 24) argued that, although public forests in Canada are mainly under provincial jurisdiction, it is possible to discern a common 'Canadian Forest Policy Regime'. That is, by and large, provincial governments have centred their forest policies around private mills, granting the latter long-term access to vast quantities of public wood as well as prominent decision-making roles. As such, forest policies across Canada have traditionally left little, if any, space(s) for local communities in public forest management (Bullock & Reed, 2016).

The notion of space(s) for community forestry referred to throughout this chapter has several meanings. At a physical level, it refers to access to public forested areas, which has historically been denied to local community members living near Quebec's public forests. It can also designate areas of decision-making power regarding public forest use whereby communities can occupy local public forest space(s) by participating in fora where decisions are made or, in some cases, by taking more direct control of local forest resources and land. Finally, on a third, more conceptual level, space(s) for communities are created when their efforts in reclaiming local public forest are backed by public support, mainly in the form of policy instruments. In short, borrowing from Nadeau and Teitelbaum's (2016, p. 89) very relevant expression, this chapter will portray communities' efforts at 'carving out a space' for themselves within Quebec's forest regime.

Since the late 1990s, Canadian forestry has faced significant challenges, including barriers on exports to the United States, historically low-profit margins due to low international prices, reduced timber availability because of fires and insect epidemics, a declining workforce as a result of changing demographics, and a loss of market share to competitors in a changing global market for pulp and paper products to which it has struggled to adapt (Clarke, 2020). These challenges, amongst others, prompted provincial governments to review their forest policies. In 1998, British Columbia introduced fairly sweeping reforms to its forest regime, including important changes to its forest tenure (Furness et al., 2015), creating more visible spaces for communities and community forestry. Provincial governments in Quebec and Ontario have also

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considered – and in some cases implemented – significant changes to their forest regimes. These reforms affect forest communities and their ability to access, participate in the decisions pertaining to, as well as benefit from public lands. The 'Canadian Forest Policy Regime' may therefore not be as homogenous as it once was.

In this chapter, we examine Quebec's forest policies over time to assess the space(s) carved out by communities. The Quebec case warrants special attention given that, as Sara Teitelbaum contends,

> [t]hus far, the community forestry literature has focused almost exclusively on those jurisdictions with clear tenure arrangements, with a disproportionate amount of attention given to development in British Columbia. Some provinces, such as Quebec, have a long tradition of collective action around forests but have generated few publications, especially in English.
>
> *(2016b, p. 8)*

In pointing to Quebec's 'long tradition of collective action', Teitelbaum (2016) reminds us that, as in other Canadian provinces, actors concerned with community development have at times questioned the dominant forest licensing system (known as 'tenure' in Canada) and have sought to create spaces for community forestry since at least the 1920s. Just as Bullock and Hanna (2007) have demonstrated for British Columbia, the 'bust' portion of the 'boom and bust' cycle of Quebec forestry has been most favourable to public discussions on community forestry as an alternative to an ailing private licensing model and has led to new public policy instruments intended to support community forestry. However, at least in Quebec, though some of these efforts have proved lasting, most have not. The cyclical return to more prosperous times tends to crowd out community forestry from the spaces it worked hard to create.

This chapter covers three different periods: the 1930s, with criticism over the concession system leading to the project of forest villages and the institutionalisation of forest co-operatives; the 1990s, with the rise and fall of the 'inhabited forests'[1] programme; and the 2010s until the present [2021], with a series of reforms leading to new spaces that have subsequently contracted. In the final section, we will discuss the ways in which historically fragile community forestry spaces impact the prospect of community forestry in Quebec.

The 1930s: Making space for forest villages

In the 19th century, Quebec's public forests were commercially exploited for sawlogs and squared timber used by the British Navy. By the 20th century, however, pulp and paper mills had grown progressively more important, as had their claims to public forest timber (Bouthillier, 2001b). Through the forest concession licensing system, these mills gained long-term access to vast tracts of public land and the timber on it, with the province only requiring that concession holders pay stumpage fees and conduct land surveying. These concessions essentially 'privatised' public land. Often bounded by fences and gates, nearby communities could no longer access these licensed public forest areas (Chiasson & Beaulieu, 2020).

In 1925, Brother Marie-Victorin, one of Quebec's first scientists, denounced that the province's public forests were being alienated from local communities and their timber resources depleted by foreign interests and investors (Gingras, 2019, pp. 62–63). Although the preceding rise of the North American conservation movement was not foreign to the province of Quebec (Castonguay, 2006), community forestry did not resonate with it. There was instead an inherent tension in Quebec between forest conservation that benefitted industrial interests and was

justified by scientific forestry at the time, and the continued colonisation of the interior of the province, steeped deep in agriculturalism (Flamand-Hubert & Lewis, 2019).

Marie-Victorin's arguments eventually found fertile ground amid the economic crisis of the 1930s. The forestry sector experienced a major 'bust', with pulp and paper mills having to close temporarily or for good. Unemployment rose sharply, and the downturn in the pulp and paper sector added to the general economic slump in forest-dependent communities. Marie-Victorin's critique of the forest regime inspired a social movement that sought to reappropriate the province's natural resources, exemplified in the 1932 manifesto *Jeune-Canada*, which condemned the concession system and demanded policies to rectify the situation (Lamonde & Corbo, 1999, p. 383). More generally, the economic and social conditions of the 1930s inspired two different approaches spearheaded by Esdras Minville that sought to remedy community exclusion from public forests.

Minville, an economist whose work centred on peripheral communities, contested the primacy of private industrial forestry interests. He argued instead for 'forest villages' (*villages forestiers)* as an alternative to mill towns (Minville, 1944). The idea of forest villages implied community-led management of forests that would translate into more sustainable forms of forest management, producing trees of higher value as well as allowing for the cultivation of forest resources other than timber (Nadeau and Teitelbaum, 2016). Minville's forest village inspired a number of projects from 1937 to 1952, notably in the Gaspésie region, where the Duplessis government granted the Grande Vallée community several thousand hectares of public forest timber rights previously held by the Brown Corporation (Teitelbaum & Saumure, 2010). The proponents of forest villages seemed, however, to have underestimated the importance of local institutional and technical capacity, limiting their success (Paradis, 1980). Though these experimental projects were cut short by the Second World War, with a return to industrial timber harvesting thereafter, the idea of forest villages would live on, inspiring future efforts to carve out forest spaces for communities.

The difficult economic times of the Great Depression also helped launch the local forest worker co-operative movement. The first of these worker co-operatives was created in Grande Vallée in the *Gaspésie* region in 1938. It was led by Minville, with some support from the province, and it prompted the creation of many others across Quebec, notably in the recently settled reaches of Abitibi-Témiscamingue. These co-operatives were created to better organise local forest workers as subcontractors for forest companies on public lands. They often served as unions, negotiating collective work and pay conditions (Boucher, 2010). By pooling together into a co-operative, local workers could collectively bid for larger contracts and lower their individual business risk.

Though some local co-operatives disappeared over the years, the movement not only survived beyond the initial impulse of the Great Depression but also in fact established forest worker co-operatives as an important and essential component of contemporary public forest management in Quebec (Boucher & Chiasson, 2013). They have entrenched forestry and wood-processing expertise at the community level (Serra & Bouthillier, 2016). They have also served, as Gingras and Carrier (2006) argue, as a lasting entry point to the public forest for otherwise excluded local communities.

The 1990s: Inhabiting public forests

In the 1970s, the provincial government began to phase out the forest concession system. In 1986, the old forest concession system was officially replaced by Forest Supply and Management Contracts[2] (FSMC) through a new Forest Act (Bouthillier, 2001b). FSMCs were volume-based

contracts, allocating a fixed number of cubic meters of wood on a Forest Management Unit (FMU) to each mill-owning company. Usually, more than one company had FSMCs on the same FMU. These companies were given exclusive access to timber for a period of 25 years while being asked to manage the forest in ways that ensured a sustained timber yield. This gave industrial contract holders important decision-making authority (where to cut, when to cut, what areas to preserve, etc.) across the FMUs, which combined, made up nearly all public forest land available, leaving hardly any public forested land for other activities.

In 1993, the government amended the Forest Act to create a new form of tenure granting small timber volumes in forest reserves to local municipalities, provided they developed management plans for the area (Bouthillier & Dionne, 1995). A similar type of contract was created again in 2001, this time not restricting timber volumes to forest reserves (CEGFPD, 2004). However, these types of contracts amounted to a mere 2.5 per cent of the total allowable cut on public land (CEGFPD, 2004, pp. 156, 281). They can therefore be considered as having achieved very little in terms of challenging the near-monopolistic access to public forests granted to mill owners, though the move to FSMCs did legitimise spaces on public forested land for hunting and fishing activities as well as for small, municipal-led forestry activities.

During this period, industrial forest management was also being increasingly criticised for its reliance on chemical herbicides to regenerate commercially valuable softwoods. A public inquiry finally led the government to ban this practice, replacing it with more labour-intensive silvicultural treatments. Some civil society groups saw this as an opportunity for communities to seek out a stronger role in the management of public land, echoing calls, in 1991, for a renewed approach to rural development by the *États généraux du monde rural*, a major forum for Quebec's rural stakeholders and researchers. This movement gained traction in government circles and, with it, the idea that public forest management had to be amended in order to contribute to the development of rural communities. The 'inhabited forest' (*forêt habitée)* concept, first used in the 1970s by Lussier (1971), became central to discussions linking public forest management reforms to community-led rural development. Not unlike Minville's 'forest village', it implied that communities should manage the forests surrounding them according to their local priorities, opportunities, and knowledge base. In order to avoid the same impasse – and fate – that forest villages had faced, Bouthillier and Dionne (1995) stressed the importance of thinking beyond timber production for industrial purposes and of articulating local economic development objectives that relied not only on wood fibre but on recreational opportunities as well.

In 1995, the provincial government, seemingly overcoming traditional industrial opposition to community involvement in the public forest, announced that it would be implementing an inhabited forest policy within a few years. It launched a series of public consultations, and various stakeholders submitted briefs in support of inhabited forests, sustaining hopes that new community forestry policy instruments were forthcoming. The government created a Secretariat meant to co-ordinate the different ministries that could pool resources towards the inhabited forest projects (Boucher & Chiasson, 2013). It also issued a call for proposals for inhabited forest pilot projects. Of the numerous proposals submitted, 14 were selected and implemented between 1995 and 1998 (Gélinas & Bouthillier, 2005). As is clear from the map shown in Figure 2.1, the pilot projects were spread across most regions of the province.

With government support, the pilot projects experimented with different public forest management approaches and with different types of partnerships with community members (Gélinas & Bouthillier, 2005). Given that nearly all public forest land had been granted through the FSMCs, most were situated on areas of land already under industrial licences and operated within the confines of the FSMC, making industrial licence holders important players and their industrial priorities (producing lumber for processing mills) likely central tenets of these

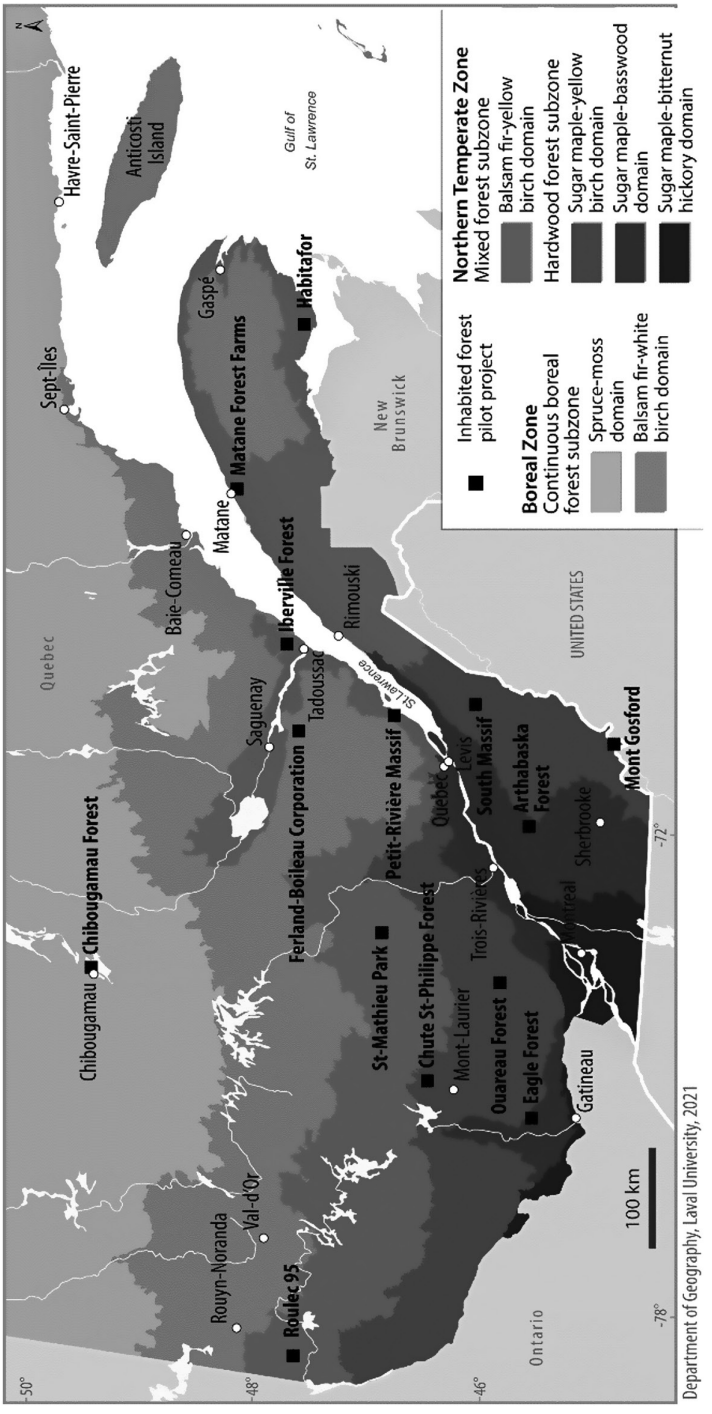


Figure 2.1 Bioclimatic Domains and Inhabited Forests pilot projects.

projects. In fact, only two of the 14 projects held full timber rights on public forest land: The *Corporation de gestion de la Forêt de l'Aigle* (CGFA) in the *Outaouais* region and the *Corporation de la forêt habitée du Mont Gosford* (CFHMG) in *Estrie*. Both likely had more leeway in deciding what was going to be attempted and achieved on public land. The CGFA became quite well-known, not only for a governance scheme that involved a very diverse array of partners, including a First Nation community (as well as local municipalities, hunting and fishing clubs, quad clubs, etc.) but also for its management plan, which took into consideration various forest uses (Teitelbaum & Saumure, 2010).

Ultimately, the inhabited forest pilot projects provided new, though rather restricted and short-lived, spaces for communities to participate in public forest management. The pilot projects were limited in number and consisted mostly of small enclaves within Quebec's public forest. Furthermore, the government perceived them as decentralised forest management experiments (CEGFPD, 2004, pp. 174–176) and maintained them within the bounds of an FSMC tenure. Pilot project promoters were therefore obliged to maintain the rights allocated to existing users (mainly timber volumes) while seeking to build consensus amongst forest users in the name of integrated resource management and attempting to secure new rights for their projects. By the end of the 1990s, it appeared that the government had lost interest in the inhabited forest projects. Not only did the state never produce its promised inhabited forest policy, but it also ended its support for the pilot projects. Left to themselves, some of the inhabited forest pilot projects proved more lasting than others. However, even the most successful, the CGFA, ran into trouble, and their partnership was dismantled in the midst of the forestry crisis of the 2000s (Boucher & Chiasson, 2013). Today, only the CFHMG and the Ouareau Forest still exist, with missions focused on their recreation potential.

Although further research would be necessary to better understand why only these two projects survived, it is perhaps telling that neither involved a large industrial partner with existing timber rights. In a conference held in Maniwaki in October 2000, representatives from 50 community-based projects across Quebec, alongside practitioners and researchers, concluded that the major stumbling block that the pilot projects faced was the obligation to satisfy the rights that had already been granted through the FSMC tenure. Indeed, the projects with the best self-financing rates had one common characteristic: they held full timber rights for the entire area where the project stood. The conference participants called upon the Quebec government to set forth a tenure framework that would grant exclusive forest licences to the public bodies of geographic communities and thus support territorial management of public forests consistent with the available resources and the expectations of residents of these communities (Corporation de gestion de la Forêt de l'Aigle, 2001, pp. 186–187).

The 2000s: Governance under supervision

The first decade of the 21st century was tumultuous for forestry in Quebec as the sector was affected by social and economic crises which once again called into question the relationship between industrial forestry and community development. This led to a series of policy developments and propositions seeking more stable and sustainable alternatives focused on regionally and locally led development, culminating in a new forest law passed in 2010, which came into full effect in 2013.

In 1999, singer/songwriter Richards Desjardins and documentary film-maker Robert Monderie released a documentary titled *L'erreur boréale*. The film sought to expose many of the negative ecological and social impacts of industrial forestry in Quebec as well as the state's complicity (Sandberg et al., 2004). The allegations put forth by Desjardins and Monderie con-

tributed to a loss of public trust in the forestry regime and fuelled social demands for change (Bouthillier, 2000).

It also became increasingly evident that the forest industry was facing an important economic crisis. In 2001, the US government, responding to pressure from its domestic industry, imposed countervailing and anti-dumping tariffs on its imports of Canadian softwood lumber. Part of a lengthy and unresolved dispute between the two countries, the duties effectively restricted exports from several Canadian provinces, including Quebec, to the US market (Bouthillier, 2001a). They had a detrimental effect on sawmills, with many forced to shut down, prompting the Quebec government to create an economic diversification programme for communities affected by these closures. Though an agreement was reached between the two countries in 2006, the demand for Canadian lumber did not pick up due to the collapse of the US housing bubble and the global financial crisis of 2007-2008 that ensued. Newsprint faced its own important market changes, namely owing to the rise of digital media.

This, combined with an overall decrease in the industry's competitiveness in the global market, contributed to further factory closures and unprecedented job losses in the forestry sector (Barré & Rioux, 2012).

Although the forestry industry and the state contested the veracity of the claims made in *L'erreur boréale* (Sandberg et al., 2004), the provincial auditor general raised serious concerns regarding Quebec's forestry practices and management in 2002. The Review Commission of the Management of Quebec's Public Forests (*Commission d'étude sur la gestion de la forêt publique québécoise*), also known as the Coulombe Commission, was established in October 2003 by the provincial government. It was mandated to report on the state of affairs of public forest management and to formulate recommendations 'in response to the needs and aspirations of Quebec's population' (Commission d'étude sur la gestion des forêts publiques québécoises, 2004, p. i). After a year-long study that included public consultations in 16 towns and four First Nation communities as well as just over 300 submitted briefs, one of the main conclusions reached by the Commission was that there were clear calls for 'decentralisation, transparency, and the active participation of regional and local actors in forest management' (Commission d'études sur la gestion des forêts publiques québécoises, 2004, p. vii).

Many of the recommendations of the Coulombe Commission – which included the revival and expansion of the 'inhabited forest' project initiatives (Commission d'étude sur la gestion des forêts publiques québécoises, 2004, p. 174–176) – were formalised in a Green Paper published by the provincial government in 2008. It detailed the vision and strategy of an upcoming forest regime change, explicitly characterising the forestry crisis as not only economic, but also structural, organisational, and social (MRNF, 2008). Though still supportive of industrial forestry, the plan stressed innovation as well as new market mechanisms and sought to open up the forestry sector to new players while pursuing ecological and social sustainability. It argued that communities and regions should have more say in the future of the forests that surrounded them and that widespread support could be rallied 'by reconciling the various users of the forest environment and bringing together communities that depend on the forest, including First Nations communities, around a set of shared values and goals' (MRNF, 2008, p. 12).

Several measures proposed in the Green Paper were included in the Sustainable Forest Development Act (SFDA). This new law, assented to in March 2010, came into full force on 1 April 2013 with the following five main objectives (Savard, 2012):

1. To decrease the forest industry's management responsibilities by strengthening the province's planning role.

2. To increase the use of market forces and mechanisms through harvest volume allocation auctions.
3. To regionalise territorial decisions through regional commissions, distinct from the central government.
4. To integrate the idea of multi-functional forests in harvesting and silviculture planning through Integrated Management Tables established on each of the 73 management units that structured Quebec's production forests in 2013.
5. To implement community forestry through the creation of *forêts de proximité*, officially translated into English as 'local forests'.

Mentioned several times in the new law,[3] local forests refer to a new form of forest tenure that give communities the rights to manage – and reap direct socio-economic benefits from – forested land and some of its resources in their vicinity in a way that reflects their values. It is the provincial government that determines whether a portion of forest may be classified as such, and local forests remain subject to the annual allowable cut (AAC) calculations made by the Chief Forester of Quebec (MRNF, 2011).

Limiting spaces for communities after 2013

Forest industry representatives began voicing their criticism of the SFDA soon after the different elements of the new forest regime were in place. The forestry crisis and the sluggish economy of the 2000–2010 decade had resulted in less pressing needs for timber from public lands. However, by 2013, with the North American economy recovering, wood processing was picking up again, causing a rise in demand for timber. By imposing limits on their timber supply, including the introduction of a quasi-market (with 25 per cent of timber being sold by auction), the new regime quickly came to be considered by forestry companies as a major hindrance to their operations. Industrial association representatives were especially adamant in arguing that Quebec's new rules would lead to mills shutting down, as they made public land timber overly expensive and guaranteed insufficient timber volumes to keep up with market demand (CIFQ 2017, pp. 31–32).

As for the creation of new community forestry spaces, the local forests initiative has thus far proved limited. In 2011, state authorities set forth a new round of consultations, insinuating that they would adopt a full-fledged community forestry policy (MRNF, 2011) to the great interest of local governments, the potential beneficiaries of this programme. Despite its 2014 campaign promises to create local forests on public land, once elected, the Liberal political party invested instead in technological innovation and silviculture programmes (Bouthillier, 2018).

By 2019, nine years after the SFDA was passed, only one *forêt de proximité* had been approved – 42,000 hectares of public forest (420 square kilometres) to be managed by the Abitibi-Ouest regional county municipality[4] (RCM). Amongst other provisions, Abitibi-Ouest RCM will have to provide the guaranteed timber volumes allocated to the mill industry[5]. This first – and long overdue – agreement has also been presented as a pilot project. It therefore seems that, as in the case of inhabited forests, the Ministry of Forests, Wildlife and Parks is choosing to implement its local forest policy in a prudent and limited way. Although this first agreement does open the door to more inclusive planning – in favour of leisure activities, fauna habitats, non-timber forest resources, and biomass production, as well as research and teaching – the Abitibi-Ouest RCM remains bound to the same management terms as expected from the central and regional state administrators of the Ministry of Forests, Wildlife and Parks (MFFP). This makes the emergence of a new form of territorial management unlikely, as the tedious planning requirements, decried

as a major burden by the forest industry, are likely to be even more constraining on the RCM given its small size and limited institutional capacity.

Other decision-making spaces for communities have disappeared altogether during this period. In autumn 2014, in the name of greater efficiency and in the spirit of reducing state expenditures, the Quebec government abolished the regional conferences of elected officials. Following this decision, the regional boards established in 2006 under these regional authorities were dismantled in 2015, effectively causing the loss of a major space where communities (local elected officials but also other non-industrial users of local public forest lands) could partake in regional forest planning (Tardif et al., 2017).

Finally, at the end of 2020, a series of announcements was made outlining upcoming changes to Quebec's forest regime. In November, Quebec's Premier François Legault presented a draft of a new forest regime, and in December, the MFFP issued the Québec Timber Production Strategy.[6] The latter seeks to increase the wealth creation potential of Quebec's forests by increasing and improving the timber supply available to the forest industry. Although a decentralised regional approach is proposed, no new community forestry measures have been introduced thus far, suggesting that industrial access to public wood will take precedence in the upcoming changes.

Discussion: What does Quebec's community forestry history reveal?

Throughout the 20th century, Quebec's forest policies have overwhelmingly embodied a state-centred forestry that perpetuates the social expectation that forests contribute best to society through large-scale industrial forestry. This social expectation has been challenged at different points in time and new policies have been introduced, allowing communities to at least try to carve out (cramped) space(s) for themselves. Despite the social transformations that have taken place since the turn of the century, most of these initiatives have either stalled or have been reversed. We have noted the frequent reversals of government policy and initiatives that favour community forestry. This ebb and flow seems to fall in line with the boom and bust movements in the forestry sector and the economy more generally, whether it be the forest villages largely forgotten after the economic boom following the Second World War, or the more recently stalled 'local forests' projects following the economic upturn after the 2008 recession and the forestry crisis. As in other Canadian jurisdictions, forest policy continues to be aligned with the interests of the industrial wood-processing industry. This 'enduring practice of state forestry' is in line with the experience of many other countries across the world (Arts, 2014, p. 20). The workers' co-operative movement that emerged during the Great Depression has survived, but it did, arguably, because of its integration within industrial forest production.

For over a century, this situation has contributed to a sense of alienation amongst the population in Quebec, with communities questioning why they hold so little power over the territory they inhabit. This feeling is neither unique to the province nor to Canada as it has been observed, amongst other places, in the United States (Davis et al., 2020) as well as in Sweden (Sandström et al., 2020). Community forestry seeks to reverse this sentiment by giving communities a key role in the development of the territory that surrounds them in ways that suit them. Furthermore, there is evidence that community forestry can contribute to sustainable forest management (Beckley et al., 2002) as well as to the socio-cultural capital development of host communities (Battilana, 2018).

Quebec's community forestry history, painted here in broad strokes, suggests that there are three major obstacles that must be overcome if such ambitious goals are to be reached and more sustained spaces for communities are to be realised. The first pertains to the unrealistic visions of

community forestry constructed by local leaders confronted with a centralised forest policy and limited means, the second to the culture of professional foresters that has dominated the forestry sector, and the third to the absence of venues for dialogue.

From the forest villages of the 1940s to the inhabited forests of the 1990s, local promoters of these projects wanted to reconstruct the world of forestry. For Bullock (2006), this is a frequent trend in community forestry projects. And yet if project initiators were to drop vague idealistic intentions in favour of a better understanding of the existing forestry sector, they could draw up realistic new possibilities. In Quebec, few people grasp the local ramifications of the 60,000 jobs and US$13 billion (CAD17 billion) in income generated by industrial forestry (CROP, 2020). Furthermore, the technical skills as well as the time and financial means required to design and implement community forestry projects tend to be underestimated (Gélinas & Bouthillier, 2005). As the example given by Davis et al. (2020) in the United States illustrates, community-based organisations can overcome this hurdle by collaborating with organisations at regional or higher-scale levels. However, given that spaces for community-based forestry in Quebec have been difficult to establish and maintain, community stakeholders in the province have had little time to build up the knowledge capital needed to lead the way in developing local forestry's full potential.

The historically dominating culture of professional foresters in Quebec constitutes a second obstacle. Obsessed by the issue of industrial supplies, forestry experts have shown little sensitivity to the community dimensions of their interventions (Morin et al., 2020). To anchor forestry development in a community, the distribution of forestry-generated income amongst the households of that community needs be understood. Equally important, the real and potential contributions of forestry activities in terms of social capital must be clarified. Community access to recreational amenities and non-timber forest products also requires explicit considerations on the part of timber harvesting planners and operators. Such receptivity to the forest needs of different community members is required to grasp the attachment of a community to its forest as well as to encourage socio-economic diversification. At the same time, it is necessary to go beyond the usual definition of 'forest stakeholders' centred on economic interests as it has historically excluded those who do not fit into this category and, with them, a wider range of values attached to forests (Reed, 2010; Teitelbaum, 2016). State resistance to cultural concerns and intrinsic rights, evident in the way Quebec has handled those of its First Nation communities (Blouin et al., 2020), contradicts community forestry itself; it is the sense of the place specific to a community that should characterise the essence of such projects.

Finally, developing a type of forestry that benefits communities requires an approach marked by legitimacy, transparency, and accountability (Lockwood et al., 2010). This requires the formalisation of mediation bodies at the community level. Here, the Quebec case points to an obstacle of a political and administrative nature. Despite explicitly referring to local forests (*forêts de proximité*) as a way to implement community forestry, the SFDA does not grant communities exclusive access to public forests classified as a local forest nor full control of the resources therein. Previously, pre-existing rights of industrial-scale forest licences as well as other licences granted on the same areas have hampered and limited sustainable spaces for community forestry. We suggest that a local management corporation formula, whereby holders of pre-existing rights (for example, rights that are recognised, including in judicial courts that grant 'intervenor status') can set out their community contribution in exchange for their assets being taken into account, could create new opportunities for community forestry (see for example the *Forêt de l'Aigle Management Corporation*). Moreover, the development of community forestry spaces in Quebec does not necessarily oppose a more industrial-type approach so long as it embeds such interests into local institutions with decision-making autonomy

(Bissonnette et al., 2020). Community forestry projects would then be free from the constraints imposed by existing industrial timber allocations. Such is the idea of adjacent agendas within a specific space fostering social innovation. When implemented by local hybrid businesses, it would enable compromises that serve the purposes of community forestry. How to pragmatically define the potential spaces for community management of public forest has yet to be decided.

Conclusion

At the end of 2020, the Quebec government affirmed its intention to reframe the forest regime. Its stance is reflective of the long-standing trends we uncovered in this chapter. Since at least the 1930s, civil society actors have seen local development potential in public forests, advocating for community spaces in terms of access to land and the management of its resources. Their arguments had more power in times of crisis, such as the period of the Great Depression as well as the forestry crisis of the 2000s, when communities felt the impacts of economic downturns. From the onset, the Quebec government responded by allowing spaces to be created through the forest villages movement, and that paved the way for the establishment of a vigorous forest co-operative movement. Ideas for community forestry, taking on different names and adapting to new eras (and forest tenures), resurfaced at different times in Quebec's history.

But overall, despite promising measures announced at the policy level, it has proved rather difficult to carve out space(s) for community forestry. Policy measures have been mostly short-lived agenda priorities, with the government's attention soon shifting elsewhere. Though community members may be able to physically access public forests, a community's ability to take control of local forest management has been restricted. This institutional blockage is not specific to Quebec and requires the development of new strategies by contemporary promoters of community forests both within government and communities.

This chapter has shown that communities hold very little space in Quebec's public forests at physical, decision-making, and policy levels. And when they do, in most cases they remain very much entangled with industrial licensing. In such a context, hybrid businesses involving communities and industrial partners may be an interesting direction to explore, especially to overcome resistance to community forestry. This seems particularly true for communities located within vast areas of commercially exploited forests. But different ways forward might be required for communities located in other geographical settings.

Notes

1 All translations from French are our own.
2 *Contrats d'approvisionnement et d'aménagement forestiers*
3 The SFDA (Quebec, LRQ, ch. A-18.1) is available online at http://www.legisquebec.gouv.qc.ca/en/pdf/cs/A-18.1.pdf
4 'Regional county municipalities are a supralocal type of regional municipality with land use planning responsabilities. RCM also act as the local municipality in unorganized territories within their borders' (www.mamh.gouv.qc.ca/organisation-municipale/organisation-territoriale/organisation-territoriale-municipale/regime-municipal-general/)
5 This agreement is available online at https://mffp.gouv.qc.ca/forets/amenagement/ED-pdf/ed-1082.pdf.
6 This document is available online at https://mffp.gouv.qc.ca/wp-content/uploads/STR_Quebec_timber_production_strategy.pdf

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3

COMMUNITY FORESTRY IN EXTRACTIVE RESERVES

The story of Verde para Sempre in Pará State, Brazil

Katiusca Fernandes Miranda, Manuel Amaral Neto, and Alison Pureza Castilho

Introduction

Conservation units (UCs, in Portuguese) are territories protected by law that have natural elements of ecological, social, and/or environmental importance. According to the International Union for Conservation of Nature (IUCN), a UC may be defined as 'an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means' (Dudley, 2008, p. 4). Conservation areas in Brazil are defined by the National System of Conservation Units (SNUC) as

> territorial spaces and their environmental resources, including waters within their jurisdiction, with relevant natural characteristics, legally instituted by the Public Authority, with conservation objectives and defined boundaries, under a special administrative regime, to which are applied appropriate guarantees of protection under law.
>
> *(art. 1º, Brazil Law 9,985)*

The first UC created in Brazil was Itatiaia National Park in 1937. However, only since the 1970s have the UCs received more attention from the federal government, motivated by a worldwide context favourably disposed towards environmental conservation. Over the following decades there were several initiatives to regulate the use and occupation of publicly owned forests as a strategy for ensuring the sustainable use of biodiversity and maintaining the rights of Indigenous and Traditional Peoples and communities. 'Extractive reserve' and 'traditional extractivist population' are defined in Articles 18 and 20 of Federal Law no. 9.985 which established the SNUC; an 'extractive reserve' is

> "an area used by traditional extractivist populations – whose subsistence is based on extractivism and complementarily, on subsistence agriculture and the raising of small animals – with the express purpose of protecting the livelihoods and cultures of these populations and of ensuring the sustainable use of the natural resources of the unit."
>
> *(Brazilian Law 9,985)*

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As of December 2018, in the Brazilian Amazon there were 339 UCs totalling 1,286,927 km², which corresponds to 26 per cent of its territory. Of that number, 220 (817,507 km² or 16 per cent of the Brazilian Amazon) are in the sustainable use category – where the goal is to harmonise nature conservation with the use of common assets for generating income, and balancing human presence in the protected areas. 119 UCs (469,420 km² or 9 per cent of the Brazilian Amazon) are in the Full Protection category – where the main objective is to maintain the ecosystems by excluding human interference, and with only the indirect use of their natural attributes being allowed (Table 3.1).

However, the concept of UCs goes beyond maintaining biodiversity, because they 'enable diverse land uses, and become a tool for empowering diverse activities that contribute to generating employment and income and to increasing quality of life' (Geluda et al., 2014, p. 185–186).

One of the models for sustainable practices that combines conservation with generating employment and income in the Amazon context is Community and Family Forest Management

Table 3.1 Numbers (absolute and percentage) for conservation units in the Brazilian Amazon by use category

Categories of UCs	*Qty*	*Area (km²)*	*% of the area in relation to the total area of UCs*	*% of the area in relation to the total area of the Brazilian Amazon*
Full protection	**119**	**469.420**	**36**	**8**
Ecological Station (Esec)	26	120,333	9	2
Natural Monument (Monat)	3	327	0	0
State Park (PES)	43	71,033	6	1
National Park (Parna)	26	223,305	17	4
Wildlife Refuge (RVS)	5	1,107	0	0
Biological Reserve (Rebio)	16	53,315	4	1
Sustainable use	**220**	**817,507**	**64**	**16**
Full Protection Area (Apa)	47	236,944	19	5
Area of Relevant Ecological Interest (Arie)	4	459	0	0
State Forest (FES)	19	132,588	10	3
Sustainable Yield State Forest (FERS)	10	2,675	0	0
Extractive Forest (Florex)	1	10,550	1	0
National Forest (Flona)	34	170,777	13	3
Sustainable Development Reserve (RDS)	26	112,147	9	2
Wildlife Reserve (RFAU)	1	105	0	0
Extractive Reserve (Resex)	78	151.264	12	3
Overall total	**339**	**1,286,927**	**100.0**	**24**

Source: Miranda et al. (2020).

(CFFM). This term encompasses the diversity of modalities and scales of management practised in community forests by Indigenous and riverbank communities, rubber-tappers, colonists, family producers, and agroextractivists in general, both collectively and individually (Amaral Neto, 2002). CCFM practice has a characteristic setting it apart from the other types of forest management, because its protagonists – the communities – 'directly depend on the forests and relate to those resources according to different perspectives' (Amaral & Amaral Neto, 2005, p. 15). That aspect enables a differentiated economic approach to use the common assets offered by the forest, which is managed by the community as a 'cultural space' (Ritchie, 2001, p. 6). Productive activities within CFFM seek 'through use of the multiple resources the forest offers, to contribute towards generating collective economic benefits and towards conserving forest resources' (Eke et al., 2016, p. 31).

Sabogal et al. (2008, p. 42) state that it was only during the 1980s that 'community forest management came to be seen as a promising alternative for managing forest resources'. It first began to be implemented through programmes and projects developed by NGOs among communities, with funding through international co-operation. By the mid-1990s, spurred by the increasing worldwide concern over the need for strategies and programmes for poverty reduction, governments began technical, social, and institutional strengthening with a view to increasing local capacities for CFFM. Amaral Neto et al. (2008) note that the collective debates helped start a process for inter-institutional articulation, which boosted the expansion of CFFM initiatives in the Brazilian Amazon. In the early 2000s, through pressure from civil society organisations, a series of public policies were drawn up and initiated, such as processes for revising procedures to regulate CFFM activities with environmental control and enforcement agencies.

Creation of the Verde Para Sempre Extractive Reserve

An example of rights-based sustainable forest stewardship was the process for creating the extractive reserves (Resexs), which began in 1987, based on Administrative Ruling no. 627 of the National Institute for Agrarian Reform (INCRA). That process for setting up Resexs in the Amazon has been chronicled by several authors (Allegretti, 2008; Almeida, 2004; Cunha, 2010) who date its beginning to the 1980s, in the state of Acre, resulting from the struggles of rubber-tappers united in their representative organisations. According to Allegretti (2008) the proposal for extractive reserves was new and at that time was not backed by Brazilian legislation on the environment and land-title regularisation. Extractive reserves became important in the strategy for ending tenure insecurity and reducing conflicts.

Extractive reserves were first recognised as UCs in 1990, through Decree no. 98.897 and in 2000 they were included in the SNUC. 'The Resex allowed community demands for access to land to be met, and guaranteed they could remain on the land. They were the "land reform" for rubber-tappers' (Sawyer, 2011, p. 365). In that context, on 8 November 2004, based on a federal decree, the Verde para Sempre Resex was created (Figure 3.1) in an area of 12,887 km² – or around 70 per cent of the municipality of Porto de Moz, in Pará. Verde para Sempre involved approximately 90 traditional communities – 10,000 persons comprising 2,200 families – most of them living along the banks of the Amazon and Xingu rivers.

Extractive reserves were created to oppose the advance of deforestation and predatory logging, including in the region of Porto de Moz municipality, and indiscriminate fishing by industrial-scale fishing boats (*geleiras*, boats with ice chests for storing large quantities of fish) from other municipalities, in addition to guaranteeing land security for communities. The municipal economy is based mainly on logging (60 per cent of income) and fishing (24 per cent of income) (Rocha et al., 1996). For decades, illegal loggers had been exploiting forest stocks, which had

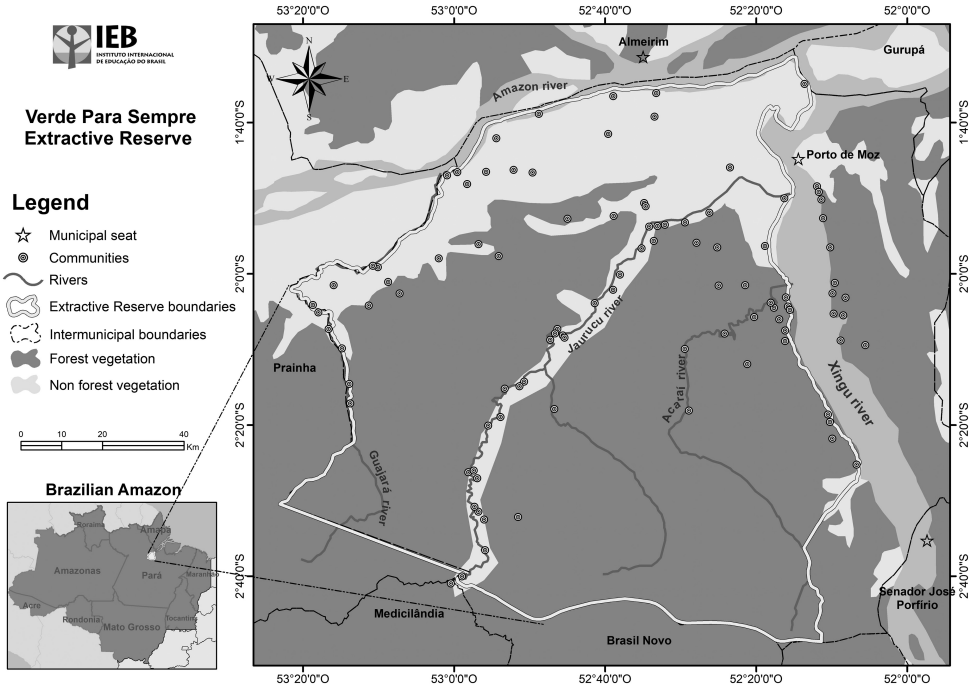


Figure 3.1 Map showing the location of the Verde para Sempre Resex. Source: Prepared by the authors, 2020.

led to intense social conflicts between loggers and local communities. Extractive Reserves were supported by strong mobilisation among local organisations – the Sustainable Development Committee (CDS, in Portuguese) and the Rural Workers' Union (STR, in Portuguese) of Porto de Moz, and the Catholic Church – which began to demand that the Brazilian government provide protection for those communities.

The evolution of community and family forest management in the Verde para Sempre Resex

To understand how CFFM has evolved in the Verde para Sempre Resex, we provide a brief historical summary of that part of the Brazilian Amazon. In general, three factors are important for understanding the region's economic and environmental history: (i) abundant natural resources serving as a pole of attraction; (ii) the catalytic role of roads in providing access to the region's wealth; and (iii) governmental macroeconomic policies, which at several periods have attracted a variety of actors to the Amazon (Instituto do Homem e Meio Ambiente da Amazônia [Imazon], 1998, p. 12). The municipality of Porto de Moz, founded in 1639 by priests of the Capuchin Franciscan Province of St. Joseph, was incorporated as a city in 1890. Here was an area previously inhabited by Indigenous Peoples living along the Xingu River and its tributaries. Most of the local population arrived in the region in the 1940s, drawn by the second wave of global demand for natural rubber. From the end of the 1960s, the national integration programme attracted and encouraged migrants from other regions to resettle as colonists (*colonos*). The communities are scattered along forest streams, floodplain forests, and tributary rivers of the Xingu and Amazon (Salgado & Kaimowitz, 2003, p. 219).

> Extractivism has always been the most important activity since the first occupations by families coming from other regions. At the end of the 1970s, besides trade in caiman, capybara and other animals and the Brazil-nut trade, trade with light woods logged along riverbanks and in floodplain forests began. During the 1980s, logging received a major boost with the arrival of barges and trucks brought by outside companies who negotiate with small local loggers. Later, there was the arrival of more machinery (skidders, dozers, etc.), which enabled intensive logging in several forest areas used by riverbank communities.
>
> *(Salgado & Kaimowitz, 2003, p. 222)*

According to Rocha, Castellanet, and Mello (1996), the 1980s brought a new reality to the regional economy. Timber harvesting was boosted by the arrival of trucks, chainsaws, and barges, brought by companies that were set up in the region. During this period, heavy timber began to be targeted, since it was now possible to transport logs by road. Two sawmills were also established in the municipality of Porto de Moz. In fishing, significant changes occurred in the region, mainly due to the arrival of industrial-scale fishing boats coming from the Tocantins River following the construction of the hydroelectric dam that created Tucuruí Lake. The industrial-scale fishing enterprises changed labour relations and stirred conflicts in the communities due to the indiscriminate use of gillnets, trawl nets, and other equipment, as well as reducing fish stocks in some places.

Studies carried out in the municipality of Porto de Moz analysed timber harvesting activities and concluded with quite a negative prognosis (Salgado & Kaimowitz, 2003). Data from the diagnosis prepared by the STR in Porto de Moz in 2001 indicate that, following the exhaustion of valuable species in large production centres such as Breves, Portel, Paragominas, and Tailândia, the Porto de Moz region would come to be seen as the 'timber paradise', with many intact, easily accessible forests, without regulatory enforcement by the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA, in Portuguese),[1] much less by the municipality, since the local authorities in the executive and legislative branches were also involved in logging (Miranda et al., 2020a). Rocha Castellanet and Mello (1996) predicted that within a short time the high rate of timber harvesting implemented in the Porto de Moz region would collapse, with the marketable species being depleted and timber buyers moving off to other parts of the Amazon.

During the 1990s, the local communities in Porto de Moz began to denounce the abuses committed by large logging groups coming from southern Pará as the region became the target for high rates of unsustainable logging, legitimised by forest management plans approved by IBAMA, which was authorising the harvesting of thousands of cubic metres of tropical hardwoods. By the beginning of the 2000s, the debate over creating the Verde para Sempre Resex emerged as an express demand from a coalition of social movements in the BR 230, also known as the Transamazônica highway region, and local communities in the Porto de Moz region linked to ecclesiastical base communities, the STR, and the small-scale fishers' organisation. During this period, two local communities – Jussara and Arimum – began physically demarcating their common use areas with support from the STR and organisations connected to the Federal University of Pará (UFPA). Those community areas were the only solution communities could find to protect their regions from invasion.

The Forest Code (Law 4.771/65, Art. 15 and the substituted Law No. 12,651 / 2012) specifies sustainable forest management (SFM) as the instrument necessary for logging in the Amazon's native vegetation forests. SFM is regulated through Decree 5.975/2006. The Forest Code views logging as a means for obtaining economic, social, and environmental benefits, while safeguard-

ing ecosystem resilience and promoting the cumulative or alternative use of multiple timber species, multiple non-timber products and by-products, and the use of other goods and services from the forest, as specified in Item VI of Art. 3 of Law No. 11.284, from 2/3/2006 (Brazil Law 11, 284).

After the creation of the Verde para Sempre Resex, and especially after issuing Normative Instruction No. 16 in August 2011,[2] the federal government issued a series of measures aimed at consolidating the management of the UC, notably by promoting the practice of sustainable timber management by the communities. In 2005, through actions by the Project for Supporting Sustainable Forest Management in the Amazon (Promanejo), implemented by the IBAMA agency linked to the Ministry of the Environment (MMA in Portuguese) with funding from international partners, a series of diagnoses were carried out on the social, economic, and environmental reality of communities located inside the Resex. The results of the diagnoses showed the potential of the communities to manage the timber CFFM, which later received support from the project entitled 'Use of felled wood and sustainable forestry in the Juçara Community Area, municipality of Porto de Moz (Lower Xingu River)', financed by the Brazilian government, from the MMA/IBAMA/Promanejo project, for the purpose of encouraging forest management through using reduced impact logging (RIL), thereby contributing towards expanding the area of managed forest and reducing the rates of deforestation and illegal logging.

The first initiative for a Sustainable Forest Management Plan (PMFS, in Portuguese) in the Verde para Sempre Resex came from the Community Association for Sustainable Development in the Community of Juçara (ACDSCJ, in Portuguese) in 2006 in an area of around 3,000 ha of forest. After discussion and planning in the communities, forest management was planned for an area of around 1,000 ha, using the principle of a 25-year rotation, with stands of at most 30 ha per year, thus producing an average of 450 m^3 of logs per year (estimating an average of 15 m^3 per hectare). However, due to management problems such as lack of guarantees for the construction of the necessary infrastructure for the execution of the activities, the community was only able to implement two annual production units (UPAs, in Portuguese), and it ended its activities in 2007 (Herrera, 2006). A UPA is a document that authorises and itemises the area and volume of wood to be exploited annually in each approved community forest management plan.

In 2007, also with support from Promanejo, the community of Nossa Senhora do Perpétuo Socorro do Rio Arimum, through the Association for Sustainable Development of Rio Arimum (Ascedesra, in Portuguese), began implementing its community PMFS in an area of 4,355 hectares. Up to 2020, seven UPAs have been harvested in that community, with an average logging intensity of 17.6 m^3/ha (Table 3.2) and generating total gross revenue for the community of approximately US$ 2.030 million over 12 years of productive activity.

In late 2015, another five PMFS were approved in the communities of Paraíso, Por Ti Meu Deus, Ynumbi, Espírito Santo, and Itapéua. In 2018, the PMFS was approved for the community of Belém, and in 2020 the PMFS was approved for the community of Ipanela. Currently, the Verde para Sempre Resex is the UC with the largest number of PMFS in the Amazon, carried out by eight communities in a total area of 82,441 hectares. These areas represent approximately 6 per cent of the Verde para Sempre Resex, and directly involve 268 families in implementing sustainable alternatives for use of the territory (Table 3.3).

Formalising the PMFS in the UC is an attempt to end the systemic illegal logging in the region and provide means for communities to manage forest resources sustainably and legally (Miranda et al., 2020a). However, requiring communities to reach a higher level of organisation in order to implement the PMFS is enormously challenging.

Table 3.2 History of the volume licensed for harvesting in the community of Arimum

UPA	*Year*	*Area (ha)*	*Volume AUTEX³ (m³)*	*Volume logged (m³)*	*Average volume (m³/ha)*	*Gross income (US$)*
1	2007–2008	200	3,449.37	1,764.64	8.82	357,742.00
2	2009–2010	200	3,734.96	1,721.31	8.61	341.802.00
3	2012–2013	197	4,186.32	4,119.83	20.86	349.810.00
4	2014–2015	177	4,052.36	4,035.79	22.82	252.988,00
5	2015–2016	189	4,740,77	3,208.69	17	188.412,00
6	2017–2018	240	6,035.38	4,838.11	20.12	292.873,00
7	2018–2019	184	5,224.00	4,650.00	25.32	247.061,00
Totals		**1387**	**31,423.16**	**24,338.36**	**17.6**	**2.030.688,00**

Source: Miranda et al. (2020).

Table 3.3 Information from management plans of the eight communities in the Verde para Sempre Resex/Porto de Moz/PA

Location	*Name community/locality*	*No. Families involved*	*Area of PMFS (ha)*
Rio Jaurucu	1. Itapéua	14	21,259
	2. São Benedito do Ynumbi	15	5,814
	3. Espírito Santo (Ig. Aruru)	12	4,187
	4. Belém	36	25,287
	5. Ipanela	12	12,289
Rio Acaraí	6. Por Ti Meu Deus	51	2,421
	7. Arimum	52	4,233
	8. Vila Paraíso	76	6,921
Total		**268**	**82,411**

Source: Miranda et al. (2020).

Analysis of the actors, evolution of governance arrangements, and power relations

A common characteristic among all eight organisations implementing PMFS in the Resex is the existence of a very strong community ethos – where the community becomes the basic unit for belonging, after the family unit. Furthermore, a defining element for the community involves belonging to the Church – the 'community' for Catholics and the 'church' for Evangelicals – so that communities attending the same church interact more frequently among themselves (Miranda et al., 2020a). Communities interact in religious contexts – Evangelical church members visit each other, have Bible seminars, hold services bringing together several churches, and proselytise in the other localities. For their part, Catholics celebrate their saints, participate in parish- and diocesan-co-ordinated activities, and in general interact in a larger context with greater diversity than is found in a single community, river, or municipality. The social interactions in and among communities are an important way for people to share the worldview propounded by Catholicism (Oliveira, 2011).

The debate over SFM means that this set of communities now interacts beyond churches and religious communities. Boosted by partnerships, the CFFM has managed to get everyone to share spaces for training, conversations, and practices, making a notable advance towards greater interaction around a common agenda. That practice is leading to the gradual emergence of a new identity in the region: that of communities as managers of their natural resources. This fact has the potential to supersede basic religious interactions in a commercial arrangement that is inclusive and reinforces a general and programmatic vision for the Verde para Sempre Resex (Miranda et al., 2020b).

As the catalytic actor in processes of social change, the local Sustainable Development Community (CDS in Portuguese) plays an important role, both in creating the Resex and in the debate regarding awareness and mobilisation for the CFFM. The CDS positioned itself as the entity that animated those different articulations at differentiated moments, becoming a link in that network that is, for the moment, irreplaceable. Additionally, the Tropical Forest Institute (IFT, in Portuguese) and the International Institute for Education of Brazil (IEB) are working in the region, taking on advisory roles in technical aspects to community organisations. There are also governmental agencies responsible for managing the Resex, such as the Chico Mendes Institute for Conservation and Biodiversity (ICMBio) and the Brazilian Forest Service (SFB).

Since 2016, those actors have been part of the Forest Management Group (GGF, in Portuguese), a participatory space for dialogue, evaluation, and planning, not only for implementing the PMFS that is underway in the Resex, but also for project implementation and fulfilling the agendas of the organisations that make up the GGF (Figure 3.2). The co-ordination began with the initial objective of planning operations for the timber harvest, involving the group of partners and institutions working to strengthen that agenda in the Resex and to facilitate the sale of produce.

The partners working with community organisations to manage and implement the PMFS sought to guarantee that log harvesting would be adapted to the lifestyle of traditional populations. This policy direction would enable arrangements that truly promote self-management of community enterprises (associations and co-operatives) at all stages of management, from preparing the community PMFS to commercialising forest products, establishing transparent and fair channels for institutional dialogue, and marketing forest products.

As systematised by Rocha, Dorresteijn, and Gontijo, the most important challenge for an enterprise is to be aware of how its members are organised, so as to deal with relationships, make decisions, co-ordinate processes, and define rules that are doable and respected by the group. 'Many cooperatives and small-producer associations face serious problems because their associates see the enterprise simply as a buyer and not a means of bonding together community interests' (2005, p. 60).

With community organisations, the first factor is that the communities and their organisations hold the legal right to the use of forest resources. Thus, they need to be strengthened and have their management capacities increased for working in the three major fields of management: organisation, production, and marketing. As presented earlier, the procedures needed for implementing a PMFS are quite complex, requiring community organisations to establish relations with outside actors, e.g. service providers and companies that buy timber. There must also be constant dialogue with the regulatory agency responsible for licensing and follow-up activities that occur in public forest areas.

Without diminishing the importance of outside actors, who are vital in order for the activity to take place, care must be taken in establishing those relations so as to guarantee management autonomy for community organisations in making decisions and in the operational, administrative, and financial management of productive activities.

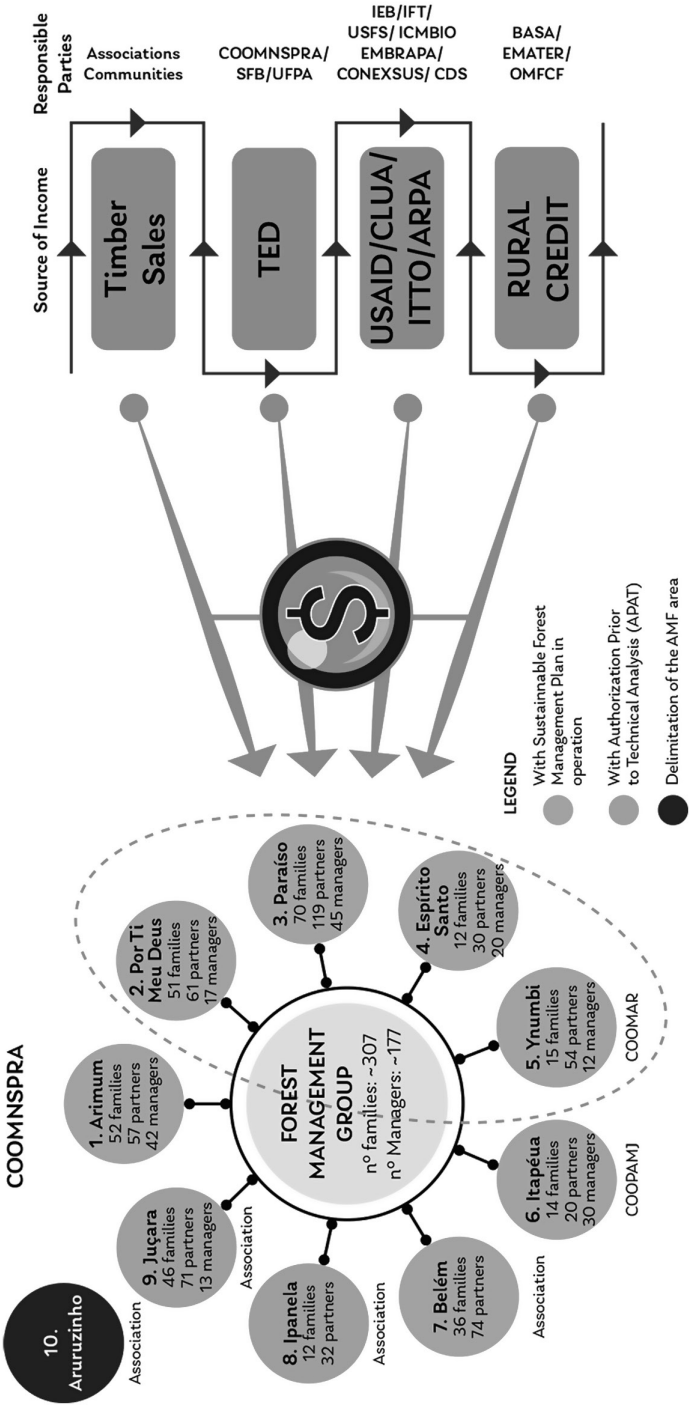


Figure 3.2 Inter-institutional arrangements of the forest management group (GGF). Source: Miranda et al. (2020).

Organisational development must respect the community's history and be done from inside to outside. External consultants should help with the processes, but the latter should be the responsibility of the community members themselves (Rocha et al., 2005). In that regard, for example, it is crucial that contractual relations with companies and service providers, as well as all financial transactions, be established by community organisations and decided on collectively by the communities (Figure 3.3).

It is important to emphasise that this proposed CFFM model was also built to change the timber harvesting *status quo*, as presented earlier, and which had been imposed on the Resex and in other CFFM areas in the Amazon by crony relationships between timber companies and community leaders. A study by Amaral Neto, Carneiro, and Miranda (2011) that analysed contracts established by associations and companies for timber harvesting in settlement areas concluded that in the absolute majority of cases, the contractual relations established were asymmetrical, with the economic interests of the companies prevailing over the sustainable development proclivities of the community organisations. To accommodate those sustainability and equity concerns, in 2016 the associations that had PMFS inside the Verde para Sempre Resex came together around the GGF, allowing all stakeholders involved with forest management to share spaces for capacity-building, debates, conversations, and practices. This was a notable advance towards greater interaction around a common agenda.

To better understand the organisational situation in the communities, IEB made an analysis of the organisational maturity of six communities inside the Resex that are operationalising PMFS. The methodology adopted for that analysis was adapted from the 'Methodological Guide for the "More Management" Programme (PMG)', prepared by the Special Secretariat for Family Agriculture and Agrarian Development (SEAD), with support from Brazil–Germany co-operation (GIZ) (Secretaria Especial de Agricultura Familiar e do Desenvolvimento Agrário [SEAD], 2018). This analysis provides an internal and external view that can aid managers of community organisations in putting their enterprises into perspective and becoming aware of critical aspects and any need for changes.

After rounds of conversations in the communities and administering questionnaires with questions on organisation, production, and commercial aspects of management, community organisations were classified, on a scale of stages of maturity, as initial, intermediate, and advanced, using a scoring scale from 1 to 5. The first stage, called the *initial* phase, is divided into two levels of maturity (level 1 and level 2), and is marked by non-existent or weak processes for organisational development. The second stage, called the *intermediate* phase and divided into two levels (level 3 and level 4), presents more criteria for measuring conformance with organisational functioning. Finally, the last stage is known as *advanced* and is made up of one level (level 5), characterised as achieving excellence in management through continuous processes for improvement.

The results of that analysis showed that the organisations in the six communities of the Verde para Sempre Resex have a low level of organisational maturity. All are classified as being in the initial phase at levels 1 and 2 (Figure 3.4), where organisational processes, although fragile, are in the development phase.

The establishment of the forest management group (GGF in Portuguese) made it possible to strengthen the organisations and increase the potential for carrying out management agreements and plans. Those are vital instruments for participatory management by the extractive reserves, in which management of natural resources by the beneficiaries themselves is a crucial issue for development along the lines defended by local organisations and social movements (Franco, 2017).

Additionally, the GGF has participated in meetings of the Resex Deliberative Board, which aims not only to develop a land management agenda to enable social control by the communi-

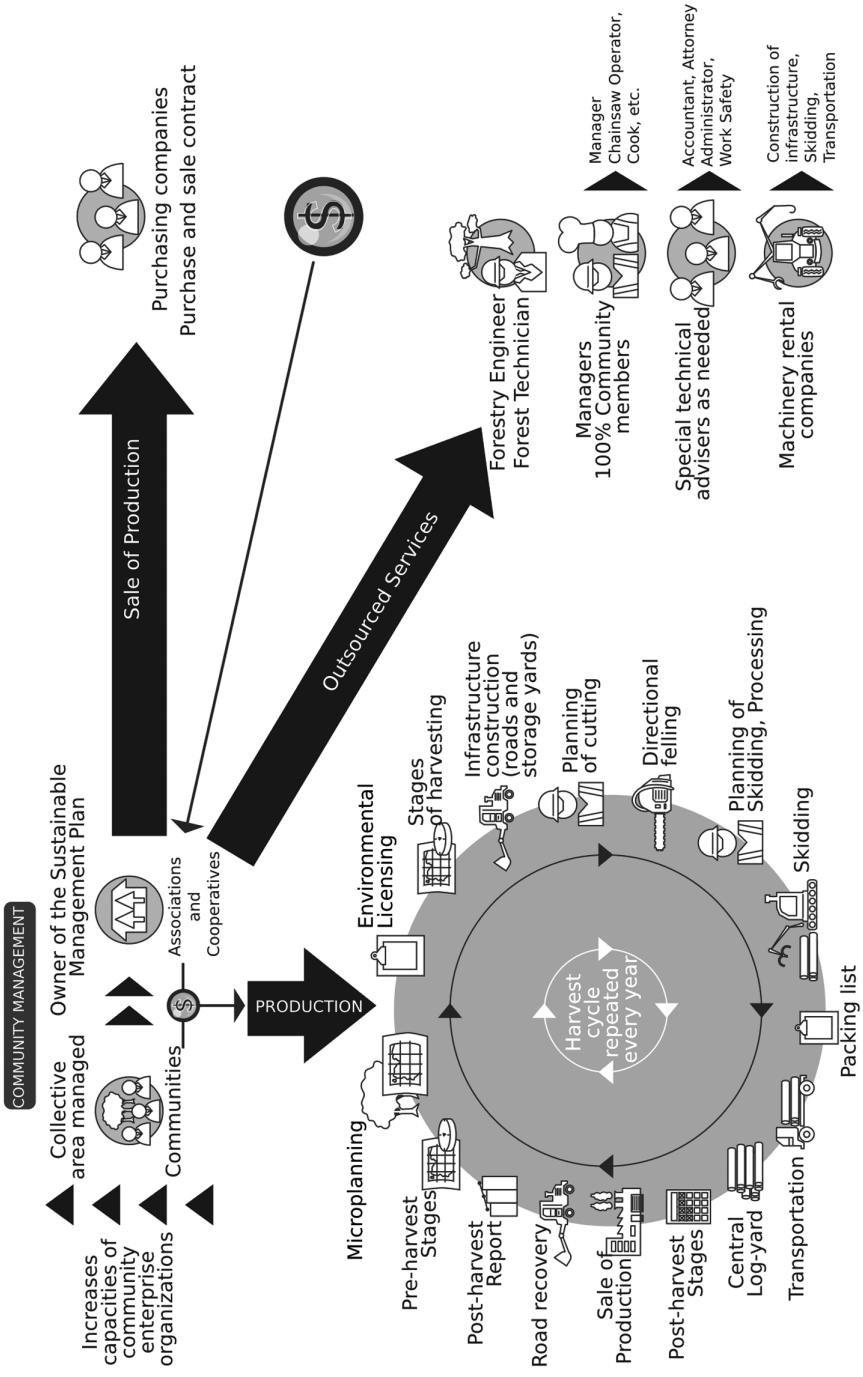


Figure 3.3 Model for community forest management by forest enterprises in the Verde para Sempre Resex. Source: Miranda et al. (2020).

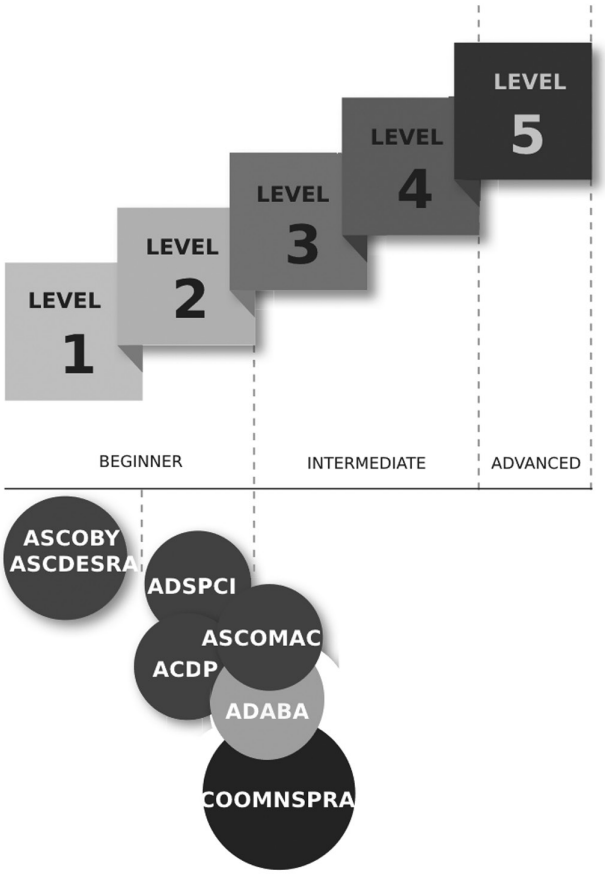


Figure 3.4 Scale of organisational maturity among the community forest enterprises in the Verde para Sempre Resex. Source: Miranda et al. (2020).

ties in presenting information on development of management plans but also to guide crucial debates for implementing a sustainability agenda. In the most recent period, a discussion has begun in the FMG for a strategic action plan for greater articulation with other local organisations seeking to achieve this objective.

Challenges for consolidating community forest management plans in conservation units

A survey by the Observatory for Community and Family Forest Management (OMFC)[4] published in 2019 indicated that there were around 122 formally registered CFFM initiatives in the Brazilian Amazon, benefitting around 266,000 families. Most of those initiatives (57 per cent) involve the management of timber products only, while the remainder (43 per cent) incorporate the use of socio-biodiversity products. In the Brazilian context, *socio-biodiversity* refers to ways of life, territoriality, and the environment (Rodrigues, 2016).

The largest process for formalising community forest management plans for use of timber in the Amazon region is currently underway in the Verde para Sempre Resex (Miranda et al.,

2020b). If, on the one hand, community-controlled logging favours sustainable land use and management by community organisations, on the other hand it is driving an increasing number of conflicts with the local timber industry sector, mainly due to the greater independence that communities have begun to exercise in the development of their forest management activities.

Even though there are now several management plans in the territory, community organisations continue to face structural problems in the development of their activities, such as (i) asymmetry in power relations in the commercial agreements signed for managing and marketing forest products; (ii) slowness by environmental agencies in licensing of management plans; (iii) insufficient public policies for development actions (e.g. credit, land-title regularisation, technical support) to provide greater stability for forest management practices; and (iv) an unfavourable political and institutional environment in Brazil, given the dismantling of the environmental agenda by the government of President Bolsonaro since 2018.

The political and institutional scenarios in Brazil are worrisome. In the environmental sector specifically, the federal government since 2018 has been promoting dismantling the agenda of public policies that may be summarised as (i) undercutting groups in civil society tasked with follow-up of monitoring the implementation of public policies; (ii) reduction and almost elimination of funds for command-control activities to combat illegal deforestation; (iii) excessive weakening of legislation; (iv) driving away investors who support the agenda for fighting deforestation and (v) clashes with government agencies responsible for monitoring deforestation, and, above all, with environmental and socioenvironmental civil society organisations (Associação Nacional dos Servidores da Carreira de Especialista em Meio Ambiente e do Pecma [Ascema], 2020).

As a result, the country is being hit with a series of trade restrictions because of the Brazilian government's lack of commitments to international climate agenda accords, above all uncertainty over investments from Norway and suspension of German support for the Amazon Fund (the largest programme in Brazil for fighting deforestation) and a major rebound of deforestation in the Amazon (Revista Veja, 2019). Indicators of deforestation may be found in recent data from the Deforestation Alert System (SAD) at Imazon,[5] which in March 2020 revealed a 279 per cent increase in deforestation in the region over the last 12 months or a total of 25 square kilometres of deforested area. A point worth highlighting in the Imazon data is that 43 per cent of the deforestation occurred in 'public forest territories' where the state is legal owner and the communities living in the conservation units have management rights (UCs, Settlement Projects, and Indigenous Territories). In the Verde para Sempre Resex alone, from 2014 to 2018, 1,338 ha of forests were lost.[6]

We estimate that these public forest territories in Brazil, under the responsibility of diverse communities, represent 63 per cent of public forests. The intent of the Brazilian government is that these forests be under a sustainable use regimen. They are important areas for leveraging a forest-based economy in the Amazon through revenue generated from the sale of timber and products of socio-biodiversity through sustainable forest management with a community and family focus.

Pará State, which covers more than 1.2 million square kilometres and where the Verde para Sempre Resex is located, is the second highest in the deforestation ranking for the Amazon region. Unsurprisingly, it is the Brazilian Amazon's largest producer of tropical timber. Around 890,000 km^2 (72 per cent of its territory) is covered by forests, with enormous potential for producing forest products and services. A major segment, around 306,000 km^2, is protected under a regime of conservation units for sustainable use. The timber sector plays a notable role in the Pará economy. In 2010, the state produced around 6.6 million cubic metres of logs, generating an estimated US$1.1 billion in revenues and approximately 92,000 jobs. However, the high

profitability in the sector along with the difficulties with control and monitoring are high risk, if the aim is sustainability.

Monitoring data from management plans revealed that 79 per cent of the timber harvested in the state of Pará between August 2015 and July 2016 was illegal. As a result, biodiversity suffers severe harm, local carbon stocks are reduced, and the sale of legally harvested wood is weakened (Barlow et al., 2016).[7] The scenario of weakening legislative controls led by the federal government pushes the advance of deforestation into public community forest areas and is a threat to their ability to protect the forest. Those territories proved their effectiveness in resisting deforestation pressures in Brazil as confirmed by Allegretti (1990), Fearnside (1992), Soares-Filho (2010), and Almeida (2018). In that regard, the experience with community management plan initiatives developed in the Verde para Sempre Resex, even though its community organisations still have a rudimentary, although increasing, degree of organisational development (Figure 3.4), is relevant for generating lessons in sustainability in the management of natural resources, given the significant share of territory in the region that is under the domain of communities and Traditional Peoples.

The agrarian issue in the Verde Para Sempre Extractive Reserve

The Verde para Sempre Resex is the largest UC in its category, occupying around 74 per cent of the area of the municipality of Porto de Moz, where it is located. It was created in 2014 because of historical demands by community leaders who were protesting against the exploitation by timber companies and was a strong component of government actions between the years 2002 and 2016. Proposed structural actions were contained in the *National Plan for Preventing and Fighting Deforestation* and *Plan BR-163*.[8] However, as has occurred with Resexs as a whole in Brazil, a conservation unit must be linked to public policies to encourage long-term socio-economic development. Only with such higher-level support can a Resex guarantee the territorial rights of their populations and control illegal and predatory activities and deforestation. Current high levels of deforestation are happening because those Resexs were usually created without having basic management instruments consolidated, such as the Management Plan for Units and the *Agreement to grant usage rights* (Contrato de Concessão de Direito Real de Uso), legal instruments in Brazil that guarantee that resources in the territory will be managed by residents (Oliveira & Souza, 2016).

Regarding land-title regularisation, in Brazil there are currently around 5.4 million hectares (Mha) of private lands inside federal UCs awaiting expropriation and legal transferral to UCs. At the current rate at which it is handling compensation procedures, the Brazilian state would take around 102 years to conclude land-title regularisation in those UCs (Franco, 2017). In the case of Verde para Sempre Resex, notwithstanding its importance for conservation in the Lower Xingu region, there is the same lack of legal procedures, in violation of the SNUC rules. For example, the Unit's Management Plan was only approved in August 2020.

This scenario of inertia and contradictory actions by public agencies is opening up the Resex to attacks by local oligarchies, who have always questioned the creation of the UCs and pursued illegal and predatory actions in extracting natural resources. The result has been a series of conflicts in the various communities inside Verde para Sempre, such as (i) illegal logging; (ii) attempts to resume business management plans cancelled by the Act that created the Reserve; (iii) the strong presence of industrial-scale fishing boats, disrespecting fishing agreements and other accords for coexistence established by communities; and (iv) investments in infrastructure by ranchers inside the Resex, including promoting buffalo raising (OMFCF, 2019).

The Lower House in the Brazilian Congress began a discussion of Draft Bill 313/20 in May 2020 that calls for changes to the SNUC definition for Resexs to enable raising large animals such as cattle and water buffalo. That proposal resulted from an offensive by sectors connected to Brazilian agribusiness, seeking to weaken legislation[9] and thereby assure continuation of its activities in protected areas in the Amazon. Although some community members carry on ranching in a few protected areas, the legalisation of this sector would open up the possibility that this activity can be carried out in all of them. Such a change has the potential to cause major social and environmental problems.

Final considerations

This case study reflects on some obstacles to the advancement of forest management actions in the Verde para Sempre Resex. We consider how the incentives for, and development of, community institutions can contribute to the fight against deforestation and the conservation of the Amazon biome. The development of certain value chains depends upon the integrity of the forests. Boosting 'forest economies' (as with the initiatives in Verde para Sempre Resex) depend on maintaining the standing forest.

Protected Areas (Indigenous Lands and UCs of Sustainable Use) are one of the main strategies for conserving territories and the ecological, cultural, and lifestyle heritage of traditional populations. An extensive network of areas has played a vital role in slowing deforestation, and the participation of the populations living in them has been shown to be important for the environmental and land management of large stretches of the Amazon.

Disincentives for and weakening of environmental policies, especially in the current Amazonian scenario (2019–2020), have encouraged the re-insertion of predatory natural resource use practices and the establishment of economies that are not forest-based (notably extensive ranches), which are harmful to efforts at conserving biodiversity and reducing greenhouse gases.

Current discussions on the role of tropical forests in maintaining a balanced global climate and the need to immediately reduce deforestation so as to avoid severe interference with the climate have highlighted the importance of traditional populations that live in and from the forests. Consolidation of protected areas by those populations will require that their territories be economically viable. Community PMFS initiatives led by local organisations, as now underway in the Verde para Sempre Resex, have a strong contribution to make to the complex issues of forest management in the Brazilian Amazon context. Furthermore, they can provide lessons for a territorial development strategy based on a whole-forest economy, while at the same time providing effective mechanisms for biodiversity conservation. It is up to the Brazilian state to fulfil its promises made in international agreements, especial regarding its role in consolidating the UCs and promoting policies for containing deforestation and valuing and using forest resources. We also draw attention to the important role that civil society organisations have played in the region, working to strengthen local organisations to be the protagonists of their development.

Notes

1 IBAMA is the government agency responsible for actions to inspect, combat, and control illegal actions against the environment in Brazil. However, in this context, beginning in 2018, it has used discretion in its application of environmental legislation.

2 Within ICMBio, Normative Instruction No. 16 regulates the guidelines and administrative procedures for approving community PMFS for use of timber resources inside Resexs, Sustainable Development

Reserves (RDS, in Portuguese 'Reserva de Desenvolvimento Sustentável'), and National Forests (FLONA, or in Portuguese 'Floresta Nacional') units.

3 Legal document authorizing logging.

4 To learn more, see https://observatoriomfcf.org.br/indicadores

5 https://imazon.org.br/publicacoes/boletim-do-desmatamento-da-amazonia-legal-marco-2020-sad/

6 https://imazon.org.br//wp-content/uploads/2015/08/18_Resex-Verde-para-Sempre.jpg

7 https://imazon.org.br/sistema-de-monitoramento-da-exploracao-madeireira-simex-estado-do-para-2015-2016/

8 MMA, 2004. Available in: http://philip.inpa.gov.br/publ_livres/Dossie/BR-163/Documentos%20Oficiais/Plano%20BR163%20Sustentavel%20Proposta%20final_%2029.01.2004.pdf

9 Curiously, this dismantling initiative is being led by the Ministry of the Environment of the current Brazilian government. At an inter-ministerial meeting held in May 2020, Environment Minister Ricardo Salles used the metaphor of 'moving the herd on through', meaning to take advantage of the distractions from the health crisis caused by the COVID-19 pandemic to quietly change the entire system of rules in Brazilian environmental legislation. A description of that dismantling process may be found in a dossier published by the National Association of Environmental Employees: *Cronologia de um desastre anunciado: ações do governo Bolsonaro para desmontar as políticas de Meio Ambiente no Brasil* (ASCEMA, 2020).

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PART II

Multi-level governance and new governance approaches – Global



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4

NON-TIMBER FOREST PRODUCT VALUE CHAIN DEVELOPMENT

Lessons from a university's 20-year partnership in the Maya Biosphere Reserve

Megan Butler, David Wilsey, Dean Current, José Román Carrera, and Deanna Newsom

Foreword

We begin and end this chapter with excerpts from a conversation with our co-author José Román Carrera about his work in the Maya Biosphere Reserve. José Román is Rainforest Alliance's Director of Partnerships and Development in Latin America. He has dedicated his career to supporting forest communities in the Maya Biosphere Reserve and throughout Latin America. José Román is from a rural community in El Petén, the department in northern Guatemala where the Maya Biosphere Reserve is located.

> Before the region was designated as a Reserve in 1990, several factors fuelled high deforestation rates in Guatemala's remaining Mayan forest. First, the region experienced an increase in population in the late 1980s and early 1990s through incentivisation for settlement in the late years of the civil war (1960–1996). During this transition, there was a great demand for land and people began to inhabit the remaining forest. Deforestation was driven by the conversion of forests to agriculture. Because there were no opportunities to sustainably harvest forest products, trees were replaced with ranching or agricultural plots. Poaching, unsustainable harvesting practices, and tomb raiding threatened the remaining forest resources. At this time, private enterprises were engaged in forestry in the region, and local communities did not participate in sustainable forestry. Local communities were involved with harvesting non-timber forest products (NTFPs) such as chewing gum *(chicle, Manilkara zapota)*, palm fronds *(xate, Chamaedorea oblongata)*, and allspice *(Pimenta dioica [Linn])*, but overexploitation was degrading wild populations. Harvesting was not organised, there were no management plans, and practices in the Reserve were not sustainable for the communities.
>
> After the Peace Accords, the Maya Biosphere Reserve was established in 1990 to stop these threats. The Reserve has three zones: the buffer zone; the multiple use zone where low impact activities such as sustainable tourism, NTFP harvesting, and sus-

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tainable forest management are allowed; and the national parks and biotopes, where human settlements and the harvesting of forest products are not allowed. In the multiple use zone, the government decided to lease land as concessions, with preference given to local communities.

Rainforest Alliance worked closely with the concessions to help them establish sustainable management practices for timber and NTFPs based upon certification standards. We also partnered with the University of Minnesota to support the development of new markets and value chains for NTFPs, especially xate palm. When we arrived in the communities, out of 100 palms (principally C. oblongata or the 'Jade' variety) that were harvested, 55 would be discarded due to poor quality, and the resource was being overharvested. We worked together with Dr. Dean Current and others at the University of Minnesota to facilitate a relationship between Continental Floral Greens and the communities, building on market research that they had completed in 2000. At first Continental said 'No' – that Guatemala's palms were not good enough for the market – but in the end they agreed to accept a small shipment from the communities as a pilot. That is how we worked with the University of Minnesota to start a new model for xate management that was centred on good practices. We focused on the value chain from harvesting to transportation to processing. We constructed a processing facility and trained a group of women in the community to do selection and packing.

– José Román Carrera

Introduction

Earth's forests harbour most of its terrestrial biodiversity, thus supporting planetary and ecosystem functions, global markets and local livelihoods, and all peoples and cultures through their direct and indirect connections to forests. Although deforestation rates have decreased since the 1990s – from an estimated 16 million hectares (Mha) to 10 Mha per year – roughly 420 Mha were lost in the last quarter century (1995–2020) to land conversion, primarily to landscapes supporting agricultural production (FAO, 2020). Identifying solutions to deforestation that protect the livelihoods of forest-dependent populations is a key development challenge that requires a delicate balance that integrates conservation and livelihood goals.

Community forest management – in which local community members play a significant role in forest management decisions and share the benefits of forest management activities – is an influential concept and approach for empowering local forest user groups, preventing deforestation and promoting sustainable livelihoods (Baynes et al., 2015). Community management is an important governance mechanism for balancing forest conservation and livelihood goals in contexts that feature relatively open access to resources (Ostrom, 1990). About 15 per cent of tropical forests fall under some form of this management regime (RRI, 2014). Continued support for community forest management and the recognition of collective territorial rights are increasingly seen as key strategies for addressing climate change while providing social and environmental benefits (FAO and FILAC, 2021).

The context for this chapter is Guatemala's Maya Biosphere Reserve (MBR), an expansive, forested region containing nine community forest concessions managed by a heterogeneous set of community forest enterprises (CFEs) that harvest timber and non-timber forest products and promote tourism. CFEs are forest product-focused businesses owned and managed by community groups and intended to create both economic and social benefits. In Guatemala, forested land is allocated to CFEs through renewable 25-year contracts with the Guatemalan government known as concessions, which give CFEs the right to extract forest resources in a

designated area in exchange for fees and for protecting the area (Reining et al., 1998). CFEs must maintain Forest Stewardship Council (FSC) (forest management) certification and adhere to long-term management plans developed by professional foresters. Three CFEs within the Reserve manage 'resident concessions', which contain communities whose residents are CFE members. Six CFEs manage 'non-resident concessions' and have members that live outside of the MBR and travel to the Reserve to harvest forest products.

The MBR is often recognised as a model for community forest management because of the positive impacts that the Reserve's community concessions have had on both forest condition and local communities (Blackman, 2015; Bocci et al., 2018; Stoian et al., 2018). Several enabling factors have facilitated the success of community forestry in the MBR. Concessions in the Reserve were endowed with an abundant supply of high-value products, such as mahogany (*Swietenia macrophylla*), for which there was substantial demand (Stoian et al., 2018). Likewise, there has been consistent international demand for commercialised NTFPs. Community forestry initiatives in the MBR also benefited from policies and networks of support that secured tenure and usufructuary rights that support local livelihoods (Baynes et al., 2015). Early and ongoing support from bilateral agencies and international NGOs helped develop the governance structures and training that led to viable CFEs (Gynch, 2020). This model would not have been successful without community interest and active engagement with the community concession system. This engagement, along with adequate funding, consistent technical support, a supportive policy environment, clear and well-respected certification protocols, and opportunities to engage in value-added processing, facilitated the success of CFEs in the MBR.

This chapter focuses upon the approach taken by the Center for Integrated Natural Resources and Agricultural Management (CINRAM) to develop NTFP value chains for products derived from community concessions in the MBR. Although CFEs obtain most of their income from timber (Stoian et al., 2018) and a significant amount of international support has gone into supporting timber production, an exploration of the lessons related to NTFP value chain development is worthwhile for multiple reasons. Firstly, seasonal variation in timber harvesting, market fluctuations, and other endogenous and exogenous shocks make non-diversified CFEs vulnerable (Radachowsky et al., 2012; Stoian et al., 2018). Secondly, income from NTFP sales is critical for many individuals and families in the MBR, and in the words of one local expert, 'is the difference between going hungry and eating'. NTFP supply chains also provide jobs for women, who are often left out of timber supply chains. Finally, much attention has been given in the literature to timber management, markets, and enterprises, with less on the dynamics related to NTFP market development, despite their global ubiquity.

In the following section, we describe the history of the MBR and the establishment of the community concession system. We then discuss CINRAM's collaborative approach with CFEs, partners in the MBR, and private and public sector partners in the USA, illustrated through the example of the NTFP *xate* (sha-tay). We discuss the gradual evolution of CINRAM's approach to livelihood and market systems, emphasising the development of strong relationships among key market actors that enabled the development of trust and creative problem-solving. Although this work is contextually specific, we hope that important insights and lessons learned will be beneficial to other community groups working to reconcile conservation and development challenges.

History of the MBR

Historically, Guatemala's Petén was treated as a frontier offering ample land for settlement. The first settler communities in the region originated as *chicle* (*Manilkara zapota* [L] van Royeen, natural chewing gum) camps in the early 1900s (Figure 4.1). *Chicle* remained a major economic driver in the region until the invention of synthetic chewing gum. However, communities

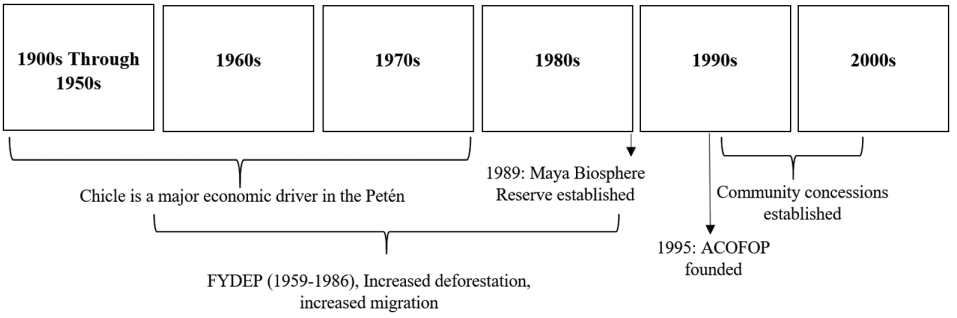


Figure 4.1 Key events in the Maya Biosphere Reserve region.

in the area continued to harvest other NTFPs such as *xate* palm (Nesheim & Stølen, 2012; Radachowsky et al., 2012).

Settlement in the region was facilitated through the creation of the Petén Promotion and Development Organisation (FYDEP) in 1959. FYDEP operated with four objectives: to integrate Petén with the nation, to promote settlement and development through land sales, to exploit precious wood species, and to increase basic grain production (Schwartz, 1990). FYDEP is credited with the sale of 1.98 Mha to 9,000 beneficiaries (Elias et al., 1997). The population of the Petén jumped from about 25,000 in 1964 to an estimated 31,000 in 1990 (Schwartz, 1990, p.11) FYDEP's success exacerbated deforestation not only through the sale of a large area of the forested landscape for development but also through the requirement that parcels be maintained cleared and ready for planting. Between the late 1970s and the early 1990s, deforestation rates in the Petén rose from 30,000 to 42,000 Mha per year (Kaimowitz, 1996). These trends lead to the dissolution of FYDEP and the establishment of the MBR (Figure 4.1).

In 1989, the Guatemalan government created the MBR and the National Council of Protected Areas (CONAP, for its acronym in Spanish) to oversee the country's national parks (Reyes Rodas et al., 2014). The MBR's 2.1 Mha covered 19 per cent of the national territory, 83 per cent of its then protected areas and encompassed significant Mayan sites (Nittler & Tschinkel, 2005). From the outset, CONAP could form alliances with civil society (NGOs, communities etc.) to develop conservation and management strategies for the MBR. Additionally, CONAP had the power to authorise concession contracts for commercial activities such as timber harvesting and tourism within the Reserve.

Although local people often have a unique understanding of the distribution and life histories of natural resources and typically have a long-term commitment to the sustainable use of resources, community concessions were not initially utilised in the MBR (Monterroso & Berry, 2012). Reining et al. (1998) suggest that this exclusion was due to the influence of large timber companies operating in the Petén and the inexperience, underfunding, and forestry focus of CONAP at the time. The Reserve received pushback from communities that had long been established in the area but were excluded from resource access (Taylor, 2010). Communities such as Uaxactún and Carmelita were established a century before the MBR and were already linked to the conservation of local forest resources, as community members depended on NTFPs such as *chicle*, *xate*, and allspice for their livelihoods.

By the mid-1990s, the idea of community forest management was gaining popularity as a means of curtailing deforestation and supporting local communities. International advocacy for participation, decentralisation, and devolution of control to communities almost certainly impacted CONAP's eventual decision to award concessions. The idea of redistributing land back

to local communities for management was also supported by Guatemala's 1996 Peace Accords. Also, CONAP realised it could not manage such a huge area without collaboration from local communities. Community concessions were seen as a means of incentivising forest conservation. These factors likely helped inspire the idea that the region's industrial timber concession system could be converted to community management.

Ultimately, the Guatemalan government signed an agreement with USAID that opened the door for other international development agencies (e.g., GIZ) and many conservation NGOs (e.g., CARE, Conservation International, The Nature Conservancy, Wildlife Conservation Society, and Rainforest Alliance). National NGOs (e.g., Centro Maya, Naturaleza Para la Vida, and ProPetén) likewise emerged as counterparts to the international organisations and local CFE sponsors. International academic institutions (e.g., CATIE, CGIAR) also provided important research that supported concession establishment and growth.

In 1994, San Miguel la Palotada became the first community concession in the MBR as a pilot project, with assistance from CATIE's Olafo project. After the pilot, other groups began forming CFEs and soliciting concessions with support from international NGOs and donors (Reyes Rodas et al., 2014). Community members hoped that a concession would help them maintain, obtain, or legitimise their access to forests in the MBR (Monterroso & Berry, 2012). To engage political leaders and negotiate for the rights of local communities to receive concessions, the Association of Community Forests of Peten (ACOFOP) was established as a second-tier organisation (Taylor, 2010). Today, nine community concessions (down from 12) and two industrial concessions operate in the Reserve. CFEs managing these concessions are quite diverse with members coming from varied socioeconomic backgrounds (Radachowsky et al., 2012).

CINRAM and the community concessions in the Maya Biosphere Reserve

The Center for Integrated Natural Resources and Agricultural Management is an interdisciplinary centre at the University of Minnesota (UMN), USA. It is a partner-based organisation that catalyses the development and adoption of sustainable land use systems by connecting expertise at the university with the experience and insights of people and organisations engaged with landscape-level issues. CINRAM's work emphasises the role of markets in promoting conservation and livelihood improvement. An important goal is to equip communities with the skills and knowledge they need to continue to support local enterprises with minimal outside assistance. The authors of this chapter include CINRAM's director, researchers at the UMN that have worked with CINRAM in the MBR, and Rainforest Alliance staff.

Starting in 2000, a series of diverse, collaborative efforts brought together CINRAM, Rainforest Alliance, and the CFEs of the MBR, as well as key public and private-sector actors. While many organisations have worked to support community forest concessions in the MBR, for the remainder of this chapter we narrow our focus to the approach taken by CINRAM and the lessons that can be drawn from its experience. We focus on CINRAM's work with *xate* palms, which initially focused upon two CFEs managing resident concessions: Carmelita and Uaxactún. Community members in both concessions had a long history of harvesting NTFPs in the region.

Value chain analysis for *xate* palms (Chamaedorea spp.) (2000–2002)

The first project undertaken in 2000 of what became the involvement by CINRAM was a consultancy designed to explore the potential for 'green trade' (in the lexicon of the time) in the

years following the signing in 1994 of the North American Free Trade Agreement (NAFTA). The North American Commission for Environmental Cooperation (CEC) contracted with the program manager of CINRAM to study the market for *Chamaedorea* palms or *xate* (Current & Wilsey, 2001). *Xate* is the local name of a subset of *Chamaedorea* palm species used in the international floral market. Since the 1950s, US and European florists have imported *xate* from Mexico and Guatemala for use as decorative foliage in floral arrangements and Palm Sunday church services (CEC, 2002).

International markets were supplied with *xate* harvested from populations within tropical forests. The analysis was motivated by concern that naturally occurring palm populations were being overharvested, endangering palm populations and the livelihoods of the communities harvesting them. *Xate* harvesters were paid by volume not quality, and 50–60 per cent of the harvested palms were discarded as they did not meet the quality requirements of the market. The market system study sought to answer two questions: (1) could *xate* palm harvest be certified for sustainability (and if so, how?); and (2) could certification or a similar intervention generate increased income for harvesters and/or their communities?

The market analysis initially focused on local retailers and wholesalers, to better understand the market and how the palms were used in the floral industry. It eventually expanded to include a survey of US-based retailers, wholesalers, and importers, to better understand market system structures and dynamics. It was determined that although the primary market for *xate* as a component of floral bouquets and displays had been declining over time, a smaller, but significant and more stable niche market existed, which was the sale of palm fronds to church congregations for use during Palm Sunday services (CEC, 2002; Current & Wilsey, 2001). Church congregations were identified as potential consumers due to their interest in social and environmental justice and their familiarity with the Fairtrade system through coffee purchases. This market represented a potential opportunity for product differentiation and increased income for the communities.

The identification of church congregations as a potential market led to CINRAM surveying US Christian congregations to gauge interest in sustainably produced and responsibly sourced palm fronds. The survey (Current et al., 2003) revealed a willingness to pay extra for the palm fronds and an equal interest in both the environmental and social justice benefits. At the time the survey was undertaken, the US market for *xate* was 300–350 million fronds annually. The potential demand from Christian congregations was estimated to be around 45 million fronds annually if all churches were to use *xate* palms.

The initial market research and subsequent church survey presented a clear opportunity to develop a niche market for palms that were sustainably managed and traded under emerging principles of social justice. As the work on *xate* continued, another opportunity emerged that trained CINRAM's focus on the community forest concessions of the MBR.

Supporting the USAID exit strategy from the Petén (2003)

In 2003, Chemonics International contracted with the program manager of CINRAM to undertake an economic analysis of the MBR's forest concessions as part of a team providing input to USAID's exit strategy (Chemonics, 2003). This work aimed to identify the economic viability of CFEs managing community concessions. The analysis had multiple outcomes. First, it established relationships among CINRAM, the CFEs, and institutional actors supporting them. Second, the experience provided an understanding of both the complex livelihood systems of the CFE members and the forest concession structure and function. It also revealed the enterprise and resource management capacities and challenges associated with new governance

and market institutions – capacities and challenges that later were viewed as opportunities for additional support (Nittler & Tschinkel, 2005).

CINRAM's link to the work with the CEC and USAID also occurred at an auspicious moment in the history of the MBR's community forest concessions. By the mid-2000s, the initial support for communities provided by NGOs and donors like USAID was being phased out, forcing the CFEs managing concessions to take on more responsibility for administering and financing their operations. This was a critical period for the CFEs; those unable to continue generating benefits from the livelihood activities considered sustainable after the exit of external support would face challenges and competition from alternative, and presumably less sustainable, livelihood options. CINRAM saw the potential for its early work with local partners on the *xate* market system to continue.

Developing the eco-palm project (2004)

CINRAM's work with the CEC – evaluating opportunities for inserting a certified palm into the market and improving the income of *xate* harvesters – had identified church markets as a promising opportunity. To further explore that option, in 2004 a meeting was held in Mexico that included representatives from a USAID Guatemala forestry project, ProNatura (a Mexican environmental NGO), Equal Exchange, and Lutheran World Relief, as well as government agencies charged with managing the *xate* trade, international NGOs, and researchers. During that meeting, Sarah Ford, the representative from Lutheran World Relief, committed to supporting the effort. The meeting gave rise to the 2005 pilot sale of 'eco-palms' to Christian congregations.

The eco-palms programme awards a premium of US$0.05 per frond, which equals 25–27 per cent of the final sales price per frond and is paid directly to the forest concession communities. Since 2013, participating concession communities have received an annual premium close to US$50,000 from sales, in addition to the base price. Since the beginning of the eco-palms programme through 2020, over US$600,000 in bonus payments has been distributed to communities in Mexico and Guatemala.

It is important to recognise the contributions of the CEC in this process. The initial funding for the market study in 2000, the survey of churches, and the pilot sales in 2005 were funded by the CEC. Without that continual support at the outset, the eco-palm project may not have been implemented.

Developing solutions: Hermes and Continental Floral Greens (2005)

During the 2005 eco-palms pilot, CINRAM personnel distributed 5,000 palm fronds in four US states. That approach was not sustainable and would have limited the expansion of the programme. Following the initial pilot, private-sector partner and wholesaler/retailer Hermes Floral stepped in to manage deliveries using a courier service, which expanded deliveries to the continental USA. Hermes Floral later developed a website to handle orders. Major Christian denominational groups accepted and helped promote the programme. The year following the pilot, sales reached 80,000 fronds and continued to grow to just under one million fronds in 2013, remaining at about that level since.

Another effort to solve supply chain problems was initiated by Rainforest Alliance and undertaken by Continental Floral Greens (CFG)s, the principal US *xate* importer. Although the eco-palms project improved the income of *xate* harvesters, it did so only for the Palm Sunday sales and did not affect the income harvesters received throughout the rest of the year. Therefore, parallel to (but independent of) the Palm Sunday effort, Rainforest Alliance requested

meetings with CFG to explore opportunities for direct sales from the community concessions to CFG. Although CFG was reluctant at first due to experience with poor quality palms from Guatemala, the outcome was a pilot programme that would allow the communities to improve the quality of their palms. As part of the programme, representatives from CFG trained palm gatherers and processors in Guatemala to collect, process, and dispatch only marketable palm fronds. Following the training, the previous 50–60 per cent of palms that were discarded due to being unsuitable for the market were reduced to less than 10 per cent and the quality improved.

The successful pilot led to a purchasing agreement between CFG and the communities that persists to this day, despite a change in ownership of CFG. Direct sales provided opportunities for the communities to negotiate with CFG, and integrated CFG as a major private-sector partner in the overall effort. Direct sales are especially significant because they created new jobs in the communities for women conducting quality control, sorting, and packing palms before shipment. Those activities were previously undertaken outside of the palm gathering communities, which kept women out of the *xate* value chain. Today over 200 women participate in the value chain. As the programme has progressed, women have taken on increased responsibility.

Rainforest Alliance (RA) helped to co-ordinate sales to CFG both for their normal year-round sales and the Palm Sunday sales. RA had taken on many of the technical assistance and co-ordination functions of the former donor projects, facilitating FSC certification of the forest concessions through their SmartWood program. Due to existing relationships between Rainforest Alliance and the CFEs, efforts to facilitate direct sales of *xate* initially centred on two CFEs managing resident concessions: Carmelita and Uaxactún. Over time, additional CFEs have begun to participate in the *xate* value chain, including AFICC, Arbol Verde, El Esfuerzo, CUSTOSEL, Impulsores Suchitecos, and Laborantes del Bosque (Table 4.1).

Before setting up the direct sales, all sales to CFG from Guatemala were managed by middlemen in the communities and Guatemala City. With the success of direct sales, and as more CFEs were certified, they joined Carmelita and Uaxactún to form a '*Xate* Committee', which co-ordinated the local harvest and sale to CFG. CINRAM co-ordinated the US sale of eco-palms, acting as a broker between churches, the distributor (Hermes Floral), and the importer (CFG). As the system developed (Figure 4.2), CINRAM scaled back its participation and transferred activities to the communities and private-sector partners, even as CINRAM explored other opportunities to support the community concessions.

Lessons learned

The first *xate* market study initiated what would become (as of 2021) a 20-year collaboration focused on integrated conservation and development in the MBR. The following section summarises some important lessons learned about developing value chains for NTFPs.

Challenge assumptions about enterprise-supported conservation

When CINRAM began working in the MBR, champions of integrated conservation and development projects held two assumptions about enterprise-supported conservation that contradicted CINRAM's empirical experience. First, CINRAM found that (generally rosy) assumptions about a product's market accessibility and growth potential could translate into unrealistic expectations about the viability of small, forest-based enterprises. For example, the literature addressing forestry development in the Petén frequently advocated the harvest and sale of *xate* palm fronds based on the observation that *xate* was abundant in the forest (supply) and that markets existed outside the region (demand). Although supply and demand

Table 4.1 Table presenting the concession management units and details

Currently active	*Concession name*	*Community Forest Enterprise name*	*Concession type*	*Size (ha)*	*Year formed*	*Membership*
Yes	Carmelita	Cooperativa Carmelita R.L.	Long-inhabited resident	52,797	1997	174
Yes	Uaxactún	Sociedad Civil Organización Manejo y Conservación (OMYC)	Long-inhabited resident	85,558	2000	280
No	San Miguel la Palotada	Asociación de Productores de San Miguel la Palotada (APROSAM)	Recently inhabited resident	7039	1994	39
No	La Pasadita	Asociación de Productores Agroforestales La Pasadita (APROLAPA)	Recently inhabited resident	18,817	1997	122
Yes	Cruce a la Colorada	Asociación Forestal Integral Cruce a La Colorada (AFICC)	Recently inhabited resident	20,469	2001	65
No	La Colorada	Asociación Forestal Integral La Colorada (AFICC)	Recently inhabited resident	22,067	2001	48
Yes	Rio Chanchich	Sociedad Civil Impulsores Suchitecos (Impulsores Suchitecos)	Non-resident	12,217	1998	22
Yes	Chosquitán	Sociedad Civil Laborantes del Bosque (LABORANTES)	Non-resident	19,390	2000	74
Yes	San Andrés	Asociación Forestal Integral San Andres Peten (AFISAP)	Non-resident	51.939	2000	170
Yes	Las Ventanas	Sociedad Civil Árbol Verde (Árbol Verde)	Non-resident	64,793	2001	309
Yes	La Union	Sociedad Civil Custodios de la Selva (CUSTOSEL)	Non-resident	21.176	2002	85
Yes	Yaloch	Sociedad Civil El Esfuerzo (El Esfuerzo)	Non-resident	25,386	2002	39
Yes	Paxbán	Gibor, SA	Industrial	65,775	1999	N/A
Yes	La Gloria	Baren Comercial Ltda.	Industrial	66,548	1999	N/A

Source: Reproduced from Bocci et al. (2018) and Fortmann et al (2017) based on Maas and Cabrera (2008) and Gómez and Mendez (2007).

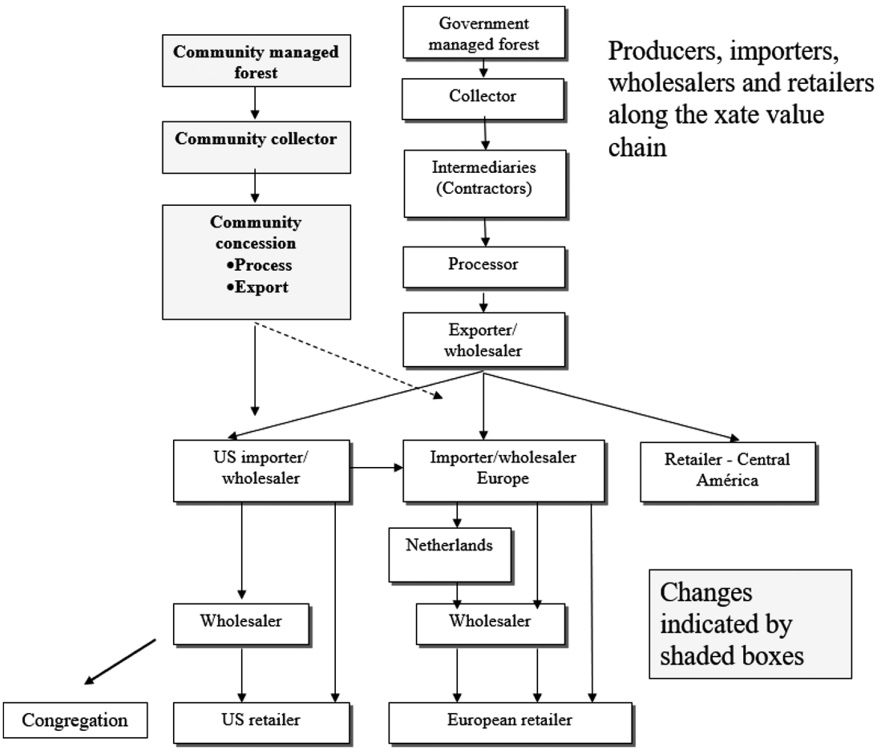


Figure 4.2 A new production pathway (shaded boxes) that resulted from the activities described in this chapter.

characteristics suggested opportunities, experience demonstrated that success required specific and sustained interventions along the supply chain. The takeaway message was that taking advantage of perceived opportunities in the *xate* market required research to understand the production system, the associated value chain, and specific opportunities for profitable engagement of community enterprises with markets. Among these nested systems there were not always connections and, even when there were, connections did not always indicate viable opportunities.

The second assumption challenged by empirical evidence was that local communities would be open to the expansion of existing activities, and/or to the adoption of new forest-based livelihood activities featuring NTFPs (Wilsey & Nelson, 2008; Wilsey & Hildebrand, 2010). While harvesters in some of Guatemala's forest concessions embraced the opportunity to harvest *xate* for a price premium and to take greater control of market activities, evidence elsewhere suggested that premiums would depress *xate* harvesting behaviour (Wilsey & Hildebrand, 2010). Thus, complex relationships with forest-based activities and mixed motivations for participation made it uncertain whether more sustainable activities, if adopted at all, would displace existing activities or merely be added to the larger mix. These observations suggested that both market and livelihood systems required attention in considering potential market-based interventions. Nonetheless, the experience in the MBR demonstrated that, after the successful integration of *xate* harvesting into CFE operations, CFEs were motivated and interested in expanding that success to other NTFPs and are pursuing those goals.

Establish strategic partnerships and co-ordinated efforts

The shared success in developing the eco-palms market resulted from a sustained, collaborative effort. CINRAM's involvement with CFEs in the MBR was only possible due to substantial investment of time and resources by others working at different levels of the market chain and a long-term commitment by numerous public and private-sector partners (Table 4.2). Each partner has played a distinct role and had unique motivations for participating in the market.

CINRAM's early efforts highlighted the importance of collaborative engagement at all stages, especially given the diversity of market actors and the need to move a perishable product through a supply chain in a short period. Although from the start CINRAM embraced a collaborative intent, experience in the MBR affirmed the value generated by the presence and perspectives of multiple engaged stakeholders in deciphering local context and history, setting priorities, managing conflict, and handling the logistics of promoting and moving a product through the market chain. All partners brought specific expertise that contributed to the development of the *xate* market under a shared vision of support for the communities and conservation in the MBR.

Sustained collaboration with Rainforest Alliance provided continuity and a presence on the ground that facilitated co-ordination. Although Rainforest Alliance is an international organisation, all its employees in the Petén are from the region, and most have been involved in the

Table 4.2 Key partners in the development of an eco-palm market

Partner	*Example*	*Role*	*Motivation*
Community	Uaxactún, Carmelita	Producers: Gathering and processing	Livelihood improvements, conservation
International Aid Agency	USAID, CEC	Funding	Environmental protection, local socioeconomic development
Local Government Agency	CONAP	Regulation and enforcement	Better control and protection, income from fees
Environmental Non-Government Agencies	Rainforest Alliance, ProNatura, ACOFOP	Technical assistance	Environmental protection, social justice
Private Sector	Continental Floral Greens, Hermes Floral	Value chain connections associated with *xate* palm procurement, importation, distribution, and sales	Market share, new product, social justice
Faith-Based Organisations	Lutheran World Relief, Presbyterian Hunger Program	Promotion and key market	Environmental stewardship and social justice
University	Univ. of Minnesota (CINRAM), Texas A&M, W. Washington University, Iowa State	research and facilitation	Research on markets and sustainable development

development and management of the concessions and associated enterprises. For example, one local staff member is a CFE founder and community leader from a resident concession. He has acted as an invaluable broker and cultural translator between CFEs and NGOs working in the region. CINRAM depended on Rainforest Alliance's ability to identify issues at the local level and recommend specific actions or research that the university could undertake to contribute to community development and the conservation of the MBR.

Work within the established market system

The eco-palms program grew out of a market system analysis that highlighted a niche opportunity with potential for expansion around social and environmental justice. That market niche was obscured by a much larger commodity market with little interest in these issues, but whose existing supply chain could accommodate both the niche and commodity products. It proved necessary to work within that chain to maintain cost feasibility and quality through the efficient delivery of a perishable product that would degrade if not promptly delivered to an end user. Ultimately, it turned out that private-sector partnerships with the existing supply chain led to direct sales from the MBR communities, generating corresponding community benefits.

Another important aspect of the approach taken early in the project was the focus on ensuring private-sector partners viewed the collaboration as a viable business strategy. While private-sector partners had a genuine interest in supporting the communities and contributing to conservation and social impacts that went beyond their commercial interests, to ensure the long-term continuation of benefits, it was necessary to ensure that the project was economically, as well as socially and environmentally, sustainable. For this to remain true over the lifetime of the project, co-ordination among stakeholders was essential as conditions and markets have changed.

Early efforts in the *xate* market system also reinforced the understanding that strong relationships among actors in the value chain create trust between buyers and sellers. These relationships fostered *xate* buyers' appreciation of the challenges faced by *xate* harvesters and even led to buyer investment in *xate* harvesters' capacity development. CINRAM endeavoured to facilitate connections and relationships that would thrive in its absence and encourage broad, engaged participation.

Understand the value of adaptation

Market systems are seldom static, meaning priorities often shift within the lifespan of a single intervention. In addition, CFEs operate within complex and dynamic systems. There is a place for traditional academic research focused upon theory development and testing, but CINRAM determined early on that its general approach should be more responsive (topically and temporally) to local needs, and that its specific efforts should be flexible enough to adapt to changing needs and expectations. A key feature of this approach is the ability to respond to emerging conditions, often shifting focus and approach to support the changing needs of the CFEs and their support organisations. For example, rather than defining its research agenda independently, CINRAM relies on local partners to identify the evolving needs of the CFEs that these projects serve.

CINRAM has expanded over time to feature a fluid roster of UMN faculty, graduate students, and consultants interested in engaging in practical, collaborative research. Today, the majority of CINRAM's work in the MBR focuses on short and medium-term interventions nested within a long-term and active commitment to harness markets to promote conservation and livelihood improvements. These efforts are supported by masters-level professional students in development practice (MDP) via field-based practicum and capstone projects,

by masters (MSc.) and doctoral (PhD) level student researchers, course-based projects, and short-term consultancies. Medium to longer-term interventions are supported by master- and doctoral-level researchers and core CINRAM and associated faculty. Recruiting consultants and students to engage in both short- and long-term projects that can either be research or application-focused helps CINRAM adapt to changing needs and maintain working relationships within the MBR.

Responsive, flexible engagement challenges institutions that have evolved to specialise in content, approach or both. While taking this approach from within an institution of higher education was challenging, this responsiveness and flexibility helped CINRAM to sustain engagement with a set of communities whose purpose remained stable (conservation and development) but whose needs evolve. This model allows CINRAM to accompany community organisations and local partners in addressing their identified needs. Throughout this period, the work/research of the university, whether theoretical or applied, has been guided by a focus on exploring how value chain actors support productive conservation and livelihood improvement.

Looking ahead

The success of the CFEs in the MBR is the result of the work of many individuals and organisations over time. While CINRAM's contribution to this greater success was small, we believe it to be significant for several reasons. Its work on the establishment and growth of the eco-palm market supported an important prerequisite to integrated conservation and development: enterprise feasibility. CINRAM's efforts targeted specific opportunities and supported linkages between the CFEs and global markets. These linkages permitted the establishment and growth of market activity with several important results.

In the MBR's resident concessions, markets for *xate* help provide a consistent wage for over 1,200 individuals working as harvesters and processors. The additional financial support provided by eco-palm sales during Palm Sundays is used by CFEs to invest in education, public health, community and enterprise infrastructure, insurance for *xate* harvesters, and boundary patrols that protect the concessions from external threats to the forest such as fire. Moving up *xate* value chains led to new market-related activities in the concessions, notably for women. With the addition of women, the direct benefits of sustainable resource use expanded to a larger share of the population, enhancing the intended linkages between conservation and development.

CINRAM's investments in supporting the CFEs over time generated relationships that have endured and borne fruit in the form of new ventures. In 2015, Rainforest Alliance asked CINRAM to explore US markets for *ramón* nuts (*B. alicastrum*), and in partnership with the principal US *ramón* importer, Teeccino, exploratory market efforts continue through student research and practicums. In 2017, CINRAM began working with community groups near the Yaxhá Nakum Naranjo national park to implement a series of student projects focused on ecotourism marketing and tourism operator toolkits, in collaboration with Rainforest Alliance, CONAP, and the Ministry of Culture and Sport. To the extent that CINRAM's work with *ramón* and tourism meets with even limited success, it is reasonable to envision a virtuous cycle focused on the continued integration of conservation and development. With each cycle, community stakeholders leverage their enhanced knowledge and capacity and increasingly drive development efforts.

While the COVID-19 pandemic has threatened lives and livelihoods internationally, the MBR's concession system and the multi-sector partnerships that support it have provided some examples of resilience. CFEs and ACOFOP acted as an important support system and pro-

vided donations to community members in need. International partner networks also banded together to continue to support the CFEs during the pandemic. For example, in 2020, Palm Sunday fell just weeks after COVID-19 was recognised by the World Health Organisation as a global pandemic, and many in-person services that use palms were cancelled on short notice. Communities in the MBR had already received orders for *xate*, and most of the palms were harvested and being shipped to the United States. There was initially fear that churches would cancel their orders and ask for refunds, but knowing the hardship cancellations would cause, church partners kept the palms and asked congregations to come up with innovative ways to use them at home. CFEs used income from these Palm Sunday *xate* sales to support households whose sources of income were diminished due to the pandemic.

There have also been challenges throughout this collaborative experience. The approach taken by CINRAM relies on the support of local partners, which can be difficult to predict. Nevertheless, the flexibility of this approach ensures that efforts align with the priorities of the moment, not the priorities of a particular donor. It also ensures that CINRAM can remain engaged when resources are abundant as well as scarce. Other challenges relate to the broader context within which all actors operate. Markets often cannot accommodate the short-term volatility in supply that is typical of natural resource production systems. National policies frequently favour industrial-scale production of products such as timber over community-scale enterprises and NTFP production. The long-term viability of CFEs in the MBR depends upon a favourable policy environment (Gynch, 2020).

Despite these challenges, as long as community-based conservation strategies depend on the linkage between conservation and enterprise, there will remain a need for those who support identification of markets, linkages to those markets, and co-ordination of activities associated with the sustainable growth of enterprises and opportunities in a dynamic context. By sharing CINRAM's experience with NTFPs in the MBR, we hope to respond to recent calls for more value chain interventions that involve productive interactions between practitioners and researchers, lasting local support for community enterprises, and safe spaces for critical self-reflection (Stoian & Donovan, 2020). We hope that in sharing our experience, we have provided useful insights that can inform the approach of organisations working to support forest communities.

Closing thoughts

Due to the work described in this chapter, several things have improved. There are now incentives in place for people to focus on the quality of xate harvested, not just quantity – and this has led to higher income for community members and less over-harvesting. One group to see the biggest gains in income were women. But the best thing about the work on xate was not just the increases in income and capacity – it was developing a system that could be applied to other NTFPs, such as chicle, allspice, and ramón. By 'system' I mean the methodologies, practices, and knowledge that are necessary for an integrated model of forest management that includes both timber and NTFPs.

Looking forward, several things need to be done to build upon this success to ensure that we continue improving community well-being. Diversifying the products communities work with will help them better protect the forest and support their livelihoods. We must also work on promoting strategic alliances and financing systems so that communities can invest more in the forest, technology, industrialisation, and

training to ensure high-quality production systems. Finally, it is important to ensure that community concession rights are renewed past their 25-year contracts and to promote intergenerational succession so that local youth take ownership of the process. These topics are fundamental for the future. Local organisations and international partners must continue to support the community concession system through long-term technical assistance so that communities can continue to innovate and improve their practices, technology, and processes and continue developing new sustainable business ventures.

– José Román Carrera

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5

PATHWAYS TO COMMUNITY TIMBER PRODUCTION

A comparative analysis of two well-established community-based forest enterprises in Mexico and Brazil

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Introduction

Timber is one of the most challenging resources for forest-based communities to access, manage, and sustainably harvest. Powerful political and economic forces steadily exert significant pressure to keep lucrative logging rights under government control (Sunderlin et al., 2005), despite persistent land grabbing and illegal logging and the difficulty of monitoring and protecting these often-remote assets. While multiple forest rights (of the diverse rights bundle) have been devolved to tropical communities across the globe (RRI, 2018), legal access to timber and effective participation in timber management may be the last to be ceded to or shared with communities (Larson & Ribot, 2007). And when timber rights are granted, managing natural forests to sustain timber harvests is technically difficult and tends to be capital- and skill intensive (Sunderlin et al., 2005), particularly in diverse tropical systems. Even in the best cases, research suggests that timber yields decline by almost half following the first harvest of old growth tropical forests, although the vast majority of forest carbon and diverse taxa may be retained (Piponiot et al., 2019; Putz et al., 2012). Once communities obtain forest rights, a host of internal and external challenges, e.g., related to regulatory frameworks, internal governance, financial and technical capacity, business management, and market access, can make it difficult to continue operating (Badini, Hajjar, & Kozak, 2018; Hajjar, McGrath, Kozak, & Innes, 2011; Molnar, 2007). Indeed, several analyses of inhibiting and enabling factors for community-based forest enterprises (CFEs) over different time frames and across diverse countries of the global South have been published (Badini, Hajjar, & Kozak, 2018; Ellis et al., 2015; Humphries et al., 2012; Macqueen, 2013; Oyono, Biyong, & Samba, 2012; Radachowsky et al., 2012; Valdez, Hansen, & Bliss, 2012), and all suggest that permanence is challenging for CFEs.

Nonetheless, despite these manifold challenges, CFEs for timber production have emerged around the globe under very diverse conditions (Gilmour, 2016), and mounting evidence indi-

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cates some are able to generate environmental and socioeconomic benefits (see review by Hajar et al., 2020). Research shows that tropical lands under community and Indigenous control, including forests where timber is sustainably harvested, tend to retain forest cover better than many protected areas (see Ellis & Porter-Bolland, 2008; Porter-Bolland et al., 2012; Seymour, La Vina, & Hite, 2014). Livelihood benefits of community timber management have also been confirmed, especially regarding income generation and/or poverty mitigation (Antinori & Bray, 2005; Humphries et al., 2012, 2020; see review by Miller & Hajjar, 2020). In addition, some – but not all – communities involved in timber production invest a part of timber revenues in community-level benefits (e.g., infrastructure, education, health care) and other productive activities (Gnych, Lawry, McLain, Monterroso, & Adhikary, 2020; Humphries et al., 2020) that contribute to overall community well-being.

In cases where CFEs for timber production have persisted and provided benefits, there has been limited examination of how these communities have built, over time, the significant timber management and community-based enterprise capitals and expertise necessary to do so. Herein, we explore in detail two forest-rich communities, one in Brazil and one in Mexico, who – against conventional odds – have taken control of logging on their communal lands and developed enduring CFEs that provide multiple benefits for residents. Centring a detailed analysis of dynamics at the community level reflects the growing awareness that local context is decisive in resource management outcomes (Butler, 2021a, 2021b; Carias Vega, 2019; Sick, 2008). We ask the following questions: (1) What pathways did these communities take to develop CFEs for timber production? (2) How do these CFEs implement community forest management (CFM) and timber production? (3) What investments have been made to strengthen community capacity (i.e., community capitals) to implement these activities by supporters and community members themselves? (4) How have these investments in community capitals over time contributed (if at all) to different types of well-being for both communities?

Conceptual frameworks and methodological approach

We have adopted the community capitals framework (CCF), an action-oriented structure that conceptualises and categorises the resources, or capitals, communities have at a certain time, the processes or actions to improve those capitals, and the resulting changes in capital. The CCF builds on earlier work by Scoones (1998) to develop a framework for analysing rural livelihoods and highlights seven community capitals (natural, cultural, human, social, political, financial, and built) as defined by Flora, Flora, and Fey (2004) (Table 5.1). Community capitals consist of both stocks and flows; they are fluid and greatly influenced by interactions with external actors, government policies, and markets, which also change over time (Emery & Flora, 2006). Examples of the use of the CCF framework in the context of CFM include research by Butler (2021a, b) on CFEs in the Maya Biosphere Reserve, and Kanel and Niraula (2004) and Maharjan, Dhakal, Thapa, Schreckenberg, and Luttrell (2009) of Nepalese community forestry user groups. In addition, Baynes, Herbohn, Smith, Fisher, and Bray (2015) emphasise the importance of social capital specifically in CFE success based on an extensive review of literature. Finally, Gnych et al. (2020) provide an in-depth look at investments in and by CFEs in different types of community capitals for timber production in Mexico, Guatemala, and Nepal.

The CCF examines how changes in community capitals help achieve sustainable livelihoods, including community well-being. Because of its multi-dimensionality, we accept the suggestion by Stiglitz, Sen, and Fitoussi (2009) to conceptualise well-being pluralistically, exploring three broad dimensions: material, relational, and subjective well-being (Biedenweg & Gross-Camp, 2018). For our analysis, material well-being includes secure livelihoods, sufficient income, sat-

Table 5.1 Conceptual model of the relationship between seven types of community capital and three types of well-being

Types of capital		*Types of well-being*
Social (internal and external relationships)	Political (access to power, capacity to improve community)	Relational (fulfill needs, achieve goals)
Human (skills and abilities)	Built (roads, ports, industry)	Material (income, skills, infrastructure, services)
Financial (cash, credit)	Natural (forests, water, wildlife)	
Cultural (world view, traditions)		Subjective (feelings, perceptions)

Source: Created by the authors.

isfactory living conditions, and forest quality. Relational well-being refers to how individuals within a community relate to one another and with outsiders to meet their needs and achieve goals. Subjective well-being encompasses how people feel about their situation and the cultural and social norms that influence them (Gough & McGregor, 2007). The multi-dimensional and dynamic nature of well-being seems particularly suited for assessing outcomes aligned with CFE capitals (Table 5.1). Miller and Hajjar's (2020) extensive literature review on forests and livelihoods concludes that most studies have focused on aspects of poverty mitigation rather than on broader dimensions of well-being.

To answer our research questions we drew on the extant peer-reviewed and grey literature as well as our collective decades of scholarly knowledge and practical experiences with these two cases and other forest-based communities in these two countries. Regarding community capitals, we use the CCF to categorise the different types of investments in the communities and their CFEs related to timber management. However, we acknowledge there were likely other concurrent community-centred activities and/or projects that also contributed to and/or detracted from these capitals. For well-being, we rely heavily on reflections of the co-authors to identify specific examples of contributions to well-being related or likely related to community timber management, especially for the subjective dimension of well-being, recognising that these are only a few of likely multiple perspectives.

Pathways to community forest management and timber production

Both southern Mexico and the Brazilian Amazon serve as international references for community-based tropical forest management (Bray, Antinori, & Torres-Rojo, 2006; Sabogal, Pokorny, Pokorny, & Louman, 2008). Each region has significant forested areas under hard-won community control and a number of CFEs focused on non-timber forest products (NTFPs) and timber. The two innovative cases profiled here have been managing their forests for timber for substantial time periods: Noh-Bec in Mexico for 36 years, and Arimum in Brazil for 14 years. We chose these cases because we know them well on the ground, and studies have been published about them that provide supporting information.

Both Noh-Bec and Arimum were settled by migrants attracted by commercially viable tree exudates: chicle from the chicozapote tree (*Manilkara zapota*), used for chewing gum, in the case

of Noh-Bec; and primarily rubber (e.g., *Hevea brasiliensis*) in the case of Arimum (Noh-Bec, 2015; COOMNSPRA, 2016). Noh-Bec, in the Mexican State of Quintana Roo on the Yucatan Peninsula, was founded in 1936 (Figure 5.1a). In 1943, it was formally recognised through a presidential decree as an *ejido*,[1] and land rights were ceded to ejido members, most of whom were originally from Veracruz state (Noh-Bec, 2015).

The population of Noh-Bec was 2,052 in 2010, with 28 per cent under the age of 14 (PueblosAmerica.com, n.d.). Only 219 were ejido members (descendants of the original founding families and primarily men; upon death, a spouse or one child inherits membership), and the rest were considered *avecindados*. *Avecindados* are residents without formal voting privileges for community decisions or legal rights to land, but they can farm certain areas for subsistence. *Avecindados* include residents of the nearby town of Cuahtemoc, who are originally from Yucatan, Tabasco, and other states of southern Mexico, and people of the Indigenous ethnic groups of Tzotziles and Tzeltales who fled Chiapas following the 1982 eruption of the Chichon volcano (Noh-Bec, 2015). Today, timber harvesting and processing are the main income source, as is employment at a privately owned poultry farm (INEGI, 2010). Few ejido members farm the 35 ha they are allotted for personal use (personal observation).

The community of Arimum is located in the Extractive Reserve Verde para Sempre (ERVS) in the state of Pará, in the Brazilian Amazon (Figure 5.1b). Arimum was founded in 1967, but many of its approximately 260 residents descend from families that have lived in the area for over 100 years. Residents make a living from livestock, subsistence agriculture (mostly manioc), NTFPs (historically rubber and Brazil nut, *Bertholletia excelsa*, and more recently açaí, *Euterpe oleracea*), hunting, and fishing (da Silva Medina & Barbosa, 2016). Logging historically has been an economically important activity in the region and was conducted illegally by outsiders who enlisted locals as day labourers and degraded the forest by harvesting the most valuable trees. As a clear signal to keep land grabbers and illegal loggers at bay, residents of Arimum and other local communities successfully fought to create a federal extractive reserve in 2004 on the lands they inhabited. Within this new conservation unit, each original family was given a 100-ha lot along the Arimum River, which has been subdivided over the years into smaller family lots.

Both states, Quintana Roo (QR), Mexico and Pará, Brazil, retain high levels of forest cover and are important timber producers. Over 80 per cent of QR's 5.1 million hectares (Mha) are covered with forest (Ellis et al., 2015), while Pará, with 124.8 Mha, has about 72 per cent forest cover (Pereira, Santos, Vedoveto, Guimarães, & Veríssimo, 2010). Of the 279 ejidos in Quintana Roo, 171 are categorised as having forests appropriate for timber management (CONAFOR, 2015). However, only 87 have been involved in forest management— since ejidos obtained timber rights in the mid-1980s (Ellis et al., 2015). Although even fewer (about 35) commercialise timber on an annual basis (Rodriguez-Ward, Blanco Reyes, Sills, & Lubowski, 2016), almost all timber production in QR emanates from ejido community forests.

Pará, Brazil's largest tropical timber-producing state (Costa et al., 2018; Pereira et al., 2010), produced 3.25 million m^3 of tropical timber in 2018 (IBGE, 2018). The state's 42 community forestry initiatives, which operate in national forests, extractive reserves, Quilombola territories, and settlement areas, have a total authorised annual harvest area of 9,223 ha and an estimated annual production of 545,163 m^3 (Costa et al., 2018; Miranda, Amaral Neto, Sousa, & Coelho, 2020), which represents 17 per cent of the state's total production. Notably, in 2017–2018, an estimated 70 per cent of timber harvesting in the state was illegal (Cardoso & Souza, 2020), including in Indigenous territories (12 per cent) and conservation units (5 per cent) like extractive reserves. While Miranda et al. (2020) estimated that the communal forests in Brazil's conservation areas could potentially produce 24 million m^3 of logs per year, this is very unlikely given CFEs' many challenges (e.g., bureaucratic, financial, access to markets).

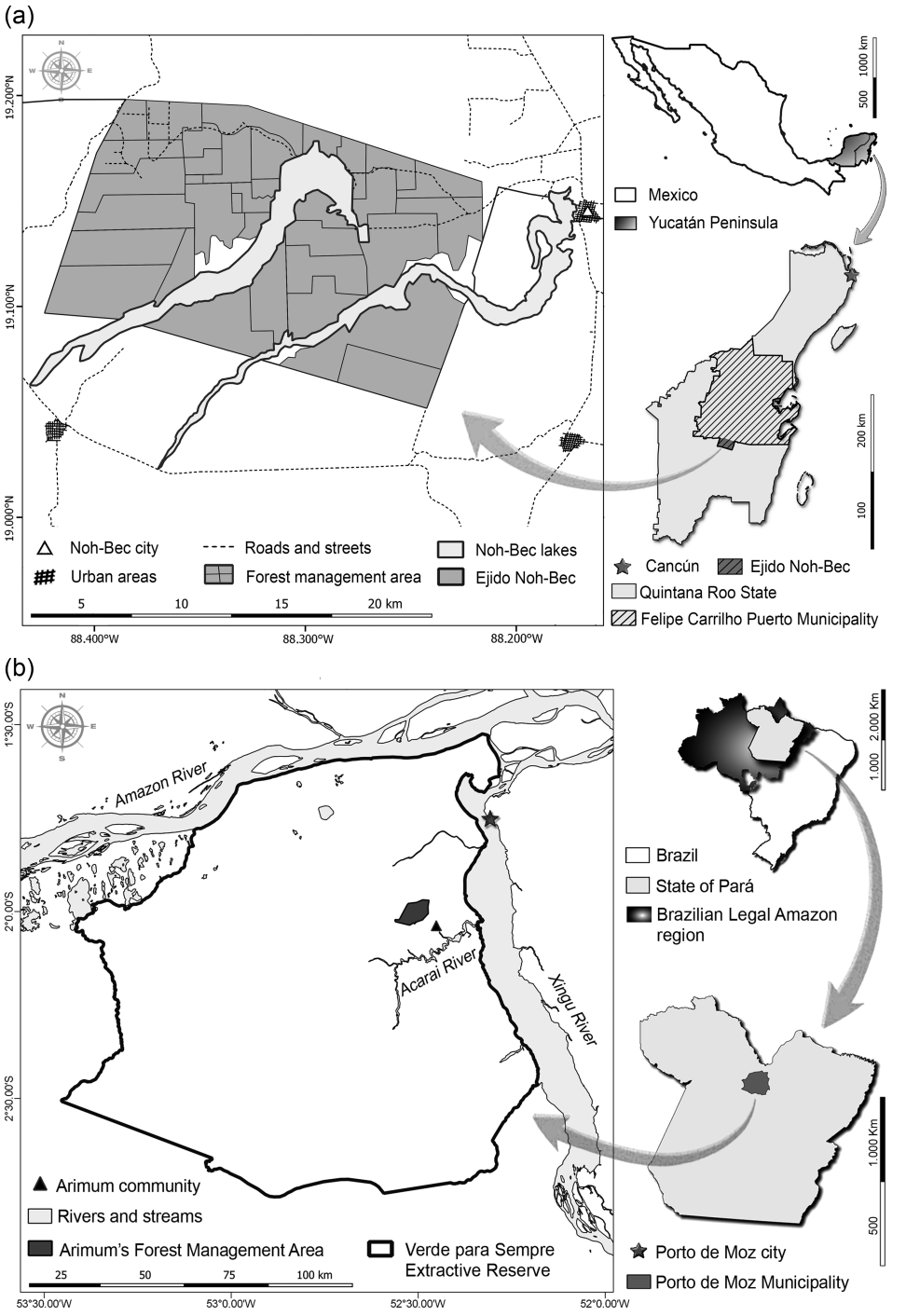


Figure 5.1 Maps of two forest-based communities with community-based forest enterprises producing timber: (a) Noh-Bec in Quintana Roo, Mexico. Source: Created by Daniel de Almeida Papa for the authors. (b) Arimum in Pará, Brazil.

Early history and struggles to achieve tenure and timber rights

Forests in Mexico's Yucatan peninsula were heavily exploited by Spanish, British, and American companies for timber and chicle in the 19th and early 20th centuries, and were the site of many wars (Ellis et al., 2015). Chicle extraction was arduous and often exploitative work. Land reform and ejido creation came after the Mexican Revolution of 1910–1917. Noh-Bec and other large ejidos (averaging 35,000 ha each) were established in the 1930s–1940s to accommodate chicle production by both native Maya and migrants from other parts of Mexico (Barsimantov, Racelis, Biedenweg, & DiGiano, 2011; Galletti, 1998). The ejidal land system put 75 per cent of forests under communal tenure (Merino-Perez, 2013).

In the Brazilian Amazon, native rubber was an enormous source of wealth in the 19th and until the mid-20th centuries (Schmink & Wood, 1992). Similar to the case of chicle in Mexico, a mixture of native and immigrant labour (mostly from drought-stricken northeast Brazil) formed the workforce for 'tapping' rubber. Vast areas of natural forest were divided into rubber estates, and rubber barons were brought in and assigned families 300–450 ha each to produce rubber under harsh and exploitative conditions (Allegretti, 1994).

In the 1950s and 1960s, the national governments in Mexico and Brazil turned their sights on tropical forests as sources of commercial wealth and import substitution. In Mexico, commercial timber concessions were granted to third parties on communal lands throughout the country (Merino-Perez, 2004). In QR, Maderas Industrializadas de Quintana Roo (MIQROO) aggressively harvested mahogany (*Swietenia macrophylla* King) and Spanish cedar (*Cedrela odorata* L.) from Noh-Bec's and other ejidal forests to produce veneer, plywood, and other products for international markets (Forster et al., 2003; Galletti, 1998). Some benefits trickled down to communities, such as hiring locals as loggers (Richards, 1992) and residual logs (personal observation), but most economic benefits went to the company.

In Brazil, a military dictatorship from 1964 to 1985 encouraged Amazonian 'development' with investments in infrastructure (e.g., roads, dams), migratory settlement, and large-scale production of cattle, agriculture, mining, and timber extraction (Bunker, 1984; Hecht & Cockburn, 1990). In both study cases, widespread environmental damage ensued with little benefit for local communities, sowing discontent that spawned grassroots social movements (Bray et al., 2006; Hall, 1997; Schmink & Wood, 1992). By the 1970s, these social movements called for improved land and/or forest resource rights for communities.

In Mexico, ejido members (including those from Noh-Bec) and their supporters led protests around the country to end forestry concessions, demanding rights to harvest timber and other resources on ejidal lands. In Brazil, families (known as 'rubber tappers') that had been living in rubber estates, in many cases for generations, and were not aware of and had not documented their squatters' rights to the land, began finding their forests and livelihoods under attack by ranchers and land speculators bent on clearing and burning forests (Almeida, 2002; Hecht & Cockburn, 1990). A movement of rubber tappers emerged in the 1970s and joined forces with environmental and social movements that portrayed the tappers as defenders of the forest with legitimate land rights (Hall, 1997; Hecht & Cockburn, 1990; Keck, 1995).

A paradigm shift in the 1980s and 1990s, moving away from central control and loosely regulated resource exploitation and towards local governance and environmental conservation, paved the way for community forestry. This change was institutionalised in new legislation and supported by large foreign aid projects and domestic programmes in both countries, but occurred more quickly in Mexico. When Mexico's 1986 Forestry Law ended timber concessions in communal lands and gave communities timber rights, ten CFEs in QR were already harvesting

and selling their own timber and three had obtained machinery and sawmills (Galletti, 1998; Wilshusen, 2005), including Noh-Bec.

In contrast, in Brazil, it was not until the early 1990s that non-Indigenous forest-based communities began receiving long-term use rights to the federal lands they inhabited (Allegretti, 1994). Social movements with widespread local engagement, including the frontline martyrs Chico Mendes in Acre state in the 1970 and 1980s and Sister Dorothy Stang in Pará state in the early 2000s, helped garner international support for tenure reform that established and protected community rights to forests. This included the creation of extractive reserves (Villas-Bôas et al., 2018) – a novel type of protected area in which government-owned land is designated for sustainable use by traditional residents (Allegretti, 2008). The Brazilian government was also slow to adopt the concept of community-based forestry for timber, and the first timber CFEs did not appear until the mid-1990s (Amaral & Amaral Neto, 2005). Only in 1998 did it recognise forest management plans (FMP) at the community level and allow simplified documentation for these operations.

Support for CFEs

A series of largely externally funded projects were very influential in helping communities in both regions set up their CFEs for timber production. *Plan Piloto Forestal* (1983–1986) in Mexico was financed by the German government (GTZ) and the Mexican Forest Service (Richards, 1992). *ProManejo* (1999–2007) was funded by the World Bank, Germany, and the United Kingdom as part of Brazil's Pilot Programme for the Protection of Tropical Forests (known as PPG-7). These two programmes provided technical and financial assistance to build capacity for forest management and timber production to pilot CFEs in 10 ejidos in QR (Richards, 1992; R. Guttierez, personal communication) and 14 communities across the Brazilian Amazon (IBAMA, 2007). Substantial investments also targeted local CFE partner organisations – non-governmental organisations (NGOs) in Brazil and producer societies in Mexico – to improve their capacities to provide continued CFE assistance. An additional project, *Floresta em Pé* (2006–2011), provided further support to pilot CFEs and their partners in Pará state, and was funded by the federal government and the French Fund for the Environment in co-operation with several Brazilian and French NGOs (Cruz, Sablayrolles, Kanashiro, Amaral, & Sist, 2011).

While governments have continued to back CFEs, support in Mexico has been much more substantial and consistent than in Brazil. QR's 1989 five-year State Forestry Plan (*Plan Forestal Estatal*) helped develop additional producer societies and expand CFE development (Wilshusen, 2005), while QR's State Forestry Plans (1999–2005, 2006–2011) subsidised forest certification (Rodriguez-Ward, 2013; Weaver, 2000). At the federal level, Mexico's National Development Plan (1995–2000) gave priority to sustainable economic development, environmental protection, and natural resource management. The National Forestry Commission (CONAFOR) initiated the Program for the Conservation and Sustainable Management of Forest Resources (PROCYMAF) to ensure CFE economic viability. In QR, from 2004 to 2008, PROCYMAF funded certification and related costs (e.g., reforestation, environmental impact assessments, EIAs). Even today, Noh-Bec benefits from competitive CONAFOR grants (e.g., to cover costs for certification fees, technical reports, timber inventories, nurseries), though Noh-Bec is not dependent on these funds.

In Brazil, federal technical and financial assistance is available for CFEs but is spread over several agencies and institutions, and financial support has significantly waned in recent years due to a lack of prioritisation and funding. The Community and Forest Management Program was established in 2009 (Decree No. 6,874/2009) within the Brazilian Forest Service (SFB) to coordinate management and promote CFM in public forests (SFB, 2016). It co-ordinated with the National Forest Development Fund (FNDF) for a few years to disburse grants for financial

and technical assistance to CFE partner organisations. Other federal sources of support to CFE support organisations have included grants from the National Development Bank (BNDES) and Brazil's *Fundo Amazônia*. In 2020, despite having a mandate to help CFM for several years, the federal program *Pronaf Floresta* finally gave a CFE, Arimum's COOMNSPRA, a loan to finance its annual timber harvest operations (which it promptly repaid) due to the ground-breaking work of several agencies and NGOs to help the *Banco da Amazonia* (which distributes *Pronaf* funds) understand the costs and income involved. With respect to technical assistance, SFB and the Chico Mendes Institute for Biodiversity Conservation (ICMBio, created in 2011) have provided direct technical support to CFEs within federal conservation units (e.g., extractive reserves) as needed, and EMBRAPA (a government research agency) has aided community and family forest management initiatives on all types of lands. At the state level, Amazonas state has offered family forest owners assistance since the time of *ProManejo* (Miranda et al., 2020), and Acre state offered CFEs assistance until recently. In contrast, the Pará state government has failed to implement its 2019 policy to support community and family forest management (IDEFLOR-Bio, 2019). This means that CFEs in Pará, other than the 12 currently operating in federal conservation units (Miranda et al., 2020), have relied more on NGOs for technical support and on companies who provide advance payments for timber than on government agencies.

Partner organisations have been critical sources of CFE support in both countries. In QR, seven producer societies offer technical assistance to member forestry ejidos in return for a share of timber revenues. These societies also set minimum timber prices among members to ensure transparency and avoid competition, help them apply for government subsidies, facilitate learning among members, and represent CFE interests to governments and other organisations (Hajjar & Kozak, 2017). Noh-Bec belonged to such a producer society for 14 years, and then secured technical assistance from another NGO before hiring its own forest engineer. In recent years, NGOs such as The Nature Conservancy and Rainforest Alliance and multilateral organisations such as the Small Grants Fund of the UNDP have also supported ejidal forestry in QR.

In contrast, in Brazil, NGOs provide free technical assistance, although CFEs often provide in-kind repayment by hosting training workshops and publicly recognising the important role of NGOs for CFEs. The NGOs that have most actively supported CFM in the Brazilian Amazon over the last 20 years include the *Instituto Florestal Tropical* (IFT) for technical forestry training; the *Instituto Internacional de Educação do Brasil* (IEB) for capacity building, mostly on governance and markets; and the *Instituto do Homem e Meio Ambiente da Amazônia* (IMAZON) for research and knowledge sharing about CFM. Other supportive organisations include EMBRAPA, universities, workers' unions, and religious organisations. NGO assistance has varied over time depending on funding availability from governmental programmes and foundations. Unlike Mexico's producer societies, explicitly or not, these Brazil-based NGOs also have worked to develop CFE technical and financial independence, though few have achieved it. Some Amazonian examples of arrangements akin to Mexico's producer societies exist and could become more popular in the future, including COOPERFLORESTA, a co-operative in Acre state that provides fee-based technical and marketing assistance to members. An important commonality, nonetheless, is that partner NGOs in Brazil also lobby for improved CFE policies and programmatic support.

Forestry laws and regulations

Although Mexico's first forestry law was passed in 1926, it had a little regulatory effect (Bray & Wexler, 1996). Robust and meaningful federal guidance only emerged with the Forestry Law of 1986, the General Law of Ecological Equilibrium and Environmental Protection of 1988 (LGEEP), and the General Law for Sustainable Forest Development (LDGFS) in 1993. These laws provided

regulations and guidelines for management plans for harvesting, environmental protection and restoration, EIAs, and sustained economic development (Weaver, 2000). In particular, the 1986 Forestry Law ended private timber concessions on community lands, emphasised the environmental consequences of timber harvesting, and supported the development of CFEs (Wilshusen, 2010).

In Brazil, the Forest Code (Law 12.651/2012), which was first passed in 1934 and has been revised many times, addresses sustainable timber management on private and public lands. In 2006, Law 11.284/2006 established directives to manage public lands, including the multiple use of these forests through timber concessions, biodiversity conservation, tourism, and other land uses. Particularly significant to our Arimum case, a multi-stakeholder process resulted in Normative Instruction No. 16/2011 (hereafter Norm 16/2011), which defines specific rules for authorising community timber management in three categories of federal protected areas: extractive reserves, sustainable development reserves, and national forests. Because of long turnaround times and bureaucratic complexity in approving and overseeing timber production by community actors, Norm 16/2011 also transferred responsibility for regulating community timber production from the federal Brazilian Institute of the Environment and Renewable Resources (IBAMA) to the newly established government agency, ICMBio (Espada & Serejo, 2016; Santos, 2017). ICMBio's national office approves forest management plans for community initiatives in federal conservation units, while its local offices are responsible for the day-to-day management of their respective conservation unit, including providing technical support to the CFEs operating within them.

In both regions, communities must have FMPs endorsed by a forestry professional and approved by a government agency: the Secretary of the Environment and Natural Resources (SEMARNAT) in Mexico and the ICMBio for extractive reserves in Brazil. Requirements include detailed maps and inventories of trees, road building plans, EIAs, environmental precautions, and reforestation commitments. The plans usually cover 35 years in Brazil and can be for 5–25 years in Mexico. In addition, communities must get approval for annual operating plans with tree harvest details and request and must secure government-issued timber transportation documents. Timber sales are tracked in Mexico by SEMARNAT, and state and federal police frequently stop and review the transit documents for timber transporting vehicles. In Brazil, federal and state agencies track timber transportation information, but in practice, they rarely stop and inspect trucks and boats/rafts transporting timber. CFEs in both regions must comply with international (e.g., CITES), federal, state, and local regulations.

Finally, both of our cases pursued Forest Stewardship Council (FSC) certification for external recognition of good forestry and potential market benefits (i.e., price premia, interest from discerning timber products' buyers), while also recognising that certification can help communities access local, national, and international resources (e.g., grants, partnerships). Noh-Bec was one of the first CFEs globally to be FSC certified in 1991, and Arimum was certified in 2016. To date, Noh-Bec has made a few sales of certified wood to international buyers, but continues to sell almost exclusively to local buyers who provide critical cash advances during harvesting operations, but do not pay certification premiums. Arimum, which operates in a market dominated by illegal timber, recently sold to a certified company in the state capital.

Implementation of community-based forest enterprises

CFE goals

Noh-Bec and Arimum pursued CFEs as part of a long-term trajectory to control decisions over and access to the forests that sustain their communities. Both communities' FMPs articulate goals of responsibly managing forest resources over the long term and generating income and

other benefits from logging for their community members. In addition, informal conversations with Arimum's leaders and other residents revealed that securing land rights and improving local health care for community members were also expected CFE benefits; other studies have found similar expectations (see Marin, 2014; Miranda, 2019; Pacheco, 2017).

CFE institutions

Both communities have community-level governance organisations with elected officials: Noh-Bec's ejido leadership team and Arimum's community association. In addition, both created institutions specifically to implement forest management, production, and timber sales activities: a Forestry Office for Noh-Bec and a co-operative for Arimum, both of which also have elected officials. Timber production is the primary activity, but both institutions also oversee and support the production and sale of NTFPs (as well as ecotourism in Noh-Bec).

Ejidos in Mexico are governed by an ejido leadership team elected by ejido members. For the majority of ejidos in Quintana Roo, the leadership team manages timber production and sales decisions, often with little transparency (Rodriguez-Ward, 2013). Noh-Bec's Forestry Office is an innovation among QR ejidos that helps separate forestry decisions from political decisions, which reduces opportunities for conflict of interest and streamlines communications with buyers. The Forestry Office is led by a periodically elected Forestry Technician and employs forest guards. The Forestry Office's performance (i.e., sales, expenses) is reviewed by the ejido leadership and the General Assembly of ejido members on a monthly basis to further ensure transparency.

Arimum's CFE has had several institutional permutations. With support from ProManejo, it began as a pilot CFE in 2005 (called *Projeto Maçaranduba*), designed as a 15-year community–company partnership in which infrastructure and machinery ultimately would be devolved to the community. This agreement ended prematurely due to Norm 16/2011, which prohibited companies from leading forest management operations in protected areas, like extractive reserves. Thus, in 2011, the community's association (ACDESRA: *Associação Comunitária do Desenvolvimento Sustentável do Rio Arimum*) assumed responsibility for the FMP and entered into a co-management agreement with ICMBio (described later in more detail). Then, in 2014, due to regulations that prohibit associations from issuing invoices and distributing profits to community members, the community formed a co-operative (COOMNSPRA: *Cooperativa Mista Agroextrativista Nossa Senhora do Perpétuo Socorro do Rio Arimum*) to co-manage Arimum's forest. ACDESRA maintained a role in deciding how to utilise the net income from timber (Miranda, 2019). This new power arrangement created confusion regarding organisational roles, some discontent about power shifts among community leaders, and resistance to changes in how timber benefits were distributed – from individual cash payments to largely community-level investments (Arimum community member, personal communication). These issues, however, were resolved through community dialogue with the assistance of partner organisations. COOMNSPRA members must be active in the community, a member of the community association for at least two years, and capable of implementing forestry-related activities; residents of nearby communities can also join if their labour is needed. The co-operative's executive board members mostly live in the nearby urban area of Porto de Moz, where the co-operative's office is located.

CFE operation

Both communities ended up adopting industrial forest management models (Table 5.2) but operate differently. Noh-Bec owns its forest, counts on a highly skilled forestry team, and has full

Table 5.2 Key timber production parameters for CFEs in the communities of Noh-Bec in Quintana Roo, Mexico and Arimum in Pará, Brazil

CFE timber production parameters	*Noh-Bec*	*Arimum*
First forest management plan approved	1984	2006
Year CFE logging began	1984	2007
Total designated timber management area (ha)	18,000	4,255
Average annual harvest area (ha)	1,000	100
Cutting cycle (years)	Originally 25; currently 15[a]	35
Average estimated annual production volume (m^3)	7,000	1,700
Average volume harvested per hectare (m3/ha)	7	17
Number of community members employed in timber production	110 Male: 90 Female: 20	46 Male: 40 Female: 6
Type of transport to market	Trucks	Ferry
Product	Sawnwood, roundwood, polewood	Roundwood
Species	Timber: mainly mahogany (*Swietenia macrophylla*), chicozapote (*Manilkara zapota*), tzalam (*Lysiloma bahamensis*), and chechem (*Metopium browneii*) Polewood: various	25 species, including these high value species: cumaru (*Dipteyx odorata*), ipê amarelo (*Handroanthus albus*), ipê roxo (*Handroanthus impetiginosus*), itauba (*Mezilaurus itauba*), and jatobá (*Hymenaea courbaril*.

Source: Created by the authors.
[a]Critical salvage harvesting triggered by Hurricane Dean in 2007 led Noh-Bec to temporarily adopt a 15-year cutting cycle.

control over management activities. Arimum, in contrast, co-manages its federally owned forest with ICMBio and relies on technical assistance from NGO partners.

Noh-Bec has a vertically integrated timber operation that runs year-round, utilising its own field machinery and sawmill. CONAFOR grants in the early 2000s were important to replace some machinery and update sawmill parts, especially given the ejidos' irregular access to credit. All forestry-related jobs are first offered to ejido members who demonstrate adequate skills

in the position. If no ejido member is available, the position is then offered to ejido members' children, and then to other non-ejido members. Frustration among other ejido residents over this arrangement is discussed in the section on contributions to well-being. Income from timber sales is first used to cover operational costs not already paid by buyer advances and then to cover some services for ejido members (e.g., health insurance) and the larger community (e.g., road maintenance, internet). Net income is distributed biannually to ejido members in a payment referred to as *utilidades*.

Arimum's co-management arrangement with ICMBio effectively means that ICMBio monitors forest management activities and approves FMPs and annual operating plans, while COOMNSPRA is responsible for implementing and keeping ICMBio apprised of forestry activities. Co-operative members implement most activities directly (e.g., tree inventories and cutting, road planning, log measurements, permanent plots monitoring), while contractors are hired when heavy machinery (e.g., skidding, loading, transporting logs) is required. A forest engineer is contracted to write the FMP (updated every five years) and the annual production plan. Usually, the forest engineer employs a forest technician that accompanies the community members in some activities, especially tree inventories. COOMNSPRA also receives technical support from NGOs, the Brazilian Forest Service (SFB), the Federal University of Pará, and Embrapa. Net income from timber sales is allocated according to the following system (based on another successful system established by the Pará co-operative): 45 per cent for capital for the next timber harvest; 10 per cent for an emergency reserve; 5 per cent for educational and social assistance; and 5 per cent for a health fund. The use of the remaining 35 per cent is for community development, including 15 per cent for community investments and 20 per cent which COOMNSPRA members decide how to use, and can distribute directly to co-operative members (COOMNSPRA, 2018).

Common challenges for both CFEs include connecting with buyers interested in lesser-known species; a reliance on buyers' monetary advances to finance timber operations, which creates a dependence on buyers and lessens CFEs' negotiating power for sales; and finding buyers willing to pay premiums for certified products. To improve the visibility of certified products in QR, in 2010 Noh-Bec co-founded – with five large, certified forestry ejidos – the Maya Forest Alliance (*Alianza Selva Maya U.E. de R.L.*), which sells FSC-certified timber products at a premium, including flooring and kitchen products. Another opportunity Noh-Bec and other ejidos have seized is to sell smaller diameter trees (polewood), fulfilling the growing regional market demand for touristic and residential construction of *palapas* (thatched roof, open-sided structures) (Racelis & Barsimantov, 2008). Arimum has recently had some important advances both in obtaining a loan in 2019 (described further in the next section), which disrupted its previous dependence on cash advances from its buyers, and, in 2020, finding a buyer willing to pay a premium for certified wood.

Investments in Community Capitals

Noh-Bec and Arimum have relatively successful and enduring CFEs that both started as pilots associated with discrete regional projects to promote CFM for timber production. Project implementers chose to work with these communities because of their various assets, which we describe here in terms of the community capitals framework (Emery & Flora, 2006). Partner organisations and communities themselves persisted in investing in these communities' capitals over time (especially social and built capital), which helped lead to improvements in other capitals (especially human, built, and financial capital).

Emery and Flora (2006, p. 3) describe social capital as 'the connections among people and organisations or the social "glue" to make things, positive or negative, happen'. Other studies

have identified investments in social capital as key to building other assets that allow CFEs to successfully attain their goals (Baynes et al., 2015; Gnych et al., 2020). Indeed, among the first steps for each CFE was strengthening their internal organisations (bonding social capital) for CFM implementation. They then reached out to external actors to build partnerships (bridging social capital) to improve their human and other capitals. Both benefited from past membership in organisations with other CFEs: a producer society for ejidos in Noh-Bec, and the Trans Amazonian Community Forestry Working Group (GT-MFC) for Arimum. Today, both Noh-Bec's Forestry Office and COOMNSPRA are leaders in CFE networks: a CFE joint venture in Quintana Roo and a Forest Management Group (GGF) composed of younger CFEs in the Verde Para Sempre Extractive Reserve (Espada, 2021).

Human capital refers to peoples' skills and abilities (Emery & Flora, 2006). Both cases originally benefited from significant partner investments to build human capital in technical and managerial skills. After an almost 14-year relationship with its original producer society, Noh-Bec relinquished its membership and procured technical services from a local NGO. In 2015, after 30 total years of timber management experience, Noh-Bec became fully technically independent by selecting a trained community member to serve as its Forestry Technician. Today, Noh-Bec supports ejido members to attend forestry-related training around the state and globe, and frequently hosts and leads training programmes for others. Many ejido members have post-secondary education, including seven (male and female) who have obtained their bachelor's degree in forestry (at their own expense). Arimum has made significant strides, but still benefits from partners' assistance and continued capacity building. Similarly, Arimum is also emerging as a role model for younger CFEs, which are learning from its experiences and from other established CFEs, particularly the Pará co-operative, COOMFLONA.

Both CFEs began with significant *natural capital*. Despite histories of predatory logging, each still had forests with enough commercial tree stocks to receive state approval for commercial logging using reduced-impact forest management regimes. To aid in tree stock recovery, Noh-Bec reduced mahogany cutting volumes when the community took over management from the parastatal company MIQROO, and then began restoring cutover forest areas and introducing lesser-known species to the market.

Financial capital and good financial management are among the biggest challenges for CFEs (Humphries et al., 2020; Radachowsky, Ramos, McNab, Baur, & Kazakov, 2012). Industrial timber operations are extremely expensive due to requisite labour, machinery, and supplies. Communal land tenure models negate the use of land for collateral (Gnych et al., 2020), making loan acquisition difficult. Many communities, including Noh-Bec and (until recently) Arimum, depend on buyers for cash advances to cover up-front costs of bureaucratic fees, labour, supplies, and machinery rentals or maintenance, which has many disadvantages. Notably, in 2019, Arimum secured with help from its CFM partner organisations (and repaid) a low-interest loan from *Banco da Amazônia S.A.* (BASA) to cover its operating costs through an innovative arrangement: the FMP served as the loan guarantee, and each co-operative member was personally responsible for a proportional share of the loan amount (Observatorio MFCF, 2020). Until credit is regularly accessible and CFEs prioritise reinvestment over disbursing net revenues (a concern identified for ejidos in Mexico by Frey et al. [2019]), buyer advances and grants will likely continue to play an important role for both organisations.

Political capital refers to peoples' access to power and their ability to engage in activities that benefit their community (Emery & Flora, 2006). Access to government partners who hold the power of approving FMPs and regulating forestry activities is especially important. Noh-Bec has developed and maintained good relationships over the years with the state offices of SEMARNAT and CONAFOR. CFE representatives are frequently invited to represent forestry

ejidos in various state councils and workshops. Arimum's efforts to cultivate and sustain a close working relationship with ICMBio as a forest co-manager have helped facilitate communication and approval of forestry-related documents.

Built capital involves the infrastructure related to implementing an activity (Emery & Flora, 2006). Noh-Bec's main CFE-related infrastructural investments have been for processing wood with two sawmills and for maintaining a network of logging roads. Community members have in turn (with some ejido support) made private investments in processing equipment to turn lumber into finished products (e.g., in carpentry equipment for making doors and furniture). In Arimum, CFM-related investments in built capital have included port improvements to facilitate timber transportation and the purchase of a co-operative office in Porto de Moz. Additionally, partner investments in communication capacities (including radio and internet) enable online generation and signature of timber transportation documents and communication with field workers and the co-operative office. To facilitate workers' lodging, as well as community gatherings and training sessions, a communal kitchen, sleeping quarters, and piped water have been installed. Arimum is also working with partners to negotiate government permission to install wood processing facilities in the community – a significant challenge given its extractive reserve status.

Cultural capital 'reflects the way people know the world and how they act within it, as well as their traditions and language' (Emery & Flora 2006, p. 3). The identities of residents of both communities are historically and traditionally tied to the forest, and undertaking timber management seems to have reinforced community forest relationships (personal observations). Noh-Bec residents are well-known as descendants of *chicleros* (chicle producers) and currently identify as living in a 'forestry ejido'. Locations of historical chicle camps in Noh-Bec remain revered cultural areas. Residents of Arimum identify themselves as descendants of *seringueiros* ('rubber tappers') and are known as 'Traditional Peoples' for their long-term subsistence lifestyles in their natural landscapes. Forestry continues after 36 years to be the main source of community jobs in Noh-Bec, along with other employment sources. For families in Arimum, forestry is the primary source of livelihoods and helps families to stay in the community instead of migrating to urban areas for work.

Contributions to well-being

The concept of well-being is difficult to delimit as there are no generally accepted theoretical models to guide analyses of how people identify and integrate the important domains of their lives (Wish, 1986). We follow the development economist Amartya Sen, who argues that well-being depends upon the opportunities available to people and what they are able to accomplish given their opportunities (Sen, 1993). Because the suite of opportunities available to people living in forest-dependent communities depends upon evolving local innovations, the capacity of communities to pursue new opportunities influences individual and community well-being (Kusel, 2001). We built on Gutierrez-Montes' (2005, p. 121) and Emery and Flora's (2006, p. 4) work and illustrations of how community assets can spiral up (or down). Figure 5.2 illustrates our observation that our study communities built on their initial assets by taking advantage of opportunities related to forest management for timber production. We suggest those realised opportunities led to new skills, knowledge and experience, which continued to build over time and contributed to an upward trajectory of improvements to well-being.

We provide examples of contributions to three types of well-being – material, relational, and subjective – that emerged at least partially from investments in community capitals related to community forest management, as well as exceptions (Table 5.3). This analysis is informed by

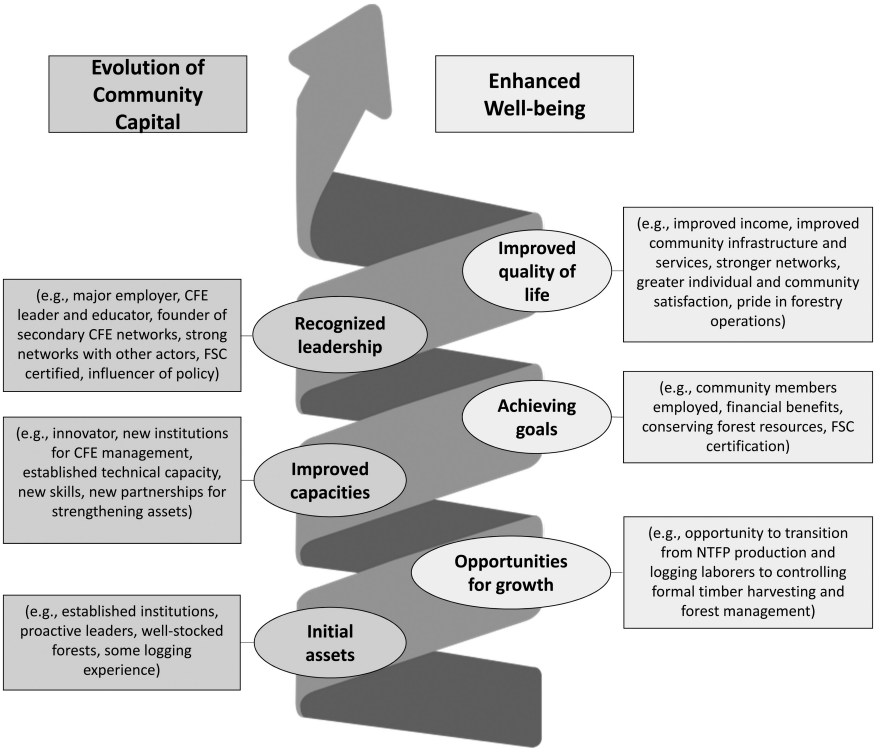


Figure 5.2 Illustration of suggested dynamic relationship between community capitals and well-being, whereby each build on one another and contribute to improvements over time. Source: created by the authors and inspired by Gutierrez-Montes (2005, p. 121) and Emery and Flora's (2006, p. 4) illustrations of how community assets can spiral up or down for a community.

scholarship on the multi-dimensionality of well-being by Stiglitz et al. (2009), Biedenweg and Gross-Camp (2018), and Gough and McGregor (2007).

For both communities, their forests are critical to the communities' *material well-being*. Timber is a major source of income and other benefits for both communities. Hajjar et al. (2012) also found that employment and income were common and highly valued benefits for CFEs in their study in Mexico and Brazil. Similarly, Cooper and Kainer (2018) reported that extractive reserve residents in Brazil reported that economic benefits were one of the highest-ranked benefits expected from an anticipated logging project. Many communal investments in infrastructure for forestry operations benefit the entire community, such as improvements in communication services in both communities, as well as community meeting spaces in Noh-Bec and worker facilities and a generator in Arimum (Table 5.3). A contribution to well-being in both communities has been the sustainable management of their forests. Remarkably, a study by Ellis and Porter-Bolland (2008) found lower rates of deforestation in the municipality where Noh-Bec is located, where forests are managed by CFEs for timber and other products, than in a neighbouring area within a biosphere reserve (a type of protected area). The authors attributed the lower deforestation rate largely to communities' forestry institutions and land zoning practices.

Relational well-being has to do with how individuals within a community relate to one another and with outsiders to meet their needs and achieve goals. It therefore involves social assets and

Table 5.3 Relationships between the types of well-being and the types of community capital that align with each, and examples of contributions to well-being for two CFEs in the communities of Noh-Bec in Quintana Roo, Mexico and Arimum in Pará, Brazil

Types of well-being and contributing capitals	*Contributions to well-being for each case*	
	Noh-Bec	*Arimum*
Material well-being		
– Financial capital	Wages for workers, payments to ejido members, medical coverage for ejido members	Wages for workers, contributions to community funds, payments to co-operative members
– Natural capital	Healthy, intact forests	Healthy, intact forests, improved community waste management
– Built capital	Improved community access to infrastructure for transport (better roads), communication (internet service), communal gatherings (meeting rooms), potable water, alternative income (ecotourism restaurant, bird watching tower)	Improved community access to infrastructure for transporting products (port improvements), communication (internet and radio service), electricity (community generator), potable water service. Improvements at family level in housing, refrigeration, and transportation
– Human capital	New skills and knowledge, investments in new businesses (ecotourism, carpentry)	New skills and knowledge, emphasis on women receiving training and participating in CFE administration
Relational well-being		
– Social capital	Support for CFE activities, community members work well together, efforts to increase employment for non-ejido members; good relationships with other CFEs, support organisations, and buyers	Support for CFE activities, community members work well together, community acceptance of power balance between co-operative and association, good relationships with other CFEs and support organisations
– Political capital	Strong internal governance organisations, good relationships with governmental organisations	Strong internal governance organisations, good relationships with governmental organisations
Subjective well-being		
– Cultural capital	Pride in having internationally recognised forestry operation, FSC certification, providing opportunities for maintaining forest-based livelihoods (NTFP and timber), serving as role model and source of knowledge; the community identifies as a forestry ejido; youth are pursuing degrees in forestry	Pride in having a legal, FSC-certified operation, providing opportunities for maintaining forest-based livelihoods (NTFP and timber), serving as role model and source of knowledge; youth are migrating less

Source: Created by the authors.

governance. Both communities have achieved well-established and functioning political and forestry-related organisations, and community members work well enough together to produce timber. Nonetheless, Antinori and Bray (2005) describe common tensions in Mexico that have arisen between long-standing community traditions and the community-based timber management model that emerged after the 1986 Forestry Law, including elite capture and the lack of women who are legal ejidatarios and therefore voting members of their communities. Noh-Bec is not immune to these kinds of critiques, as detailed earlier. The limit on ejido member numbers serves to maintain indefinitely these inequalities and continued support for the current system by non-ejido members is potentially at risk if discontent over the system increases. In Arimum, we perceived general support for the current division of power and responsibilities between the community's co-operative and its association. Notably, Arimum has not struggled with similar equity issues, perhaps because populations levels are lower and anyone from the community or neighbouring communities can apply to be a co-operative member, which qualifies them for forestry-related employment and a share of timber profits. Both communities have extensive networks of partnerships with governmental agencies, NGOs, and universities that have brought many benefits.

Subjective well-being encompasses how people feel about their situation and the cultural and social norms that influence them (Gough & McGregor, 2007). Leaders of both communities have expressed pride to be generating forest-based employment and income for their residents while protecting forests from deforestation and degradation. We also have observed pride among residents of both communities for achieving internationally recognised FSC forest certification, and legal timber production in itself in is an accomplishment for Arimum in a region and country plagued by illegal, destructive logging. Other positive indicators of subjective well-being are some young people in Noh-Bec pursuing degrees in forestry and returning to work for the Forestry Office, and a perception in Arimum that youth are increasingly staying in the community to work in forestry, and that some young people from other communities are moving to Arimum to work in this field (personal observation).

Discussion and conclusions

In the face of much resistance, Noh-Bec and Arimum achieved the rights for their forest-dependent residents to formally manage forests for commercial timber production, and have since leveraged their initial assets (i.e., natural, human, cultural capitals) to obtain additional investments from projects and partners over the years in other community capitals (i.e., in social, financial, human, and built capital). As a result, both have well-established community-based forest enterprises (CFEs) that are a primary source of employment and communal benefits for residents, contribute in diverse ways to the well-being of the communities, and are important role models for other forest-based communities interested in forest management.

For both of our CFEs' pathways, an alliance of social and environmental activists in each country was instrumental to obtain tenure reform and community rights to forests, while pilot CFM support projects were key to getting started. An important distinction between the two cases is their main contemporary sources of support. First, the government of Mexico has been much more active and consistent in providing national-level funding to CFEs than in Brazil. This is likely because since the early 20th century, it has been accepted in Mexico that communities own and manage their land, while this concept is still new and frequently challenged and/or undermined in the Brazilian Amazon (Ianova, 2020; Vale et al., 2021). Second, CFE partnerships with NGOs, the primary source of technical assistance in both regions, operate under very different frameworks. In Mexico, producer societies were set up to provide continuous techni-

cal and other types of assistance in exchange for a share of member ejidos' timber sale income (Wilshusen, 2005). Most members in Quintana Roo have long-term relationships with their societies, but some, like Noh-Bec, end up leaving when they are technically prepared to operate independently. In Brazil, in contrast, NGOs provide assistance through time- and resource-limited projects under the assumption, explicit or not, that CFEs will acquire the skills necessary to become independent. In practice, many Brazilian CFEs continue to need technical and other types of assistance, but the NGOs they depend on are themselves dependent on donors. This linking of CFE assistance with donor funding cycles can generate a general environment of instability or insecurity and vulnerability for CFEs (Pokorny et al., 2010), which may discourage long-term investments by community members or others.

Regarding CFM implementation, both CFEs created institutions with similar goals to run their industrial-model forest management and commercial timber production activities in a sustainable way, provide timber-related jobs, and support the production and/or sale of other forest products and services (e.g., NTFPs, ecotourism). FSC certification was also a goal achieved by both CFEs over time. Furthermore, because Noh-Bec owns its forest, it can manage it directly, while Arimum only has user rights to its federally owned forests and co-manages them with the government agency ICMBio. Finally, Noh-Bec has industrial sawmills that create additional jobs and add value to its timber products, while Arimum's aspiration to purchase processing equipment is hampered by bureaucratic bottlenecks related to its location within a federal multi-use protected area.

Initial community assets were certainly helpful in the selection of our two communities for participation in the early pilot support projects in each region. These include active leaders, established local institutions, strong ties to and knowledge of the forest from a history of forest-based livelihoods, some experience with logging, and sufficiently stocked forests. We describe how the CFEs continued to both leverage these human, cultural, and natural assets to attract new partners and investments to help build the skills and knowledge (social capital), relationships, infrastructure (built capital), and financial resources necessary to implement sustainable commercial timber production. Each invested their own timber income in their communities to help facilitate forestry and other productive activities. Some notable differences in capital identified are likely related at least partially to Noh-Bec's CFE having operated nearly three times as long as Arimum's. This is especially true for human capital, where Noh-Bec has obtained higher levels of technical capacities, and for natural capital, where Arimum has not perceived the need to restore its forests and indeed is harvesting much higher volumes of timber per hectare than Noh-Bec.

We suggest various ways in which these community forestry–related investments, in combination with others, likely contributed to notable improvements in community members' well-being, including income for families and community funds, new knowledge and skills, and improvements to living conditions. Relational benefits of strong community-supported local institutions and good partnerships with external partners were also identified. Gnych et al. (2020) also describe a process by which forest-based communities in several countries invested their existing capitals in commercial timber management and engaged supportive partnerships to do the same. The developing CFEs attracted further investments such that, over time, both community and external stakeholders gained assurance that respective obligations would be met, and the CFE were able to deliver socioeconomic and environmental returns. Similarly, Hajjar et al. (2020) identify that when communities and others (e.g., government and NGO partners) actively engage in CFM over time, greater resources are attracted, leading to both improved income and environmental outcomes.

The issue of unequal access to forests and material benefits from timber is certainly an important issue for Noh-Bec residents who are not formal ejido members, and one that Arimum

could potentially face in the future. Indeed, the previously mentioned Hajjar et al. (2020) study also found that environmental and income benefits can be accompanied by decreased forest access and resource rights.

Our examination of the different paths taken by Noh-Bec and Arimum highlight similarities and differences regarding how communities in southern Mexico and the Brazilian Amazon obtained the rights to manage their forests for timber and the support and policy reforms that facilitated the development of the two communities' CFEs. We provide important insights based on our own experience and the scientific literature on ways in which forestry-related investments in community capitals made by these communities and their partners likely helped these CFEs to endure and improve community well-being. Nonetheless, further research is needed to capture the diversity of perspectives that surely exist within each community regarding the changes in community capitals and fluctuations of well-being for different actors, as well as other factors that may have influenced these in addition to community timber management activities.

Note

1 Community that received communal ownership of lands as part of agrarian reform in the 20th century.

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6

SOCIAL FORESTRY AND LAND TENURE CONFLICTS IN INDONESIA

Myrna Safitri

Introduction

Social Forestry encompasses a wide range in the forest management paradigm, from promoting multi-purpose tree planting and poverty alleviation to devolution of forestry management (de Jong, 2012; Lacuna-Richman, 2012; Wiersum, 1999). In this chapter, the definition used reflects a governance strategy where the State transfers resource rights and forest management responsibilities to forest communities (Erbaugh, 2019).

Social Forestry, in different forms and terms, has been implemented in Indonesia since colonial times and continues today. Beginning in the 19th century, competing forest land claims between the Dutch colonial State and the people impelled the former to initiate the reforestation program using local people as planters.

When forests fall under State control, communities lose their rights and access to land and forest resources. In consequence, conflicts have erupted (Fisher, Kim, Latifah, & Makarom, 2017; Peluso, 1992; Purnomo & Anand, 2014; Riggs et al., 2016).

Limited access to forest land and resources also results in a greater poverty incidence rate in forest villages (CESS-ODI, 2005; Dewi, 2018; Peluso, 1992; Rosyadi, 2003). People also are not motivated to conserve the forest once it is under State ownership. In certain circumstances, unstable and chaotic political conditions in former times (such as in the years following Independence, during the political riots in the mid-1960s and in 1998) led to uncontrollable forest resource depletion. Indonesia has many experiences that show how revolution and a change of political regime have led to people's occupation of State forests (Mccarthy, 2000; Sato, 2006).

Successive governments of Indonesia have adopted various approaches in their Social Forestry programme. The colonial and the subsequent national governments, particularly during the authoritarian New Order regime (1967–1999), placed communities mostly as forest guardians who were hired as labourers to replant critical forest lands. But official policy has evolved to attempt to devolve forest management in the last two decades.

There has been a remarkable transformation in Indonesian Social Forestry since 2015, both in policy changes and outcomes. The government announced in 2020 that four million hectares (Mha) of forestland would be devolved to local communities under several kinds of Social Forestry permits. The Social Forestry programme has now become President Joko Widodo's

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priority program. The government set a target of 12.7 Mha for Social Forestry permits from 2015 to 2019. During that time, the President himself frequently handed over the Social Forestry permits to the communities.

Several studies describe the 2015–2019 period as a new era of Indonesian Social Forestry, while at the same time expressing concern about the difficulties in achieving the targets. Researchers conclude that the complicated procedure, inadequate data, and inaccurate maps of forests, villages, and indigenous territorial boundaries are some of the problems identified in Social Forestry (Erbaugh, 2019; Fisher et al., 2018; Moeliono, Thuy, Bong, Wong, & Brockhaus, 2017; Santika et al., 2019).

This chapter focuses on how Social Forestry can limit forest tenure conflicts. It scrutinises conflicts that involve non-Indigenous peoples, whose numbers are significant in and around forest areas outside the main islands of Java, Bali, and Madura. Forest tenure conflict will be placed in the context of migration, to see how it relates to the multi-layered land claims. Before detailing this problem, I present an overview of the legal concept of forests and forest areas, and procedures for establishing designated forest areas. An explanation regarding the relationship between the formation of forest areas and tenure conflicts is presented next. I then offer an analysis of the complexity of forest land conflicts involving non-Indigenous claimants and the ability of Social Forestry to resolve them.

Forest and forest areas in Indonesia

Forest (*hutan*) and forest area (*kawasan hutan*) are two key concepts in the Indonesian legal system. Forestry Law Number 41 of 1999 provides official definitions. The Law defines a forest as 'an integral unit of an ecosystem in the form of lands containing biological resources, dominated by trees in their natural environment'.[1] The forest area is defined as 'a certain area stipulated by the government to be preserved as permanent forest'. [2]

The Food and Agriculture Organization (FAO) lists the various types of forest ecosystems in Indonesia. They include coastal forests; tidal forests such as mangroves; palms, including nipah; heath forests associated with poor sandy soils and peat; swamp; wetland; evergreen bamboo; and savanna and montane forests (FAO, 2020). Nevertheless, not all forest ecosystems are officially categorised as forest areas. Forest areas are constructed by government decrees (Peluso & Vandergeest, 2001), making forest areas contain not only natural forests but also various forms of land use such as plantations, farm lands, and rural and even urban settlements.

The Government states that the forest estate covers 120,295,719 hectares or 63 per cent of the country's entire land area. There are various categories of forest cover within the forest estate, from primary to secondary and plantation forest. There are also non-forested lands, which cover about 33 Mha. Approximately 45 Mha of primary forest, according to official data, remain intact (MoEF, 2020).

The forest estate is categorised into conservation areas (*kawasan konservasi*), protection forests (*hutan lindung*), and production forests (*hutan produksi*). There are different regulations regarding utilisation in each category.

Conservation areas permit limited land and resource utilisation for the people. Environmental services, research, education, religious and cultural activities, and selective utilisation of non-timber forest products (NTFP) are permitted. Included in the conservation areas are national parks, grand forest parks, hunting parks, wildlife reserves, and nature reserves. A small number of conservation areas are the legacy of the Dutch colonial era forest management in the mid-19th century. However, many others were established after Independence, and especially since the

1980s. All conservation areas are under the central government's authority, administered by the Ministry of Environment and Forestry (MoEF).

In the protection forest, greater access is granted to NTFP harvesting than in the conservation areas. Currently, the protected forest area is around 29 Mha, including 9.4 Mha in Papua, the largest island, which has many pristine forests.

Several protection and conservation forest areas were formerly held under licence by logging or ex-plantation companies. Degraded forests were designated as protected forests at the end of the concession contract. One example is the protection forest of Sungai Lesan in East Kalimantan Province. In 2001, it was a logging concession area, but in 2014, the Ministry of Forestry declared it to be a protection forest. Research conducted by several NGOs and academics found the forest to be rich in biodiversity, including orangutans, and they successfully proposed that this logged-over forest be gazetted as an orangutan protection area (Purwanto, 2020).

The third category is the production forest. These are areas where logging and forest plantations are permitted. Around 57 per cent of the forest area in Indonesia is in the production forest category, which consists of three sub-categories: limited production forest, permanent production forest, and convertible production forest. The limited production forest is an area where only selective logging is allowed. The permanent production forest allows exploitation by clear-cutting and selective logging. The convertible production forests can be converted to non-forest development purposes, such as plantations, agriculture, or infrastructure development.

The establishment of forest areas and their impact on forest tenure conflicts

The categorisation of forest areas is determined through a series of stages, namely forest gazettement (*pengukuhan kawasan hutan*), starting with the designation of an area as a forest area (*penunjukan kawasan hutan*); this is followed by demarcation (*penataan batas*), mapping (*pemetaan*), and finally, the enactment as a forest area (*penetapan kawasan hutan*).

Only the Government has the authority to designate an area as a forest. This decision must be verified in the field through a demarcation process, where a settlement of communities' land claims is conducted. After this settlement process is concluded, the area is assumed to be free from tenurial rights or claims. It is mapped, then enacted as a forest area.

Forest areas under the designation stage have the potential to create tenurial conflicts. One reason that forest tenure conflicts arise is because the Government in the past had taken pre-emptive actions, such as issuing forest utilisation permits, before the procedures for forest gazettement were completed and while the forest area's status was still in the designation phase. This has resulted in overlapping claims in forest areas.

This ambiguity was eventually corrected by the court. In 2012, the Constitutional Court annulled the clause in the Forestry Law that stated that forest areas were also areas designated by the Government. The Court ruled that this clause obscured legal certainty for forest areas and decided that forest areas that have legality must be those that have been enacted, that is, completely gazetted.

Forest gazettement, however, is a long and challenging process to implement. In 2013, for example, the enacted forest area only reached 615,695 hectares, but it increased drastically in 2014 when 77 Mha of forest areas were enacted. By the end of 2019, 88 Mha of forest had been gazetted.

Several factors explain this success. In addition to the Constitutional Court's decisions, the Corruption Eradication Commission (KPK) and the demand of civil society groups were other contributing factors. In 2013, the KPK was authorised to supervise the Ministry of Environment

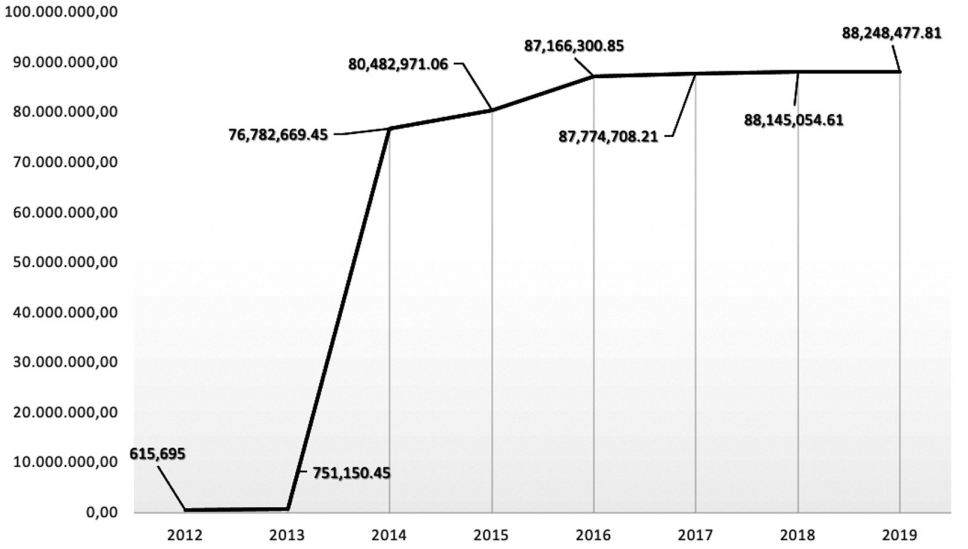


Figure 6.1 The progress of forest gazettement in Indonesia (in hectares). Source: Ministry of Environment and Forestry, 2013, 2020

and Forestry. One of the activities was to accelerate the gazettement of forest areas (see Figure 6.1). Some forestry corruption occurs when forest areas' boundaries are still unclear, leading local governments to issue plantation and mining permits for these areas. Two years earlier, in 2011, a civil society coalition for forest tenure reform had proposed the same agenda. The coalition found many communities' claims could not be settled because the forest areas had not been gazetted (Koalisi Tenure, 2011).

A proper forest gazettement procedure is key to the reduction of forest tenure conflicts. However, the Social Forestry programme can be another way to reach this objective, in addition to its other roles in livelihood and conservation purposes. The next section presents the typology of local communities living in and around forest areas.

Non-Indigenous communities in Indonesian forest areas

In 2019, the Indonesian Government released data on 25,863 forest villages: they consisted of more than 9.2 million households, of which about 1.7 million were low-income families (Media Indonesia, 2019). The forest villages are inhabited by Indigenous Peoples and migrants. The ethnic diversity of forest villages, especially those outside the islands of Java, Madura, and Bali, cannot be separated from migration history. This section discusses how policies affect the existence of non-Indigenous forest communities, especially those outside Java Island.

Forest utilisation by non-Indigenous communities during the colonial era (1901–1941)

During the period of Dutch colonial rule, the colonisation programme had the greatest influence on the resettlement of populations in forests outside Java. This programme, which was launched in 1901, was part of the Ethical Policy (*Ethische Politiek*) of the Dutch East Indies

Government and was implemented through irrigation development in Java, education for the natives, and migration policy.

The population explosion and acute poverty in Java made the Colonial Government introduce a resettlement programme for the Javanese to other islands. A migration program to Sumatra, called *Kolonisatie*, was carried out from 1905 to the 1940s. Lampung, a place located at the southern tip of Sumatra Island, was its first destination.

In 1905, the *Kolonisatie* sent 155 families to Lampung. By 1911, 4,818 families had been dispatched. The colonial Government provided full subsidies, including residential and agricultural land and daily allowances. In 1911, the subsidy policy was revised. The programme was then carried out by co-operating with the People's Credit Bank, where the Javanese covered their migration costs by a loan provided by the bank. This policy was unsuccessful and only able to operate until 1927 because many migrants did not repay their loans.

From 1932 to 1941, the *Kolonisatie* was revisited again by applying the principle of co-operation. The Javanese who had succeeded in Sumatra, especially in Lampung, were encouraged to accept other Javanese to work with them for agricultural production. A system called *Bawon*, which was usually practiced in Javanese villages, then was adopted in colonised areas. Using the *Bawon* method, the *Kolonisatie* became attractive for the labour recipients and Javanese who wanted to migrate to Sumatra. For the Javanese settled in Sumatra, the arrival of their siblings provided agricultural help. Meanwhile, for people in Java, migration to Sumatra meant job opportunities. In the 1930s, the global economic depression also affected Java, especially in the plantation sector, causing many people to lose their jobs as plantation workers. Therefore, trying their luck in Sumatra was an option to survive (Levang, 2003). Because of this situation, the colonisation programme from 1930 to 1941 recorded notable results by moving 90,000 Javanese to Lampung or approximately 25 per cent of Lampung's total population at that time (Kingston, 1987).

In addition to the colonisation programme, plantations were also another pull factor for Javanese migration to Sumatra. The establishment of plantations in this island began around the 1860s, and rubber and coffee were dominant. Plantation companies had more robust land rights after the Colonial Government issued the Agrarian Law of 1870, which provided them with more incentives to run their business. When the Japanese occupation began in 1942, Sumatra's plantations were estimated to cover 1,000, 000 hectares (Li, 2017).

Initially, the plantations sought to recruit workers through voluntary contracts. The workers were generally Chinese, and a few Javanese. Companies were reluctant to hire Indigenous People, who were judged lazy and difficult to control. Meanwhile, for Indigenous People who asserted rights as landowners, working for the company was deemed as subjugation. This situation led the plantations to mobilise workers from Java by employing labour recruiters in the villages of Java (Pelzer, 1945; Kingston, 1987).

The colonisation scheme and the plantation economy brought about significant changes in the ethnic composition of Sumatran forest villages. The Javanese who were brought in by these two development projects settled around the forest. They were part of the history of converting natural forests into agricultural land, settlements, and plantations outside Java.

Migration, deforestation, and conflicts in the post-colonial era

The migration of people from Java to Sumatra continued after independence. This program was carried out on a massive scale by Soeharto's administration from 1969 to 1999. The 1980s–1990s were a crucial time for transmigration to forested lands. During this period, large-scale displacement of people from Java took place and certainly had an impact on the change

of forest cover in Sumatra. The transmigration program converted forests into agricultural land and settlements.

Transmigration was executed by the Government and forest plantation companies. The Government allowed them to bring in workers from Java. The labour shortages in the resource extractive industry were also answered through migration policy. For Sumatra, this process started in colonial times. The national Government expanded it to reach other islands such as Kalimantan, Sulawesi, and Papua.

While the migration resolved labour issues for plantations to some extent, it also caused conflicts between Javanese migrants and Indigenous Peoples. In addition, Indigenous Peoples were protesting the government's ongoing gazetting of customary lands as State Forest (Bräuchler, 2017; McGibbon & Alagappa, 2004). Conflicts between the migrants and the Government sometimes occurred when the agricultural land obtained from government projects in the past was designated as forest areas. This occurred in cases where land had been previously granted by the plantation owners to the community, but before the legalisation of the land rights could be completed, that land was designated as a forest area.

Tenurial conflicts in forest areas also occur when the Government changes a forest area's categorisation from production forest to protection or conservation forest. As discussed in the previous section, altering this categorisation is one of the strategies taken to reverse forest damage caused by excessive exploitation in the production forest. On the environmental side, this might be a solution. But it is not always the case in social matters.

The conflicts described here involve sponsored migrants, whether they come based on government projects or are employed by plantation or forestry companies. The second type of conflict involves groups of voluntary migrants from ex-colonisation or ex-transmigration places. There are many stories of the failure to achieve a decent living. As a result, some of them look for new land. For example, in Lampung, people moved from one place to another, sometimes crossing provincial borders. So, one can find a Javanese who became a transmigrant in Lampung but is now on the edge of a South Sumatra forest area.

The in-migration phenomenon relates to deforestation too. Based on data collected from 2000 to 2010, Darmawan et al. proved a positive link between in-migration and deforestation. Interestingly, this also occurs in protection and conservation areas, which legally are areas with limited access. Encroachment of the protection and conservation forests has been found in many places, due to the effects of this in-migration (Darmawan, Klasen, & Nuryartono, 2016).

In summary, we finally see that poverty and land shortage in Java transferred social and environmental problems to other islands. Colonisation that had metamorphosed into transmigration is a clear example of how this works. In all forms, the migration policy places pressure on forests and triggers tenure conflicts. One way the Government of Indonesia has responded is to provide the people with access to use State Forests.

The evolution of the Social Forestry policy

As reviewed in some literature, various concepts of Social Forestry describe it as a forest management paradigm that is different from the scientific or professional forestry paradigm. Social Forestry places the community and local culture as an inherent part of forest management. The community is neither outside the arena nor viewed as a disturbance to forest management. Besides the State and the private sector, communities also play an essential role in forest management, including in decision making. For some experts, Social Forestry is driving devolution in forest management. The State transfers power over forests to the community as a whole, through recognition of resource rights and community authority to manage and make deci-

sions concerning their forests (Cronkleton, Pulhin, & Saigal, 2012; Fisher R., n.d; McDermott & Schreckenberg, 2009).

There has been a long journey in the transformation of Social Forestry policy in Indonesia. It began with the mobilisation of workers for forest security and rehabilitation, and moved into the delegation of power over a broader forest area. This following sub-section discusses how Social Forestry has evolved.

Change and continuity of the Social Forestry paradigm, from colonial to post-colonial times

Social Forestry is the most dynamic forestry policy in Indonesia, the one that has changed the most, and has received much attention from Civil Society Organisations (CSO). It has been running for a long time, with several trials and much pressure on CSOs for change.

The *taungya* system's adoption by colonial forestry authorities in Java was the first Social Forestry project in Indonesia.[3] Through this system, villagers around the teak forest area were allowed to plant the understory with food crops. Post-colonial Social Forestry projects were done with great care. A State Forestry Corporation called *Perhutani* conducted a Social Forestry pilot project in Java in 1973. The approach taken tried to accommodate the community's need for land and the company's interest in forest protection. Illegal logging and land-grabbing cases prevented this State company from controlling the forest. As for the community, the logging and land acquisition were part of their resistance because of their increasingly limited access to that forest land.

The 8th World Forestry Congress, held in Jakarta in 1978 with the theme 'Forest for People', was another milestone that spurred a review of state-driven forest management. In Java, as noted earlier, that control was exerted through *Perhutani*, a State Forestry Corporation that managed the production and protection forests. In Indonesia's other islands, that control was exerted by the private sector. In 1984, the Ministry of Forestry, with the support of several universities and the Ford Foundation, a philanthropic organisation, implemented a social forestry programme through several trials in 13 locations in Java (Sylva Indonesia, 1988). This programme extended into the 1990s, for example, in a pilot project carried out in West Kalimantan with funding support from GTZ, the German Agency for Technical Cooperation.

Until 1995, Social Forestry was implemented through pilot projects. In that year, the Minister of Forestry issued the first formal policy on Social Forestry in a Decree on Community Forestry. The Decree categorised the community as forest growers rather than government partners in managing State Forests. The only permitted areas for the practice of community forestry were protected forest that had been degraded and required rehabilitation. Communities could only be involved if they signed an agreement with the Provincial Forestry Service. Furthermore, the Government placed restrictions on the species of trees planted. Participants were required to plant and maintain forests, delineate boundaries, prevent forest fires, and pay fees to the Government (Safitri, 2010). In addition, the Ministry recognised the agroforestry practices of the Krui people, an Indigenous People in West Lampung in 1998 (Siscawati et al., 2017).

Policy changes were confirmed in 1998 and then continued in 1999 when the new Forestry Law Number 41 of 1999 replaced the old Law enacted in 1967, which had promoted forest extraction by foreign and domestic capital and denied peoples' rights, including the inherent rights of Indigenous Peoples. The 1967 Law had defined all forest areas as State Forests.

The 1999 Forestry Law divides forest land tenure into two categories – State and private forests. The State Forests (*hutan negara*) are forests on land that is not encumbered by land rights, while the private forests (*hutan hak*) are forests on land with land titles. At first, the customary forest (*hutan adat*) was included in the State Forest. Only in 2013, after a long struggle, including judicial activism, did change occur. In 2013, the Indonesian Constitutional Court declared that customary forests were no longer part of the State Forest and were to be categorised as private forest. Within the category of private forest, there are both communal and individual land titles.

The scope of Social Forestry also expanded when the 1999 Forestry Law was enacted. As mentioned earlier, social forestry includes village forests, community forests, community plantations, and partnership in forest management between forestry companies and the people in the State Forests. An explanation for each form of Social Forestry is described here.

New policy under President Joko Widodo

As stated in the Introduction, Social Forestry is a priority program under the leadership of President Joko Widodo. In the first term of his administration (2014–2019), the Indonesian National Medium-Term Development Plan (RPJMN) set a target of 12.7 Mha to be granted under Social Forestry licences. This target is very high, considering that until 2014, the legal rights of all communities in forest areas reached only 455,000 hectares or 0.4 per cent of the national forest area. In comparison, forestry concessions granted to companies up to 2020 cover 34.18 Mha.[4] The extent to which allocations under Social Forestry correspond to the communities' claims on State Forests cannot be quickly answered. There are no official data on the size of forest areas that overlap with the communities' claims. Although there is data on the number of villages situated in and around forest areas, data on village territories within the various categorisations of forest areas are not yet available.[5]

Attempts to advance the range of Social Forestry have been promoted by Indonesian CSOs since 1999. A counter document to the Government's Forestry Bill was published by the Community Forestry Coordination Forum. It set out the need to clarify forest tenure into individually owned forests, customary forests and public forests (FKKM, 1999). More explicitly, another Indonesian CSO Coalition in 2014 proposed that forest areas managed by people must be 40 Mha in extent (Galudra, Bram, Nagara, & Muharrom, 2014). In addition to this, a government document – the National Access to Justice Strategy – also mentions an adequate allocation of 30 per cent of forest areas for community empowerment. This percentage is equivalent to 40 Mha of forest area (Bappenas, 2016).

The initial draft of the 2015–2019 RPJMN document included 40 Mha forest area for Social Forestry, but then this figure was reduced to 12.7 Mha. The reason was to ensure that Social Forestry would be implemented in forest areas that were entirely free of private concessions.

As mentioned earlier, the new Social Forestry programme tries to make local communities and Indigenous Peoples the main actors in forest management. The aim is to improve welfare, protect the environment, and solve conflicts. The Social Forestry programme is carried out inside and outside State Forests. In the State Forests, it is implemented through village forest (*hutan desa*), community forest (*hutan kemasyaratan*), community plantation forest (*hutan tanaman rakyat*), and partnerships between community and forestry companies (*kemitraan*). Outside State Forests, Social Forestry includes communal titles for customary forests of Indigenous Peoples.

Table 6.1 Implementation of Social Forestry Program in hectares

Year	*Areas granted Social Forestry permits*	*Impacted Households*	*Number of Permits*
2007–2014	456,266	109,048	3,215
2015	96,413	26,832	125
2016	162,168	37,775	189
2017	524,292	157,405	505
2018	1,227,611	298,604	1,293
2019	1,582,073	239,951	1,079
2020	385,796	58,178	359
2021	298,961	106,503	463
Total	**4,733,580**	**1,034,296**	**7,228**

Source: DG of Social Forestry MoEF, 2021.

Village forests (*hutan desa*) are located on State Forests and managed by village institutions. Community forests (*hutan kemasyaratan*) are in State Forest areas utilised by forest user groups from the same village or several villages. Community Plantation Forests (*hutan tanaman rakyat*) are permits granted to individuals or co-operatives to plant and harvest timber in production forests.

All Social Forestry licenses are valid for 35 years but are extendable. During that time, an evaluation is conducted every 5 years, resulting in a decision as to whether the permit can be extended or not.

The issuance of Social Forestry permits is based on a map called PIAPS (Indicative Map of Social Forestry Allocation), which is provided by the Ministry of Environment and Forestry and reviewed every 6 months. The Social Forestry target area of 12.7 Mha is listed in the PIAPS map. However, this map is not the only information used to determine whether local communities qualify for legal access. Under certain conditions, including attempts to resolve tenurial conflicts, the Social Forestry proposal can be processed even though the location is not yet included in the PIAPS.

By 2014, only around 400,000 ha of the Social Forestry permits had been enacted (Table 6.1). However, from 2015 to September 2021, there was significant progress in the implementation of the Social Forestry programme when an additional 4.3 Mha of forest areas were granted permits.

Various factors have contributed to the difficulties in reaching the target of 12.7 Mha. The absence of data on communities and the forest land they claimed versus the forest land verifiably utilised is one of the problems. Therefore, the Government must verify every incoming application. A field verification to ensure that the area requested is free from other parties' claims is a critical issue that must be checked. Besides, the requesting community groups also need to be verified. In several cases, these groups were proven to be ones that were deliberately created by land grabbers who were free-riders in the application for Social Forestry permits. Information regarding Social Forestry licensing also does not always reach the communities properly.[6]

How Social Forestry can eliminate forest tenure conflicts

In addition to improving livelihoods and responsibly managing forests, the Social Forestry programme is also aimed at resolving conflicts. This section describes some challenges to achieving that objective.

Understanding tenurial conflicts involving non-Indigenous groups in forest areas must consider their settlement's history. Some people have lived for generations in the forest villages, while others came later. As such, migration factors are essential in the formation of a community's land claims within Indonesia's forest areas. The problem of conflict cannot also be separated from the basis of the claims held by the community.

For non-Indigenous groups, there are several forms of forestry claims. The first are claims made by those groups who inhabited and used the land before 'forest areas' were established. This group of claimants was granted their land rights by local authorities and sometimes by plantation companies, or by the Colonial Government as part of the Colonization program. The second are claims made by groups that arrived after the legal designation of 'forest area'. Some of them cleared new forest lands or bought land from people who had previously settled there. The third are claims made by groups that clear a forest area as part of illegal transactions. The land grabbers come from various places and are usually mobilised to clear forests. In Sumatra, from 1998 to the 2000s, such cases were rampant following the collapse of the New Order regime.

Due to the varied settlements' histories, the Government faces difficulty in identifying authentic forest user groups. Those currently residing in forest areas are not always those with the strongest land claims. Other groups can emerge by providing seemingly more valid claims of land tenure. The disorderly land administration in the past contributed to this confusion. Land rights often do not guarantee tenure security due to overlapping granting of rights by different levels of government. Another factor is that forest areas, especially outside Java, are mostly *de facto*, open access areas. In this situation, land transactions and the issuance of semi-legal rights are effected by various authorities (Fitzpatrick, 2006).

When the facts show such complexity, it is necessary to decide on another way to recognise the most appropriate land claimants. A Government Regulation on Land Registration (Regulation 24 of 1997) states that those who control the land for 20 consecutive years, in good faith and without objection from the surrounding communities, are included among eligible claimants. In practice, even this is not an easy policy to implement.

Significant changes in the Ministry of Environment and Forestry's policies for handling tenurial conflicts have taken place since 2011, especially since the holding of an International Conference on Forest Tenure, Governance, and Enterprise. At that time, the Ministry was willing to discuss tenure issues inclusively. After that conference, intensive talks between the Ministry of Forestry and the CSO Coalition took place. The tenure reform proposal initiated by the Coalition became a critical stepping stone in the negotiations. Following the conference, several policies were issued, and the Ministry was equipped with a unit to handle tenurial conflicts. The Ministry of Environment and Forestry reported that during 2015–2019 their conflict handling unit received 257 tenure conflict cases found on 3.7 Mha of forest areas. Of these, 42 cases have been resolved, mostly through mediation (DG of Social Forestry, 2020).

Social Forestry is not the only instrument for resolving tenurial conflicts. The policy for resolving forest tenure conflicts is set out in Presidential Regulation Number 88 of 2017 concerning Settlement of Land Tenure in Forest Areas. This regulation provides for the resolution of tenurial conflicts in several ways, as detailed in Table 6.2.

Table 6.2 shows that Social Forestry is mainly used to resolve conflicts related to arable land. Presidential Regulation 88 of 2017 prescribes other conflict resolution mechanisms such as resettlement, land exchange, or release of land claimed from forest areas. Whether Social Forestry can solve the problem of arable land will also depend on several factors.

Table 6.2 Forest tenure conflict settlement

Settlement method	*Forest land utilisation*
Resettlement	All land utilisation in conservation areas.
	Housing, public facilities, social facilities within the production forest in the province with an area of forest equal to less than 30 per cent
	Housing, public facilities, social facilities within the protected forest and land meet the criteria maintained as protected forests
Social Forestry	Arable land (*lahan garapan*) in protection and production forests situated in the province having less than 30 per cent of forest
	Arable land utilized for less than 20 consecutive years in protection and production forests in provinces with a forest area of more than 30 per cent
Land forest exchange (*tukar-menukar kawasan hutan*)	Housing, public facilities, social facilities within the production forest in the province with an area of forest equal to less than 30 per cent
	Housing, public facilities, social facilities within the protected forest in the province with less than 30 per cent of forest area and land do not meet the criteria maintained as protected forests
Release from forest areas	Land owned or utilized by the communities before the designation of forest areas
	Housing, public facilities, social facilities within the protected area in the province with over 30 per cent of forest area and land that does not meet the criteria maintained as protected forests
	Housing, public facilities, social facilities within the production forest in the province with an area of more than 30 per cent forest.
	Arable land used for more than 20 consecutive years in protection and production forest in provinces with a forest area of more than 30 per cent

Source: Presidential Regulation 88/2017.

First, the Government must have accurate data on the number and area of cultivated land in the protection and production forests. The data referred to includes the extent, forms of use, and ownership, whether legal, semi-legal, or traditionally recognised. Secondly, data must also be obtained regarding the parties entitled to the cultivated land. One of the conditions in Presidential Regulation 88 is that arable land that has been under the control of a community for less than 20 years can proceed to a Social Forestry permit. Meanwhile, as discussed in the previous section, in 1999, there was extensive forest occupation, especially in Sumatra. The overlapping claims of forest lands until 1999 had not been completely resolved. The massive occupation of forest lands during the reform period has added to the complexity of overlapping land tenure. Nevertheless, finding out who has the most valid rights to utilise the land must still be done. In order to break the chain of this problem, the most likely legal provisions are in the Government Regulation 24 of 1997 concerning Land Registration, whereby land ownership for 20 consecutive years in good faith is the basis of recognition.

As noted here, the Government of Indonesia needs to invest more in improving data on populations and land tenure as many of the problems stem from these two things. The village

territories need to be mapped extensively because many villages do not have a map of the area in question. The map of forest areas should also detail various land uses in it, including community cultivated lands. A trusted independent team to lead this programme seems a necessity.

Another important aspect is ensuring that the new Social Forestry licenses do not cause new conflicts. Several caveats have been laid out by some studies (e.g., Fisher et al., 2018). The question of the accuracy of the applicant's data and the map of the forest land being requested are integral parts of conflict mitigation. This is not an easy task considering the burden of past policy mistakes in terms of land, migration, plantations, and forestry itself.

Conclusions

Even though Social Forestry programmes have been introduced in Indonesia since colonial times, there have been major changes in the 2015–2021 period. First is the President's high level political commitment to make Social Forestry a national development priority. Second, the government issued a series of policies with clear targets to be used as part of the evaluation of the forest bureaucracy's performance. Third, the support of Civil Society Groups to accelerate the achievement of the Social Forestry target was accepted.

Social Forestry aims to answer questions on livelihoods, forest conservation, and the resolution of forest tenurial conflicts. In terms of resolving conflicts, which is the focus of this chapter, we conclude that the problem is rooted in establishing forest areas in the past, beginning in the colonial period, that were inadequate in their process and outcome. Only recently have there been systematic attempts to fix this problem.

Conflict resolution involving non-Indigenous peoples is as complex as the issue of Indigenous land claims. Overlapping claims occur in forest lands used by non-Indigenous migrants. Part of this is due to past migration and plantation policies, including those from the colonial period. Meanwhile, political riots following the fall of the successive governing regimes have made land occupation in the forest uncontrollable. Some of Indonesia's forest areas are *de facto* open access areas where the existence of free riders further complicates the conflicts.

Amidst this situation, Social Forestry must provide answers to conflict resolution. Because the settlement of tenurial conflicts is closely related to land, population, and resources, accurate data will be the key element here. Whether and how data and maps regarding land tenure, resource potential, and population can be provided, and whether and how forestry maps, land tenure maps, and village territory maps are consistent will determine the Social Forestry programme's ability to contribute to conflict resolution. In addition to these, the Indonesian Government still has to continue synchronising policies on the issues of land administration, forestry, and demographic and spatial data.

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Appendix: Glossary

Forestry legal term in Bahasa Indonesia	*English*	*Definition*
Hutan	Forest	An integral unit of ecosystem in the form of lands containing biological resources, dominated by trees in their natural environment
Hutan adat	Customary forest	Forests located in an area of a customary law-based community (indigenous peoples)
Hutan hak	Title forest	A forest located on land bearing private land rights
Hutan lindung	Protection forest	A forest area having the main function as life- supporting systems preservation for managing water resources, preventing floods, controlling erosion, preventing sea water intrusion, and maintaining soil fertility
Hutan negara	State forest	A forest located on land bearing no land title
Hutan produksi	Production forest	A forest area having the main function of producing forest products
Kawasan hutan	Forest area	A certain area which is enacted by the government to be preserved as permanent forest
Kawasan konservasi	Conservation area	A forest area having the main function of preserving the diversity of flora and fauna as well as their ecosystems
Penataan batas kawasan hutan	Forest area delineation	An activity that includes forest boundary projection, setting of boundary stakes, public announcements, inventory, settlement of third-party land claims, installation of forest boundary markers, mapping, and making official reports on the forest boundary demarcation
Penetapan kawasan hutan	Forest area enactment	An affirmation of legal certainty regarding the status, boundaries, and area of a forest area to become a permanent forest area
Pengukuhan kawasan hutan	Forest area gazettement	A series of activities for designating forest areas, making forest boundaries, mapping, and enacting forest areas with the aim of providing legal certainty on the status, location, boundaries, and land size of the forest areas
Penunjukan kawasan hutan	Forest area designation	An initial determination for designing a certain area as a forest area

Notes

1 Article 1.2 of Forestry Law Number 41 of 1999.
2 Article 1.3 of Forestry Law Number 41 of 1999 after the Constitutional Court Ruling 45/2011.
3 *Taungya* is a forest management system introduced by British forestry authorities to Western forestry literature in the 19th century based on their experience in Burma. In this system, forest land is planted with mixed crops where trees and food crops share the same plot (Menzies, 1988).
4 http://phpl.menlhk.go.id, retrieved 27 August 2020.
5 Even though official data on the intersection of village territories and forest areas is absent, data on customary land in forest areas have been collected by Indonesian NGOs. The Customary Territory Registration Agency (BRWA), an organisation that manages the mapping of customary land, estimates that the Indigenous territories that overlap with forest areas cover around 6.4 million hectares. Of that

area, 1.9 million hectares have been burdened with forestry permits. As of August 2020, BRWA has verified around 11 million hectares of the customary land map (BRWA, 2020).

6 Based on an MoEF official's statement who is in charge of Social Forestry permits, https://news.trubus.id/baca/32641/terdapat-penunggang-gelap-klhk-ungkap-permasalahan-perhutanan-sosial-tersendat, retrieved 27 August 2020.

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7

COMMERCIAL TIMBER PLANTATIONS AS A MEANS TO LAND AND ECONOMIC RESTITUTION IN SOUTH AFRICA

Ratsodo Phillip Tshidzumba, Jeanette Clarke, and Paxie W. Chirwa

Introduction

Although South Africa is a middle-income country with abundant natural resources and a well-developed economy, an estimated 30.4 million people (55.5 per cent of the population) live below the poverty line (Africa Check, 2018). South Africa continues to be one of the most unequal societies in the world, with a Gini Co-efficient (0.625) second only to that of Lesotho (World Population Review, 2020). More than 25 years since the dawn of democracy in 1994, the promise of a 'better life for all' remains an elusive goal. Unemployment levels reached 30 per cent in the first quarter of 2020, and this figure is expected to soar to 35 per cent in 2021 because of the impact of the coronavirus pandemic on the national economy (Naidoo & Vanek, 2020). Poverty and unemployment rates in rural areas are even higher than the national average and are increasing, with unemployment exceeding 47 per cent in 2017 (Davies, 2012; Development Policy Research Unit, 2018).

In 1994 the democratic government inherited a country strongly divided along racial lines, a long history of land alienation and dispossession, and an economy that effectively excluded Black People other than as labourers (Kloopers & Pienaar, 2014). In this chapter, *Black People* means descendants of people of African origin who inhabited what is now South Africa before contact with European settlers. *White People* means people descended from immigrants who entered South Africa directly from Europe or indirectly through the other African States.

The Natives Land Act No. 27 of 1913 limited African land ownership to 7 per cent of the area of the country, and restricted Black People from buying or occupying land in areas allocated for White occupation only. Following the Act, Black families were forcibly dispossessed of their land and relocated into designated 'homelands' under the rule of Traditional Authorities.[1] The Native Trust and Land Act of 1936 increased the area for the Black occupation to 13 per cent.

When the Apartheid government came to power in 1948, colonial policies of racial segregation were strengthened and further enforced. Under the system of *apartheid*, the population was segregated into racial groups, with each group forced to live in separate areas and use separate facilities. Black South Africans were confined to nominally independent homeland states and had to obtain permits to live and work in South Africa. A period of mass evictions and forced

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removals in both urban and rural areas followed. Millions of non-White South Africans were dispossessed of their properties and forced to relocate into areas designated for their race group.

In 1994, the new government embarked on an ambitious programme to redress the wrongs of the past and build a functioning democracy.[2] A far-reaching process of policy and legislative reforms was initiated aimed at economic empowerment and justice for the previously disadvantaged Black majority. The new government put in place a land reform programme to address the colonial and apartheid legacy of land dispossession, and measures to promote Black economic empowerment and inclusion in the formal economy. A central component of the land reform programme is land restitution: giving people and communities who had been dispossessed of their land as a result of racially discriminatory laws the right to restoration of their property or fair compensation.

Forestry policy and law were also comprehensively revised post 1994,[3] with an emphasis on economic inclusion, sustainable rural livelihoods, and rural employment creation. These and other measures opened up opportunities for community forestry and for greater inclusion of Black South Africans in the forestry sector.

This chapter proceeds as follows. The introduction provides context and background information on the land tenure systems, the land reform programme, and the forestry sector in South Africa. In the following section, the opportunities for community-based commercial forestry within communal lands and a case study from Mabandla in southern KwaZulu-Natal Province are highlighted. Then, an overview of land restitution models on commercial forestry land and a case study of the Amabomvini community's land restitution claim in the Kranskop area of central KwaZulu-Natal Province are presented. The discussion contains a comparative analysis and assessment of the performance of the community commercial forestry case studies, examining indicators of success and constraints. Lastly, a summary lists our conclusions and priorities for the way forward.

Context and background

Land tenure and land reform

The South African land tenure system and patterns of land ownership still reflect the historical legacy of land alienation during colonialism and apartheid. South Africa can be divided into four land tenure categories: privately owned agricultural land; land held in trust for the occupation of rural communities (communal land); State owned/public land; and urban areas (Table 7.1).

Section 25 of the South African Constitution makes provision for three components of land reform aimed at redressing Black landlessness and tenure insecurity arising from centuries of race-based legislation and policies:

1. Land redistribution to provide equitable access to land.
2. Tenure reform to upgrade informal and customary tenure rights into more secure forms of tenure.
3. Restitution of land lost through racially discriminatory laws and practices after the promulgation of the Natives Land Act of 1913.

The government's land reform programme remains of crucial importance to the community forestry initiatives reviewed in this chapter. At the time of writing (2021), the tenure reform programme has yet to deliver on its mandate of upgrading the tenure rights of communities and households occupying communal land. The process of settling land claims has also fallen behind

Table 7.1 Land distribution and tenure in South Africa

Tenure	*% land area*	*Overview*
Private agricultural land	67%	In 1994 all private agricultural land was in White ownership. Farms were also home to 3 million Black farm workers and tenants with insecure tenure rights. Approximately 10% of this land had been transferred into Black ownership by 2019 through land reform, as against the government target figure of 30%. Farm workers and tenants have been extensively displaced off farms since 1994.
Communal lands	15%	Mostly State-owned land held in trust for occupation by Black rural communities under customary form of land tenure. Includes the former 'homelands' and Nygonyma Trust land in KwaZulu-Natal. Constitutional provisions to upgrade informal tenure rights not yet realised.
Public property State property	10%	Protected areas, including State forests, SA National Defence Force (SANDF), public works, and other.
Other, including urban	8%	Nearly 60% of the total population reside in urban areas.

Sources: Republic of South Africa, 2019; South Africa High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change, 2017; Walker and Dubb, 2013.

target dates set by the government. Although an estimated 40 per cent of land held by private forestry companies and 70 per cent of State-owned plantations are subject to land claims made by dispossessed Black communities, only a fraction of these claims has been settled. Sector-specific statistics for the settlement of claims are not available, but it can be inferred from overall assessments of the land restitution programme and from forestry company reports that progress in settling these claims and transferring ownership to claimants has been slow (South Africa High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change, 2017).

Forestry in South Africa

Natural forests and woodlands are the terms defined in the National Forests Act of 1998 to refer to the naturally occurring tree cover of South Africa. Natural forests are groups of indigenous trees whose crowns are largely contiguous. Woodlands are naturally occurring trees whose crowns are not contiguous and cover more than 5 per cent of the area. Natural forests are confined mainly to the mountains and coastal areas of the eastern seaboard, covering 0.5 million hectares (Mha), or 0.4 per cent of the country. Although under threat from agricultural expansion, woodlands are more widespread than natural forests, covering around 30 Mha.[4]

Exotic timber species were first introduced in South Africa in the 1800s to provide an alternative to timber from limited stocks in natural forests (Britton, 2006; Owen & van der Zel, 2000). Afforestation was also a means to provide jobs for poor Whites in the pre- and post-war recession years in the 1930s and 1940s (Mabece, 2016). The distribution of natural forests and exotic timber plantations in South Africa is shown in Figure 7.1.

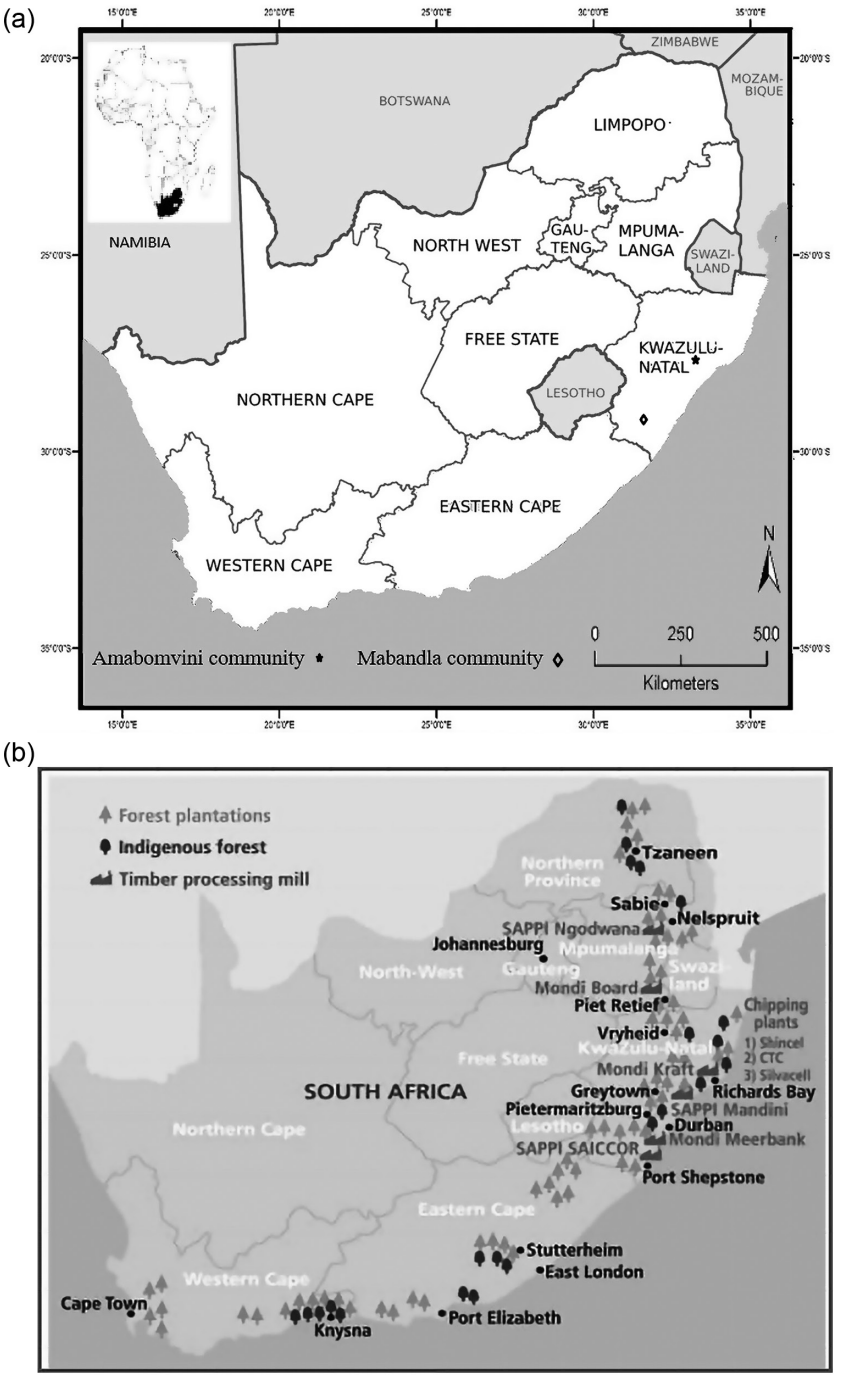


Figure 7.1 (a) Case study areas and (b) distribution of forest types in South Africa.

South Africa is a water-scarce country, and opportunities for plantation expansion are limited by water availability in catchments suitable for afforestation. The total area of timber plantations has declined slightly over the past 10 years, from around 1.35 Mha in 2000/01 to 1.22 Mha in 2015–2016, mainly as a result of improved environmental management practices (Forestry South Africa, 2016). Although commercial forestry plantations cover only 1 per cent of the land area of the country, South Africa has a well-developed and internationally competitive forestry industry. Collectively, forestry and forest products industries contribute an estimated US$4.6 billion (Rand 69 billion) to GDP, amounting to 18.7 per cent of manufacturing GDP and 2.3 per cent of national GDP (Department of Trade and Industry, 2018). Forestry and downstream industries provide an estimated quarter of a million direct jobs, many in less developed rural areas of the country where unemployment rates are highest (Clarke, 2018).

In 1994, ownership of timber plantations and downstream industry was concentrated in the hands of White-owned businesses and the State. A sector-wide transformation charter (known as the Forest Sector Code) was released in 2008 under the umbrella of the Broad-based Black Economic Empowerment (B-BBEE) Act[5]. The Forest Sector Code[6] makes provision for extending economic opportunities and benefits of forestry to previously disadvantaged Black groups. Together with the land reform programme and changes to forestry policy and law, forestry opportunities began to open up for previously disadvantaged Black South Africans. These opportunities can usefully be characterised across a tenure and forest type matrix (Table 7.2).

This chapter focuses on community forestry in the context of changing patterns of ownership and control of commercial forest plantations in South Africa, drawing on two contrasting case studies, shown in bold font in Table 7.2.

The case studies are drawn from two contexts: *communal land* and *privately-owned forestry plantation land acquired through settlement of land restitution claims*. These cases were selected on the basis of prior research and involvement by the authors and the useful insights they provide into

Table 7.2 Post 1994 community forestry opportunities by forest type and land tenure

	Forest type[a]		
Land Tenure	Natural Forest	Woodland	Plantations
State-owned	Participatory Forest Management	Co-management Land Restitution	Ownership restitution, lease fee
Private	Land restitution Controlled access Co-management	Land restitution Controlled access Co-management	Land restitution / Land purchase • Full ownership • Joint ventures • **Sale and leaseback**
Communal land	Community-based forest management	Community based natural resource management (CBNRM)	Timber outgrowers Small growers/ Co-operatives **Community-owned plantations and processing**

[a] *Natural forests and woodlands* refer to the naturally occurring tree cover of South Africa. Natural forests are groups of trees whose crowns are largely contiguous. Woodlands are naturally occurring trees whose crowns are not continuous. Plantations are a form of forest that comprises cultivated trees, mostly exotic timber species.

both the opportunities and limitations of existing community-based commercial forestry in the context of land reform, employment creation, and Black economic empowerment.

Community-owned timber plantations on communal land

Background

South Africa is a water-scarce country and timber plantation expansion is controlled through a licensing system. Licenses are issued on the basis of water availability. All but a minority of catchments suitable for afforestation in the country are now closed to further licence allocation. The only remaining catchments still open for afforestation licensing are in communal areas of the Eastern Cape and KwaZulu-Natal. Land suitable for timber plantations in the Eastern Cape is estimated at 100,000 ha, with an additional 40,000 ha of land suitable for afforestation in catchments in KwaZulu-Natal (Chamberlain, Essop, Hougaard, Malherbe, & Walker, 2005).

In the mid-1990s, the forestry corporation, Mondi, identified Umzimkhulu in Southern KwaZulu-Natal as an area with significant forestry potential. At the time, Mondi had a programme to support community plantations as a means to secure additional fibre for their paper mills. Community leaders were approached, and three areas were identified for the establishment of community-owned plantations. After Mondi withdrew their support from the programme, Mondi foresters Peter Nixon and Themba Radebe resigned and set up an independent forestry advisory service so that they could continue to support the three communities to establish plantation businesses. This service later formed the basis of a non-profit forestry support organisation, Umsonti.[7] The Mabandla community was one of the original three, and it has since become the most successful in that area, mainly because the area allocated for forestry was the largest and the community leaders are strongly supportive.

Case study: Mabandla community-owned timber and associated enterprises

Establishing the timber plantation and governance structures

Plantation establishment at Mabandla commenced in 2000, funded through a household grants' allocation acquired through the land reform programme. A total of 2,300 households contributed their household grants to the Trust fund. Additional loan finance was secured from the Land Bank (SA Forestry, 2012). Those who contributed became beneficiaries of the Mabandla Community Trust. A forestry company, with the Trust as 100 per cent shareholder, was formed to run and manage the forestry enterprise. The Umsonti team has provided the Mabandla Community Trust (MCT) with technical and managerial support since the project's inception. Umsonti also provides support to a number of other community-based forestry enterprises in the area.

The Mabandla plantation comprises 850 ha of *Eucalyptus* and 450 ha of *Pinus* species (Ballantyne & Nixon, 2015). Harvesting of the first eucalyptus compartments began in 2008 (Ballantyne & Nixon, 2015). Now in full rotation, around 90 hectares of timber are harvested per year. The eucalyptus timber is sold to local pulp and pole markets, and pine timber is processed by the Mabandla sawmill (SA Forestry, 2016). Income generated from timber sales is used to run the plantations. Profits after costs are paid to the Community Trust in the form of dividends. The annual turnover of the forestry business is in excess of US$743,800 (R13 million), and it provides 120 full-time jobs (J. Ballantyne, personal communication 5 August 2020).

Re-investment of profits in additional businesses and capacity building

The plantation alone generates insufficient income and jobs to benefit all 2,300 beneficiary households of the Community Trust. For this reason, Trustees made a decision to re-invest all profits from timber sales in establishing other businesses, with the aim of providing more jobs and additional income streams for the community (Baleni, 2016). To date, the Trust, with support from their partners, has established a sawmill, a livestock business, an eco-tourism and conservation programme, and a training academy (SA Forestry, 2016). Several other local businesses are in the planning stage, including a plant to treat eucalyptus poles with chemical preservatives and a large agro-processing business. The training academy provides a range of short courses and youth learnerships aimed at employees of the various businesses, the Trustees, and the local community, including school leavers. The academy is also registered as an external training provider and generates additional income for the Trust (SA Forestry, 2019).

Timber production as a catalyst for local economic development

Timber production at Mabandla is serving as a catalyst for local development, providing a source of development finance as well as building institutional and governance capacity in the form of commercial business entities and community governance institutions. Revenue and employment are set to grow significantly with the expansion of the existing businesses and with new enterprises coming on stream. The agro-processing venture alone is expected to generate 453 jobs and an annual profit of US$322,278 (R 5.6 million) (Baleni, 2016).

Restitution of commercial forest plantation land

Background

The forestry and forest products industries make an important contribution to GDP and export earnings (Forestry South Africa, 2018). With an estimated 40 per cent of privately owned plantations and up to 70 per cent of State-owned plantations subject to land claims, the industry lobbied the government around the need for restitution models that would protect the timberland resource base and ensure a stable manufacturing sector (Makhathini, 2010).

The forestry industry in consultation with the government developed models for the restitution of plantation land in 2008 (Godsmark, 2008). The first claims to be settled on forestry land were on the basis of the sale and leaseback (SLB) model (Muller, 2011). Under this model, the government buys the land back from the current owner at market price and transfers ownership to the claimant community; the forestry corporation then leases back the land from the community (Makhathini, 2010). Community benefits include the annual lease fees, a stumpage fee paid against harvested timber, and a range of 'empowerment benefits' including a youth bursary scheme, assistance in setting up a Community Trust, forestry contract opportunities, and assistance in forming and running contracting businesses (Makhathini, 2010).

The SLB model was touted by the industry as a 'win–win' solution with claimants regaining their land rights and being assured of a regular annual income from the land rental and stumpage fees, and forestry companies securing an ongoing supply of timber for their mills (Muller, 2011). The model was also hailed as a way to ensure the successful transfer of not only land but also economic opportunities and empowerment for beneficiary communities.

Case study: Amabomvini community land restitution

Claim settlement

The Amabomvini community in Kranskop, KwaZulu-Natal, lodged a land restitution claim for eight farms in the area, all then owned by a large international pulp and paper company (hereafter referred to as the forestry corporation). The claim was lodged prior to the cut-off date for lodging claims on 31 December 1998. The total extent of the Amabomvini claim was 2,265 ha, most of it under timber plantations and a smaller portion leased out for sugar cane production (Lima, 2007). This and the nearby Amahlongwa land restitution claims were the first to be settled on commercial forestry land using the sale and leaseback restitution model. Both claims were settled in 2008 (Muller, 2011). The Eyethu Community Trust (ECT) was set up as the legal land holding entity for the Amabomvini community.

Terms of the agreement and implementation overview

In terms of the settlement agreement, the forestry corporation retained ownership of the standing timber whilst ownership of the land reverted to the community. The forestry corporation then entered into a lease agreement with the ECT for a duration of two rotations (20 years, 10 years per rotation). In terms of the lease, the forestry corporation pays the Trust an annual rental fee for their land set at 7 per cent of the land value, as well as a stumpage fee of 2 per cent of the value of unprocessed harvested timber (Makhathini, 2010). In addition, the forestry corporation undertook to reserve forestry contracting opportunities on the land for the Amabomvini community and provide them with technical and business training support (Makhathini, 2010; Muller, 2011).

The Eyethu Community Trust registered a forestry contracting company. The company was contracted to manage all silvicultural operations on the farms with mentorship provided by the forestry corporation. The forestry corporation also undertook to provide two bursaries for youth from the community to undergo further education and training in forestry (Makhathini, 2010).

The forestry corporation established a dedicated support team to provide ongoing mentorship and training to the Amabomvini and other beneficiary communities in governance, business and technical aspects of forestry. The sale and leaseback model with ongoing mentorship, training, and support provided by the forestry corporation was hailed as a step forward for land restitution and a means of ensuring success and sustainability (Muller, 2011). Being one of the first claims settled on the basis of this innovative model, hopes for and expectations of the Amabomvini community restitution programme were high.

Community perception of benefits

Ten years after settlement, a study conducted into community perceptions of benefits received through restitution found extremely high levels of dissatisfaction amongst those interviewed as well as high levels of conflict within the community (Tshidzumba, 2019). The majority of respondents (57 per cent) expressed the view that equitable benefit-sharing among the beneficiaries had not been achieved (Tshidzumba, Chirwa, & Babalola, 2018a). This was attributed to the lack of benefits flowing from the model itself and to elite capture of these limited benefits. Concerns voiced by those interviewed included the following:

- Livelihood and income-generating opportunities provided for the community members to date had been very limited. The silviculture work allocated to the community contracting

company employed only 12 people. Plans to expand silviculture contracting teams and provide additional work in fire protection, harvesting, and haulage (SA Forestry, 2009) did not materialise. During focus-group discussions, the community beneficiaries indicated that the contracting company had gone into debt and had to be subsidised using the lease income paid to the Trust. In effect, the Community Trust was using the lease fee to subsidise the contracting operation (Tshidzumba, 2019). Concerns were also raised about the 2 per cent stumpage fee, which gives the community an insufficient share in the profits further along the timber value chain. The forestry corporation is a vertically integrated grower processor company that make its profits in downstream processing.

- Prior to the settlement, the Amabomvini community had expressed hopes for a diversified land use model alongside forestry operations, including livestock production, vegetable gardens, sugar cane production, and a sawmill (Lima, 2007). The forestry corporation pledged to provide support for a range of other businesses on the land (Makhathini, 2010), but none of these had materialised. The promised post-settlement support that should have been paid out by the government in 2009 after the settlement had only just been released in 2019, a decade later. Lack of finance further constrained development on the land.
- There was a lack of transparency and accountability in the disbursement of annual lease and stumpage fees paid to the Community Trust. The respondents associated the failure to achieve equitable benefit-sharing amongst the beneficiaries with a lack of transparency, trust, financial management skills, and clearly defined benefit-sharing mechanisms, as well as with excessive greed (corruption) on the part of the Trustees and those tasked with the management of the forestry contracting company, all with links to the Amabomvini Royal Family under the chieftainship of the Ngubane clan (Tshidzumba, 2019). Apart from a one-time household payment of US$275 (R 2,000) in 2011, the majority of community members reported that they had received no benefits from the income paid to the Trust since the inception of the lease agreement.
- The capture of benefits by a local elite linked to the Royal Family led to a high level of conflict within the community and a breakdown of trust between the leadership and community members. This conflict tragically resulted in a brutal murder as well as a case of arson. The house of the youngest wife of the Chief was burnt to the ground in retaliation for suspected involvement in embezzlement and in the murder of a whistleblower (Tshidzumba, 2019).
- Education and training benefits had also failed to meet expectations. Both bursary recipients dropped out before completing their degrees. This was later attributed to the poor standard of maths and science education in the local secondary schools (Makhathini, 2010).
- Community members also expressed dismay at the lack of consultation and involvement in decision making, both in the formulation of the sale and lease back model itself, and in planning and managing day to day operations on their land after the lease had been signed (Tshidzumba, 2019).

Discussion

Returning to the theme of this chapter, what do the case studies reveal about the role that commercial timber production can play in improving the lives of the rural poor in South Africa? What role can forestry play in sustainable and equitable land reform? New entrants starting up businesses in the highly competitive, globalised forestry value chain face considerable challenges. Community-owned enterprises face additional challenges over and above those faced by small and medium start-ups. Low levels of education and lack of exposure to the formal sector present

additional challenges for rural communities entering business. Lack of financial means is a further barrier to entry. The poor performance of land reform and rural development programmes has highlighted the need for much greater levels of external support and oversight. What can we learn from the case studies about the form this support should take? How can support be balanced with the need to reduce dependency and allow autonomy and empowerment? Lessons emerging from the case studies are discussed in relation to three interrelated criteria for effective support: a) increased livelihood opportunities and economic inclusion; b) good governance and accountability; and c) community involvement and empowerment.

(a) **Livelihood opportunities and economic inclusion**

i) *Maximising employment and profits from timber*

The extent to which local communities are able to secure the full value of timber on their land differs sharply between the two case studies. A key success factor at Mabandla is that the community, through their Trust, fully own the timber plantation. Plantations on the Amabomvini land, by contrast, still belong to the forestry company. Although the Eyethu Community Trust (Amabomvini) receives payment in the form of land rental and stumpage fees, this amounts to just over half (59 per cent) of the profits they could expect if they owned, managed, and harvested the timber themselves, with administrative and technical support costs included (Table 7.3)[8].

At Mabandla, grant finance from a government land reform programme covered the cost of plantation establishment and ensured that the community retained full ownership of the timber (SA Forestry, 2016). In the case of Amabomvini, government land reform finance was sufficient to purchase the land but not the timber on the land. Additionally, no mechanism was put in place for gradual buy-out, locking the community into an arrangement that is sub-optimal. If they were full owners, the community could potentially derive significant additional value from the existing gum pulpwood timber plantations on their land (Table 7.3).

Converting a portion of the timberlands to eucalyptus pole production and black wattle (*Acacia mearnsii*) could further increase the profits for the Amabomvini beneficiaries (Table 7.4). Kranskop is a prime wattle growing area with a bark processing facility in the vicinity,

Table 7.3 Actual and potential annual income from forestry plantation case studies – Eucalyptus only

	Mabandla	*Amabomvini*
Extent of plantation (hectares)	850 eucalyptus for pulp and poles	1,515 eucalyptus for pulp
Potential annual profit (after expenses) from timber sale	US$119,784 (R2,081,411)	US$ 58,256 (R1,012,283)
Income, rental and stumpage	N/A	Lease: US$26,660 (R450,000) (actual) Stumpage 2%: US$8,938 (R150,894) (est) Total: US$35,598 (R600,894)
Number of full time jobs in plantation	120	12
Number of beneficiary households	2,300	220

Table 7.4 Potential to increase annual earnings from full ownership and converting to more profitable timber species and products – Amabomvini

Species/product mix	*Potential profit US$ (Rand)*	*% increase over sale and leaseback model*
Total land area (ha)	2,265	
Plantation area (ha)	1,515	
Current – SLB model	US $35,598 (R600,894)	
Pulp wood only[a]	US$58,814 (R1,012,283)	68
Conversion to eucalypt species suitable for poles.[b] Sale volume estimate: 20% poles, 80% pulp (conservative ratio)	US$131,815 (R2,230,343)	271
Conversion 50% of area to wattle & 50% eucalypt species suitable for poles, same sale volume estimate as above	US$164,322 (R2,778,868)	362
Wattle 100% of area (*Acacia mearnsii*)	US$207,705 (R3,516,157)	485

[a] *Eucalyptus dunii (*grown for pulp wood only)
[b] *E. grandis, E. grandis x urophylla, E. grandis x nitens* clones.

and wattle timber alone is more profitable than low-value eucalypt pulpwood. When wattle bark sales are added, income potential increases further. The Mabandla plantation is more profitable mainly because the area is more suitable for timber production and the mean annual increment is higher. Despite this, the Amabomvini community could be earning considerably more than they currently do from a) securing full ownership of the timber on their land and b) converting to a more profitable timber species and product mix.

Employment is another important benefit for communities. At Mabandla, the forestry business provides 120 full-time jobs in silviculture, harvesting, and transport (SA Forestry, 2016). The only employment generated for the Amabomvini community to date is through a silviculture contract with the forestry corporation, providing 12 contract jobs. Additional contracting opportunities envisaged at the outset have not materialised (Makhathini, 2010; SA Forestry, 2009).

ii) *Investing in value addition and diversifying land use and production*

At Mabandla, a decision was taken early on to re-invest profits from the timber plantation in other businesses as a means to create more jobs and diversify and increase revenue streams (Ballantyne & Nixon, 2015). The sawmill will employ 24 people by Phase 2, with more expansions planned (SA Forestry, 2016). The income from the plantation has also been used to support a livestock improvement programme to increase income for cattle owners, a community-based ecotourism initiative, and more recently the establishment of the training academy (SA Forestry, 2019).

The Amabomvini community's aspirations for the development of the land have been frustrated by a lack of finance and lack of support from their private sector and government partners, as well as dysfunctional community governance. The leaseback agreement itself limits use of the land by the owners. Nearly 75 per cent of the land is under low-value pulpwood plantation and is under lease to the forestry corporation. On-site value addition

is not an available option as the timber belongs to the forestry corporation and is destined for their pulp mills.

(b) **Good governance and accountability**

The separation of civil and enterprise governance in community development contexts has been introduced as a means to manage potential abuses inherent in collective property and business ownership (Howard & Madlala, 2015; Ballantyne & Nixon, 2015). This model was followed in Mabandla. A Community Trust was set up for the purposes of collective ownership of land and financial assets, and separate companies were formed to run businesses, with the Trust as sole or majority shareholder. At Mabandla, mentorship and support are provided on an ongoing basis to ensure that trustees, employees, and directors all clearly understand and are able to fulfil their roles and legal responsibilities.

A similar structure was established during the settlement of the Amabomvini claim. The Eyethu Community Trust was established to represent the beneficiary households and enter into the settlement agreement on their behalf. The Trust later set up a forestry contracting company on behalf of the communities (Makhathini, 2010). The forestry corporation provided capacity building support to both the Trust and the contracting company. Although the forestry corporation also provided the Trust with administrative assistance and mentorship, including training in their legal responsibilities, they did not involve themselves in fiscal oversight or conflict resolution, considering this to be outside their mandate (Makhathini, 2010).

Government partners to the Amabomvini settlement agreement provided the Trust and the contracting business with little to no support and oversight. In terms of the settlement agreement, a partnership executive committee comprising representatives of the forestry corporation, government, and the Community Trust were to meet on a regular basis and provide overall guidance and oversight. However, the appointed government officials stopped attending these meetings early on, which led to the collapse of the structure, leaving a support and oversight vacuum. Lack of oversight and the resulting collapse of community trusts have been implicated in the widespread failure of land reform programmes countrywide (Gwanya, 2010; South Africa High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change, 2017). Lack of government support and oversight has been particularly problematic in models where community beneficiaries are left to confront and negotiate with a private sector partner on their own, despite limited negotiation capacity and power (Gwanya, 2010).

It is evident from the events and testimony from the Amabomvini community that local elites in control of the Trust and the contracting company abused their power and that there was misappropriation of funds (Chamberlain and Anseeuw, 2017; Tshidzumba, 2019). Individuals connected to traditional authority structures captured the benefits, although limited, that were intended for the wider community. During focus group discussions, community members raised concerns regarding misappropriation of funds, lack of financial accountability on behalf of the trust and the contracting business, and lack of equitable benefit sharing (Tshidzumba et al., 2018a). The collapse of the executive oversight committee left the community with limited opportunity for recourse.

(c) **Community involvement and empowerment**

The Amabomvini community restitution case highlights some key limitations with the sale and leaseback model (SLB) and with the implementation of the model. Although community workshops were held to discuss the SLB model and the clauses of the settlement agreement prior to the settlement of the claim, the main features had already been agreed to, behind the backs of forestry land claimants. The SLB model was developed by the for-

estry industry in consultation with the government to address strategic concerns around government financing of restitution on forestry land and the need to protect timber supplies for the forestry industry (Tshidzumba, Chirwa, & Babalola, 2018b). These concerns effectively eclipsed beneficiary rights to occupy and take charge of their restored property for a 20-year period. The lease agreement locks the beneficiary community into an arrangement that unfairly benefits the forestry corporation at their expense. Furthermore, despite the rhetoric around empowerment in the agreement, no mechanisms are in place to allow for a transition to a more profitable land-use model:

- Financial arrangements to enable the community to purchase the standing timber on their land are not in place.
- No plans have been made for a transition from low-value pulpwood (feedstock for corporate pulp mills) to a timber species mix optimised for employment creation and profits (see Table 7.4).
- Opportunities for on-site value addition and other types of production on the land, with the exception of the existing sugar cane plantations, have not been explored.

Likewise, capacity building measures included in the settlement agreement have been largely unsuccessful. Both students who received study bursaries dropped out. The forestry corporation withdrew from providing mentorship and training to the Community Trust and the contracting company in protest of the government's lack of ongoing involvement in joint governance structures and the poor performance and conflict within the Community Trust and contracting company. Ten years later, community members interviewed spoke out about the failure to bring about real empowerment and capacity building, keeping them dependent on the *status quo* and on receiving a rental for their land rather than moving towards managing it themselves. Instead of benefiting from the restitution of their land, the community remains locked into receiving minimal benefits from a low-value land use option, further confounded by elite capture and rising levels of intra-community conflict.

The Mabandla community is in a sense at the opposite extreme: rather than being abandoned by their development partners, external guidance and support still play a key role both in community governance and in running the business entities. Refresher training and troubleshooting support continue to be provided to the Community Trust. Qualified external professionals are placed in management positions of the new start-up businesses, along with a succession plan. It has become clear that ongoing external support is needed, especially as the range of enterprises continues to expand and requires specialist input and guidance. Ongoing assistance with conflict resolution within the Trust and the wider community has also been critically important.

Conclusions

South Africa faces urgent challenges of unemployment and poverty, and these problems are especially acute in rural areas. Commercial timber production has the potential to catalyse rural revitalisation in economically marginalised communal areas, as the Mabandla case study demonstrates. Innovative public–private partnership models developed by the government and the forestry industry in 2009 were hailed as a means to deliver sustainable land reform and beneficiary empowerment. It is evident from the Amabovini community case study and other examples cited in the literature, however, that the model has failed to live up to expectations and has not delivered benefits to the majority.

The contrasting Mabandla and Amabomvini case studies provide insight into the necessary conditions for successful community-owned commercial forestry enterprises. First and foremost

is the need to secure full ownership and control of both land and trees. In both contexts, access to finance is key to securing ownership and developing forestry and associated businesses. The ongoing support of committed, skilled, and capable advisors working in the best interests of the community is essential. Finally, community governance institutions and businesses need to be competent and to be held to account. The priority actions needed to address these key requirements are discussed here.

Securing land and tree tenure

Ownership is the basis for control and securing benefits from land and forestry resources. The Mabandla timber plantation was established with grant funding provided by the government, with a 20 per cent top-up loan provided by the Land Bank. The loan was fully paid off three years after the first harvest (Ballantyne and Nixon, 2015), giving the community full ownership and control over their plantation. Lack of land tenure security, however, remains a key concern on communal land. The government's failure to enact provisions for tenure upgrading in communal lands has left occupants without legally recognised tenure rights (South Africa High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change, 2017). Although development has taken place at Mabandla on the basis of *de facto* ownership, a lack of formal recognition of customary land rights presents obstacles to further development.

Although the Amabomvini land claim was settled, ownership and control over the land was encumbered by the lease agreement with the forestry corporation. Furthermore, the forestry corporation retained ownership of the timber. Without full ownership and control over the land and the timber resource, the community is unable to secure the full potential value of production on their land. As has been shown, current earnings from leasing the land amount to less than a quarter of profits that could be expected from owning the plantation and converting to more profitable timber species and products. Diversifying production on the land and investing in on-site timber processing could further increase livelihood opportunities for the community members.

Improved access to affordable development finance

At Mabandla, access to affordable finance was the key to full ownership and control of land and production. There is a need to review the sale and leaseback model, introducing mechanisms to enable the beneficiaries to acquire unencumbered ownership of both land and timber resources, if not from the start, then progressively over two full rotations to fit within the 20-year lease period. Improving access to grant finance and other financial mechanisms is a key requirement for community commercial forestry on both privately owned and communal land.

Ensuring access to independent professional advisory and support services

Government has a very poor record in providing post-settlement support to land restitution beneficiaries and extension services in communal lands (Nemaangani, 2011). Public–private partnerships (PPP) were hailed as a means to fill this gap and provide much needed expertise and mentorship to local communities. The sale and leaseback model is a form of PPP. As the Amabomvini community case study shows, the interests of the private sector partner may however be counter to those of the local community. Evidence from this case study suggests that the forestry corporation put their own financial interest above that of beneficiary communities (Tshidzumba et al., 2018a). Driven by financial considerations and accountability to sharehold-

ers, private sector partners may lack the expertise, desire, and mandate to provide sustained and independent support services to communities.

Contrast this with the highly successful support model at Mabandla, where the cost of independent professional advisory support services is included in business running costs. Through their businesses, the community indirectly employs their advisors. These advisors are capable and committed to working in the best interest of the community. It is quite possible to replicate this model in cases where sufficient affordable finance is available to cover costs until first harvest, as was done at Mabandla. Facilitating these and other options for the provision of effective advisory services is key to ensuring viable and community-owned commercial forestry businesses.

Ensuring effective oversight of Community Trusts and associated businesses

The failure by the government to provide effective support and oversight of Community Trusts is one of the main reasons for the dysfunction and failure of these structures countrywide (South Africa High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change, 2017). The Mabandla Community Trust is a rare example of good governance, with contributing factors being sound traditional authority leadership and the support of skilled and competent development partners.

Misappropriation of funds and escalating conflict within the Amabomvini community, on the other hand, are a direct result of the lack of support and oversight provided to the Community Trust and contracting business. The government's failure to play its prescribed role in the partnership executive committee set up in the terms of the settlement agreement caused this structure to collapse and left an oversight vacuum. As noted by the South Africa High Level Panel on the Assessment of Key Legislation and the Acceleration of Fundamental Change (2017), the government needs to put in place effective mechanisms to support Community Trusts and businesses, and ensure effective oversight of these structures.

Notes

1 https://www.sahistory.org.za/article/chieftaincy-and-kingship-south-africa
2 In 1994, the first democratically elected government gazetted a White Paper on Reconstruction and Development (RDP) (Government Gazette Notice No. 1954 of 1994). The RDP was a socio-economic policy framework which sought to address the immense socio-economic challenges brought about by apartheid.
3 1996 White Paper on Sustainable Forestry; 1997 National Forestry Action Programme; National Forest Act 84 of 1998.
4 https://www.daff.gov.za/daffweb3/Branches/Forestry-Natural-Resources-Management/Woodlands-and-Indigenous-Forest-Management/Forests/Natural-Forests
5 The BBBEE Act No. 53 of 2003 was introduced to promote the achievement of equality and to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination. The amended BBBEE Act No. 46 was enacted in 2013.
6 The BBBEE Forest Sector Code was gazetted in May 2009.
7 Umsonti is a non-profit organisation set up to support the development of forestry and related businesses in rural South Africa http://www.umsonti.org.za/
8 The profit modelling done here is based on spreadsheets developed by Umsonti, an NPO formed to provide specialist forestry, governance and business support to community owned forestry businesses, and who are the support partners at Mabandla http://www.umsonti.org.za/

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8

COMMUNITY FORESTRY IN AUSTRALIA

Caring for Country, land, and the bush

Giselle Cruzado Melendez and Peter Kanowski[1]

Introduction – the Australian context

Seventeen per cent of Australia is forested.[2] Almost all of 134 million hectares (Mha) of forests (132 Mha; 98 per cent) are native forests of largely endemic species; the 1.95 Mha (1.5 per cent) of commercial plantations provide 86 per cent of national wood production (Montreal Process Implementation Group for Australia and National Forest Inventory Steering Committee [MPIG and NFISC], 2018, pp. 2 and 15). The continental distribution of native forests is shown in Figure 8.1.[3] Australia's highly urbanised population is concentrated in major cities and in towns along parts of the eastern, southern, and south-west coastal fringe (87 per cent of the population; Australia State of the Environment, 2011, p. 54).

Although 'community forestry' is a little-used term in the Australian context, common definitions, such as that of Gilmour (2016, Box 2), are applicable to Australia:

> Community-based forestry includes '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.

Amongst the principal motivations for community(-based) forestry are the empowerment of local communities and marginalised peoples through 'rights-based approaches' (e.g. Bray, 2020; Rights and Resources Initiative, 2021), enhancing the economic and social well-being of those groups, addressing conflict within communities and with governments over resource access, and strengthening the sustainability of forest management (Gilmour, 2016). These reasons are also variously relevant in particular Australian contexts.

As Barlow and Cocklin (2003) noted in the context of Australian rural communities and forestry, 'community' is a socially constructed concept. Australian national and sub-national governments and other actors routinely refer to and engage with 'communities' at scales from the national to the local (e.g. for native forests: Department of Agriculture, Water and Environment [DAWE], 2019a; for plantations: Barlow & Cocklin, 2003), and with specific groups such as First Nations peoples (e.g. Feary et al., 2010) and forest-dependent communities (DAWE, 2019b).

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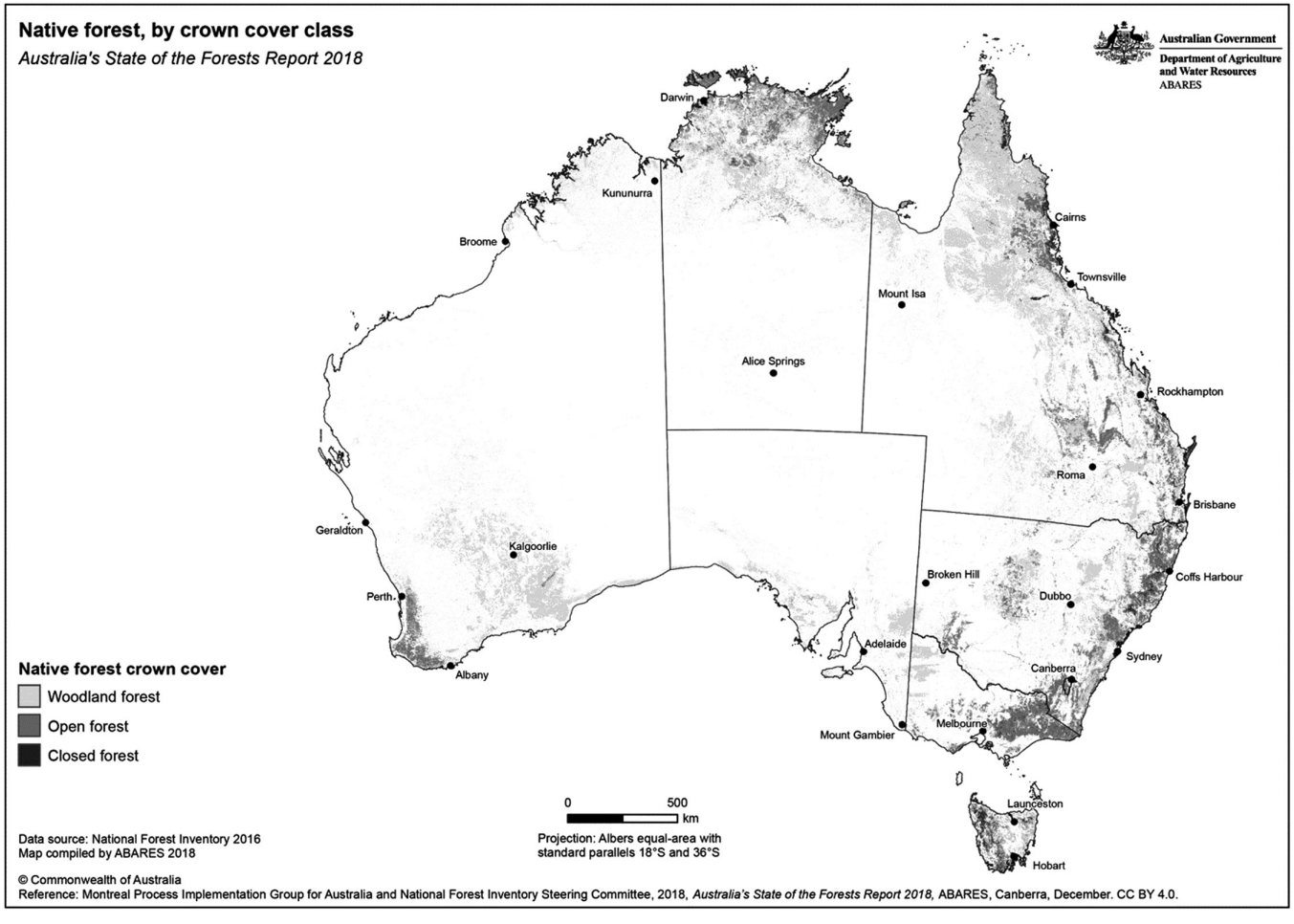


Figure 8.1 Australia's native forest extent.

Here, we interpret 'community' both in terms of its place-based sense (e.g. Brunckhorst, 2010) and in its use to characterise particular societal groups (e.g. First Nations Australians; Altman & Kerins, 2012). Community forestry in Australia is expressed in two primary forms: by Australia's First Nations peoples exercising their responsibilities in 'caring for Country',[4] and through a Landcare movement dedicated to restoration of native vegetation, primarily but not exclusively on private land.

Historical contexts

The Australian continent and adjacent islands are home to the oldest living cultures on earth, with some 60,000 years of human occupation (Australian Institute of Aboriginal and Torres Strait Islander Studies [AIATSIS], n.d.-a). For Australian First Nations, comprising both Aboriginal and Torres Strait Islander peoples,[5] there is no separation between people and place, between land and waters, or between the natural and supernatural. Rather, there is 'Country', as Rose (1996, p. 7,8) explains:

> Country is a nourishing terrain … Country is a place that gives and receives life. Not just imagined or represented, it is lived and lived with ...

The British colonisation of Australia from 1788 displaced First Nations peoples from their Country without negotiations or treaties. Colonial occupation of the continent progressed as a series of informal 'frontier wars' (Reynolds, 2013), displacing First Nations peoples and relocating them to formal or informal settlements (Curthoys, 2015). In parts of the remote centre and north, however, they continued to live 'on Country'. A series of legal and policy decisions since the 1970s progressively established First Nations peoples' legal rights over Country, and enabled a greater role in management of some state land in settled Australia. However, these decisions also 'extinguished' Indigenous rights over Country to which private ownership rights had already been assigned to non-Indigenous parties (Calma, 2005).

First Nations Australians now have exclusive possession of 12 per cent of Australia's land area and non-exclusive possession of 23 per cent; 25 per cent are subject to formal but still to be determined 'native title' claims (Jordan et al., 2020). These lands, over which some forms of rights have been formalised, have been described as the 'Indigenous Estate' (Altman, 2012; Jacobsen et al., 2020; Jordan et al., 2020).[6] Nationally, 69.5 Mha (16 per cent) of the Australian Indigenous Estate[7] are forested (Jacobsen et al., 2020, table 5; see also MPIG and NFISC, 2018, Indicator 6.4a). First Nations Australians' management of their Country and its forests represent a first strand of community forestry in Australia.

Farmers in some of the longest-settled and the more marginal Australian farming landscapes began to work together in the 1970s to repair and restore those land in a community-based environmental stewardship movement (*sensu* Bennett et al., 2018) known from the mid-1980s as 'Landcare' (Robins, 2018). A *National Landcare Program* and *Decade of Landcare* were launched in 1989, capitalising on broad community and political support for a movement that, within 5 years, involved around a third of Australian farmers who together manage 58 per cent of Australia's land area (Australian Bureau of Agricultural and Resource Economics and Sciences, 2020; Curtis et al., 2014; Robins, 2018). Although the 'Landcare movement' has not maintained the momentum or national profile of its first decade (Curtis et al., 2014; Robins, 2018), Landcare activities represent a second strand of community forestry in Australia.

The third strand of community forestry in Australia is that of the participation of local communities in the management of public forests, half of which are under state forest or other

Table 8.1 National extent of Australian forests by forest structural class and tenure

Forest class (columns) / *Tenure category (rows)*	*Area (million ha)*							*% of total*
	Native forest					*Plantation*	*Total*	
	Woodland	*Open forest*	*Closed forest*	*Unknown*	*Total*			
Leasehold	40	6	0.3	0.5	**47**	0	**47**	**35**
Public: multiple use	3.6	5.7	0.4	0.1	**9.8**	0.9	**11**	**8**
Public: nature conservation reserve	12	7.7	1.5	0.1	**22**	0	**22**	**16**
Public: other Crown land	9.7	1	0.2	0.1	**11**	0	**11**	**8**
Private (non-Indigenous)*	12	7	1.1	1.8	**22**	1.1	**23**	**17**
Private (First Nations exclusive rights)*	13	6	0.0	0	**19**	0	**19**	**14**
Unresolved tenure	0.5	0.2	0.1	0.1	**0.8**	0	**0.8**	**1**
Total forest	**91**	**34**	**3.6**	**2.6**	**132**	**2**	**134**	**100**

Totals may not tally due to rounding.
Sources: Jacobsen et. al. (2020); Meadows et al. (2020), table 8.2; MPIGA and NFISC (2018), table 1.8.
Notes: Forest structural class is as defined by MPIGA and NFISC (2018, p. 30).
* National reporting does not separate First Nations Exclusive Rights from private forests; interpretation by the authors from sources listed.

Crown land tenures that may allow management for purposes other than sole conservation (16 per cent of Australia's forests; Table 8.1). This strand has commonalities with elements of community forestry internationally (e.g. Gilmour, 2016), but it has found little expression in Australia. This is in part because of the broader context of longstanding and sometimes intense contestation about the management of Australia's native forests, characterised as Australia's 'forest wars' (*sensu* Ajani, 2007; Dargavel, 2018).

In this chapter, we address each of these three strands of community forestry in Australia. Each strand is expressed primarily in different parts of Australia's forested and rural landscapes, which Australians colloquially describe as 'the bush' (e.g. Watson, 2014). The extent of the forest of different structural classes in major tenure categories is summarised in Table 8.1. As we will discuss, First Nations Australians' rights to, if not management of, Country may extend over each of these tenures, as well as across non-forested lands. Landcare focuses on private and leasehold land used primarily for agriculture, but also extends to smaller areas of public land, such as coasts and urban parks. The third strand of community forestry could be expressed in public forests under state forest and other Crown tenures, where it may intersect with the first strand.

Traditional and colonially established rights over Country

Traditionally, First Nations Australians' rights to and responsibilities for Country were exercised by extended families ('clans'): 'clan members were owners of their Country, they belonged to their Country, they were identified with their Country, and they were stewards or carers of their

Country' (Smyth, 2001a, p. 61). Groups of clans share a common language, some 250 of which predated the British colonisation of Australia (AIATSIS, n.d.-b), and customary laws that govern peoples' interactions with Country (Marshall, 2017).

At the time of British colonisation, all land was declared property of 'the Crown' (i.e., the British state), and subsequently alienated for farming and development. Owners of this 'freehold' (viz. private) land have 'full rights to own and occupy land and to exclude others' (Sutherland & Muir, 2001, p. 30), excluding those for minerals and petroleum and, in some cases, forest products. Crown lands may also be held by private individuals or businesses under long-term leases, most extensively for pastoralism (MPIG and NFISC, 2018, p. 52). Leases are comparable to freehold title in many respects, although rights over commercial use of forest products are generally retained by the Crown (MPIG and NFISC, 2018, p. 38).

When the Australian colonies federated in 1901 to become the 'Commonwealth of Australia', almost all Australian Crown land remained vested in the governments of those former colonies, now 'states' or 'territories'.[8] Consequently, most decisions about Australian land and forest ownership, use and management are made at the sub-national level of states, although the Commonwealth has exercised increasing influence since the 1980s (Kanowski, 2017). Crown (viz. public) lands of various designations are managed primarily by state agencies, including as conservation reserves and state forests.

The emergence of the contemporary Australian Indigenous Estate

Contemporary Australian First Nations' rights over Country have been shaped by the conjunction of this history of settlement and alienation of land, a series of social and political campaigns for their rights, and a consequent complex mix of national and state legislation. The Australian High Court's 'Mabo' decision of 1992 and the 1993 Commonwealth *Native Title Act* established the basis for contemporary First Nations' rights to and management of Country (Baker et al., 2001). Native title determinations and Land Rights Acts provide legal recognition of Traditional Owners'[9] rights to their land, which are collectively vested in a legal entity which represents and acts for those owners (Calma, 2005).

As a result, First Nations Australians, primarily those in the less-settled parts of Australia, have progressively gained more control over their lands and waters, and increased agency and recognition as managers of their Country (Baker et al., 2001; Hill et al., 2013; Orchard et al., 2003). In parallel, various forms of First Nations organisations have emerged to represent Traditional Owners' interests (Altman et al., 2007) and to engage in the 'hybrid economy' (Altman, 2012) in ways that reflect the 'interlinked and interdependent, customary, state and market sectors' in which First Nations people operate (Buchanan & May, 2012, p 66).

The Australian Indigenous Estate currently comprises 57 per cent of Australia's land area (Figure 8.2) and will increase as additional native title claims are determined. The overwhelming majority are rangelands or desert ecosystems, but the 16 per cent that is forested represent 52 per cent of Australia's total forest extent (MPIG and NFISC, 2018, p. 3). The Indigenous Estate is therefore significant for the achievement of national forest-related goals such as those for biodiversity conservation and carbon sequestration (see Commonwealth of Australia, 1995), as well as inherently for its Traditional Owners (e.g. Altman, 2012).

Indigenous rights over Country and forests

The Indigenous land rights and native title regime summarised here is now manifest in a complex variety of tenure, management, and access arrangements, the legal basis and expression of

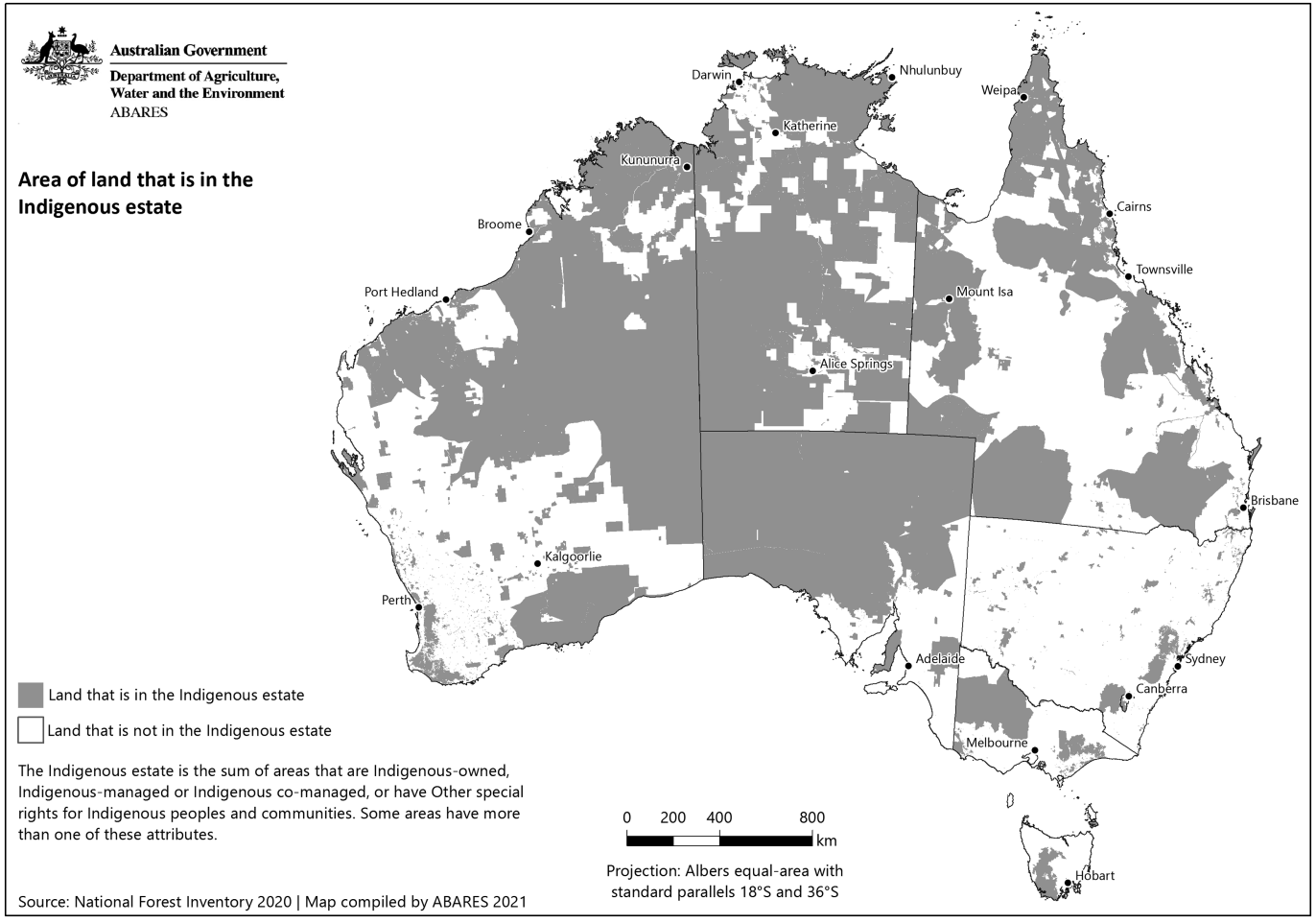


Figure 8.2 The Australian Indigenous Estate.

which vary among the Australian states. These can be characterised according to four categories of attributes (Jacobsen et al., 2020, p. 8), described in Table 8.2 and mapped for forests in Figure 8.3.

Across these categories, Indigenous Land Use Agreements (ILUAs) are the principal mechanism under which Traditional Owners can assign specified rights over their lands and waters to other parties. An ILUA is a voluntary but legally binding agreement between Traditional Owners and other public and private sector parties to establish the terms and conditions of use, access, and development on Indigenous Lands (National Native Title Tribunal, n.d.).

Governance and management arrangements

Within the Indigenous Estate

The primary First Nations governance institutions are 'Land Councils' (and, in some states, Land Trusts[10]), which operate at a range of scales (see National Indigenous Australians Agency [NIAA], n.d.-a). Their functions and responsibilities are legislated, and focus on representing and acting in the interests of Traditional Owners in respect of their land and its management (see Central Land Council, 2021). Land Councils or Land Trusts are the overarching governance structures for all lands and waters in the Indigenous Estate, including for *Indigenous-owned lands.*

Indigenous-managed lands are held and managed under a variety of arrangements, which include Land Trusts and Aboriginal Corporations. The latter are legally incorporated institutions organised independently by Indigenous members (see Office of the Registrar of Indigenous Corporations, n.d.), with similar roles and tasks as Land Councils (Rowse, 2015). These corporations manage, amongst other enterprises, Indigenous pastoral leases, which are the most common use for much of this category of land (see MPIG and NFISC, 2018, table 6.43). These lands may also be managed for conservation, ecosystem services, and tourism and may be subject to ILUAs.

Traditional Owners and the Australian or state governments may enter into co-management arrangements for biodiversity conservation and non-extractive enterprises such as nature- and culture-based tourism. These *Indigenous co-managed* arrangements were first developed in the Northern Territory, including for the iconic Uluru-Kata-Tjuta National Park. The 'Uluru Model', variants of which now apply to co-managed protected areas across Australia, involves Traditional Owners entering a long-term leaseback agreement with a conservation agency, and the parties managing the area jointly through a joint Board of Management.[11] Under these arrangements, the autonomy of Traditional Owners is constrained (Smyth, 2001b).

Lands to which *other special rights* apply include those under native title determinations and under some ILUAs. Native title determinations define areas where traditional rights and interests to land and water are recognised under Australian law, and may grant either exclusive or non-exclusive rights to these lands and waters (Kimberley Land Council, 2020). Whilst native title recognises traditional rights to land, it is not a tenure category and does not in itself confer property rights (Altman et al., 2007). The award of non-exclusive rights typically allows First Nations peoples access for traditional purposes, and standing in consultations about development proposals or management by the other parties, but it may also diminish some negotiating rights (Jordan et al., 2020).

Management arrangements

In conjunction with the expansion of the Indigenous Estate, Indigenous Land and Sea Management (ILSM) organisations have emerged to give effect to the aspirations of Traditional

Table 8.2 First Nations Australians' rights over forests, associated tenures, and governance and management arrangements

Characterisation[1] *(forest extent, m ha)*	*Tenure terminology*	*Governance arrangements*	*Management arrangements*	*Level of Traditional Owners' rights*
Indigenous-owned (22.0) Lands (including forests) to which First Nations peoples hold exclusive rights; all these lands are either Indigenous-managed or co-managed.	Indigenous Lands; Indigenous Protected Area	Aboriginal or Torres Straights Islander Lands Trusts/ Land Councils	Indigenous-led management, often in partnership with other actors. May be implemented by Indigenous Ranger Groups	Right to possess and occupy an area to the exclusion of all others, and to restrict entry. Development determined by the owners may occur independently, or with other parties under ILUAs.
Indigenous-managed (18.4) Lands (including forests) that are managed by First Nations peoples, regardless of ownership. Of these, 87 per cent are also Indigenous-owned (Jacobsen et al., 2020, table 6)	Indigenous Lands or Leases; Indigenous Protected Areas.	Aboriginal or Torres Strait Islander Land Trust or Corporation.	Aboriginal or Torres Strait Islander Land Trust or Corporation. Indigenous-led or co-management, in partnership with state agency	Land may be held by government on behalf of First Nations owners, who may manage, co-manage or sublease to other managers. Many lands used for pastoral purposes are in this category.
Indigenous co-managed (10.2) Lands (including forests) managed under formal legal agreements to include First Nations peoples' participation in management planning and implementation. Of these, 30 per cent are also Indigenous-owned (Jacobsen et al., 2020, table 6)	National Parks; other conservation reserves.	Board of Management, or equivalent, typically with majority Indigenous representation. Various consultative processes. Formal Management Plan.	Government agency; agency staff may include Indigenous Rangers	Joint decision making with government agency. Management through formal consultation, advisory committees, and co-management boards. Indigenous land under conservation agreements is leased by the traditional owners to government, and co-managed for biodiversity and cultural heritage
Other special rights (50.9) Lands (including forests) of various tenures, over which agreement has been reached to allow First Nations peoples' access and use, typically for cultural purposes, and for which significant development activities may be subject to prior coordination with the Traditional Owners.	Public lands: State Forest; other Crown Land. Freehold, Leasehold	Government agency; various consultative mechanisms. Formal Management Plan. Private landowner or lessee; formal or informal access and use rights negotiated on an individual basis. Forest management subject to Code of Practice or equivalent.	Government agency; may include First Nations staff. Private landowner or lessee	Rights to access land for Traditional purposes. First Nations use is mediated by the interests and management activities of the other parties. First Nations may have some form of special use rights over state lands, freehold land, or land leased from the state by non-Indigenous individuals or businesses. A Memorandum of Understanding may be agreed between interested parties.

Notes: [1] Termed 'attribute' by Jacobsen et al. (2020), who also present details of datasets; multiple attributes may apply to any specific area.

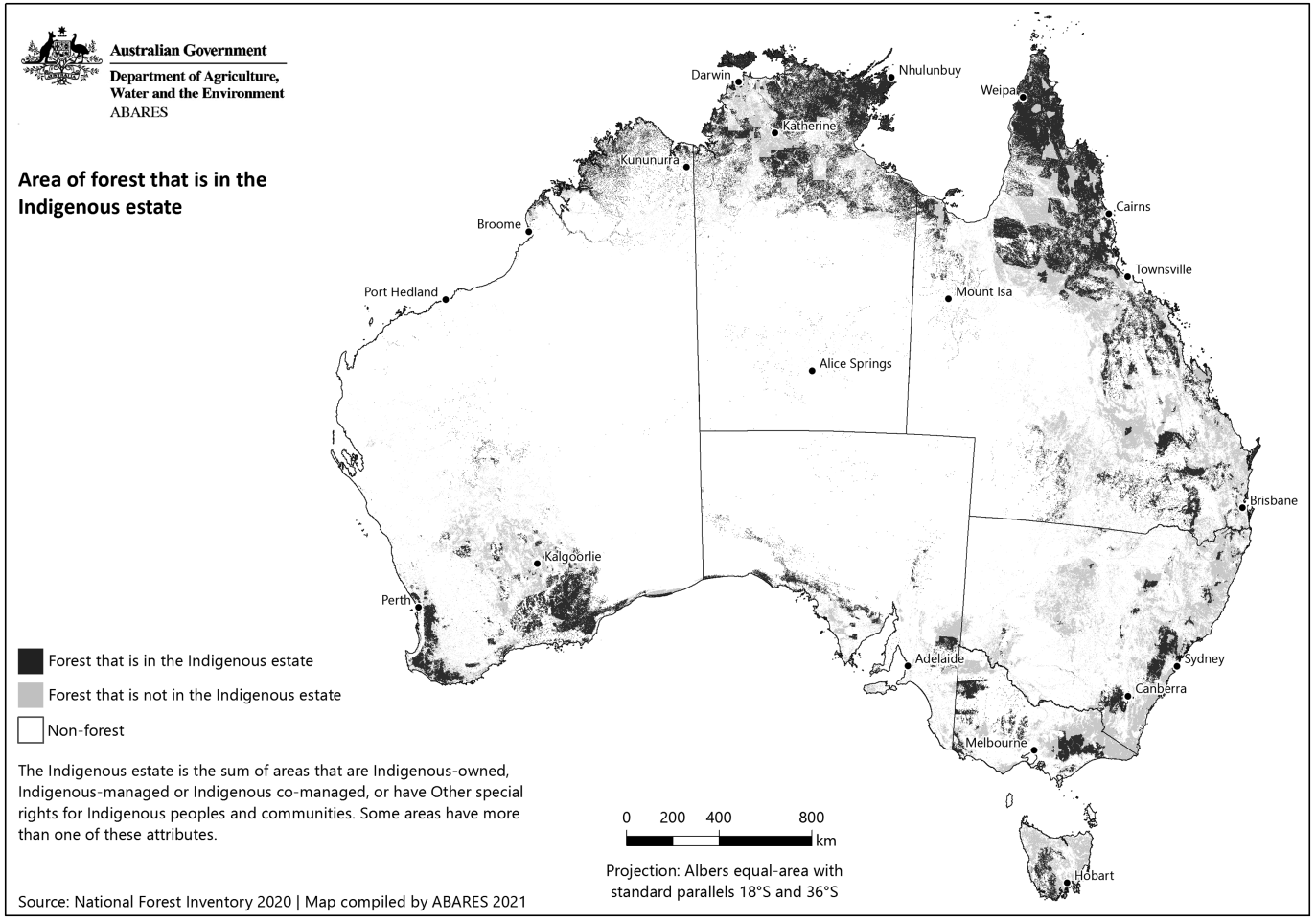


Figure 8.3 Forests in the Australian Indigenous Estate.

Owners (Pert et al., 2020). These First Nations organisations are a means of both connecting to and caring for Country (Altman & Kerins, 2012; Lane, 2002; Smyth, 2011), of empowering communities, and of addressing Indigenous social and economic disadvantage (e.g. Chaney, 2015; Rowse, 2015).

Much of the work of ILSM organisations, and that on co-managed lands, is undertaken by Indigenous Ranger groups. These were first established by Traditional Owners in 1976 to manage and protect their traditional lands and seas while maintaining and enhancing cultural practices (Kerins, 2012), and to participate in co-management arrangements with government agencies (Smyth, 2011). By the 1990s, they had become an important and practical manifestation of a new era of Indigenous-led land and sea management (Smyth, 2011). In 2020, there were c. 130 nationally funded Ranger groups, employing c. 900 people (NIAA, n.d.-b).

Outside the formal Indigenous Estate

Freehold and leasehold land

Freehold title held by individuals or corporations allows the development and management of that land as the owner wishes, consistent with applicable national, state, and local government regulations (e.g. for forests, state-level regulations for forest clearing, or Codes of Practice for harvesting forest products; see McDermott et al., 2010, Ch 10; MPIG and NFISC, 2018, Indicators 7.1a and b).

Landowners and leaseholders may voluntarily enter into various forms of stewardship agreements (*sensu* Bennett et al., 2018) with the Australian or state governments or NGOs. Examples include the Australian Government's Environmental Stewardship Program (Zammit, 2013), and various state-based conservation covenant schemes which total 3.2 Mha of forest nationally (MPIG and NFISC, 2018, Indicator 1.1c). Under some schemes, community groups may assist landowners in stewardship activities that enhance the conservation values of their properties.

Landcare Movement and related initiatives

The Landcare groups that emerged from the 1970s onward to address land degradation on private land were initially simply groups of like-minded volunteers, who in some cases were already collaborating over other land management issues (e.g., pest animals, weeds). Governance structures were informal or minimally formal, limited to the election of chairs and committee members in entities that typically did not have legal standing. As Landcare grew in the 1980s and evolved into a series of government-funded programmes (see Robins, 2018 for a chronology) that intersected with the devolution of natural resource governance more generally (Curtis et al., 2014), Landcare groups necessarily adopted more formal governance structures, typically through incorporation as an association (Landcare Australia, 2021). This allowed them to accept and account for funding from the Australian, state, and local governments, and from business and philanthropic donors.

Individual Landcare groups were connected by government-supported networks supported by government-funded facilitators, the arrangements and funding for which varied with successive national and state governments (Robins, 2018; Tennent & Lockie, 2013). Ultimately, however, many Landcare groups became less active as public funding diminished and members suffered both volunteer fatigue and an increasing administrative burden (Robins & Kanowski, 2011; Tennent & Lockie, 2013). Conversely, other groups arose in urban and peri-urban con-

texts. Over time, national governance and administrative arrangements were vested in Landcare Australia, as the national co-ordinating, representative and service provision body; it is constituted as an independent not-for-profit organisation (Landcare Australia, 2021). Other not-for-profit organisations, such as Greening Australia (Greening Australia, 2018), are also important actors in landscape restoration.

State lands

Governance and management arrangements for state land depend on the designation of the land and relevant legislation (MPIG and NFISC, 2018, table 7.1). Typically, land designated for conservation as part of the National Reserve System is managed by the state conservation agency. State forests, from which harvesting of wood and non-wood forest products is allowed, were originally managed by not-for-profit state agencies, but are now mostly managed by government business enterprises operating on a commercial or partly commercial basis (Kanowski, 2017).

State land management typically requires community engagement in the development of both strategic and operational management plans, and through various other consultative processes (MPIG and NFISC 2018, Indicator 7.1b). However, other than through the various forms of co-management with Traditional Owners for biodiversity conservation and cultural heritage, there is little more substantive participation (Buchy & Race, 2001) or 'community management' (*sensu* Gilmour, 2016; Petheram et al., 2004) of public forests, although this has long been proposed (e.g. Gilmour et al., 1989; Henderson, 1945). One short-lived recent attempt, in Victoria's Wombat State Forest (2003–2006), failed largely because of entrenched differences over forest management within the community (Matthews & Missingham, 2009).

More recently, agencies responsible for management of public forests have developed a range of co-management partnerships with Traditional Owners, particularly in relation to cultural and fuel reduction burning (e.g. Feary, 2020; Maclean et al., 2018) and tourism (Forestry Corporation, n.d.). The former have been inspired by the success of savanna fire management partnerships on Indigenous-owned land in Northern Australia (Whitehead et al., 2003). Across most forested state lands, however, governance and management responsibility and authority have remained primarily with the state and its agencies.

Strengthening community forestry in Australia: Critical issues and challenges

We identify three sets of critical issues and associated challenges to strengthening community forestry in Australia in pursuit of the range of objectives identified in the Introduction:

1. The 'unfinished business' of reconciliation between First Nations and other Australians.
2. Institutional arrangements for governance and management of Australia's forests.
3. The impacts of 230 years of European settlement, and the accelerating impacts of climate change, on the Australian environment.

The 'unfinished business' of reconciliation

As Jordan et al. (2020, p 3) observe,

> The Australian settler-colonial state has been largely built on a denial of Indigenous property rights and political and citizenship equality. For many First Nations peoples,

this has meant dispossession of their lands and economic resources and a loss of control over many of the decisions that affect their lives.

For these reasons, amongst others, many Australians see the process of reconciliation between Australia's First Nations and non-Indigenous peoples as 'unfinished business' (e.g. Gunstone, 2007; Reys, 2012), and progressing reconciliation as necessary for Australia's First Nations peoples 'taking a rightful place in [their] own Country' (Burney, 2018). The Australian First Nations' *Uluru Statement from the Heart* (Referendum Council, 2017) argued for this as the basis of 'establishing a new relationship between First Nations and the Australian nation based on justice and self-determination where Indigenous cultures and peoples can flourish'.

Lee et al. (2020), amongst others, argue that recognising and capitalising on First Nations' land and sea management offers a vehicle for progressing towards this goal. In this sense, enabling First Nations Australians' governance and management of Country to foster 'landscapes of reconciliation' (Feary et al., 2010, p. 133) can make an important contribution to the larger ambition of resolving this 'unfinished business'.

Institutional arrangements for governance and management of Australia's forested Country

These issues relate to the roles of different levels of government and other actor groups, the extent and character of devolution of natural resource and environmental governance and management, and how those arrangements are enabled, funded, and sustained. Successive national assessments have identified the need for more effective national policies and coordinated programmes across different levels of government for environmental protection and sustainable natural resource management (Australia State of the Environment, 2011, 2016).

Australian governments began to decentralise natural resource governance on lands outside the public estate in the mid-1990s (Curtis et al., 2014; Lockwood et al., 2009), but within two decades, this 'great experiment with devolved NRM governance' (Curtis et al., 2014, p. 175) had faltered. Around the same time, the Regional Forest Agreement and related processes (Davey, 2018; Kanowski, 2017) focused on forest land use allocation, sustainable forest management regimes, and recognition of a wider range of forest values than hitherto, but they did not bring fundamental change in governance or management responsibilities for these forests. Although some Indigenous co-management initiatives have emerged subsequently, as noted here, the evident challenges and limitations of implementing 'community forestry' in communities with strongly divergent values for forest management (e.g. the Wombat Forest, as discussed here), have not encouraged the pursuit of community-based models. Locally developed co-management models for the conservation estate may offer a platform for the expansion of community forestry more widely.

These trends are paralleled in the case of the Indigenous Estate. The logical progression of First Nations Australians' caring for Country responsibilities and work would be to move from the current 'tenure-bound' to a more 'tenure-blind' basis (Smyth, 2011, p. 4). However, progress towards this ambition has been slow, at best, reflecting the intersecting factors of the deeply contested politics associated with Australian First Nations issues (e.g. Burney, 2018) and with 'the bush' (e.g. Chan, 2018; Watson, 2014); the associated lack of trust between key parties; the legislative and operational challenges faced by state land management agencies (see e.g. Hill et al., 2013); and the narrowing focus of Australian Government-funded programmes that support ILSM organisations (Kerins, 2012; see also Pert et al., 2020; Robinson et al., 2016).

The Anthropocene and the Australian environment

The conversion of some 40 per cent of Australia's pre-colonial forest extent to agriculture over the past 230 years, ongoing deforestation associated with agricultural expansion, and the impacts of pest animals and plants are leading to ongoing loss of biodiversity, ecosystem functionality and agricultural sustainability (Australia State of the Environment, 2011, 2016). Climate change is already having major impacts on the Australian environment (Australia State of the Environment, 2011, 2016). Transforming rural land use and management to enhance terrestrial carbon stocks, promote biodiversity conservation, restore ecosystems, and sustain agricultural productivity were amongst the recommendations of a foundational review of how Australia might address and respond to climate change (Garnaut, 2008). Subsequent studies have further explored how these ambitions might be realised without adversely impacting on agricultural production (e.g., Evans, 2018; Hatfield-Dodds et al., 2015; Paul et al., 2016).

Such a transformation, envisaged to be funded in large part by a price on carbon emissions, would also generate funding for First Nations management of Country, and for Landcare and related initiatives such as farm forestry, amongst others. However, bitterly contested climate politics, and their manifestation in the election and policy positions of successive conservative Australian Governments (Wood & Blowers, 2016), have led instead to a 'lost decade' of climate inaction (Climate Council, 2019), without the policies or programmes required to facilitate the transformative changes envisaged in 2008. In conjunction with the faltering of the regional model discussed here, this has also meant a lost decade for addressing sustainability challenges and restoration imperatives in Australian landscapes.

Future prospects and recommendations

For the reasons discussed in the preceding sections of this chapter, the prospects for stronger, more effective, and sustainable community forestry in Australia are mixed. A range of enabling factors provide broad foundations for each of the strands of community forestry manifest in Australia. These factors include the steady expansion of the Indigenous Estate, and of partnerships with Traditional Owners for forest management both within and outside that Estate; the persistence of the Landcare network and related community-based organisations, and nationwide experience of devolved natural resource management; relatively high (if varied) levels of environmental education and awareness and of traditional knowledge; and a generally wealthy, if increasingly unequal, society. However, for reasons discussed here, the factors enabling community forestry are likely only to be expressed at the margins of policies, programmes, and practices rather than more centrally, and the scope and scale of transformation needed to sustain Australian forests and landscapes, and restore those most impacted by various forms of environmental degradation, will remain largely unrealised.

Shifting the balance in favour of stronger, more effective, and sustainable community forestry in Australia therefore depends on a series of actions at a range of levels. Some of these speak to the core of Australian identity and ambition, in terms such as those articulated in the *Uluru Statement from the Heart*. Models of economic development, and of social and environmental justice that recognise the rights and interests of First Nations Australians, are a necessary complement to reconciliation and recognition (Organisation for Economic Co-operation and Development, & Organisation for Economic Co-operation and Development [OECD], 2020).

The potential virtuous circle between Australian climate policy instruments such as carbon pricing, climate change mitigation, and sustainable land management transitions at a landscape scale were identified by Garnaut (2008). These remain the most likely source of funding adequate to support First Nations, and private and public land managers, to deliver a sustainable package of

environmental, economic and social benefits appropriate to their responsibilities and priorities (see OECD, 2020). Models of the hybrid economy proposed in the context of remote First Nations communities (e.g. Altman, 2012; Jordan et al., 2020) may be more widely relevant as a result.

Revisiting another initiative of earlier this century, 'the great experiment with devolved natural resource management' (*sensu* Curtis et al., 2014), and re-empowering both regional communities and community-based organisations such as Landcare, Greening Australia, and Indigenous Rangers, through stable and sustainable funding and partnership programmes with public and private sector actors, would be the best means to develop and sustain the on-ground capacity required to deliver each of the three strands of community forestry. In all cases, a progression from co-management to collaborative governance, as argued by Hill et al. (2014), underpins the empowerment of communities.

In the public forest estate, models of partnership already developed for various forms of co-managed conservation reserves should be extended to state forest tenures, as has begun to occur on a modest scale in relation to First Nations' cultural burning and tourism and has been extended to other community groups beyond First Nations. This broader expansion of the third strand of community forestry will remain constrained by contestation over key elements of forest management, principally wood harvesting and the use of managed fire, although new visions and partnerships offer promise (Jackson et al., 2021). In the short term, a promising focus might be in urban and peri-urban forests, close to where the majority of Australians live and where broad consensus about priorities may be more likely to be realised (e.g. Bartlett et al., 2005; Frantzeskaki, 2019; Saldarriaga et al., 2020).

Conclusions

At the establishment of the Australian nation in 1901, forest governance and management were divided primarily between public and private sectors, neither of which offered space for community forestry. Since the 1970s, the progressive expansion of the Indigenous Estate, and the development of innovative collaborative models of management of parts of that Estate, have fostered the emergence of First Nations–led forms of 'community forestry'. This first strand of community forestry in Australia is now expanding to encompass more forests under a range of tenures and management partnerships. The unrelated but parallel emergence of the Landcare movement represented the expression of a strand of community forestry focused on the restoration of private land. In the case of both strands, associated government programmes have played both enabling and constraining roles.

A paradigm shift is necessary to empower and support Traditional Owners to exercise their responsibilities for Country while participating in contemporary economic life (e.g. Altman, 2012; Langton, 2012; Lee et al., 2020). As Garnaut (2008) and other studies (e.g. Hatfield-Dodds et al., 2015; Paul et al., 2016) have demonstrated, a comparable paradigm shift is both necessary and possible in the management of Australia's agricultural landscapes, building on the foundations established by Landcare and related initiatives, and drawing in part on ecosystem services payments to enable sustainable landscape management in the contexts of both the legacies of unsustainable practices and of a changing climate. The management of Australia's public forests offers other opportunities for partnerships with communities, both First Nations and non-Indigenous, that can draw inspiration and learnings from such partnerships in other parts of the landscape.

In all cases, the intersections of actors, tenures, and objectives, and the limits of what any single actor group can achieve in isolation, emphasise the importance of fostering mutually respectful partnerships – among First Nations peoples, private landowners, and lessees, govern-

ments and their implementation agencies, and the city and the bush – to enable more comprehensive, holistic, and enduring approaches to managing Country, and its constituent forests and rural landscapes (e.g. Colloff, 2020; Jackson et al., 2020; Kanowski, 2017). Reconciliation – between First Nations and other Australians, in the forest wars, and between forest and land management regimes and Australia's unique environment in the context of climate change – is foundational to achieving this aspiration, and to realising the values and services that Australia's communities want for and from their forests.

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Acronyms

AIATSIS: Australian Institute of Aboriginal and Torres Strait Islander Studies
DAWE: Department of Agriculture, Water and Environment
ILSM: Indigenous Land and Sea Management
ILUA: Indigenous Land Use Agreements
MPIG and NFISC: Montreal Process Implementation Group for Australia and National Forest Inventory Steering Committee
NIAA: National Indigenous Australians Agency
OECD: Organisation for Economic Co-operation and Development

Notes

1 We acknowledge and celebrate the First Australians of and from whose traditional lands we write, and pay our respects to their elders, past and present. Giselle is of Indigenous American descent from Peru. Neither author is a First Nations Australian.
2 The Australian definition of 'forest' – an actual or potential tree height exceeding 2 m, and actual or potential crown cover of at least 20 per cent (MPIG and NFISC, 2018, p. 30) – differs from that adopted internationally by FAO, viz. 5 m height and 10 per cent canopy cover (FAO, 2020, p. 4), to better reflect the characteristics of Australia's unique forests in predominantly woodland formations.
3 Plantation forests are not mapped at this scale; for locations, see MPIG and NFISC (2018), Figure 1.1.
4 'Country is the term often used by Aboriginal peoples to describe the lands, waterways and seas to which they are connected. The term contains complex ideas about law, place, custom, language, spiritual belief, cultural practice, material sustenance, family and identity' (AIATSIS, n.d.-c)
5 Following the Referendum Council (2017), we use the term 'First Nations' throughout this chapter, other than where we are referring specifically to either Aboriginal or Torres Strait Islander people or quoting from sources. We use the term 'Indigenous', synonymous with 'First Nations', in contexts or terminology in which its use is accepted in Australia.
6 The extent of areas in the Indigenous Estate reported by Jacobsen et al. (2020) and Jordan et al. (2020) may not align due to different datasets and definitions.
7 As defined by the Australian Government: Jacobsen et al. (2020), table 5.
8 For simplicity, we subsequently use the term 'state' to refer to all sub-national jurisdictions.
9 'In relation to land, Traditional Owner means a local descent group of Aboriginals who: (a) have common spiritual affiliations to a site on the land, being affiliations that place the group under a primary spiritual responsibility for that site and for the land and (b) are entitled by Aboriginal tradition to forage as of right over that land' (Commonwealth of Australia, 2015)

10 In some states, Aboriginal or Torres Strait Islander Land Trusts, established as body corporates under state legislation, are a legal requirement for Traditional Owners to claim, purchase, lease or manage land (see e.g., Queensland Government, 2017). These Trusts have the responsibility to manage land to deliver social, cultural, and economic benefits for the Traditional Owners (MPIG and NFISC, 2018, Indicator 6.4c).

11 Under joint management agreements, the Commonwealth Environment Protection and Biodiversity Conservation Act (EPBC Act) requires the formation of a Board of Management, with a majority of Aboriginal representation and the Traditional Owner as a chair.

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PART III

Inter-agency collaborations in Community Forestry – USA



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9

OLD WORLD AND NEW WORLD COLLISION

Historic land grabs and the contemporary recovery of Indigenous land management practices in the western USA

Janette Bulkan, John Palmer, Anne M. Larson, and Mary Hobley

When William Penn, a Quaker from England, offered trade goods to the Native Americans in what is now Delaware in 1682, in what Penn believed was a fair purchase of land (Stone, 1882), the people of Turtle Island (the common Indigenous term for all of North America) encountered for the first time the strange Old World concept of individual private cadastral property rights over land. Prior to this event, in what is now Canada and the USA, the Native American tribes held lands as joint community property without personal tradable freehold rights. The European land invasions and expropriations, and the incidental epidemic diseases which swept from the eastern Atlantic seaboard across the entire North American continent to the Pacific coast in less than 200 years substantially reduced the Indigenous Americans from perhaps 4–5 million at the time of first European contact to around 0.3 million when the last of the asymmetric treaties were signed in 1868 (with the Nez Perce); note that it is very difficult to estimate pre-Columbian populations, and the literature contains some much larger estimates.

The gulf in understanding was illustrated by Chief Tecumseh of the Shawnee nation in 1806:

> The way, the only way, to stop this evil [the land invasions] is for the red men to unite in claiming a common and equal right in the land, as it was at first, and should be now – for it was never divided but belongs to all. No tribe has the right to sell, even to each other, much less to strangers. Sell a country? Why not sell the air, the great sea, as well as the earth?
>
> *(Ohio Central History, n.d.)*

This philosophy of a deep but fluid attachment to the land, together with the relatively egalitarian societies of the Native Americans and their almost entirely oral records, faced the millions of incoming mainly European immigrants from a quite different tradition: legally defensible rights to heritable private property in socially stratified societies under monarchs with Westphalian country boundaries and long histories of written records. Many of the incoming colonists came

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from Lockean traditions that land acquired value from the human effort (muscle power) put into its cultivation and husbandry (Macpherson, 1954, 1999), quite different from the Turtle Island view that land, and natural resources more generally, had intrinsic utilitarian and spiritual values quite independent of the presence or activity of humans.

There were attempts to operate the Native American and European approaches to governance in parallel, most notably after the (British) Royal Proclamation of 1763, which followed the Treaty of Paris that ceded the French colonial possessions in eastern North America to the British. This Proclamation of British rights by conquest was of course written in Great Britain in the imperial language of its time, mainly to deter the French from trying to recover their colonies. The Proclamation acknowledged what we would now call Native Title, but the language was simply incomprehensible to the Native Americans. The British colonial administrator Sir William Johnston and his partner (the Mohawk leader known in English as Molly Brant, Konwatsi'tsiaienn) convened 2,000 tribal leaders from 24 First Nations in the following year, 1764, to agree on the Treaty of Niagara. The intention of parallel contemporaneous systems of the government was illustrated by exchanges of the 'two-row wampum' belts, sashes embroidered with white and purple sea shells making a pattern of two canoes being paddled side by side along a river (Borrows, 1997).

The extensive farming and hunting economy of the Native Americans lightly exploited the land but produced agricultural surpluses. If it had not been for the maize found stored in abandoned farms of the Native Americans, the small group of the Pilgrim Fathers would probably have died in their first cold winter of 1620–1621 at what is now known in English as Cape Cod in Massachusetts. The Native Americans had a mixed diet derived from cereal agriculture, hunting, fishing, and foraging nutritious wild plants. With their organised systems of government and their knowledge of the fluid boundaries of land uses between tribes and villages, the Native Americans should have been proofed from land takeover because they and their lands could not or should not have been treated as *terra nullius* under the late medieval Papal Doctrine of Discovery (1493) and the European respect for borders under the Treaty of Westphalia (1648) (McNeil, 2016b). However, the direct sowing of cereal and maize crops without first ploughing the ground counted against the Native Americans; the immigrants argued that no ploughing meant no property rights. By the time that the immigrants reached the southwest of North America, where the hand hoe was the customary tool to prepare the land to receive seed, the notion that Native Americans had only usufruct property rights was embedded in US laws and legal thinking.

Europeans had been using metal tools for farming for thousands of years before they reached the Americas. Metal tools were scarcely known to the Native Americans, although they were quick to acquire them by trade with the colonists. Anyone who has cleared trees from even a small patch of land with a stone axe knows that it is very hard work, requiring skill and endurance. Obsidian axes and knives can be flaked from the native glass with very sharp edges but they are too fragile for tree felling and are used mainly in the kitchen and for ceremonies. Instead, Native Americans were adept at using controlled burning of forests rather than stone tools to clear and prepare the land for the sowing of crops. The incoming Europeans had no recent tradition of land management by fire, except for the special case of moor burning. The immigrants, with their strong attachment to the fixed and movable property and fear of fire as a threat to the property, suppressed the Indigenous use of fire and so disrupted severely the Indigenous farming practices (Kimmerer & Lake, 2001).

The charters of discovery awarded by European governments to the exploration ships voyaging to North America were not so scrupulous about respect for the rights of the inhabitants of the lands which the explorers encountered. The first wave of discoverers from Europe was setting out

not long after the reconquest by Christian armies of the Iberian peninsula which had been under Muslim rule for centuries, so there was an underlying concept of the conquest and seizure of lands not then under Christian monarchies. The discoverers were therefore ordered to plant their European military banners on the seashores on arrival and to claim the lands for the sponsoring European monarch against the European rivals (Seed, 1995), an incomprehensible pantomime for the Native Americans who had been living on the lands for thousands of years (Biggar, 1911).

Notwithstanding the Native rights to land which were protected according to European laws and customs, and notwithstanding the paper records on which the European colonists registered the agreements with Native American tribes, the Europeans frequently defaulted, amended unilaterally, and simply broke these same treaties.

> British colonial administrators and local legislators narrowed and manipulated a recognition of legal interests, aiming to efface the property rights that they acknowledged existed among true occupants of the land. In essence, British and American governments normally accepted the theory of native property interests but set about assessing how much was occupied in terms of standards of usage and improvement familiar to the colonizers. Then governments exerted power through sovereign acts to acquire or expunge whatever native title had been conceded to the Indigenous peoples.
>
> *(Weaver, 2003)*

The Europeans usually escaped censure for persistent dishonesty by sheer force of arms and numbers of colonists. The Native American idea that land could be used and that resources could be shared but not claimed for exclusive use was rarely incorporated into the European legal language in which the treaties were written.

When arguments arose about the interpretation of the meaning of the treaties, the absence of Native writing systems and the reliance on the oral recitation of events by the Indigenous peoples meant almost certain defeat in courts where procedures were European and judges referred to the written records. Not until late in the 20th century were courts in western Canada willing to accept the legal validity of the oral histories of the Native Americans (First Nations in Canada). Even now the courts insist that every case for reclaiming land ownership and resource rights which had been stolen by legal trickery from the Indigenous peoples must be proved again according to European legal concepts and procedures (Christie, 2015; McNeil, 2016a).

The Tsilqhot'in legal victory in 2014 in the Supreme Court of Canada came after battling through all the lower levels of courts. The federal court confirmed that at least a portion of the customary territory of the Tsilqhot'in Nation in British Columbia had been covered and still was covered by Native Title since time immemorial (Bennett, 2021). The logical implication – that therefore the whole of habitable North America (Turtle Island) had been under Native Title at the times of European 'discovery' – could not be uttered by the federal justices. The only way that the huge cost of two decades of legal arguments by this small First Nation could be paid from public funds was by arguing that just a fraction of the overall argument was still unproven and yet of general public interest and therefore eligible for legal financial aid. The Chief Justice herself clearly recognised the wider and logical implication but could not circumvent the legal rules.

Following the creation of the United States of America in 1775 by the war of independence from British colonial rule, the new federal government initially made some attempts to keep the colonists to the east of the Appalachian mountains. The reports from fur traders of immense fertile and apparently under-occupied lands to the west of the Appalachians rapidly nullified such efforts. Through 370 treaties with Native American tribes between 1778 and 1868, just 90 years, the US government acquired some 777 million ha and sold most of that area to European

colonists. The Native Americans, the descendants of those left after the ravages of epidemic European diseases, attacks by armed settlers, and wars with the US Army, now hold 24 million hectares in Reservations guaranteed by the US federal government. Even these Reservations, usually on the least fertile and water-scarce land that the 19th-century settlers did not want, need to be defended against legal attrition if the federal government wants access to minerals under or surface water over these lands.

In both Canada and the USA, the Native Americans were driven from their customary lands and water. The three main drivers were (1) mostly by the epidemics of European diseases against which the Indigenous peoples had no natural immunity and the social disruption caused by the terrible mortality rates; (2) legal trickery (as mentioned here); and (3) military expeditions by the Canadian and US governments on spurious charges, aided by colonist militia and freelance killers. A fourth main driver applied in the great central plains of the USA, where the densely growing, deeply rooting prairie grasslands on sticky clay soils could not be tilled until the invention by John Deere of the sod-buster steel plough in 1837. Until then, the lives of the Plains Indians were linked closely to the annual migrations of the huge herds of bison, the main food source for these tribes. The prairie grasslands were burned annually either by lightning fires or fires set by the Plains Indians to stimulate fresh grass growth.

A series of federal laws from the Indian Removal Act (1830) to the Curtis Act (1898) displaced the Native Americans from their homelands and drove them westwards, leaving their homelands open for European-style farming firstly in the east and southeast States of the USA. The discovery of gold in the rivers of California and Oregon in the 1840s and 1850s stimulated the European immigrants to move westward across the tribal landscapes in horse-drawn wagon trains, and the Homestead Act (1862) made Indigenous land available cheaply to immigrants for farming. The European expansion westwards accelerated with the laying of railways, the first transcontinental connection being made in 1869. The railway companies were subsidised by the Pacific Railroad Act (1872) which awarded alternate blocks of 1 square mile (259 ha) up to 40 miles (64 km) on each side of the railway for onward sale to migrants. This checkerboard pattern is described in Pat Frost's Chapter 12 (this *Handbook*).

In the western States, the Indigenous tribes were driven from their squash and maize plots on the river valley flats into the steep hills unsuitable for arable. Their traditional landscape management, mainly by controlled burning in small patches, was opposed by the logging and sawmilling companies moving into the heavily timbered hills. The Weeks Act (1911) provided for government purchase of private lands for protection of the headwaters of rivers and suppression of wildfire. The belief that all forest fire is bad and should be prevented and controlled has dominated US land management for a century. Only recently have comparative studies begun to convince the settler communities that native vegetation including forests is well adapted to Indigenous management with frequent small-scale ground fires set before the summer heat, consuming the ground fuel and stimulating grass, berries, nuts, and fruits. Widely spaced trees and fresh grasses and shrub layers offer the best protection for the homesteads and retirement homes in the forested areas of the western States, as described in Chapter 13 (this *Handbook*).

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10

COMMUNITY FOREST OWNERSHIP, RIGHTS, AND GOVERNANCE REGIMES IN THE UNITED STATES

Kathleen A. McGinley, Susan Charnley, Frederick W. Cubbage, Reem Hajjar, Gregory E. Frey, John Schelhas, Meredith Hovis, and Kailey Kornhauser

Introduction

Community forests have been established in many parts of the United States (Baker & Kusel, 2003; McCullough, 1995). They span a broad range of ownership models, tenure regimes, governance approaches, aims, and activities and have evolved over time within local and larger-scale social-ecological contexts and conditions (Christoffersen et al., 2008; Hajjar & Molnar, 2016). In the United States and internationally, community forests typically encompass clearly delineated areas where community members have access to and management responsibilities for natural resources, are engaged in their governance, and receive direct and indirect benefits from their management (Charnley & Poe, 2007; McDermott & Schreckenberg, 2009). The communities associated with community forests frequently are delineated not only by place but also by interest, practice, and a combination of these aspects (Lawrence et al., 2021). Although many countries around the world have specific legal structures for communal forest ownership, the United States is fairly unique in its broad range of community forest titleholders, which include local, state, and federal governments; American Indian Tribes; non-governmental organisations (NGOs); private corporate landowners; and other public and private entities.

Land ownership in the United States typically determines who has legal authority and responsibility for the land and its resources (Demsetz, 1967; Rolph, 1983). Associated governance arrangements determine who may participate in related decision-making processes, and how (Ostrom, 2003; Smith, 2002). Community forests under most ownership models involve a shift from top-down or distanced decision-making by corporate owners or the federal government toward increasing community participation in forest-related decisions, their implementation, and their outcomes (Davis et al., 2020). These shifts can have positive effects on the sustainability of forests and local communities, particularly where communities have clear and secure tenure, access, and rights to participate in forest decision-making and benefits (Ostrom, 2003, 2007; see also Gilmour, 2016; Larson & Soto, 2008; Molnar et al., 2007; Sunderlin et al.,

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2005). Nevertheless, community forestry initiatives, particularly in the global South, also may involve trade-offs between environmental and socio-economic benefits for local communities (Anderson et al., 2015; Gilmour, 2016; Hajjar et al., 2021).

Understanding how different community forest ownership models and associated property rights and governance regimes shape benefits and potential trade-offs for forests and communities in the United States is important for devising effective policies and practices related to community forestry. In this chapter, we explore the range in community forest ownership in the United States and consider how different ownership models affect community authority and participation in forest decisions and outcomes at the local level. We start with an overview of US forest ownership. Then, we review key bodies of theory on land ownership and property rights, which provide a lens for examining the range in rights and roles of communities under different community forest ownerships. We include examples of public, private, and tribe-owned community forests to explore and compare these variations. Finally, we discuss the implications of different community forest ownership models for local communities and their rights, responsibilities, and benefits from forests in the United States.

Public, tribal, and private forests in the United States

Forests cover 310 million hectares (Mha) of the United States (34 per cent forest cover) (Oswalt et al., 2019).[1] Of forested land, 58 per cent (184 Mha) is privately owned, including about 36 per cent that is owned by individuals, families, and other non-corporate owners (e.g., estates, trusts, NGOs, unincorporated associations, and clubs) (Butler, 2019) (Figure 10.1). Of forested land, 20 per cent is owned by private corporations (e.g., forest industry, timberland investment management organisations [TIMOs], real estate investment trusts [REITs]), and about 2 per cent is within Native American Tribal reservation boundaries (Butler, 2019). Privately owned forests provide most of the timber produced in the United States (Adams et al., 2006) and much of the hunted game, as well as a variety of public goods and services (e.g., water quality, carbon storage, biodiversity, scenic values).

Private forest ownership has shifted in the past few decades, particularly on private corporate-owned lands, as the major vertically integrated forest products companies have converted their ownerships into separate REITs or sold their lands, mostly to TIMOs (Harris et al., 2013; Zhang et al., 2012). Additionally, some family-owned forest land has shifted to corporate ownership as families restructure their ownership to limited liability companies (LLCs) for tax or other purposes (Sass et al., 2021). A small portion of corporate forest land has been purchased for or converted to community forests as these divestitures provide opportunities for local community involvement in timberland ownership, governance, management, and outcomes (Belsky, 2008, 2015).

Approximately 130 Mha of forest (42 per cent of total forest area) are held by federal, state, and local governments in the United States (Butler, 2019). These public forests generally are managed for a broad range of goods and services that may include timber and non-timber products, recreation, wildlife protection, and aesthetic values. Forest ownership differs regionally in the United States, with federal and some corporate lands predominating in the west (Butler, 2019; Hewes et al., 2017) (Figure 10.2). Midwestern states have a diverse mix of public and private lands, including large areas of state and local government-owned forest lands. Forests in the northeast are located mostly on private lands held by family forest owners, in corporate holdings, or on large state-held lands. Forests in the south are comprised of mostly private non-corporate (60 per cent) and corporate (26 per cent) land holdings (Cubbage & McGinley, 2020).

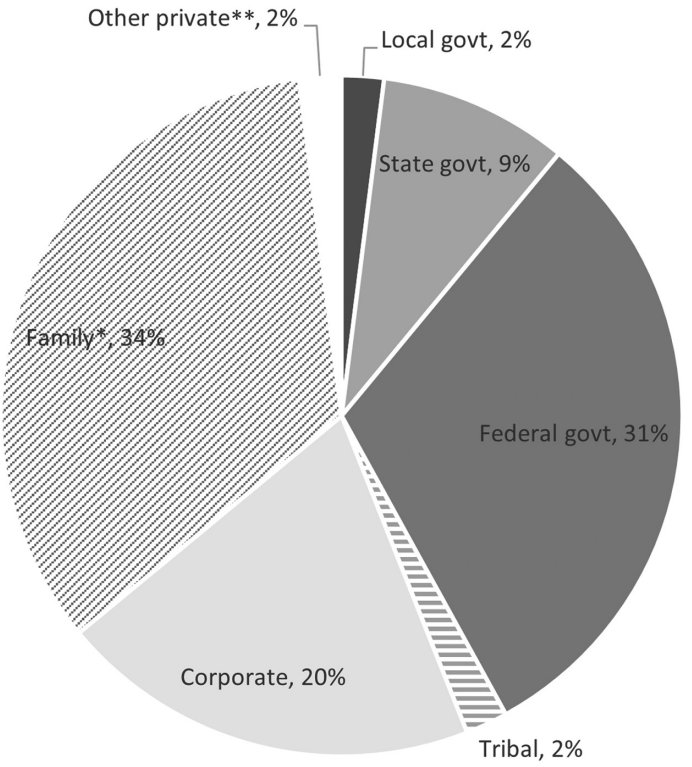


Figure 10.1 Forest ownership in the United States, 2017 (Source: Butler, 2019). *Family includes individuals, families, trusts, estates, and family partnerships, **Other private includes conservation and natural resource organisations and unincorporated partnerships and associations.

Theoretical framing

To understand how community forest ownership shapes community input, involvement, responsibilities, and outcomes and vice versa, a theory about common pool resources and associated property rights is particularly useful. This body of work helps in parsing out the types and bundles of rights that may be held and shared by individuals, groups, and others (Schlager & Ostrom, 1992; see also Ostrom, 2003; Ostrom & Hess, 2007). Common pool resources are characterised primarily by two features: (1) it is difficult to exclude people from their use or benefit; and (2) their consumption by one person reduces their availability and benefit to other people (Ostrom, 2003). Examples of common-pool resources include forests, fisheries, and game animals. Common pool resources may be associated with a range of property rights (Ostrom & Hess, 2007; Schlager & Ostrom, 1992).

A property right is an enforceable authority to undertake specific actions in a distinct domain (Commons, 1968 cited by Ostrom, 2003). Schlager and Ostrom (1992) identify five property rights most relevant to forests and other common-pool resources. From least to most far-reaching in terms of authority, they include access, withdrawal, management, exclusion, and alienation or sale (Table 10.1). Individuals or collectives may possess all or some of these rights. Rights to land, goods, and services also may be held separately by multiple owners. Private property

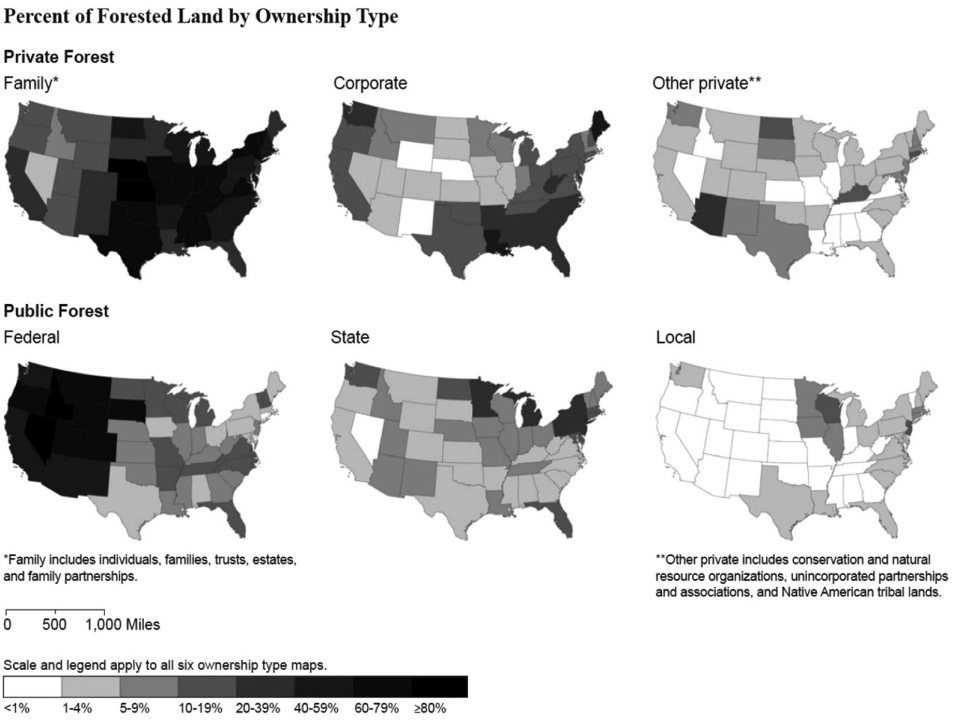


Figure 10.2 Distribution of forest ownership types in the United States (Hewes et al., 2014) Scale refers to the percentage of forestland held by owner type indicated. Darker shaded states have a higher percentage of forestland in a given ownership type but not necessarily more forest.

Table 10.1 Property rights and types of rights holders associated with land ownership

Property rights/rights holder	*Owner*	*Proprietor*	*Claimant*	*Authorized user*	*Entrant/viewer*
Access: right to enter a defined physical area and enjoy non-subtractive benefits (e.g., hike, canoe, sit in the sun)	✓	✓	✓	✓	✓
Withdrawal: right to obtain resource units or products (e.g., catch fish, divert water, harvest timber)	✓	✓	✓	✓	
Management: right to regulate internal use patterns and transform the resource	✓	✓	✓		
Exclusion: right to determine who has access and how it may be transferred	✓	✓			
Alienation/Sale: right to sell or lease rights of exclusion, management, and withdrawal	✓				

Sources: Ostrom & Hess, 2007; Schlager & Ostrom, 1992.

entails the full bundle of rights to land, including the right to sell or lease the rights of exclusion, management, and withdrawal (Schlager & Ostrom, 1992).

Incentives to sustain and protect land and resources can differ according to the combination of rights and responsibilities possessed (Ostrom, 2003). Generally, more comprehensive, well-defined, and upheld bundles of rights provide greater incentive for sustainable resource management than less comprehensive, insecure, or disregarded bundles of rights (Araral, 2014; Cox et al., 2010; Ostrom & Hess, 2007). When high levels of responsibility (e.g., best management practices, certification of forest management) are not accompanied by clear and secure tenure or ownership, incentives for sustainability may wane. Temporal factors also affect rights holders' incentives to contribute to sustainability. Longer-term or permanent property rights provide greater incentive than short term or temporary rights, particularly when timber production is a priority, since it generally requires long term management and investment due to relatively long timber harvest cycles (Cubbage et al., 2017). In this chapter, we aim to understand better the interaction between different community forest ownership models and associated bundles of community property rights, and their implications for community engagement in and responsibilities for forest management (input, implementation, investments, outputs) (Figure 10.3).

Holding clear and complete title to land and associated resources is provided and protected by law in the United States. Most privately owned land is held through fee simple ownership (meaning complete and clear title for purchased or otherwise acquired land and associated structures or enhancements). It includes the rights to possess, use, sell, lease, mortgage, subdivide, and devise or bequeath property (Barlowe et al., 2013). These rights are clearly delineated in the US legal framework, as are governments' rights to tax land and its uses, control land use, and take land for public use or interest (i.e., eminent domain). Ultimately, fee simple owners in the United States hold exclusive but not absolute rights, since land ownership rights may be limited and conditioned by societal interests as enforced and upheld by the state (Cubbage et al., 2017).

Land ownership in the United States typically encompasses all aboveground rights, while belowground rights to resources (e.g., minerals, oil, water) may be held separately. Therefore, aboveground rights to own, harvest, use, and protect forestland may be and often are held separately from rights to belowground resources (Cubbage et al., 2017; McGinley & Cubbage, 2020). Although complete ownership of all aboveground forest resources was common for commodity production of timber and other forest products and services through most of the 20th century, forest property rights have been parsed further through the sale and separate ownership of development rights since the late 1990s (McGinley & Cubbage, 2018). These development rights may be conferred through conservation easements or other policy instruments designed

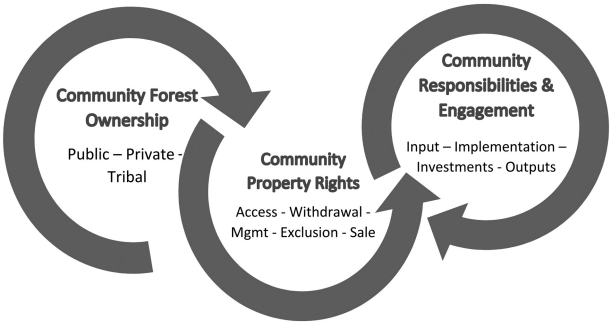


Figure 10.3 Community forest ownership, property rights, and related responsibilities and engagement.

to ensure that land is not converted to developed uses (e.g., residential, commercial, industrial) for a determined length of time or in perpetuity. Conservation easements on forestland may be used to promote, permit, or prohibit extractive uses for commercial and/or non-commercial purposes (e.g., timber, fuelwood, non-timber forest products). They frequently are used in the establishment or acquisition of community forests on private lands in the United States, and their terms and requirements have implications for the forest rights and responsibilities attained by community members, explored further in the examples here.

Policies, programs, and organisations that support community forests in the United States

There is no federal legislation focused solely on community forests in the United States. However, a few states, including Washington and Oregon, have passed legislation (Oregon) or have budget provisions (Washington) that authorise them to fund land acquisition for establishing community forests. Additionally, a number of tools, including tax incentive programs associated with forests and timberland, community forestry bonds, payments for ecosystem services including carbon offset credits, and conservation easements – mostly at state and local government levels – support community forest acquisition and development.

Communities draw on a variety of federal, state, and private funding sources designed to help protect forest and timberland, water resources, or fish and wildlife habitat (e.g., US Forest Service Forest Legacy Program).[2] Some programs explicitly provide cost-share funding for the acquisition of private forestland to be managed as a community forest. For example, the Farm Bill authorises spending for the US Forest Service (USFS) Community Forest and Open Space Conservation Program, which provides funds and other forms of support for the acquisition and establishment of community forests to local and Tribal governments and non-profit organisations. Funders may stipulate who is eligible for community forest ownership, which in turn may influence community forest characteristics and associated management institutions and governance arrangements.

Other civil society and public sector organisations provide assistance for community forest development. For example, The Trust for Public Land's Community Forest Program helps communities raise funds, conduct research and planning, and acquire and protect land as community forests throughout the country.[3] The Northern Forest Center, based in New England, provides technical expertise to help communities in the region acquire and manage community forest lands.[4] Similarly, the Northwest Community Forest Coalition based in the Pacific Northwest supports the growth of community forestry by providing technical support for acquiring and managing community forests, education about community forests through case examples, and networking among community forest groups for knowledge and resource exchange.[5]

Examples of US community forest ownership, rights, and governance

There are many options for groups of individuals connected through place, interest, and/or practice to own, manage, and protect local forests in the United States. At one end of the spectrum, these communities may hold temporary access, use, and/or management rights through an organisation or mechanism created for a specific short-term purpose or need. At the other end, communities may possess long-term communally owned and operated forest areas that provide multiple benefits to the community as a whole and across generations. Most community forests in the United States fall somewhere along this spectrum (Belsky, 2008; Urgensen et al., 2017). A key question for community forests in the United States centres on how decision-making

authority and related responsibilities are exercised, shared, and distributed amongst members of the community, or between community members and the forest owner(s) under different ownership models.

Historical examples of community forests in the United States include communally managed forests on Tribal lands throughout North America, on open access and community grant lands in the pre- and early Spanish colonial southwest, and on town and municipal forestlands established starting in the late 1800s, primarily in New England (Baker & Kusel 2003; McCullough, 1995). More recently, community forests owned by community-based organisations; land trusts; private community collectives; local, state, and federal governments; and other groups have emerged. They address, for example, shifts in wood products production and forestland ownership, growing demand for access to recreation opportunities, and pressures for conversion of forestland to non-forest uses (Lyman et al., 2013; Urgensen et al., 2017). Many of these newer community forests, particularly in the Western United States, have been created through collaborative processes driven or supported by communities organised around specific places or interests (Danks, 2009; McDermott, 2009). In the sections to follow, we explore the rights and responsibilities acquired and exercised by local communities in implementing community forestry under different ownership models throughout the United States.

Public ownership – local government

Local governments in the United States, such as towns, cities, counties, and municipalities may purchase and/or designate land as a community forest for community benefit. These local government-owned forests are found in many parts of the country, particularly in New England states, which have a long history of local government–owned 'town forests' (McCullough, 1995). Town forests are properties owned by local governments, designated for the benefit of local communities, and important to maintaining open space, recreational opportunities, and working lands conservation, among other uses and values. Certain local government–owned forests exhibit characteristics of a community forest, including high levels of community participation in decision-making, management, and benefit-sharing (Lyman et al., 2013; McCullough, 1995). One example is the city of Arcata's community forest in northern California (see Chapter 13, Wilkinson & Sahara). Here, we focus on the North Falmouth Community Forest in Maine to illustrate this model.

The North Falmouth Community Forest (152 ha) is one of many conservation properties owned by the town of Falmouth in Cumberland County, Maine. This community forest was established in 2007 to preserve open space, watershed protection functions, wildlife populations, and recreational and aesthetic values (Town of Falmouth, 2013). The first parcels of the North Falmouth Community Forest were purchased with the town's open space funds from a private family forest owner. Additional parcels have since been acquired from private landowners with town funding and support from the USFS Community Forest and Open Space Conservation Program. About half of the community forest is protected by a conservation easement held by the Falmouth Land Trust. The easement prohibits forest conversion to residential, commercial, or other development in perpetuity (Falmouth Land Trust, 2020). Management costs for this community forest are covered mostly by town funds but may be offset by timber revenues in years when timber is produced. Harvested wood not suitable for sale as timber is donated to local schools to fuel wood-fired boilers (Town of Falmouth, 2013).

The Falmouth Town Council has decision-making authority for the management, harvest, and use of this community forest. The Open Space Division of the town's Parks and Community Programs Department is responsible for forest management and contracts a

local forester to prepare and execute forest management plans (Town of Falmouth, 2013). Residents may participate in decision-making through advisory committee appointments and public meetings (Town of Falmouth, 2013). The Town of Falmouth Land Management and Acquisition Committee – a seven-member committee of town residents appointed by the Town Council – advises the council on forest policy, practices, and acquisitions. Committee meetings are open to town residents and meeting minutes are made publicly available on the town website. Falmouth residents hold rights to access the forest for non-consumptive uses and mostly use it for recreational hiking and biking. Residents may obtain permits for withdrawals, in line with the forest management plan. These permits are issued and overseen by the Town's Open Space Department.

For most local government-owned community forests, like the North Falmouth Community Forest and the Arcata Community Forest, decision-making authority ultimately resides with the local government, which owns and manages the forest on behalf of the local community. Local government ownership generally supports the rights of local access, participation in decision-making, and shared benefits, mostly associated with recreation, open space conservation, and protection of other ecosystem services. Although community members do not hold title or direct decision-making authority over the land and its resources, they may serve on advisory committees, participate in public meetings and other public processes, or hold public office positions themselves. Community members also maintain close influence on decision-makers, particularly since local government office holders are democratically elected by local residents (Lyman et al., 2013).

Public ownership of community forests at local and higher levels of government involves a system of rules and regulations that ultimately determine community access and use (Urgenson et al., 2017). When community forests include conservation easements, future land-use decisions typically are limited. Similarly, when these forests are certified as sustainably managed or when they sell verified carbon offset credits, some decision-making authority is ultimately shared with certificate holders, at least as long as the certificate is valid or remains in effect. Forests without easements or other permanent protection status may be subject to sale or development, particularly at local government levels if crises arise or budgets fall short, or where local interests, involvement, and awareness are low or decline. However, local government–owned community forests often benefit from some level of fiscal support for forest acquisition and management made available through annual budgets, tax revenues, or municipal bonds. This contrasts with most privately held community forests, which must generate enough revenue or acquire enough external support to cover the costs of acquisition, management, and maintenance.

Public ownership – state government

State government-owned community forests in the United States are unique to the state of Washington. In 2011, Washington created the Community Forest Trust Program aimed at empowering communities to acquire and manage forests that support local economies and public recreation through a partnership with the state's Department of Natural Resources (WSDNR, 2020). Community forests acquired through this program are held by the state in a non-fiduciary trust on behalf of the local community. They are different from other state trust lands, whose primary focus is revenue generation, in that community forests are intended to generate multiple benefits, including but not necessarily primarily focused on revenues (WSDNR & WDFW, 2015; WSDNR, 2017). Nonetheless, the program stipulates that community forests must generate income 'at levels that are, at a minimum, high enough to

reimburse the Department for management costs and provide for some reinvestment into the forest's management objectives' (WSDNR, 2020). State-owned community forests are managed by the Washington State Department of Natural Resources (WSDNR) in collaboration with the Washington Department of Fish and Wildlife (WDFW) and a local advisory committee appointed by the state legislature. The advisory committees are comprised of individuals representing the public and private sectors who advise the state on forest issues, needs, and goals and collaborate in forest planning and management with WSDNR and WDFW (WSDNR, 2020).

As of 2020, two state-owned community forests (Teanaway; Klickitat Canyon) had been established in Washington. The Teanaway Community Forest (20,332 ha) was the first and illustrates this model. Its primary objectives are protecting the headwaters of the Yakima River Basin, maintaining working forest and grazing lands, providing recreational opportunities, conserving and restoring fish and wildlife habitat, and supporting community partnerships and collaboration (WSDNR, 2020). A proposal to purchase the land from American Forest Holdings LLC (a private corporate owner) was negotiated and secured through a collaborative effort led by Forterra, a state-level non-governmental conservation organisation, in partnership with the local community. The project was presented to and approved by the state legislature for acquisition through the Community Forest Trust Program in 2013. A 20-person community-based advisory committee, including stakeholders representing local government, civil society organisations, interest groups, the private sector, neighbouring landowners, and the Confederated Tribes and Bands of the Yakama Nation, was appointed by the state legislature to advise and collaborate with the WSDNR and WDFW in the planning and management of the Teanaway Community Forest (WSDNR & WDFW, 2015; WSDNR, 2020). Additional opportunities for input include regularly held public meetings, hosted site visits and reviews, and other activities sponsored by WSDNR, WDFW, and the community forest advisory committee (WSDNR, 2020).

For Washington's state-owned community forests, decision-making authority ultimately resides with the state legislature. Management authorities largely are held by the WSDNR in collaboration with WDFW, other state agencies, and state-appointed community-based advisory committees. As with local government–owned community forests, this ownership model supports community members' rights of local access, participation in decision-making, and shared benefits. Because ultimate decision authority lies with the state rather than local government, decision processes may be more removed from and less accessible to local communities, contexts, and conditions. Although state-owned community forests are designated for local community use and benefit, they ultimately are accountable to a wider range and scale of interests and stakeholders that extend beyond the local level. Also, community forests established under Washington's Community Forest Trust Program must generate at least enough revenue to offset any state-incurred management costs, unlike many local government–owned forests. As outlined in the program directives, failure to generate sufficient revenues could lead to reassignment or divestiture by the state, and also may occur if, for example, the WSDNR and local advisory committee fail to reach a consensus on forest planning or proposed projects (WSDNR, 2020).

Public ownership – federal government

Over the past several decades, both governmental and non-governmental community-based organisations have increasingly collaborated and partnered with the federal government on federal forest management in the United States (Butler, 2013; Davis et al., 2020; Koontz et al., 2004). These efforts typically focus on enhancing local participation in the governance of federal lands and increasing local benefits from federal land management. In some places, community-based organisations play a central role in implementing on-the-ground federal forest manage-

ment activities by providing resources and capacity that federal agencies lack, contributing to both forest restoration and local job creation (Abrams et al., 2015). Some collaborative efforts on federal lands might be characterised as community forests or community-based forest management initiatives, including the Weaverville Community Forest in California (Chapter 12, Frost & Sheen, 2022).

The Weaverville Community Forest (6,055 ha) encompasses 405 hectares of land administered by the Bureau of Land Management (BLM) and an adjacent 5,665 hectares of the Shasta-Trinity National Forest administered by the USFS. Both agencies have established stewardship agreements with the Trinity County Resource Conservation District (TCRCD) to assist in the management and oversight of these lands. The TCRCD is a local government organisation focused on natural resource conservation and management that serves as a bridge between the local community and federal agencies. A Community Forest Steering Committee comprised of diverse stakeholder groups and members of the public advises the TCRCD, BLM, and USFS on management priorities and related activities (O'Sullivan, 2011; TCRCD, 2020).

Stewardship agreements between federal land management agencies and local partners are authorised under Section 323 of Public Law 108-7, which gives BLM and USFS permanent authorities to enter into stewardship contracts or agreements to exchange goods and/or funds for services to achieve land management goals that meet local and rural community needs.

These contracts and agreements typically are established for a period of ten years and can be renewed with the same parties at the end of an agreement period. Both the BLM agreement established in 2005 and the USFS agreement established in 2008 with TCRCD to manage the Weaverville Community Forest have since been renewed for an additional ten-year period (TCRCD, 2020). Stewardship contracting authorities were amended in 2018 extending the maximum contract or agreement duration to 20 years where federal lands exhibit specified fire regime characteristics.

Stewardship contracts and agreements are used across many federal lands administered by BLM and USFS, some of which demonstrate some characteristics of community forests, but the Weaverville Community Forest is the only area officially referred to as a 'community forest' of which we are aware. As with other types of government-owned community forests, this model supports community members' rights of local access, participation in decision-making, and shared benefits, particularly through participation and collaboration with TCRCD. However, because decision authority resides with the federal government, ultimate decision authority may be even more removed from and less accessible to local communities, contexts, and conditions than local or state government-held community forests. In addition, community rights of access, use, and management are governed by an extensive legal framework for federal land management, and specific rights conveyed by the stewardship contracts or agreements are good only as long as the instrument is in place. Currently, there is no indication that existing stewardship agreements with TCRCD would be terminated, creating a relatively high level of perceived tenure security of the Weaverville Community Forest among local community members, lending itself to continued investment through local participation and support (see e.g., Agrawal, 2001; Ostrom, 2003).

Private ownership – non-profit, community-based organisation

Some communities establish or work through an existing non-profit community-based organisation to acquire, own, and manage community forests. The Mt. Adams Community Forest (407 ha) is an example of a community-based organisation–owned community forest located in Glenwood, Washington. The forest is owned by the Mt. Adams Resource Stewards (MARS) – a

community-based non-profit organisation established in 2004 to address forest fragmentation and frequent ownership changes of private industrial forestland through local forest stewardship (MARS, 2020). The parcels comprising this community forest were purchased by MARS from a private timber company through a combination of community-raised funds and grants, including support from the USFS Community Forest Program. The Mt. Adams Community Forest is managed for multiple objectives, including forest health and restoration, wood and non-wood products, recreation, and other goods and services. The forest generates revenue from regular timber harvests, which averaged over US$200,000 annually from 2014 to 2017 (Ganguly et al., 2018).

Decision authority for the Mt. Adams Community Forest resides with the MARS Board of Directors, consisting of members of the community's public and private sectors elected by organisation members. MARS staff carry out management activities, including timber harvests, fire management, and recreation development, often with paid and volunteer support from members of the local community (MARS, 2020). A community-level advisory committee provides input and guidance to the Board on forest policy, planning, practices, and investments, including reinvestment of profits from timber production into planning, and development of forest goods and services (e.g., recreation). Opportunities for broader community input on forest decisions and their implementation are promoted through regularly held public listening sessions, forest tours, and other activities organised by MARS (Ganguly et al., 2018; MARS, 2020).

Local community members' rights to access the forest for recreation and other non-consumptive uses are provided by the Mt. Adams Community Forest as established in its bylaws and rules. Although this community forest is privately held, these broader community rights are likely to be guaranteed for at least as long as the forest maintains its status as a community forest. In addition, financial support from the USFS Community Forest Program provides incentive to maintain the forest as an accessible community resource while providing a strong disincentive against land use change or sale.

Private ownership – non-profit, land trust

Land trusts have had a prominent role in the promotion and development of community forests in the United States for several decades (Saxton, 2012). In this context, land trusts are non-profit organisations that purchase land or its development rights (e.g., through conservation easements) primarily for the purpose of protecting, conserving, or stewarding natural areas or working lands and limiting land conversion to developed uses (e.g., residential, commercial, industrial). Land trusts also provide extensive administrative and financial support to local communities and other partners for the acquisition and management of community forest lands. Per a 2015 census, land trusts have helped protect 53 Mha of land in the United States (Lyssen, 2016).

The Downeast Lakes Community Forest (22,532 ha) in Maine is owned by the Downeast Lakes Land Trust (DLLT), a non-profit organisation 'committed to the long-term economic and environmental well-being of the Downeast Lakes region through the conservation and exemplary management of its woods and waters' (DLLT, 2020). Starting with the purchase of 10,959 ha of productive timber land from Wagner Timber Management in 2005, as of 2021 it totalled 22,532 ha across multiple tracts of forested land. Management objectives include the production of 'high quality high value timber', along with the protection of wildlife habitat, provision of recreation opportunities, and preservation of open space (DLLT, 2020). Acquisitions have been supported by donations, public fundraising, and grants, including a grant from the USFS Community Forest and Open Space Conservation Program. The forest also includes

multiple conservation easements on different tracts (DLLT, 2020). This community forest has been certified to Forest Stewardship Council standards since 2007 and has had Climate Action Reserve verified carbon stores for the carbon offset market since 2012 (DLLT, 2020; NEPcon, 2020; Smartwood, 2007). The sale of carbon offsets has helped finance forest expansion and provides 'additional long-term protection for the property … and environmental benefits from increased timber stocking' (DLLT, 2020).

Ultimate decision authority for this community forest is held by the DLLT, as landowner, and its 10-member Board of Directors is comprised of local community members from the public and private sectors. Easement holders also have some authority over the rights of exclusion and sale of tracts for which they hold individual easements. Management responsibilities fall to DLLT staff, including a Managing Forester, supported by contracted service providers and community volunteers (DLLT, 2020). Community members have opportunities to participate in management through multiple community-level advisory committees that contribute to the planning and management of the forest, including committees dedicated to forest resources, trails, fish and wildlife, education, and governance. Non-consumptive uses of the forest are open to the general public. Local community members can request withdrawal rights through permits for timber, firewood, gravel, Christmas trees, and other goods subject to policies and procedures approved by the Board of Directors. Forest certification and sale of carbon offsets mean that some authority over management and withdrawal rights is shared with the associated entities.

Private ownership – for-profit firm (e.g., limited liability corporation)

Community members may opt to join together to form a for-profit firm, such as a subchapter C corporation (C-Corp) or LLC to purchase, manage, and protect forest land.[6] There are many examples of forestry co-operatives (formalised legal entities with individual land ownerships committed to a collaborative business model) and other types of forest landowner collectives in the United States. These generally do not involve group ownership or group-level decision authority over all forest resources within the co-operative. Instead, these organisations typically maintain individual property ownership and decision-making among group members, which may be shaped but not necessarily dictated by collective goals and objectives (Groot et al., 2015).

The Little Hogback Community Forest (47 ha) is an example of a for-profit, private firm founded by a small group of community members in Monkton, Vermont, with administrative and financial support from the Vermont Land Trust, Vermont Family Forests, Ford Foundation, and other organisations (Saxton, 2012; VFF, 2018). In 2007, an LLC comprised of 16 shareholders was formed to purchase 47 hectares of productive forest from a private timber company. Half of the 16 shares are subsidised for purchase by low-income individuals or families for whom forest ownership otherwise may not be financially feasible. The other half are available to any interested investor in the local community. Vermont Family Forests retains the right in perpetuity to repurchase any corporate share that a member may choose to sell (VFF, 2018). Additionally, the Vermont Land Trust holds a conservation easement on the entire forest, which helped lower the initial costs of acquisition for shareholders and to protect the land from future residential or commercial development.

Together, the Little Hogback Community Forest shareholders have ultimate decision authority for the forest, its uses, and benefits, though land use change to residential, commercial, or other developed uses is restricted by Vermont Land Trust's conservation easement. Shareholders maintain the rights to harvest timber and firewood, hunt, and recreate on the land and share in forest revenues when timber is sold. The local community and public at large are permitted access to the forest for recreational uses and engage in the forest through multiple volunteer

opportunities. Additionally, firewood harvested from the forest is regularly donated to local wood banks (Lyman, 2008). Decisions about the forest are made by consensus amongst the shareholders. Forest management must follow a plan jointly developed and approved by the Little Hogback LLC, Vermont Family Forests, and the Vermont Land Trust, as dictated in the forest's bylaws, but decision processes generally are not open to the larger local community or general public (Lyman, 2008; VFF, 2018).

Tribal ownership

Tribes in North America have a long history of communal forest management that predates the arrival of Europeans and subsequent colonisation (Lucero & Tamez, 2017; Mausel et al., 2017; Trosper, 2007; Trosper et al., 2012). Dispossession of land and the termination of American Indian Tribes during the US settler-colonial period and westward expansion eliminated or greatly altered Tribes' ancestral connections to forests and other natural resources. Later instances of Tribal recognition, land repatriation, and designation of reservation lands held in trust for Tribes by the federal government led to some restoration of, or new association with, these resources. But Tribes have ancestral ties to specific landscapes, portions of which may not have been incorporated within designated reservation lands.

Today, Tribal trust lands encompass 7.3 Mha of forest across 305 reservations (Gordon et al., 2013). Historically, forests located on Tribal trust lands were managed by the Bureau of Indian Affairs (BIA), which interpreted its trust responsibilities as maximising sustainable timber harvest revenues (Catton, 2016; Newell et al., 1986). Over time, Tribes assumed greater participation in forest management on reservations, supported in part by the Indian Self-Determination and Education Act of 1975. As Tribes have established or strengthened their Tribal natural resource agencies, many have taken over responsibility for forest management from BIA (Catton, 2016). In addition, collaborative management and shared stewardship of federally designated lands, sometimes including transfer of ownership, are increasingly being considered as ways to restore Tribes' access to and authority over their ancestral lands. For example, the Klamath Tribes of the Pacific Northwest entered into a Master Stewardship Agreement with USFS in 2011 to share forest decision and management responsibilities for parts of the Fremont-Winema National Forest on their ancestral lands (Chiu, 2008; Hatcher et al., 2017).

Current land ownership and management arrangements on Tribal lands are varied and complex, with a trend toward increasing Tribal control of forests on and off trust lands (Dockry & Hoagland, 2017; Lucero & Tamez, 2017; Trosper et al., 2012). For example, the Menominee Tribe has long practised communal management of its ancestral and reservation forest lands. In 1908, the Tribe established the Menominee Tribal Enterprises to manage more than 90,000 ha of forest covering 95 per cent of their reservation lands (Menominee Tribal Enterprises, 2020). Menominee Tribal Enterprises is a for-profit private entity that aims to sustain Tribal access to game, fish, and medicinal plants while providing jobs and income from timber production and investments in Tribal infrastructure and other goods and services from timber revenues (Menominee Tribal Enterprises, 2020; Pecore, 1992; Trosper, 2007).

The Tribal legislature maintains ultimate decision authority over the Menominee forest and elects a Board of Directors comprised of Tribal members to preside over the forestry organisation (Tribal Government of Menominee Indian Tribe of Wisconsin, 1999). Menominee Tribal Enterprises coordinates with BIA and Wisconsin Department of Natural Resources in forest planning and management, with broad participation by Tribal members (Menominee Tribal Enterprises, 2020). The organisation directly employs nearly 300 Tribal members (full-time equivalents annually). Distribution and reinvestment of net profits are determined by the Tribal

legislature, with 'equitable shares' retained for reinvestment in the forestry business and 'utilized for tribal operations, distributed to tribal members, or divided and used for both purposes' (Tribal Government of Menominee Indian Tribe of Wisconsin, 1999).

Tribes also purchase, own, and manage forestland outside their reservations for community use and benefit. For example, in Washington, the Kalispel Tribe established the Indian Creek Community Forest (1,238 ha) to protect and restore riparian and wetland zones on private land bordering their reservation. This community forest forms part of a network of Tribe-owned lands outside the reservation totalling more than 2,000 ha, purchased by the Kalispel from private owners to expand land access and harvest sites for Tribal members. The Indian Creek Community Forest is managed by the Kalispel Natural Resources Department (KNRD) for the benefit of Tribal members and the local community, including open space conservation and watershed protection. A local advisory council that includes Tribal and other public and private sector actors was created to advise the Tribal Council and KNRD on management priorities and projects (KNRD, 2019). Meetings are open to the public.

These examples of Tribal community forests demonstrate the range in forest ownership and associated property rights and responsibilities possessed by Tribes in the United States (see also Chapter 13, Wilkinson & Sahara). Whether located on Tribal trust lands, federally administered lands, or private lands purchased by Tribes outside their reservations, these community forests generally occur within clearly delineated areas where Tribal members have access to forest resources, are engaged in their governance, and receive direct and indirect benefits from their management.

Discussion

Community forests in the United States have been established on local, state, and federal government lands held in trust for and managed by or for local communities; on forestlands owned by community-based organisations that are managed with community input and involvement; and on forests owned outright by Tribes or private firms comprised of local community members. Some community forests involve significant input and investment by a wide range of community members, like many community-based organisation–owned community forests. Others may be managed by a more limited number of actors on behalf of a local community, including some community forests owned and managed by local or state governments or land trusts. Some have existed in one form or another since long before the concept of 'community forest' was widely adopted, including many Tribal forests. Others have been established more recently to protect forestland from conversion to residential or other developed uses, and to designate it for local community benefit in perpetuity, including community forests with a conservation easement. Still others are established for a limited, but potentially renewable, period of time for community use and benefit, like those established through stewardship contracting on federal lands. Most community forests reflect a balance between desired community rights to local forests and community capacity to assume the responsibilities and authority associated with forest ownership. These range from financial and technical investments, to input and involvement in decision-making and implementation, to outputs and outcomes of management plans.

Figure 10.4 displays the range in property rights and responsibilities acquired by communities through different models of community forest ownership in the United States. The figure is useful for understanding better the spectrum of community rights and responsibilities associated with community forestry under different ownership models. It also suggests questions regarding the outcomes, durability, and evolution of different community forest ownership and governance approaches for future research.

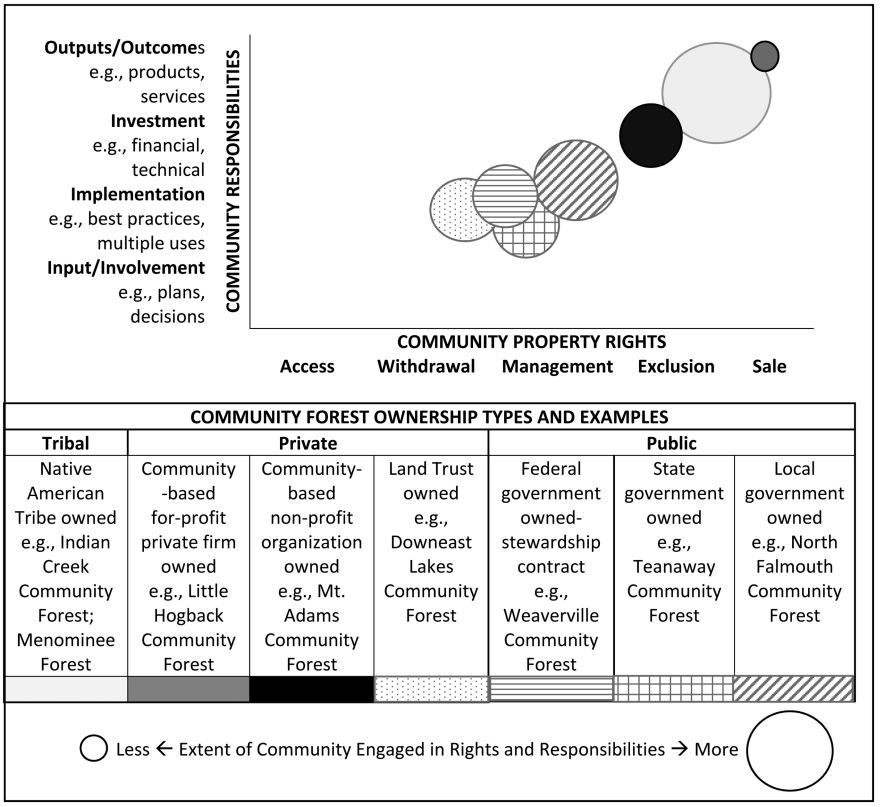


Figure 10.4 Community rights and responsibilities under different community forest ownership models in the United States. Circle shade and hatching corresponds to the community forest ownership type and example. Circle size corresponds to extent of community engagement in the rights and responsibilities associated with different ownership types. Community forests are classified based on the expanding bundle of property rights attained by the community on the horizontal axis, and the hierarchical range of community engagement in the forest on the vertical axis.

Community forests under private ownership may be held by for-profit and non-profit entities. The former are not very common in the United States. Under this ownership model, illustrated by the Little Hogback Community Forest, owners possess the full bundle of property rights associated with land ownership. They are also accountable for a broad range of responsibilities (including financial), forest-related decisions, their implementation, and their outcomes. This private community forest ownership model provides community members with a means of direct ownership in and benefit from local forests, including profit sharing from timber sales. It also can generate multiple benefits for the larger local community, including preservation of open space and access to recreation, but limits forest decision-making and benefit sharing to owners' private interests, with fewer opportunities for public input and participation than other ownership models explored in this chapter.

Tribes that own private forestlands outside their reservation boundaries or actively manage forestland on their reservations also possess the full or near complete bundle of property rights and ultimate authority for forest inputs, processes, and outcomes. These community forests are managed to meet Tribal needs and interests and offer multiple ways for Tribal members to

participate in decision making and implementation. Forest revenues may be distributed among Tribal members, invested in Tribal community infrastructure and services, or reinvested in Tribal forest operations. Tribal community forests also generate benefits that extend beyond community forest boundaries, but may not provide extensive opportunities for public input or participation in decision-making.

Other models of privately owned community forests include those owned by land trusts and other non-profit community-based organisations. This model offers local community members a fairly broad range of opportunities to provide input and engage in forest planning and decision-making through the creation of non-profit community-based organisations, membership on the Board of Directors or other advisory committees, and participation in public meetings and volunteer opportunities. Community-based organisations largely are comprised of local community members who aim to represent and serve local interests. Ultimate authority over forest inputs, processes, and outcomes, including benefit sharing, is held by the organisation as landowner. Local benefits provided by these community forest ownership models include open space preservation, recreation opportunities, and forest products production and supply for local industries. Revenues generated from forest production and other means typically are invested back into the forest and its management or expansion, but also may be invested in the local community. Ultimately, the local community as a whole possesses a comparatively smaller bundle of property rights under this model, but also fewer responsibilities than Tribal members in Tribally owned or managed forests and shareholders or owners invested in a private firm–owned community forest.

Publicly owned community forests have been created by local, state, and federal governments in many parts of the United States. Local community members or organisations often are key partners in the establishment and management of these forests, though the government maintains ultimate authority over decision-making about the forest and its uses. Publicly owned community forests provide multiple benefits for local communities, with some generating revenues that are reinvested in the forest or other public goods or services. They also offer many opportunities for community input and involvement in decisions through public meetings, accessible information, and opportunities to serve on advisory committees and in other capacities. Community engagement in these participatory processes varied across the examples examined here. Given their local nature and domain, local government–owned community forests may provide more accessible opportunities for community members to engage in management decisions and shared benefits than state or federal government–owned community forests. Nevertheless, the examples of state and federally owned community forests described in this chapter involve fairly extensive, though not necessarily expeditious or conflict-free, community engagement processes.

The examples of community forest ownership models examined in this chapter have a broad range of objectives and desired outcomes that directly and indirectly benefit local communities. These include open space conservation, recreation, watershed and wildlife habitat protection, timber and non-timber forest products production, and support of local wood-products industries. Many of these community forests include revenue generation (e.g., from timber, non-timber forest products, carbon sequestration) as an objective. However, only for-profit private or Tribally owned community forests directly distribute a portion of their earnings or dividends amongst community members. Government and non-profit organisation–owned community forests that generate net profits typically reinvest at least a portion in the community forest to offset management costs, in addition to investments in the development or expansion of forest uses or opportunities, the acquisition of additional property to expand the community forest, or investments in other community goods and services.

Acquisition and operational funding are key considerations for community forests. Publicly owned community forests typically benefit from some base level of staffing and funding through regularly appropriated or specially designated government funds, resulting in fewer direct responsibilities for local community members, particularly in terms of direct investments, implementation, and outcomes. For most of the ownership models and examples in this chapter, some level of external financial support is critical, both in the acquisition phase and throughout forest planning and management, especially where restoration is a key (and often costly) objective, and income generation is limited. Some financial support comes through grants like those offered through the USFS Community Forest and Open Space Conservation Program or conservation easements, both of which can help offset the costs of forest acquisition and result in some level of shared decision authority over current and future forest uses. The goals and guidelines of these programs and policy instruments may shape who participates in community forest development, where community forests are established, who is included (and excluded) from the 'community', and, ultimately, the goods and services that are available at the local level.

Conclusions

Community forests in the United States are diverse and involve a wide range of public and private ownership models adapted to their local contexts, aims, and capacities. They may encompass small areas, like the 47 ha Little Hogback Community Forest owned and operated by 16 local shareholders in Monkton, Vermont, or they may stretch across large expanses of forestland, like the 90,000 ha Menominee Forest managed by a private Tribal entity on the Menominee Tribe's reservation trust lands in Wisconsin. Some community forests in the United States have long been established, like some town forests in New England. Others have been more recently created, like most land trust-owned community forests, emerging from collaborative efforts, contested policy arenas, and social and political movements driven by local stakeholders seeking greater access to and benefits from local forest resources. Community forests may comprise a modest share of the total forest area in the United States, but they are increasing in number and extent as local communities pursue greater access to, benefits from, and retention of local forestlands.

The community forests examined in this chapter all involve clearly delineated areas where local community members have access to forest resources, are engaged in their governance, and receive multiple direct and indirect benefits, albeit to varying degrees. Community forest ownership determines who has ultimate decision authority over rights of forest access, withdrawal, management, exclusion, and sale, and influences how forest rights, responsibilities, and benefits are shared amongst different stakeholders. It may be that the larger or more complete the bundle of forest rights possessed by a local community, the more sustainable, enduring, and equitable the resource management system will be (Ostrom, 1990; see also Agrawal, 2001; Coleman & Liebertz, 2014; Gibson et al., 2005), but this bears further study in the context of different community forest ownerships and associated governance approaches in the United States.

For many communities, the investment, capacity, and other responsibilities required for outright ownership may be out of reach or may not be sought. When high levels of investment in local forests are not feasible for local communities, other private (e.g., land trust) or public (e.g., local government) community forest ownership models may provide a more viable means for keeping forests as forests and for increasing opportunities for local involvement and investment in their management. This is particularly so where community forests are established on former private industrial timberlands or on federal forest lands that were previously tightly controlled.

Shifts to community forestry from other types of forest management and ownership regimes generally involve greater benefits to local communities as a whole, but these shifts do not guarantee an equitable distribution of benefits or increased benefits to poor or marginalised community members. How community engagement and benefit sharing and rights and governance regimes vary across different community forest ownerships in the United States, and how they evolve over time, should be further studied.

Our focus on community rights, responsibilities, and engagement under different community forest ownership models contributes to a better understanding of the comparative costs, benefits, and potential trade-offs for local communities, their partners, and policymakers in establishing community forests. This approach also is helpful for those seeking to understand and assess the community forest ownership options and associated rights and responsibilities that are available and evolving in the United States, and for devising effective policies and practices related to community forestry and forest sustainability. Community forests provide multiple means for sharing and increasing local forest tenure, governance, and benefits, and may provide a broad array of goods and services for local communities, particularly when they are established on former corporate-owned lands or to protect forests prone to development pressures. Examining the social and ecological outcomes and long-term sustainability of different community forest ownership models, and their implications for community rights and governance, is an important topic for further study that we hope will benefit from the analytical lens developed and applied in this chapter.

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Notes

1 Following the United Nations definition, forests reported here include land that has at least 10 per cent crown cover by live tally trees of any size or has had at least 10 per cent canopy cover of live tally species in the past, and is at least 0.4 hectare in size and 37 metres wide (Oswalt et al., 2019).
2 https://www.fs.usda.gov/managing-land/private-land/forest-legacy
3 https://www.tpl.org/our-work/community-forests
4 https://northernforest.org/programs/community-forests/overview
5 https://nwcommunityforests.org/
6 Under United States federal income tax law, a C corporation refers to any corporation that is taxed separately from its owners, and a limited liability company refers to business for which the owner(s) is/are not personally liable for the company's debts or liabilities.

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11

COMMUNITY-BASED FORESTRY IN THE WESTERN UNITED STATES

Reimagining the role of communities in federal forest management

Cecilia Danks and Yvonne Everett

Introduction

In the western United States (US), where over two-thirds of forests are managed by the federal government, community-based forestry groups emerged from the 1990s onward in response to conflicts over federal public lands policy, declining rural economies, and concerns over environmental impacts of industrial forest management. Some of these groups have grown to become nationally networked entrepreneurs that often take the lead in developing and disseminating innovative forest restoration practices through place-based research and development, peer learning, and multi-scalar partnerships. In doing so, community-based forestry (CBF) organisations are restoring forests, renegotiating relationships between communities and federal land management agencies, and influencing natural resources policies and management.

Community forestry is a term used globally (e.g., Charnley & Poe, 2007), including in the US (e.g., Baker & Kusel, 2003), for community involvement in stewarding forests for social and environmental well-being. In the US, however, community forestry often refers to urban forestry due to 1990 legislation (PL 101-624, Title XII), which authorises the federal urban and community forestry assistance programme. 'Community forests' are typically owned by municipalities or community organisations (The Conservation Fund, 2021). A formal vesting of authority by central governments in local communities is an important aspect of community forestry as understood globally (Charnley and Poe, 2007). However, for CBF on US public lands, government agencies retain management authority (Davis et al., 2020). While advisory groups and public input are common, land transfers or leases to communities are rare (Congressional Research Service, 2021). Nevertheless, the influence of CBF organisations in guiding federal forest management is growing, even without formal governance authorities (Abrams et al., 2015). Moote (2008, pp. 245–246) distinguishes between 'collaborative forest management', which focuses on discursive approaches for seeking consensus among diverse perspectives in planning processes for public forests, and CBF, which 'is characterized by the substantive involvement' of community members, including landowners and forest workers, who

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do not necessarily represent the full range of public concerns. We use the term *community-based forestry* in this chapter to describe how community-based organisations, often in partnership with others, seek to create resilient ecosystems and communities. In CBF, communities share in decision-making and benefits, while integrating their knowledge and labour in forest management for social and ecological benefits (Danks, 2008).

The Watershed Research and Training Center (hereafter the Watershed Center) is a leader among CBF organisations (Abrams et al., 2015). What started in the early 1990s as a local effort to retrain displaced loggers and millworkers is now an influential NGO active in forest and wildfire management, watershed and fisheries restoration, and biomass energy development. It works to restore forests locally, while leading state-wide and national initiatives. How can one small, community-based organisation have such capacity to influence forest management across scales? This chapter explores that question while highlighting lessons learned that are applicable to community-based forestry worldwide.

The authors are long-term board members of the Watershed Center. This longitudinal experience, in addition to our research on community forestry elsewhere, encouraged us to reflect on the evolution and influence of the Watershed Center on CBF and how this model may have broader significance for community forestry. Haraway (1988) and others have problematised 'objectivity' and noted the value of 'situated knowledge' in creating 'a better account of the world'. In reflexive participatory research, being embedded and acknowledging the biases associated with such a position can be an added source of insight. In varying roles, we have participated in 'the self-reflective spiral in action research' (Kemmis & Wilkinson, 1998, p. 21) with Watershed Center staff, board and partners.

The context of community forestry in the western United States

Today 33 per cent of the US (over 314 Mha) is forested, nearly half of which is under federal ownership, mostly in the west (Oswalt & Smith, 2014) (see Figure 11.2, Chapter 10). Federal forests are managed by several national government agencies, primarily the Forest Service (USFS) and the Bureau of Land Management (BLM) (Congressional Research Service, 2021). Forest industry and ranching are based on private lands, but many landowners access resources on public lands through contracts to log or leases to graze livestock (Zaslowsky & Watkins, 1994). In this context, landscape scale natural resource management requires collaboration among diverse landowners to achieve cross-boundary stewardship of wildlife, water, and fire-adapted forests.

These lands include ancestral territories of Native American tribes who managed natural resources for thousands of years prior to the arrival of Europeans. As settlers spread west seeking gold and land, Indigenous populations were confronted with violence, their populations decimated and their lands taken, and survivors often moved far from their homelands (Dunbar-Ortiz, 2014). For the last 150 years, tribal influence over the management of forest lands has been limited, even on designated tribal reservations. However, there is growing recognition of tribal treaty rights, Indigenous knowledge, and the potential for co-management of ancestral lands with federal agencies (Long & Lake, 2018).

Western federal lands were long managed primarily for resource extraction in co-operation with private timber, mining and ranching industries (Riddle, 2019). By the 1990s in the Pacific Northwest, advocates for the protection of endangered species and old-growth forests were pitted against timber interests (Maier & Abrams, 2018; Rule, 2000). In response to lawsuits filed by environmental groups, a federal court halted timber sales and ordered the federal government to develop forest practices that would protect the endangered spotted owl. The resulting Northwest Forest Plan (NWFP) dramatically shifted regional forest management from resource extraction

towards conservation oriented 'ecosystem management' (USDA Forest Service, 1994). While ecosystem management protected forests (Spies et al., 2019), it slashed timber revenue and led to disinvestment in federal lands (Christensen et al., 1999). As agencies downsized staff and field offices, their forest management capacity decreased (Moseley & Reyes, 2008). Meanwhile, the forest industry increased log exports from private forests, mechanised mills, and laid off workers (Phillips, 2006).

Towns that had depended for decades on cutting and processing timber were divided by conflict and economic decline. Some communities with scenic amenities close to urban areas were able to shift towards tourism (Charnley et al., 2008). For others, finding the capacity to plan for the future was overwhelming (Kusel et al., 2000). In yet others, residents came together in the vacuum left by the withdrawal of forest agencies and industry to reinvent their forest-based economies. These CBF groups had a shared interest in building legitimacy for community perspectives and taking responsibility for improving the health of 'their' communities and landscapes (Abrams et al., 2017).

Numerous CBF groups were incorporated as NGOs (Gray et al., 2001) to apply for government and philanthropic grants. From 1994 to 1999, the federal Northwest Economic Adjustment Initiative (NEAI) provided support for communities to build capacity, envision projects, write proposals, manage contracts, and implement work on the ground (Kusel et al., 2007). Federal and state agencies offered competitive contracts and grants for work on public lands, including contracts for forest inventory and restoration, fuel reduction, and use of prescribed fire. Philanthropic foundations also provided capacity-building and networking grants (Cheng et al., 2006). A new community-based restoration economy emerged (Bendor et al., 2015).

Nearly 30 years later, some of these CBF groups have become influential across scales. They have trained and employed community workforces to actively manage forest restoration efforts. They have explored and nurtured value-added processing enterprises and supported educational initiatives. Regional peer learning networks have helped to share community experiences and build organisational capacity. CBF groups now advise federal and state policy makers on the challenges of wildfire management and climate change adaptation. In short, they actively create and influence natural resource institutions (Abrams et al., 2017).

The Watershed Research and Training Center

The Watershed Center is based in Hayfork, California, (population: 2,700) in rugged and remote Trinity County (830,000 ha; population 12,270) (US Census Bureau, 2019). Nearly 80 per cent of the county's largely forested landscape is managed by the USFS, and the town's economy was formerly highly timber dependent (Charnley et al., 2008).

In 1992, a handful of Hayfork residents formed the Watershed Center to help their community survive the strife and economic decline brought by the upheaval in federal forest management. As of 2021, the Watershed Center manages seven robust programmes supported by 30 full-time staff, 35 seasonal hires, and a multi-million-dollar annual budget – and it is still growing. As Hayfork's economy and culture have shifted from timber to cannabis cultivation, forest restoration, and fixed-income residents, the Watershed Center has helped to address transitional challenges, while expanding community engagement in stewarding their landscape.

The Watershed Center's programme areas operate at varying scales (Watershed Research and Training Center, 2021). Their Trinity County programmes in Forest and Fuels Management, Watershed and Fisheries Stewardship, and Youth activities work with partners in the local landscape while providing employment, training, and educational opportunities. State-wide, the

Watershed Center builds capacity to address wildfire through their Regional Forest and Fire Capacity Program, offers prescribed fire services through their Fire Management Program, and leads the California Biomass Working Group to encourage community-scale forest biomass energy. Nationally, they run the Fire-Adapted Communities Learning Network.

In this chapter, we focus on two core issues that motivate the Watershed Center across programmes: sustainable livelihoods and wildfire management. We argue that how they work – at once collaborative and entrepreneurial – is critical to their success in helping to reframe the relationship between local communities and federal forests.

Promoting sustainable livelihoods that support healthy forest ecosystems

In the early 1990s, the Watershed Center's motto was 'Healthy Forests, Healthy Communities' – without an 'and' in between – because they recognised them as interdependent goals. If forest-reliant communities were going to create sustainable livelihoods, it would be by creating jobs that paid liveable wages while working to restore the forests around them. Their efforts were three-pronged: workforce development, job creation, and value-added processing.

Workforce development

The NEAI supported worker retraining, community development, and infrastructure upgrades largely through government grants and loans to qualifying institutions. But as Lynn Jungwirth, founder of the Watershed Center, noted 'It was raining money, and we had no buckets' (Danks, 2002, p. 63). Communities in that region have limited local government and few NGOs with the capacities needed to apply for and administer such funding. Retraining funds for displaced workers typically went to vocational institutions in larger towns and cities and were limited to training for occupations with proven vacancies, such as long-distance truck driving or air conditioner repair, none of which were located in Trinity County. Therefore, government programmes intended to soften the economic impact of timber harvest reductions would actually exacerbate impacts by channelling funds to institutions outside of forest communities and requiring displaced workers to leave home to get retraining for jobs that necessitated their relocation. Without 'buckets', federal economic development funding would act to further impoverish remote forest communities.

The Watershed Center was founded to create the local 'buckets' – the institutional capacity needed to capture funding and put it to work in ways that benefited local communities as well as the forest ecosystem. Its staff began by convening meetings with regional economic development and job retraining agencies to explore how to overcome bureaucratic obstacles to offering worker retraining in a new location – remote Hayfork – and in a new occupation, ecosystem management field technician. These technicians would learn to inventory wildlife and vegetation, reduce forest fuels, and implement restoration projects. The Watershed Center created a novel partnership in which they recruited trainees and teachers, while the USFS provided field projects, and a community college in the neighbouring county provided accreditation. The six-month training programme targeted former forest and sawmill workers, was free to participants, and paid wages to help support trainees' families. A third-year programme review concluded that 70 per cent of trainees found jobs within a year of graduating, including five who started new contracting businesses. This programme later transitioned to training contractors and field crews. Through these efforts, the Watershed Center began reframing the old narrative of timber-dependent communities from that of loggers of old growth to 'gardeners of Eden' (Jungwirth, 2001).

Creating work opportunities

Creating sustainable employment to steward the forest proved to be a bigger challenge than providing retraining. It required re-orienting USFS practice towards employing local, skilled workers to collect data, plan projects, and implement treatments, even as the USFS struggled to refocus forest management from fire suppression and timber extraction to fuel management and ecosystem restoration.

During and after each project, the Watershed Center gathered staff and project partners to reflect on outcomes as related to their overarching 'healthy forests, healthy communities' goal. These strategic sessions were not just project evaluations, but also programmatic planning. They asked participants what had been learned, what were the missing pieces, and who else needed to be engaged. Watershed Center staff also sought out peer CBF organisations with whom to share experiences and reflect.

Through such iterative reflection on their workforce development efforts, staff identified five gaps to developing livelihoods in forest stewardship: (1) environmental assessments needed before project implementation; (2) acceptance of fire-adapted management practices; (3) technology to extract and utilise smaller diameter wood and biomass resulting from fuel treatments; (4) mechanisms that allowed agencies to hire small-scale contractors for ecosystem management projects; and (5) incubation of businesses that add value to the new forest products resulting from ecosystem management. Some objectives could be advanced by investing in local capacities, like expertise to conduct environmental assessments or business incubation, but others, like new contracting mechanisms, required political action. While the retraining programme was pulled together within a year, this ambitious programme of work continued to evolve over the next three decades.

The Watershed Center built upon its on-the-ground experience to redefine problems, pilot practical solutions, and engage relevant partners. For example, to understand how USFS contracting rules presented challenges to small-scale contractors and the new mix of work required for ecosystem management, the Watershed Center convened 'the Stewardship Group', composed of Trinity County contractors, loggers, environmentalists, business owners, and USFS employees. This group discussed what forest stewardship meant to them and what kind of stewardship contracting would work for Trinity County's small, independent contractors. The group determined that multi-year contracts that addressed all the restoration needs of a given forest area could provide steady work that improved the health of the forest and the community (Danks, 2003). To test this model 'stewardship contract', the local USFS district packaged tasks to implement a shaded fuel break so that the value of commercial timber harvested could help pay for the restoration and fuel reduction work.

The Watershed Center sought advice from other communities that were struggling with similar issues. They shared experiences in peer networks such as the Collaborative Learning Circle, a grant-funded initiative which supported cross-visits and pilot projects among CBF groups in California and Oregon. National NGOs, including American Forests and the Pinchot Institute, helped CBF groups connect and strategise to bring their case to Washington D.C. Working collectively, they secured passage of laws that granted new authorities for agencies to issue stewardship contracts. CBF groups learned to testify effectively before Congress, with their credibility derived from programme review of their on-the-ground experience. The regional NGO Sustainable Northwest, the Watershed Center, and other CBF groups formed the Rural Voices for Conservation Coalition. Together, they were successful in influencing provisions of at least eight federal laws that 'articulate a central role for forest-reliant community stakeholders in decision making, implementation, and monitoring of forest stewardship activities' (Cheng et al., 2011, p. 94).

Value-added processing challenges

When Hayfork's last sawmill closed in 1996, replacing those 160 jobs was a top priority. The Watershed Center embarked on multiple attempts to find new technologies and products to add value to the small-diameter trees and woody biomass harvested as part of restorative forest management. 'Value-added' forest products are those that are processed and marketed in ways that increase their value beyond primary processing. Community-based value-added forest enterprises have been developed worldwide to support sustainable livelihoods (e.g., Wollenberg & Ingles, 1998).

From vineyard stakes to fine furniture and funeral urns, the Watershed Center experimented with new forest products and markets. They expected that developing commercial value for the products of ecosystem management, especially the thinning that reduces fire hazards, would be a win-win. It would help make fuel treatments more economically viable and therefore more widely applied, yielding a more resilient forest and a safer, more prosperous community. To that end, they tested specialised milling equipment and partnered with the USFS Forest Products Lab to research drying regimes. They settled on flooring as a high-value product that could be manufactured from the dense wood of small trees cut in shaded fuel breaks. They partnered with regional CBF organisations, wood crafters, and retailers to market these as sustainable products (Danks et al., 2003).

The Watershed Center and their partners assumed the risk of these value-added experiments not because they wanted to be in the forest products business themselves, but as a way to foster independent enterprises. With Trinity County, they established a business incubator that provided manufacturing space and business mentoring for forest-based start-ups. The most successful of these was Jefferson State Forest Products, a furniture company started in 1996. It grew to provide over 50 jobs with clients nationwide. While committed to using locally grown, ecologically harvested wood, they often had trouble sourcing it because very little timber was being harvested from the surrounding federal forest. When the original owners retired in 2007, they sold the business to an investment firm which pledged to keep jobs in Hayfork. However, within two years, the business was moved to Oregon and later resold and closed permanently.

Still determined to create commercial value and local jobs from the products of fuel management, the Watershed Center pulled together grants, philanthropic investments, and commercial loans to purchase a former Hayfork sawmill site in 2015. There they piloted ways to turn wood biomass into products like firewood and compost – lower value than furniture, but still value-added. They also had trouble sourcing local supply from USFS land and found the economics of transporting and processing challenging. In 2018, the Watershed Center sold the sawmill property and put on hold further efforts to develop new forest products enterprises. This painful choice reflected limits imposed by geography and policy. Hayfork remained as distant from urban markets and dependent on decisions of the USFS as ever. With increasingly catastrophic wildfires, however, more public funding was becoming available for fuel treatment. In 2021, the Watershed Center invested in a second masticator – machinery used to grind up woody fuels on site. Based on their experience, tending the forest, rather than commercialising its products, emerged as a more viable role for local communities in the 21st century.

Promoting healthy ecosystems while supporting rural livelihoods: Fire use and wildfire-adapted communities

Wildfire is at once a transforming regenerative process and, due largely to human activities, an increasingly destructive power in the western US. Working to counter decades of management

efforts focused on fire suppression, the Watershed Center's wildfire programme emphasises forest restoration and strategic fuel reduction, with manual treatments and prescribed fire use. Staff actively engage with partners on promoting community wildfire protection planning and fire-adapted communities while working to address wildfire policy at the state and national levels.

Characterising wildfire

Wildfire drives ecosystem renewal in western US forests. Prior to European colonisation, many Native Americans used fire to encourage the growth of desired plants and reduce pest infestation and build-up of fuels (Anderson, 2018). However, Europeans were blind to the vegetation management by Indigenous peoples that had shaped North American landscapes. Settlers saw wildfire as a threat. Indigenous tribes' ecologically and culturally resilient systems of wildfire use were outlawed (Long & Lake, 2018). As natural resources agencies such as the USFS and the California Department of Forestry and Fire Protection (CalFire) emerged, they developed paramilitary fire suppression forces, and until the late 1990s, they succeeded in limiting the number of hectares burned. Meanwhile, however, biomass that would have burned in frequent lower intensity wildfires accumulated, leading to extreme fuel loading in forests and the severe fires now experienced across the west (Stephens & Sugihara, 2018).

Additional factors have contributed to the challenge. Industrial timber harvesting changed forest structure, increasing forests' vulnerability to wildfire (Hessburg et al., 2015). Rapid expansion of development in the wildland urban interface (WUI) increased human-caused wildfires and the loss of life and property (Radeloff, et al. 2005). Climate change exacerbated extreme wildfire behaviour. These factors now drive wildfires of unprecedented scale and intensity that frequently cannot be controlled with historic suppression tactics (Stephens & Sugihara, 2018).

The Watershed Center's wildfire programme

The Watershed Center did not ask *if* another wildfire would occur, but *when*. In Trinity County the need to protect communities from wildfire was something that everyone could agree on. The focus was on how to improve forest management, reduce wildfire danger, and employ local workers in the process. Wildfire management was also a key goal for the USFS.

By the 1990s, most of the large trees in federal forests surrounding Hayfork had already been harvested, leaving a cut-over patchwork of forest plantations. Fuels had built up from over half a century of fire suppression. The forests needed stewardship.

The Watershed Center, working on USFS lands, developed local restoration forestry crews that targeted forest thinning to remove weaker trees and fuel beneath the canopy, leaving the strongest trees behind. Challenges loomed at each step: raising funds, securing insurance bonding, finding effective equipment, hiring and training crews, and identifying demonstration project locations that would reduce fire risk and be highly visible to the community. Fuels were treated along roads and ridgelines and in protective rings around communities. Staff were trained to fill gaps in agency capacity, such as conducting environmental analysis required for project implementation. The Watershed Center collaborated with community and regional partners to gain social acceptance and funding to expand implementation. Skilled Watershed Center crews became sought after by USFS managers.

While working with the USFS to reduce fuels, the Watershed Center sought partnerships with other organisations to address community adaptation to wildfire. With increasing wildfire risk, the importance of residents taking responsibility for reducing hazards before the wildfire event, e.g., by retrofitting homes with fire-resistant building materials, removing vegetation to create defensible space, and planning evacuation routes, was recognised (Everett & Fuller,

2011). Across California, 'fire safe councils' (FSC) were formed to mitigate wildfire hazards (Everett, 2010).

In 1996, the Watershed Center and local organisations formed the Trinity County Fire Safe Council (TCFSC). Their goals were to provide outreach to landowners and develop approaches to community involvement, preparedness, and adaptation for living with wildfire. TCFSC partners implemented fuel reduction projects with private landowners and, collaborating with residents across the county, conceived the Trinity Fire Safe Plan (TFSP). The TFSP included a landscape scale management and fuel reduction plan, capacity building for pre-fire treatment, and suppression strategies for public education and engagement (Everett, 2008). This prototype Community Wildfire Protection Plan (CWPP) was endorsed by local government and used in USFS fire management planning (Everett et al., 2005; TCRCD, 2021). As the TCFSC initiated these efforts, other CBF organisations in the region such as the Applegate Partnership and the Mattole Restoration Council were also working on community wildfire planning, and groups discussed plans and ideas.

Lynn Jungwirth was invited to share these approaches with the Western Governors' Association. Community-based collaborative planning for wildfire was then included in the governors' 10-Year Comprehensive Strategy: A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment (WGA, 2001) and later in national policy in the federal Healthy Forest Restoration Act (2003). Today, CWPPs are a key element of community-based wildfire management (California Fire Safe Council, 2021).

Building regional and national wildfire response through collaborative networking and capacity building

Even as the Watershed Center restoration crews became more skilled, it was increasingly clear that manual treatments alone could not address the fuel problem. Crews could treat a few hundred hectares per year, whereas thousands awaited fuel reduction. Fire was needed to tackle wildfire at scale. Fire managers had long debated using intentional fire to restore forests and not suppressing every wildfire (Biswell, 1989). Advocates argued for letting wilderness fires burn, containing them with fuel breaks, and suppressing them only when they threatened communities (Miller & Aplet, 2016). Researchers and fire managers began to listen to Indigenous leaders and learn about ages-old Native American fire use for vegetation management and ecosystem health (Lake et al., 2017).

Managers began to apply 'prescribed fire', involving carefully planned ignitions to achieve specific fuel reduction and ecosystem restoration goals (Northern California Prescribed Fire Council, 2021). Policies for prescribed fire vary across the United States. Commonly used in Florida, prescribed fire is difficult to implement in California, where the regulatory and liability related constraints make finding a feasible 'burn window' challenging (Quinn-Davidson, 2009). Frustrated with limits imposed on prescribed fire, the Watershed Center and regional partners sought to learn from the experiences of fire managers in other states to break down barriers stalling fire use in California.

In the early 2000s, the Watershed Center, the Mid Klamath Watershed Council, the Karuk Tribe, and other regional groups and tribes were invited to join The Nature Conservancy and USFS's Fire Learning Network (FLN). Together with CalFire, the Air Quality Management District, and the USFS, these groups then formed the Northern California Prescribed Fire Council (NCPFC) in 2012. The Watershed Center served as a steering committee member and as its fiscal agent (Northern California Prescribed Fire Council, 2021). Their goals were to provide public education about the benefits of prescribed fire, to push for policy changes needed at the state level to allow its use, and to promote prescribed fire training exchanges (TREX) among communities, tribes, and agencies.

The TREX model has been highly effective for training people and getting 'fire on the ground'. It has been used region-wide, including on burns in Trinity County. There is now an Indigenous Peoples Burning Network, and many CalFire and USFS fire service staff have been trained through TREX. The NCPFC also seeks to extend knowledge of wildfire and fire management skills to the general public (Callahan, 2020). Current collaboration efforts focus on an 'all-hands all-lands' approach among burn teams to share resources across a multi-county area to allow more land to be treated.

Leveraging capacity to address wildfire policy

As these efforts gained traction, state support for community involvement in fire management was needed. The Watershed Center and a growing number of partners argued for opportunities to scale up prescribed fire use on non-federal lands throughout California, and the Regional Forest and Fire Capacity Program was established in response (California Department of Conservation, 2021). The Watershed Center serves as its state-wide programme co-ordinator for technical capacity building and peer networking to advance the dissemination of best practices. This work helps other CBF groups to engage in collaborative planning, workforce development, TREX, fundraising for community wildfire protection, and watershed and forest restoration projects. Combined, these efforts contributed to dramatic increases in prescribed fire use in California, with 48,000 hectares treated in 700 separate burns in 2019 (Jung, 2021). Still, this is only a beginning; there are millions of hectares that would benefit from forest restoration through prescribed fire.

Public lack of experience and fear of wildfire continue to limit prescribed fire. Watershed Center staff believe that a change of culture is required for communities to recognise that wildfire is part of the landscape and that they can and must adapt. In 2013, again, in partnership with The Nature Conservancy and the USFS, the Watershed Center launched the Fire Adapted Communities Learning Network (FAC Net) to promote this cultural change. FAC Net is now a national network of 24 core organisations and 120 affiliated groups and individuals focused on changing the way people relate to wildfire (FAC Net, 2021). Diverse partners include agencies, universities, tribes, CBF groups, fire departments, fire safe councils, and individuals who share expertise, e.g., through online workshops, blogs, and in-person field-based training. FAC Net addresses agency and public education about fire and the role that preparedness and active prescribed fire treatments can play in community adaptation to wildfire; overcoming the professionalisation of fire management to allow and encourage communities to play a larger role in protecting themselves; and building capacity in communities to take larger leadership responsibilities. Today, prescribed burn associations with community members managing funding and gaining the technical capacity to implement burn treatments are emerging (Haggerty, 2020). Despite the formidable challenges, FAC Net has had considerable success (Rank, 2018).

Foundational practices: Problem framing, peer learning, and collaborative leadership

The Watershed Center has been uncommonly effective in working at multiple scales to bring community concerns and expertise into state and federal forest policy in ways that reorient practice on the ground and redefine the role of communities in federal land management. Abrams et al. (2015, p. 695) highlight the work of the Watershed Center in 'strategically filling key institutional voids'. Here we add the lens of social entrepreneurship to identify three factors that illuminate how the Watershed Center works so effectively: reframing problems, peer learning, and collaborative leadership (Table 11.1).

Table 11.1 Foundational practices underlying the Watershed Center's effectiveness

Reframe problems and pilot solutions
• Seek collaborative action, not conflict, in pursuit of mission
• Reframe challenges as opportunities for positive change
• Invest in and share innovative research and development
• Develop place-based practice and expertise as needed to address challenges
• Accept risk in pursuit of innovative solutions
Connect, reflect, and learn collectively
• Develop enduring peer relationships
• Find champions within agencies
• Develop regional and national networks
• Root learning and priorities in community experience
• Employ reflexive self-evaluation with peers and partners
• Mobilise knowledge, skills, and resources of partners to address challenges
Lead collaboratively and prioritise capacity building
• Invest in mentoring and grow leadership
• Develop programmatic structure and delegate authorities
• Seek, train, and support talented staff both locally and elsewhere
• Diversify funding sources

Social entrepreneurship is distinguished from typical business enterprise in that its central goal is to create 'social value' – public goods and services, including community well-being and a healthy environment (Peredo & McLean, 2006). Entrepreneurial strategies include reframing challenges as opportunity, employing innovation, utilising networks, and undertaking risks in ways that effectively create value (Drucker, 1985). By employing entrepreneurial strategies in a collaborative way, the Watershed Center has been able to navigate a complex political environment and respond to evolving community needs.

In the midst of the polarised debate over forest management, the Watershed Center sought action over conflict. Staff felt their role was to tackle problems, rather than just take a stand. That emphasis on problem-solving, not finger-pointing, is one reason why larger agencies and organisations invited the Watershed Center to sit at their tables and to help lead their initiatives. Staff framed problems as common concerns and their solutions as common sense – a skill that enabled them to engage constructively with environmentalists and the forest industry, with legislators on both sides of the aisle, and with Republican and Democratic administrations.

The social entrepreneurship literature emphasises working through networks to achieve social change (e.g., Montgomery et al., 2012). The Watershed Center staff invested in relationships with agency line officers, scientists, forest workers, Native American tribes, and congressional staffers as well as peers from other CBF groups and NGOs. Reciprocity and social learning characterised their work. Be it through the peer exchanges of the Collaborative Learning Circle or national networks like FAC Net, the Watershed Center developed and advanced its vision through collaborative reflection and sharing of place-based experiences. As these networks expand and overlap, learning becomes an emergent property (Cheng et al., 2011; Rodela, 2011), which contributes to change in policy and management institutions.

As with any entrepreneurial venture, leadership is critical, and leadership transitions are especially challenging. Founding executive director Jungwirth set the action-oriented and social learning tone of the Watershed Center, while practising supportive, discussion-based leadership and delegating authority to programme directors. She recruited a diverse, locally

based board of directors and staff of natural-resource professionals. Jungwirth's collaborative leadership style enabled the successful transition to its next executive director, Nick Goulette, who had started as a summer intern. Jungwirth and colleagues in other CBF groups supported Goulette as he guided the Watershed Center through the difficult economic conditions following the 2008 financial crisis. He has since expanded its field programmes, professional staff, and community networks. He is now, like Jungwirth before him, an important voice of community-based approaches to forest management. As the organisation has grown, shared leadership between Goulette and FAC Net co-ordinator and Hayfork native Michelle Medley-Daniels has emerged. They in turn encourage entrepreneurial capacities at the programme level.

Conclusions

CBF groups such as the Watershed Center have taken an entrepreneurial yet collaborative approach in developing new forest and wildfire management practices and training their workforce with diverse skills to meet the challenges of ecosystem management and restoration forestry. Together they are reshaping the role of local communities in federal forest management and in managing wildfires across the landscape. As challenges emerge, the Watershed Center has responded by engaging partners, piloting solutions, and, if necessary, building its capacity to take on tasks from understaffed agencies. Their work has gone beyond public collaboration to co-produce more resilient landscapes and communities with agency and community partners.

Such co-production requires strong partners and recognition by government authorities of the multi-faceted roles communities can play. CBF groups have developed networks of individuals, organisations, and agencies to create a cultural shift in the social and policy landscape of forest management. Through peer learning networks such as FAC Net, CBF groups like the Watershed Center share experience and broaden skills to achieve greater community involvement and institutional change in resource management. Co-management successes between government agencies and tribes are emerging. Expanding relationships between federal government and sovereign tribal nations regarding future management of ancestral lands are important indicators of growing institutional awareness of social justice, the relationship of people to place and the roles they play in landscape stewardship. These welcome trends may be significant as models for community forestry elsewhere.

The challenges ahead for forest management in the western US require all hands and all lands. Groups like the Watershed Center have helped reshape the roles of forest communities from being dependent on timber and victims of wildfire to being partners in restorative forestry and wildfire preparedness. However, partnerships are not substitutes for adequate government budgets and staff. Effective action that spans land ownership and scales requires strong capacity on all sides. The federal government must re-invest in the capacity for land management agencies, forest-reliant communities, and tribes to contribute to managing resilient forests for future generations.

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12

THE WEAVERVILLE COMMUNITY FOREST

Putting community in the forest

Patrick Frost and Kelly Sheen

Description and context

Trinity County in far northern California is a rural county dominated by mountains in the Klamath Bioregion.[1] Carl Skinner et al. note that 'the bioregion includes the Klamath and Trinity River systems … and the most diverse conifer forests in North America'.[2] Roughly 75.6 per cent of Trinity County's 0.83 million hectares (Mha) are public lands managed by federal government agencies. About 0.60 Mha are managed by the U.S. Forest Service (USFS). BLM manages about 29,846 ha. Approximately 10 per cent (105,000 ha) of the county's land base are industrial timberlands,[3] most owned and managed by Sierra Pacific Industries. Most of these properties were purchased from the Sierra Pacific Railroad and form a part of the 'checkerboard' pattern of land ownership, the legacy of the 19th-century federal land policy when much of America's public domain lands were surveyed into square-mile 'sections' (260 ha), regardless of topography.[4] To support construction of railroads, the federal government granted railway companies a 400-foot right-of-way and alternating 260 ha sections up to 20 miles back from the tracks on either side. The sections not granted to the railroad were retained by the government. A mix of non-industrial forestlands (i.e., all other privately held forestlands), agricultural lands, and residential areas make up the remainder of the land base.

Trinity County was created in 1850 at the founding of the State of California. It is sparsely populated: approximately 14,000 people are dispersed across the landscape (2010 U.S. Census). There are no incorporated towns or cities in the County. Incorporation means that there is a local government authority (municipality) which has elected officials and can levy taxes to pay for public services. Without incorporation, many public services are delivered by special districts; note that in this context a 'special district' means an agency or department created by a vote of the people to be included for specific services within a specific geographic area. Most were established to provide specific services to targeted geographic areas (e.g. Weaverville Community Services District providing potable water; Weaverville Fire Protection District providing fire protection, etc.). Each special district is overseen by its own board of directors, who are elected or appointed from within its jurisdictional boundaries. A set of State regulations govern special districts and are designed to provide transparency and open, public participation in local government.

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Weaverville is Trinity County's largest community (approximately 3,500 in 2010), founded in 1848 with the discovery of gold in the County, as evidenced in the historic downtown district. Weaverville is located in a topographic basin – the Weaver Creek watershed. There are 7,145 ha of federally managed public land; 2,545 ha of private, industrial timberlands; and 3,178 ha that include non-industrial forestlands, rural and urban residential areas, and local government infrastructure (Figure 12.1).

The timber industry replaced gold mining as the primary economic driver, rising to prominence after World War II with the demand for building materials for California's growing population. There were over 40 lumber mills in Trinity County. By 1999, the only mill still operating was in Weaverville.

This chapter focuses on the evolution of a partnership that developed between the Trinity County Resource Conservation District[5] (TCRCD), the federal land managers (USFS and BLM), and the community to manage the Weaverville Community Forest (WCF), consisting of 6,055 ha, or half the area of the basin.

The Klamath Bioregion is characterised as a mixed coniferous forest. Species composition is related to elevation, slope, and aspect. The elevation of the Weaverville Basin ranges from about 610 m to 914 m., the slopes surrounding the town in all directions. The climate is Mediterranean with a distinct winter rainy season and hot, dry summers.

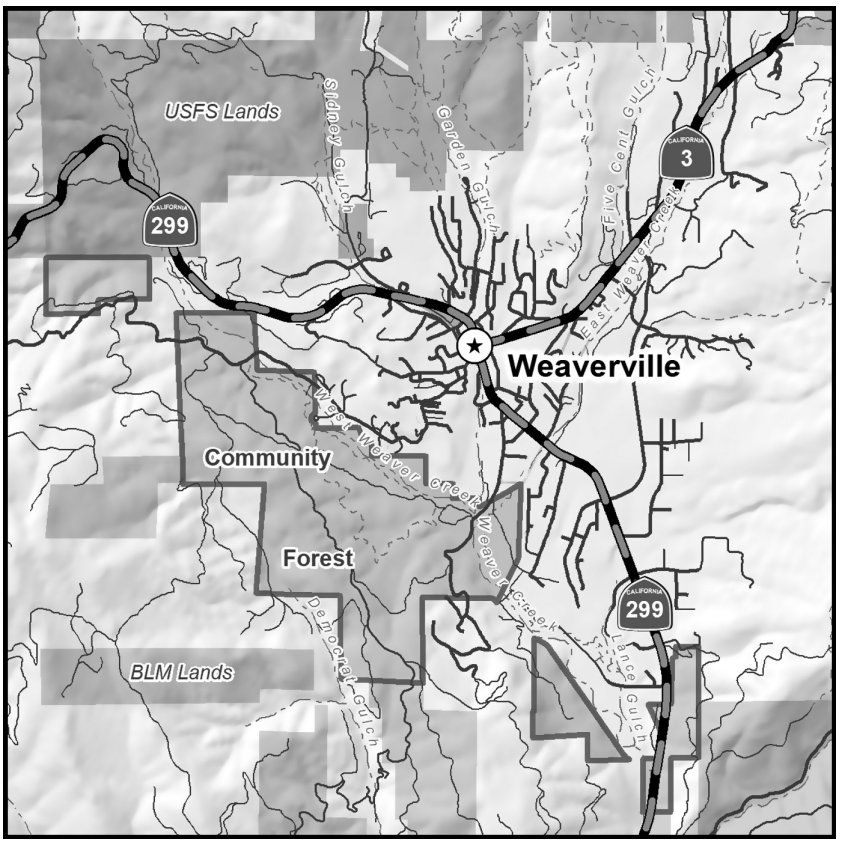


Figure 12.1 Map of WCF – BLM 1000.

Wildfire is a natural component of the region, reflected in vegetative communities that are adapted to fire. Before European colonisation, the Indigenous Peoples used frequent, small-scale, low-intensity fires to stimulate the annual growth of forage grasses and hence populations of deer, as well as berry bushes, for food. The European colonists, being accustomed to more intensive and arable agriculture and not understanding the ecological principles used by the Indigenous Peoples, excluded fire from much of the landscape since early in the 1900s. The consequent natural build-up of wood fuel, from dead and dying trees and dense understory and changing species composition, have led to increasingly intense and devastating fires started by lightning strikes and human actions. The settlers' exclusion of fire also means that the understory is not very open, but contains dense thickets of conifer seedlings and the conversion of oak woodlands to mixed oak-conifer stands through the encroachment of conifers. Weaverville has been threatened by wildfires thrice in this century (2001, 2006, and 2014). Fire as a landscape management tool has only recently been reintroduced.

The WCF overstory includes Douglas fir (*Pseudotsuga menziesii*) and ponderosa pine (*Pinus ponderosa*). There is an oak woodland component at lower elevations, primarily Oregon white oak (*Quercus garryana*). On hotter, drier slopes, the oak woodland includes grey pine (*Pinus sabiniana*), various 'California Lilac' (*Ceonothus* spp.), and manzanita (*Arctostaphylos* spp.). Elsewhere, ponderosa pine and Douglas fir are intermixed in the oak woodland. Moving up-slope from the oak woodlands, the forests are a mix of Douglas fir, ponderosa pine, and incense cedar (*Calocedrus decurrens*).

The Weaverville Basin has been altered greatly by humans. The landscape was occupied and managed long before the first European-Americans began to settle in the basin. Forests were harvested to the point of denuding the slopes during the mining era (1850–1930). Primary forests are now found only in very isolated and inaccessible pockets (Figure 12.2).

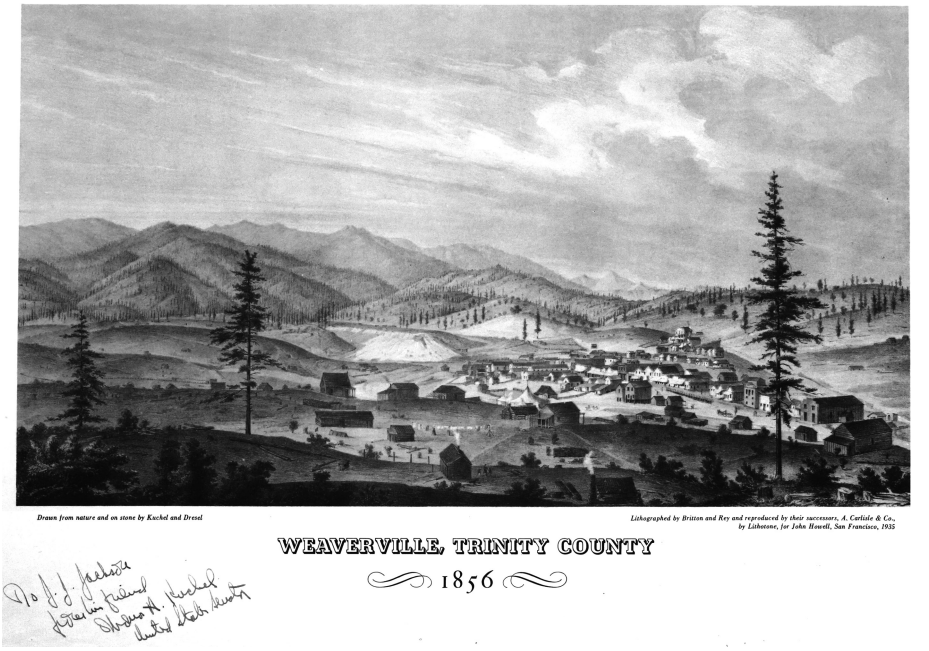


Figure 12.2 Lithograph of Weaverville Basin 1856 (courtesy of Jake Jackson Museum).

Forest management in northern California, especially on lands managed by the federal government, was greatly influenced by the listing of the northern spotted owl (*Strix occidentalis caurina*) as an endangered species, and the subsequent development of the Northwest Forest Plan by the USFS. The region's 'timber wars'[6] were exacerbated by the Northwest Forest Plan, which was seen as an overly bureaucratic set of policies and procedures that dictated management of federal forest lands in the range of the northern spotted owl, and centred around strategies that emphasised protection and restoration of late seral (old growth) forest types to the detriment of active timber harvests in the region, including Trinity County.

Evolution of the Weaverville Community Forest (WCF)

In 1999, Weaverville citizens raised concerns over a proposed land exchange. The BLM intended to trade 405 ha in the Weaverville Basin to Sierra Pacific Industries (SPI). These parcels, remnants of the 'railroad ownership checkerboard', were isolated from other BLM lands and difficult to manage. Simultaneously, BLM was acquiring lands along the Trinity River critical to the river's restoration, which began in the 1980s to restore salmon populations harmed by the Trinity and Lewiston dams on the Trinity River. BLM, while charged with acquiring riverfront lands that could be used in the river's restoration, was not given any funding from the US Congress. Instead, BLM relied on its ability to trade lands with private landowners. The intention was that SPI would acquire riverfront parcels and offer them in trade for BLM disposal parcels with equal monetary value.

The community was concerned with the visual effects that intensive logging (clear-cuts) by SPI would have on Weaverville's viewshed (the aesthetic appearance of the landscape of the Basin from the town of Weaverville) and the effects that would have on the community's quality of life and tourism, a main source of income. This came to a head when a small clear-cut block on SPI lands became visible from a restaurant at the south-eastern edge of town. Members of the community began to meet informally to discuss alternatives to the land trade. Before long, this loose-knit group of neighbours became the *Weaverville 1000* (representing the roughly 1,000 acres (405 hectares) of BLM lands involved in the trade), with a goal to prevent the trade and keep these lands in public ownership.

In 1999–2000, the County also was contemplating a road project that would divert traffic around downtown Weaverville. Local businesses and community members feared this road would have a negative effect on the local economy by shunting traffic away from the historic downtown businesses. The proposed roadway corridor under study crossed BLM disposal parcels. Opponents of the by-pass, believing that it would be more difficult for the county to obtain a road right-of-way from the BLM than from SPI, joined forces with the Weaverville 1000.

The Weaverville 1000 petitioned the County Board of Supervisors — the only local government with decision-making authority over land use issues — to intervene. The board asked BLM to put the trade on hold while the community explored its options. BLM agreed to a two-year hold through 2002 on the land trade. BLM proposed a path for the community to pursue: acquisition of the lands from BLM through a mechanism similar to the one proposed with SPI. The Weaverville 1000 moved forward with this option, developing a three-pronged approach:

- Build support locally and regionally through a targeted outreach campaign.
- Investigate the financing of a purchase of the 405 ha parcel from BLM.
- Find a public entity with the authority to own and manage land, with the added condition that the public entity needed to be trusted by the community over sensitive issues important to the community – viewshed and sustainability in particular.

Key community leaders in the Weaverville 1000 kept the issue in front of the public. The outreach efforts embraced the benefits of public ownership, and expanded upon the original issue of viewshed protection, including the following:

- The development of 80 kilometres (km) of recreational trails on the public lands. *Weaverville Basin Trail System – A Trail Through Time* highlighted the historic nature of the trails.
- The use of public forestlands to provide a source of saw logs to the only local mill through sustainable harvesting.
- The use of the area by the local elementary school as an outdoor classroom to learn about natural history and cultural resources, including an annual Pioneer Wagon Train trip.
- Reducing the risk from catastrophic wildfire through sustainable forest management by a public entity. The 'Oregon Fire', an 809-ha wind-driven wildfire in August 2001, had burned from the western rim of the basin into the town. Several homes in Weaverville were destroyed and the approaching fire caused the evacuation of neighbourhoods, the local hospital, and the county jail.

The Weaverville 1000 was committed to active forest management in the context of the values listed here. They knew that the cost of the BLM parcels would need to be paid for in part by some level of commercial harvesting. They turned to the Trinity Resource Conservation and Development Council (now the Northwest California Resource Conservation and Development Council,[7] not to be confused with the Trinity County Resource Conservation District, described later), a local non-profit group. The Council secured a small grant from the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), to hire local consulting foresters to conduct a forest inventory, to estimate the sustained yield that could be expected through active management at levels supported by the community on the 405 ha, and to determine if those harvests would be adequate to finance the acquisition. The firm of Baldwin, Blomstrom, Wilkinson and Associates (BBWA) conducted the inventory and identified the likely constraints on management, including:

a. Community perceptions

BBWA knew the desire to keep the land in public ownership was due, in part, to the community's negative perception of commercial timber harvesting. The BLM parcels were scattered around the Weaverville Basin, abutting residential neighbourhoods. Additionally, there was the heavily used recreational trail network. What level of commercial harvesting would be acceptable?

b. Regulatory framework

The transfer of the land from federal ownership to non-federal, but public, ownership eliminated the need to adhere to the requirements of the National Environmental Policy Act (NEPA).[8] There still would be significant regulatory oversight of forest management, including:

- The northern spotted owl recovery programmes.
- The protection of streams and the associated habitat for species of salmon (*Oncorhynchus* spp.) that were listed under the Endangered Species Act (ESA),[9] or that were under consideration.

- The protection of significant cultural resources, primarily from the gold mining era. A portion of the BLM parcels had been listed in the National Register of Historic Places as the 'West Weaver Creek Mining District'.
- The California Forest Practices Act,[10] which is functionally equivalent to the California Environmental Quality Act[11] for projects involving forest management, especially where forest products are sold.

BBWA concluded that the small size (405 ha), combined with the constraints, would make the acquisition financially dubious without outside funding.

c. Government framework and land tenure

Trinity County's rural nature, predominance of federal lands, and sparse population are reflected in a minimalist approach to government. The Weaverville 1000 struggled in its search for a public entity willing and capable to take ownership of and manage the 405 ha of forestland. The County had no interest and made that clear in 1999.

Trinity County Resource Conservation District (TCRCD)

The TCRCD[12] is a special district (already defined here) established in 1956 under Division 9 of the California Public Resources Code (PRC).[13] The PRC authorises conservation districts to own land (fee simple tenure or conservation easements) when it supports the mission of the district. The Weaverville 1000 approached the TCRCD Board of Directors and the Board agreed to participate, if the community could acquire the property and if there was public support.

The original intent of the TCRCD was to act as a bridge between federal agencies and local landowners to improve conservation practices on private land. TCRCD used its Division 9 authority to expand its role to include working with federal land and resource management agencies in *government-to-government* co-operative agreements. TCRCD had developed a strong relationship with BLM in the mid-1980s with the restoration of the Trinity River. TCRCD developed a skilled, professional, in-house workforce specialising in natural resources planning and management, leading to the establishment of long-term co-operative agreements with BLM, the Bureau of Reclamation (U.S. Department of the Interior), USFS, and NRCS (U.S. Department of Agriculture). TCRCD served as a local arm of the federal agencies for on-the-ground management on federal lands. TCRCD developed a sophisticated grants management department skilled at using federal funds to secure counterpart state and local funds to augment work on federal land. TCRCD's areas of operation include watershed restoration, forestry practices, and environmental education. Forestry projects were designed to reduce fire spread and intensity through felling smaller, sub-canopy trees and cutting shrubs.

Governance

Stewardship contracting framework

The cost of lands that would be considered by the BLM in a land trade was about US$2 million in 2004. The community's vision of sustainable harvests could not earn enough income to support such a purchase. The Weaverville 1000 investigated models such as the Arcata Community Forest in adjacent Humboldt County in California and the City of Ashland in Oregon, just to the north of Trinity County (during 2002–2004).

Stewardship contracting and agreements were being applied by the federal land management agencies and were gaining in popularity. A congressionally mandated Stewardship Contracting Pilot Program had evolved into a regular contracting tool for the USFS and BLM (Section 323, P.L. 108-07).[14] This programme authorised federal agencies to enter into contracts or agreements with many entities that combined the sale of harvestable material (e.g., sawlogs from public lands) with work that usually cost the federal agency money to implement (erosion control work, invasive weed removal, forest fuel reduction, watershed restoration). The receipts received from the harvests are used to pay for the service work within the management unit, providing an added incentive to agency staff to use these agreements. Stewardship authorities emphasise that the primary purpose of projects must focus on maintaining or improving the natural resources, not maximising timber yield.

Building consensus for a community forest

In May 2004, the TCRCD invited the community to a day-long meeting on the concept behind a community forest. The term *community forest* was used for the first time at this meeting. TCRCD used an outside facilitator to reduce any perception of bias. The meeting was held in a neutral space – the Congregational Church. Over 50 people, representing a wide range of interests and views, attended (Figure 12.3). The meeting concluded with three outcomes:

- Development of the Community Vision for the WCF: (a) protect Weaverville's viewshed, (b) promote a more fire-resilient forest, (c) deliver sustainable timber harvests for the local mill, (d) maintain and improve the recreational trail system, and (e) use the landscape as an outdoor classroom.
- Designation of the TCRCD as local managers of the WCF.



Figure 12.3 Community Visioning Meeting 2004.

- Use the framework of Stewardship Contracting Authorities. There was a clear alignment of the community vision for the land with stewardship authorities. BLM offered its stewardship authorities as an alternative to community acquisition of exchangeable lands. As presented, the BLM retained ownership of the land and its resources, while the land management decisions would fall under the TCRCD through a stewardship agreement. The TCRCD would seek regular input from the community.

Negotiating an agreement

The community authorised the TCRCD to negotiate a stewardship agreement with BLM. Three individuals were appointed to negotiate: the TCRCD Manager, a TCRCD board member, and a community member associated with recreation. The direction from the community meeting was for a ten-year stewardship agreement under the Stewardship Contracting Authorities. The draft agreement had to be approved by BLM's Washington Office because the agreement with the TCRCD was between the federal government and a local government, not a contract with a private timber purchaser. The agreement did not identify specific projects to be implemented or a project schedule. Instead, it set up a process by which the TCRCD would seek community input to guide the timing, location, and design of projects, including timber harvests. A broad goal was to implement harvests on approximately 81 ha every other year. The money earned would fund conservation projects during alternating years. One of TCRCD's tasks was to leverage those retained receipts with grants from other sources.

Setting the boundaries

The initial meeting with the BLM defined the boundaries of the WCF. The criteria were:

- Include the parcels that were originally the subject of the land trade to protect the community's viewshed.
- Include parcels adjacent to residential neighbourhoods to enhance protection from wildfire.
- Protect the recreational trail system.
- Select parcels that needed restoration after the 2001 wildfire.

The volume of merchantable timber was secondary to these objectives, but the community's negotiation team was aware that it would take the sale of sawlogs to fund the community's projects.

BLM had its own objectives:

- Include parcels that were isolated from other BLM lands, making them difficult to manage.
- Include parcels adjacent to neighbourhoods.
- Exclude parcels adjacent to industrial timberlands to reserve them for future trade considerations.

Agreement on the boundaries of the WCF was completed in one meeting and included the original 'exchange' parcels, totalling approximately 405 ha.

Building the case for a stewardship contract

The next step was to develop a justification for a stewardship agreement between BLM and TCRCD. The BLM's Stewardship Project Review Checklist identified seven stewardship objec-

tives. The BLM State Forester and TCRCD Manager compared the objectives to the community vision. Three objectives were supported in WCF's vision:

- Promote healthy forest stands and reduce fire hazards through certain vegetation removal.
- Promote water quality improvements through road and trail maintenance. The TCRCD had an existing watershed improvement programme with a focus on reducing erosion from roads into streams.
- Protect and improve soil productivity, habitat for wildlife, and fisheries. Active forest management and fuel load reduction would generally benefit the forest and stream ecosystems and would specifically address endangered species (the northern spotted owl and Coho salmon [*Oncorhynchus kisutch*]).

The other four stewardship objectives were reviewed jointly, and the required evaluation of their relevance to the WCF was deferred into the future.

- Use prescribed fire to promote healthy forest stands and to reduce fire risk. The current conditions of the forests did not make them candidates for prescribed fire until understory vegetation was removed. Additionally, BLM had been involved in a prescribed fire in a nearby community in 1999. That fire escaped control and destroyed over 20 homes, leaving the community suspicious of BLM's use of fire as a management tool.
- Direct watershed restoration (in-stream work). Not a high priority in the community vision.
- Restore wildlife and fisheries habitat.
- Control noxious (invasive) weeds. There were only minor infestations.

Two other objectives were assessed, and it was determined that they supported the stewardship agreement.

- The overall vision of the WCF would result in the restoration and maintenance of ecological processes.
- There would be explicit recognition that the collaboration was supported by a local organisation (TCRCD) that had the rural community's needs at the centre of its mission.

The Stewardship Checklist was completed by January 2005 and submitted to the BLM State Director and then the BLM Washington Office for review and approval in the summer of 2005. The national office of the BLM was concerned about the proposed ten-year duration, the maximum allowed under the law. The State Forester prevailed, emphasising that forest management is a long-term proposition, while timber prices can fluctuate greatly from year to year. The success of this agreement would hinge on enough retained receipts to cover the other stewardship work.

Execution of a stewardship agreement

The BLM State Forester and TCRCD Manager signed the stewardship agreement in September 2005. TCRCD assigned a project manager to oversee the management plan to be developed between TCRCD and BLM with community input. The plan would include broad concepts for the ten-year timeframe but would identify specific projects for the first two years. TCRCD would lead the design and layout of the first timber harvest plan on 81 ha adjacent to a residential neighbourhood. The BLM would provide initial money to develop the harvest plan and

complete the pre-operations environmental assessment under the NEPA. The TCRCD would implement the harvest and also start the agreed conservation projects, after obtaining outside funds to match the retained receipts generated from the timber harvest.

Management

Overview

The stewardship agreement allows the BLM to negotiate the price of the standing timber directly with the TCRCD as the purchaser. The funds collected from timber harvests are kept in a WCF Stewardship Account to be drawn upon through an annual work plan. BLM retains the responsibility for completing NEPA requirements, but the TCRCD provides technical assistance for the design and layout of projects (including prescriptions for timber harvests) and the acquisition of non-federal permits, when needed. TCRCD implements the felling and extraction of the felled logs using third-party contractors, with some supplemental TCRCD staff assistance.

Leveraging funds

TCRCD actively seeks additional funds from non-federal sources to augment the stewardship account to complete service projects. The agreement also authorises the BLM to use money collected from the timber sales to pay the TCRCD to design and implement stewardship projects, like invasive weed control and trail maintenance, as long as they are consistent with the annual operating plan (AOP) and the stewardship authorities. Most of the funding is from California State agencies that require matching monies from non-state sources, like the retained receipts in the WCF Stewardship Account.

Oversight

The WCF is managed under the Stewardship Agreement and the policies of the TCRCD. TCRCD has long-standing financial policies and procedures for contracting, purchasing, fiscal management, and general oversight required of special districts in California. TCRCD holds monthly governing board meetings. The agendas are published ahead of time and the meetings are open to the public. The board of directors added the community forest as a standing report. The operations of the community forest are generally overseen by the manager of the TCRCD with input from the Weaverville Community Forest Steering Committee, with the approval of the USFS and BLM.

Community input to management

The WCF Steering Committee is an inclusive group; any member of the public can attend, participate, and have an equal voice. About eight individuals have been the core members, led by a member of the TCRCD board of directors and the TCRCD manager. The Steering Committee has regularly included representatives of local environmental groups, the timber industry, the county office of education, the County Board of Supervisors, a registered professional forester, recreation interests, local landowners, and federal agency staff. Decisions are made by consensus, including the development of the long-range strategic plan and the AOP. The AOP identifies projects with notes on the funding sources, the timeline for completion, and the

responsible parties. It is signed by the USFS Ranger for Weaverville, the BLM Area Manager, and the TCRCD.

Project development is a product of collaborative deliberations and annual community meetings. The community meetings are widely advertised and usually draw 25–30 persons. Each meeting includes reports on the status of ongoing projects and then wide-ranging discussions on issues, ideas or concerns. Community field trips and educational tours are scheduled throughout the year to look at completed, ongoing and future projects.

The following illustrates the willingness of the BLM and TCRCD partnership to respond to the community's project ideas: the community, deeply steeped in the historical context of Weaverville, wanted to see a timber harvest implemented with horses instead of mechanised equipment. TCRCD and BLM entered into a negotiated sale that required draft horses to move forest materials. Tours to watch the operation were conducted throughout the project. The community learned that draft horses are not as gentle on the land as one might think,[15] and that the project was as expensive, if not more so, than a mechanised timber harvest (Figure 12.4).

Initial results and the evolution of the WCF

The 2005 Stewardship Agreement with the BLM was authorised through September 2015. Four significant outcomes have resulted from this novel approach to stewardship contracting and community forestry.

Expansion of community forest onto USFS lands

1. The WCF was expanded onto lands managed by the USFS, following the initial success of stewardship authorities with BLM. A ten-year stewardship agreement for 4,856 ha was



Figure 12.4 Horse logging in WCF.

implemented by the TCRCD and the Shasta-Trinity National Forest in December 2008, expanding the WCF to 5,261 ha, or about 90 per cent of the federal land within the Weaverville Basin. That agreement was reauthorised for another ten years in January 2019.

2. The WCF Steering Committee assisted the USFS in finalising the environmental document (Record of Decision), a conditional operating permit for a multi-phased timber harvest project called the 'Browns Timber Sale'. This project had languished within the USFS bureaucracy for several years, being analysed and reanalysed to try to avoid litigation by environmental NGOs trying to protect natural forest ecosystems as in the aforementioned Northwest Forest Plan. The WCF Steering Committee added recommendations they felt would avoid litigation. Members of the Steering Committee representing local environmental interests brought an extra level of trust to the negotiating table. Key provisions of the draft Record of Decision (ROD) included the following:
   - Retention of 70 per cent canopy closure.
   - Protection of hardwoods against felling.
   - No construction of new roads.
   - That TCRCD would review and provide written justification for harvesting trees 63.5 cm (25 in) diameter at breast height (dbh) or greater.

There was no legal challenge to the Record of Decision by the environmental community, but the timber industry did file a challenge. The industry argued that the 70 per cent canopy closure would not alter fire behaviour enough to help protect the community of Weaverville and suggested 40 per cent canopy closure. WCF Steering Committee members joined the USFS in a meeting with the industry representatives to defend the Record of Decision, offering that this project was the first step towards more active management and was needed to build social licence for more live tree harvests. In the end, litigation was avoided and the USFS had the basis for the first live tree timber harvest in the Weaverville Basin in many years.

Extension and expansion of BLM Stewardship Agreement

3. The WCF Stewardship Agreement with BLM was reauthorised for an additional ten years (2015–2025), and additional lands managed by BLM were added to the WCF. Almost 809 ha were added to the WCF, because BLM was pleased with the management relationship with TCRCD and the community, and considered that an overarching stewardship objective of improving watershed health could be met for the Weaver Creek watershed if more of the federally managed lands were to be included in the WCF (see Figure 12.5 – expansion of WCF).
4. The County of Trinity Board of Supervisors was approached in the spring of 2012 with a request to 'scale up' the WCF model of co-operative management of federal lands. There had been no timber harvests on the USFS-managed lands in the previous year – a concern rooted in an economy in rapid decline and ever-increasing threat of catastrophic wildfire. The Board of Supervisors approved the establishment of a countywide collaborative group built on the WCF model. The need for action was heard as far away as Washington D.C. Tom Vilsack, Secretary of the U.S. Department of Agriculture, visited Weaverville, held a community listening session (attendance estimated to have been 250), and met in a roundtable discussion with community leaders. He tasked his federal Departmental leadership to help the county. In early 2013, the Trinity County Collaborative Group (TCCG) was formed to work with the USFS, and by extension with BLM, to increase the pace and scale of the WCF success. The TCRCD and another local natural resources organisation,

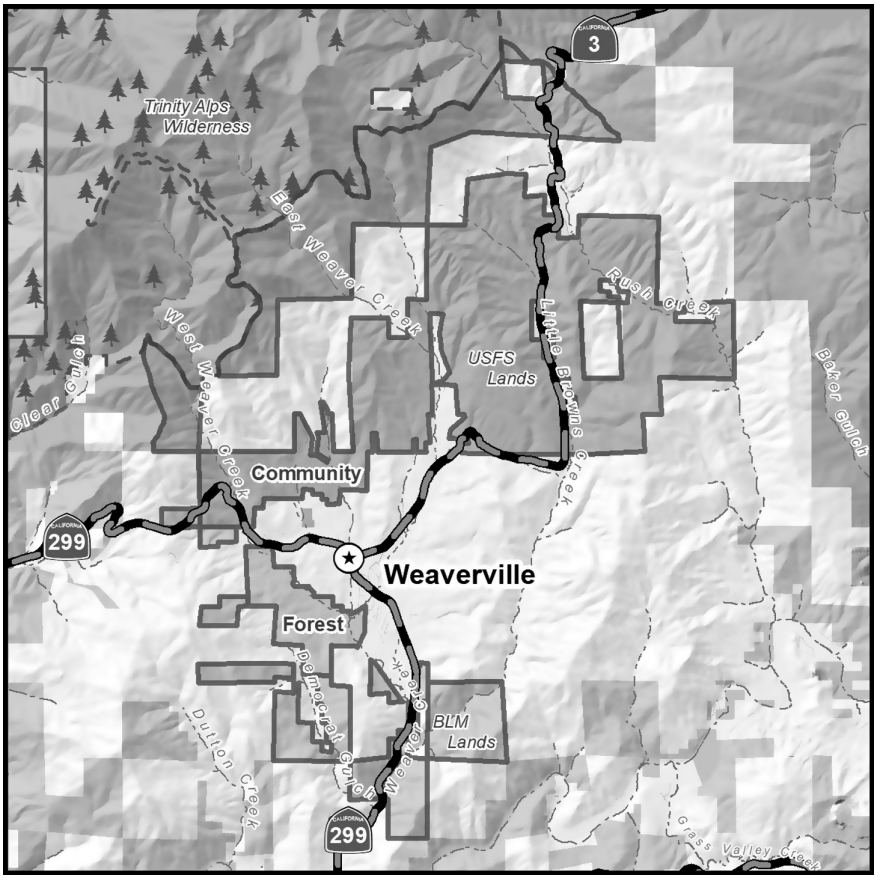


Figure 12.5 Map of WCF expansion.

> the Watershed Research and Training Center, have facilitated the TCCG, which includes two national forests (Shasta-Trinity and Six Rivers), BLM, and NRCS as federal partners – many of the same interest groups represented on the WCF and local landowners and interested citizens from throughout the county.

The TCCG has had some successes implementing forestry projects and in securing funding from special federal sources. The TCCG applied successfully to a special funding programme called the Joint Chiefs Initiative (JCI), a nationwide competition for multi-year funding that is awarded by the heads of the USFS and the Natural Resources Conservation Service (NRCS). JCI awarded the TCCG US$3.7 million in 2016 and US$3.8 million in 2019. In addition, TCCG received US$1.2 million in 2017 and US$3.2 million in 2019 from the State of California (California Climate Initiative). Erin Kelly, Humboldt State University, noted in 2018 that

> Participants in the WCF are working to change how the nearby federal forest is managed but also to reconstitute the beneficial relationship between the forest and its community, from one of timber dependence to a more nuanced relationship based on repairing human relationships and restoring the forest.[16]

There are different ways to measure the outcomes of the WCF. One way is to look at measurable accomplishments and outputs (areas treated, money earned and spent, the volume of logs sent to the mill). Four timber harvests have been completed between 2005 and 2012. Three of these were located on BLM and one on USFS land (Browns Phase I), resulting in 6,372 m^3 (2,700 MBF) of wood sold to the local mill. These harvests resulted in treating 260 ha of the forest to make them more fire resilient. About US$150,000 in retained receipts were leveraged by the TCRCD that secured 6 dollars for every stewardship dollar to complete projects in every category of service work identified in the WCF Strategic Plan. Every year requests for proposals (RFP) are published from a wide range of granting institutions, including federal and state agencies and private foundations. TCRCD applies to these RFPs and uses the retained receipts as matching funds. The WCF became a priority area for the BLM and the USFS to allocate their own appropriated funds to implement WCF projects as well. After 2012, a second harvest of regenerating forest was completed on USFS-managed lands (Browns Phase II), which generated over US$233,000 of stewardship funds for the WCF. The AOP guides the use of stewardship funds to identify matching funds from other sources and to track project progress (https://tcrcd.net/wcf/documents.htm). The AOP identifies projects that are in the planning/design stage, the environmental permitting stage, and the implementation phase. It also categorises projects by type: forest thinning, brush management, prescribed fire, recreation, invasive weed control, watershed/stream restoration, and community education. The third and final phase of the Browns Project was scheduled to begin in August 2020 but was delayed due to the severe wildfire season.

Putting community into the community forest

The WCF model of co-operative management did not change the land's ownership; it changed the relationship between the federal land managers and the community. It also presented an opportunity to better define 'community'. TCRCD widened the bridge of its relationships with BLM and USFS to add space for different perspectives to be included in management decisions. It set up a mechanism to honour minority opinions and built success around a consensus process. Any member of the steering committee that disagreed with a prevailing recommendation could write a minority opinion that would be sent to the federal agency along with the committee's prevailing recommendation. An example of this occurred during the marking of the Brown's Phase I timber harvest on USFS lands. The environmental document required a review and written justification by TCRCD of the harvesting of any tree with a dbh of 65.3 cm or greater. A steering committee member disagreed with the recommendation on some of the trees, and his minority opinion was forwarded to the Forest Supervisor, along with the TCRCD recommendation. Success builds on success. Despite the litigiousness that grew out of the Northwest Forest Plan in defence of unlogged forest as habitat for the northern spotted owl, no project developed through the WCF consensus model has been litigated. Success has also built a framework for trust in part due to the willingness of steering committee members, the agencies, and the larger public to accept harvest designs that are compromises. In the past, the environmental community would not accept any harvesting, while the industry would advocate for intensive harvests.

The community, or more correctly constituency groups, have an opportunity to engage in the management and use of the WCF with a sense of ownership and pride. The WCF has become more than a forest and trees to be managed and harvested. More and more interest has been given to the WCF, and it is seen as an amenity; for example:

- Soon after the first harvest on the original BLM 1,000, a real estate advertisement touted the benefits of a home that 'backs up on Community Forest'.

- A local non-profit (NGO) dedicated to improving the Weaverville public swimming pool collected Douglas fir branches from the WCF to make Christmas wreaths to sell as a fundraiser.
- TCRCD used the waste timber logs from the harvests on BLM lands to produce firewood for community members to purchase. The funds raised went into the following year's community firewood project (Figure 12.6).
- The WCF received national recognition in 2009, being selected for a Partners in Conservation Award[17] from Ken Salazar, Secretary of the federal U.S. Department of the Interior.
- A syndicated Public Television Series, 'Road Trip with Huell Howser', aired a segment on Weaverville featuring the WCF in 2010, which gave the WCF statewide exposure.[18]
- The World Endurance Mountain Bike Organization (WEMBO)[19] held their international competition in the WCF in 2015. The race attracted about 150 contestants and 500 visitors and brought about US$100,000 into the community. Eighty community members volunteered to help put on the race and formed the Trinity Trail Alliance, which is now active in the WCF Steering Committee. They lead recreational trail work days and host an annual mountain biking race, the La Grange Classic, in concert with the USFS.
- TCRCD formed a partnership with the USFS and the Shasta College Foundation to lead wildflower hikes every spring. A group of 60 or more people join the USFS botanist and Shasta College Natural History Instructor on these hikes (Figure 12.7). In 2020, with the restrictions of the COVID pandemic, the partnership developed a virtual nature hike (https://youtu.be/plxHRykxR5Q).
- Prescribed fire (= controlled burns) was reintroduced in the WCF around 2008. The Five Cent Gulch Prescribed Fire (2014) became a control point for firefighters, helping to keep the Oregon fire from reaching residential neighbourhoods on the edge of the WCF. TCRCD partnered with the Watershed Research and Training Center[20] to apply for funding to support prescribed fire on private lands adjacent to the WCF, and by 2017, cross-



Figure 12.6 Community firewood day.



Figure 12.7 Annual wildflower hike in WCF.

boundary prescribed fires had been implemented with total funding of US$232,900 from outside sources.

- The success of prescribed fire on WCF led the Trinity County Collaborative Group to prioritise projects that continue to reduce the standing forest biomass, thereby reducing the risk of wildfires. These projects can be implemented with the federal funding awarded from a three-year JCI (USFS/NRCS) proposal. The federal funding includes US$181,000 for TCRCD to implement non-harvest stewardship work.

Challenges

The successes and challenges facing the WCF are based on the following:

- The WCF remaining under federal ownership.
- Federal Law (stewardship authorities) and the regulations adopted by federal agencies to implement the law.
- Agency personnel with the time and interest in the WCF as a management model.
- Community members willing to invest their time in the WCF Steering Committee.
- Projects developed by TCRCD with the agencies having a much lower risk of being the targets of litigation.
- TCRCD willingness to be the bridge between the community and the federal agencies.
- TCRCD success at securing matching outside funding.
- General community perceptions about the need to actively manage surrounding forests.

However, federal ownership means that all projects must be approved through the time-consuming and costly environmental NEPA review process. This often means that opportunities,

like favourable log prices, are missed. The same law that created the opportunity for the WCF (stewardship authorities) resulted in two different regulatory frameworks – one for BLM and the other for USFS. While BLM allows retained receipts to be used to monitor the forest and plan future projects, the USFS does not. This means that progress can be slower on USFS lands, and the burden of securing planning funds falls on other agencies, like TCRCD.

Federal agency personnel were key to the WCF's successes. However, institutional memory is lost when federal employees are transferred if there is no process for information retention. TCRCD and the Steering Committee continuously provide guidance to new agency staff and deal with long periods of position vacancies. It can be difficult to get federal staff enthusiastic about the WCF as a model when they may only be in Weaverville for a short time. On the other hand, some agency staff develop deeper working relationships with the WCF.

The WCF Steering Committee has been quite stable, with key members like the TCRCD board member participating since the beginning. New members have joined (recreational trails). However, it can be difficult to sustain interest, and the Steering Committee is ageing with no clear succession planning.

The WCF has avoided any litigation on its projects, but that fear continues to drive USFS and BLM to make solid, defensible arguments in their environmental documentation, inevitably slowing the pace and scale of implementation.

Community members' interests change with time, and as threats to the community fade from memory, they can become complacent and less engaged in the WCF. There is a general feeling that 'someone else is taking care of it'. The formation of the Trinity County Collaborative Group siphoned off some energy and funding from WCF to the bigger countywide efforts.

TCRCD has been the hub around which WCF activities rotate, but the agency has always been under-funded for the administrative services it provides to the WCF, with staff oftentimes donating time to the WCF. This is risky and unsustainable.

Final thoughts

It seems that the biggest threat to the long-term viability of the WCF is tied to the lack of succession planning – how to get a new generation to invest their time and energy in the WCF. TCRCD's strength is its reach into the community and hiring a younger generation of professionals. The Steering Committee needs to tap TCRCD's relationships with the youth and young adults to strengthen their appreciation of what the WCF has to offer. It takes time and energy to maintain the public's interest. It is likely that this model of community forestry will always require cultivating community involvement – that a healthier forest means a healthier community and changing the paradigm from 'not in my backyard' to 'in my backyard, please'.

Notes

1 A bioregion is 'a region whose limits are naturally defined by topographic and biological features, such as mountain ranges and ecosystems' (https://www.merriam-webster.com/dictionary/bioregion).
2 Skinner, C. N., Taylor, A. H., & Agee, J. K. (2006). Klamath mountains bioregion. In N. G. Sugihara, J. W. Van Wagtendonk, J. Fites-Kaufman, K. E. Shaffer, & A. E. Thode (Eds.), *Fire in California's ecosystems* (pp. 170–194). University of California Press.
3 Industrial timberlands are commercially viable forestlands owned by forest industry companies.
4 https://en.wikipedia.org/wiki/Checkerboarding_(land)
5 Trinity County Resource Conservation District (TCRCD) is a special district created by a vote of the local people in 1955. It is a local government organisation dedicated to natural resources conservation and management, independent of the County of Trinity.

6 The so-called 'Timber Wars' of the 1980s and early 1990s pitted environmentalists wielding lawsuits and civil disobedience against federal officials and timber firms. Efforts to protect the northern spotted owl, an old-growth denizen, became a centerpiece of the conservation campaign, and the shy owl its mascot. https://www.sciencemag.org/news/2017/10/
7 Northwest California Resource Conservation & Development Council http://www.northwestcarcdc.org/about-us.html
8 National Environmental Policy Act (NEPA): The National Environmental Policy Act of 1969, as amended (Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982). The law went into effect on January 1, 1970. The purpose of NEPA is to ensure that environmental factors are weighted equally when compared to other factors in the decision-making process undertaken by federal agencies, and to establish a national environmental policy.
9 The Endangered Species Act (ESA) of 1973 (Public Law 93-205, 16USC-1973) is a key legislation for both domestic and international conservation. The act aims to provide a framework to conserve and protect endangered and threatened species and their habitats.
10 California Forest Practices Act (California Code Public Resources Code Division 4 – Forests, forestry and range and forage lands Part 2 – protection of forest, range and forage lands chapter 8 – Z'berg-Nejedly Forest Practice Act of 1973). The law declares that the policy of California is to encourage prudent and responsible forest resource management calculated to serve the public's need for timber and other forest products, while giving consideration to the public's need for watershed protection, fisheries and wildlife, sequestration of carbon dioxide, and recreational opportunities alike in this and future generations.
11 California Environmental Quality Act (California Public Resources Code, Sections 21000–21178, and Title 14 CCR, Section 753, and Chapter 3, Sections 15000–15387) is a statute passed in 1970 and signed in to law shortly after the United States federal government passed the (NEPA) to institute a statewide policy of environmental protection. CEQA does not directly regulate land uses, but instead requires state and local agencies within California to follow a protocol of analysis and public disclosure of environmental impacts of proposed projects and, in a departure from NEPA, to adopt all feasible measures to mitigate those impacts. CEQA makes environmental protection a mandatory part of every California state and local (public) agency's decision-making process. It has also become the basis for numerous lawsuits concerning public and private projects.
12 Trinity County Resource Conservation District (http://www.tcrcd.net)
13 Division 9 of the California Public Resources Code provides the authority to form conservation districts and provides parameters for what conservation districts have authority over within their district boundaries. https://law.justia.com/codes/california/2016/code-prc/division-9/
14 Stewardship Contracting Authorities grants the Forest Service and the Bureau of Land Management permanent authority to enter into stewardship contracts or agreements to achieve land management goals for the National Forests or public lands that meet local and rural community needs. Section 8205 supersedes the temporary authority granted to the Forest Service in section 347 of Public Law 105-277, the Omnibus Consolidated and Emergency Appropriations Act, 1999. Section 604 (16 USC 6591c) of Public Law 108-148 as amended by Section 8205 of Public Law 113-79, the Agricultural Act of 2014.
15 The photograph shows ground dragging of the logs and consequent rutting instead of using a sulky or wheeled hitch, as is normal in Scandinavia and the United Kingdom. Sulkies hitched to single or pairs of draft horses have almost zero negative environmental impact and permit faster and cheaper extraction. Oxen are used with sulkies in southern and south-central Africa because they are less affected by tsetse flies. WCF later switched to a forwarding arch that had less impact on the ground surface.
16 Kelly, E. (2018). The role of the local community on federal lands: The Weaverville Community Forest. *Humboldt Journal of Social Relations*, *40*, 137–151.
17 No cash prize but bragging rights.
18 'Road trip' is a Huell Howser Production ©2010. #154 Weaverville (www.calgold.com)
19 World Endurance Mountain Bike Race 2015: www.weaverville24.us
20 Watershed Research & Training Center: https://www.thewatershedcenter.com/

13

COMMUNITY MANAGEMENT OF NATIVE AMERICAN, MUNICIPAL, AND PRIVATE MANAGED FORESTS IN NORTHERN CALIFORNIA, USA

Bill Wilkinson and April Sahara

Introduction

This chapter examines 15 forests in northern California which are managed sustainably for timber, as well as two others whose primary intent is conservation and restoration (Table 13.1). All significantly benefit surrounding communities. The 17 forests have been subdivided into four categories:

- Designated Community Forests.
- Conservation Forests.
- Small Indian Reservations (Rancherias[1]).
- Large Tribes and Indian Reservations.[2]

In the United States, the preferred term for Indigenous People is 'Native American'. The words 'tribe' and 'Indian' are legal terms.

The region and its forests

The area of analysis ranges from the Garcia River's confluence with the Pacific Ocean in southern Mendocino County north about 322 kilometres (km) along the coasts of Mendocino, Humboldt, and Del Norte Counties to the Elk Valley Rancheria near the Oregon border; from there southeast about 145 km to the community of Weaverville in Trinity County; then almost due south for 193 km to the Middletown Rancheria in Lake County; and, finally, back 88 km west to Point Arena on the Garcia River. The area is the core of a region called the North Coast, in the state of California, a rural area characterised by rugged terrain, rivers, ranches and forests, small homesteads, villages, and small cities. Coast redwood is unique to this area, and the common phrase 'Behind the Redwood Curtain' emphasises the insularity of the region.

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Table 13.1 Community forests matrix: Tenure classification, designation, and agency oversight

Forest	*Owner*	*Ownership class*	*Forestland (hectares)*	*Timber management*	*Agency oversight*	*Regulatory oversight*	*Environmental oversight*
Hoopa Valley Indian Reservation	Hupa Valley Tribe	Tribal	35,410	Yes	USDI – BIA	Tribal – Federal Trust	NEPA
Round Valley Indian Reservation	Confederated Tribes of Round Valley Reservation	Tribal	8,966	Yes	USDI – BIA	Tribal – Federal Trust	NEPA
Yurok Indian Reservation	Yurok Tribe	Tribal	21,570	Yes	USDI – BIA	Tribal – Federal Trust	NEPA on Trust, CEQA on Fee
Karuk Tribe WKRP Program	USFS	US Govt	2,226	Yes	USDI – BIA	Tribal – Federal Trust	NEPA
Resighini Rancheria	Resighini Rancheria	Tribal	185	No	USDI – BIA	Tribal – Federal Trust	NEPA
Trinidad Rancheria	Trinidad Rancheria	Tribal	19	No	USDI – BIA	Tribal – Federal Trust	NEPA
Redwood Valley Rancheria	Redwood Valley Rancheria	Tribal	57	No	USDI – BIA	Tribal - Federal Trust	NEPA
Elk Valley Rancheria	Elk Valley Rancheria	Tribal	200	Yes	USDI – BIA	Tribal – Federal Trust	NEPA
Big Lagoon Rancheria	Big Lagoon Rancheria	Tribal	8	Minor	USDI – BIA	Tribal – Federal Trust	NEPA
Middletown Rancheria	Middletown Rancheria	Tribal	50	Minor	USDI – BIA	Tribal – Federal Trust	NEPA
Arcata Community Forest	City of Arcata	City	923	Yes	CalFire	Municipal	CEQA
Weaverville Community Forest	BLM and USFS	US Govt	6,055	Yes	BLM/USFS	Federal	NEPA
McKay Community Forest	Humboldt County	County	405	Yes	CalFire	County	CEQA
Usal Redwood Forest	Redwood Forest Foundation	NGO	2,0234	Yes	CalFire	Foundation	CEQA
van Eck California Forest	van Eck Forest Foundation – CA	NGO	877	Yes	CalFire	Foundation	CEQA
Garcia River Forest	The Conservation Fund	NGO	9,623	Yes	CalFire	Foundation	CEQA
Big River and Salmon Creek Forest	The Conservation Fund	NGO	6,483	Yes	CalFire	Foundation	CEQA

Source: Bill Wilkinson.

North Coast forests also contain an abundance of Douglas fir as well as sugar and ponderosa pines, white and grand fir, red and incense cedar, and a narrow band of Sitka spruce along the Pacific shoreline. Non-commercial conifers include knobcone pine, shore pine, Bishop pine, and Pacific yew. A significant acreage is occupied by hardwoods, including tanoak, Oregon white oak, California black oak, Pacific madrone, and California bay laurel. The mixed-evergreen vegetative type contains a mix of commercially valuable conifers and competing hardwoods that traditionally have little economic value. Industrial logging in this area provided the raw material for urban development in California and beyond, from the beginning of European settlement.

Land ownership

From the mid-1800s on, the more easily accessed timberland (in the counties examined here: Humboldt, Mendocino, Trinity, Del Norte, and Lake) was largely owned by timber barons who clearcut and then sold timberland at a rapid pace. Harder-to-access forest stands, on poorer sites, remained in the custody of the US Government, which also carried out a programme of old growth[3] liquidation for many decades until derailed by the northern spotted owl controversy and other societal forces in the 1990s.[4] Extensive areas of productive timberland have been logged multiple times with little silvicultural treatment, and the legacy of those serial harvests is evident on these sites today in the form of immature conifer stands or those dominated by non-commercial species, and the concomitant effects of erosion, stream degradation, exacerbated fire hazard, and failing roads. Beginning in the 1970s, the subdivision of ranches and timberland created a patchwork of small parcels occupied by vacation homes or homesteads, many of which became major producers of marijuana. The local economy is still resource-based and includes timber, fishing, livestock, and cannabis.

Large blocks of commercial timberland remain a major economic force. Green Diamond Resource Corporation, owned by the Reed family of Washington State, owns and manages around 162,000 hectares (ha), mostly near Eureka and Arcata in Humboldt County. Mendocino Redwood and Humboldt Redwood Companies, owned by the Fisher family of *Gap* and *Old Navy* fame (clothing shops), have pioneered a more environmentally focused approach on the 178,000 ha they purchased from Scotia Pacific and Louisiana Pacific in the 1990s. The largest landowner in California is Sierra Pacific Industries, owned by the Emerson family, which owns a total of 769,000 ha of timberland across several counties, and 77,173 ha in Trinity County.

In addition, the United States Forest Service (USFS)[5] is responsible for the Six Rivers and Mendocino National Forests (774,287 ha) and Shasta-Trinity National Forest in Trinity County (approximately 404,686 ha), while the Bureau of Land Management (BLM) administers the King Range National Conservation Area (24,281 ha) in Southern Humboldt County. Two conclusions can be drawn: there is a lot of timberland in the area and much in large holdings that are managed for the benefit of absentee owners.

Despite the vast riches and sway of large corporations and the US Federal Government, some timberland ownership and management have taken a different path. Two communities (Weaverville and the Karuk Tribe) co-manage surrounding government land. A significant acreage is owned by Native American tribes and managed by resident and non-resident tribal members. In at least three cases, forest owners have codified community benefits as the primary management goal. Whether the operations profiled in this chapter represent a trend or not, they present a clear contrast with other forestry operations of all sizes and designs.

Timberland history

Since their codification in 1973, the (State-level) California Forest Practice Rules have curtailed the 'cut-and-run' mentality that characterised earlier logging activity (Prudham, 2005). Nevertheless, intensive logging for timber continues to be the norm on most industrial ownerships. Ownership fluctuates as significant acreages are sold to smaller buyers, including Timber Investment Management Organizations (TIMO),[6] developers, and community forests.

The purchasers of such properties often find that the former industrial timberlands are so understocked with commercial species that they cannot reasonably be managed for sustainable timber harvest without first undergoing extensive restocking. Also, the State of California has made landowners responsible for correcting environmental problems, such as erosion, caused by their predecessors. These previously socialised costs mean that today commercial timber management is an expensive proposition under the best of economic conditions. If times are tough for owners of commercial timberland, imagine the challenges faced by owners of marginal or non-commercial forests, where the expectation of timber revenue to support beneficial rehabilitation projects is lacking.

The North Coast was a social convergence point in the 'Timber Wars' of the 1980s and 1990s as local protesters rallied to prevent the last old growth redwood forests from being logged (Widick, 2009). A subset of this protest movement focused on the effects of arboricides on human and ecological health. Along with the northern spotted owl controversy, many factors have conspired against intensive forest management in the area, including broader public awareness of environmental issues, enactment of increasingly strict State and local regulations, decline in the economic power of the timber industry (and in associated jobs), the decline of timberland productivity due to poor past management, and the entrenchment of environmental organisations globally, nationally, and locally.

Emerging trends

However, new trends have helped the timber industry to evolve: voluntary third-party forest certification under Forest Stewardship Council (FSC) standards has increased community confidence in forest management activities. Brokerage of carbon sequestered in forest trees under the California Cap-and-Trade Program[7] has added an economic incentive to support less intensive harvest practices. The broad-scale application of conservation easements[8] has acted to slow the spread of development by compensating landowners for conservation practices.

Designated community forests

The State of California introduced the category of 'community forest' in 2014.[9] A designated community forest is one which is legally managed by a municipal or county government or a legally incorporated local entity.

Arcata Community Forest

Arcata Community Forest (ACF) is the oldest designated community forest in California. Owned by the City of Arcata, the forest lies on the hills overlooking Arcata, adjacent to Humboldt State University. Continuously adding land since 1955, the ACF now includes 923 ha, with the proceeds from log sales going toward further land acquisition and recreational infrastructure development.

The ACF core redwood forest is well stocked at 172,261 cubic metres (m^3) conifer. The Annual Allowable Cut (AAC) ranges from 708 to 1,180 m^3, with single tree selection being the primary silvicultural treatment. Management goals include restoration of the pre-settler forest structure and stocking, fuel reduction, and control of invasive plants. Pre-settler conditions include a mix of tree species. The typical shrub layer is densely dominated by salal, ocean spray, and Oregon grape, and the herb layer is very sparse. At the wetter end, the shrub layer is dominated by salmonberry, sword fern, and red huckleberry.

McKay Community Forest

The McKay Forest, 15 km south of the Arcata City Forest, is a recent addition to the list of community forests in the region. This 405-ha tract was sold in 2014 to Humboldt County by Green Diamond Resources Company because of continuous arguments with the general public about timber management. The McKay Community Forest will be managed for public access and recreation, timber harvest, and watershed and resource conservation.

The County released a draft recreational trail plan for public review in 2020 and engaged a local forestry consulting firm to prepare a Non-Industrial Timber Management Plan (NTMP) for the property. An NTMP is an alternative for landowners with less than 1,012 ha who are willing to manage their land using specific management techniques. Like a Timber Harvest Plan, an NTMP must be prepared by a Registered Professional Forester (RPF) and be approved by the California Department of Forestry and Fire Protection (CalFire). An NTMP is an environmental review document that outlines the long-term management of a specific property. It also locks in the Forest Practice Rules that were applicable at the time the NTMP was prepared. When the landowner decides to harvest timber, they file a Notice of Intent with CalFire that describes the planned harvest. The process is streamlined, allowing the owner to take advantage of high timber prices, for example, and to lower the future costs of harvest preparation.

Weaverville Community Forest

The unincorporated[10] community of Weaverville, in Trinity County, is one of the oldest towns in California, dating back to the Gold Rush (1848–1855). An innovative Community Forest model was implemented there in 2003 when the Resource Conservation District (RCD) negotiated to take over the management of urbanised BLM properties (see Chapter 12, this volume).

McKinleyville Community Forest

As of November 2021, the Services District of the unincorporated town of McKinleyville, 8 km north of Arcata, is devising a management plan for its purchase of 221 ha of redwood and spruce forest along its east boundary that will buffer this urbanising community from the seller, Green Diamond's, managed forest lands.

Local culture and the timber wars

From the late 1960s on, the North Coast was inundated by counter-cultural adherents seeking a back-to-the-land existence. Had it not been for cannabis, the immigrants might have blended quickly into the local culture, but the financial advantages of 'weed' production made them a social force to be reckoned with.

By the 1970s, it was clear that commercial timber stocks on private land had declined. To keep the mills working, the United States Forest Service (USFS) contrived a plan to increase harvesting on government land. This plan lost the social licence for many reasons. One notable episode was when the USFS built a secret logging road to connect the communities of Orleans and Gasquet in Northern Humboldt and Southern Del Norte Counties, so that timber could be transported from Orleans to mills on Highway 101. Passing through the high country sacred to local tribes, the GO Road was discovered by a practitioner of traditional religion who was on a vision quest. The outrage generated by impending cultural genocide for timber's sake was enough to get that project cancelled, though not without extensive legal action.

Legal action and public protest, this time from timber industry adherents, continued as Congress authorised the expansion of Redwood National Park to include thousands of acres of cutover redwood industry land. As their job prospects dwindled, timber-dependent communities mobilised to oppose government conservation efforts. The stage was set for the 'timber wars'.

In southern Humboldt and northern Mendocino counties, the immigrant-now-turned-local community mobilised to protest industry's plans to wipe out the final representatives of old growth redwood not protected in parks. Most of the remaining pristine groves were owned by Pacific Lumber, whose Texan owner, Charles Hurwitz, was impatient with environmentalism and its adherents. Hundreds of protesters from surrounding local homesteads mobilised to tree-sit and chain themselves to gates to impede harvest operations. Tensions ran high until the death of a protester within a logging unit cooled the ardour of folks on both sides, and the US Government found the funds to purchase the largest remaining tract of old growth forest.

These immigrants also brought with them a strong environmental ethic, from the beginning at odds with the local timber-based economy. Until then lumber mills and timber harvest had generated most of the region's profits, and the local population was highly dependent on timber being harvested by whichever means could be applied. Private lands were clear cut and then clear cut again. The prescriptions in the 1976 Forest Practices Act (FPA) to restock after harvest and to leave trees of good phenotypic quality were not strongly enforced. Industrial managers continued to resist investments in sustainable practices. The area suffered, akin to other places with extractive resources' economies, with profits flowing out of the region, leaving environmental devastation behind. The FPA also prescribed that all private forests be regenerated with at least 300 stems per acre (740/ha) on high-quality site lands, and 150 trees per acre (370/ha) on low-quality site lands. The 1976 FPA was declared the functional equivalent of the requirement for an Environmental Impact Report for such activities under the California Environmental Quality Act (Green, 1982).

Redwood Forest Foundation and the Usal Redwood Forest

At 20,234 ha, the Usal tract is the third largest tract of timberland in timber-rich Mendocino County. The tract is very mountainous, rugged, and isolated, the nearest major population centre being Fort Bragg (39,500 pop.), 56 km to the south. *Usal*, in Mendocino County, pronounced *Yusawl*, appears to be derived from the Pomo word *Yoshol*, containing the stem *yo*, 'south'. *Sho* is 'east', and *l* a suffix signifying direction in the same language.[11] Managed for timber since the 1880s, it once included a sawmill at the mouth of Usal Creek with a 488-metre wharf for loading lumber onto coastal schooners, and a 5 km railroad up Usal Creek to bring logs to the mill.

Passing through a long list of owners, the Usal property continued to change hands over the 20th century, the last industrial owner being Hawthorne Timber Company, with The Campbell Group as managers. When the property came up for sale in 2004, local residents discovered that

the Fisher family, which had just purchased the Louisiana Pacific redwood lands, was intent on acquiring the Usal tract as well. Another perceived threat was subdivision. Although isolated and relatively infertile for agriculture, the booming but illegal cannabis industry was poised to acquire and subdivide these isolated (and difficult to police) mountain lands.

Not only did locals see profits going out on log trucks but they also saw jobs leaving as the industry consolidated and local mills began to close at an alarming pace. A sustainable model for forest management was badly needed, including a plan to save local livelihoods. Community members advocating for local control had already mobilised in 1997 to incorporate the Redwood Forest Foundation (RFFI). Founders and supporters included not only local activists but also foresters, lumber mill owners, county supervisors, and local philanthropists. The foundation paid a US$610,909 transfer tax to Mendocino County, indicating a purchase price of about US$60M, which, financed by the Bank of America, left the new owners deeply in debt. One strategy to help pay off the debt was by selling a conservation easement to the Save the Redwoods League, which was eventually acquired by The Conservation Fund, using a US$19.5M grant from the California Wildlife Conservation Board and an additional US$500,000 grant.

As local forest activist Richard Gienger stated:

> Thank goodness for the coalescence of the strong variety of forest conservation interests that founded the Redwood Forest Foundation, and its acquisition of their first model for community-based forestry, Usal Redwood Forest. Utilizing first-hand experience by many persons involved in helping to restore damaged watersheds and depleted forests – and protecting precious remnants – gives real life and hope for multi-generational connection and partnership in conservation. The still-strong runs of salmon and steelhead in some of the streams of the Usal Redwood Forest are a motivating force and reality. Quality forests and healthy ecological, economic, and social/cultural relationships are the goals.
>
> *(personal communication, 4 August 2020)*

Taking advantage of the conservative silviculture demanded by its board and supporters, RFFI explored the potential of selling sequestered carbon on the California Cap-and-Trade Program. In Usal's case, registration took over six years and was completed in 2016. The Usal Redwood Forest Company (a wholly owned subsidiary of RFFI) registered carbon offset credits from the 2007 purchase date through 2014, a total of 3,918,782 credits. This made Usal the largest offset project in the United States at the time and earned it the Climate Action Reserve 2016 Project Developer of the Year award. The additionality of the carbon offset is the carbon sequestered through the conservative silviculture, minus the carbon which would have been sequestered under business-as-usual cut-and-run logging. However, the debt to Bank of America continues to overshadow the ambitious goals of RFFI to establish additional community-based forests that improve regional economic vitality and provide critical habitat and long-term benefits for the communities.

One point of note on the Usal forest is the relatively low timber harvest level. Redwoods are shade tolerant and able to compete with hardwoods, particularly tanoak, a ubiquitous understorey tree, which has flourished in cutover stands after removal of the conifer overstorey. However, the majority of forest sites on the Usal tract are better suited to Douglas fir, which does not compete well against hardwoods. Most forest operations in the area utilise arboricides to control hardwoods until the conifers can recover ecological dominance, but the founding members of the RFFI board viewed reliance on chemicals as being counter to their community values.

Although the Foundation has not formally excluded herbicide use, it has extended an informal ban to the present day. This exclusion means that a significant portion of the Usal forest will not be ready for commercial timber harvest within a human lifespan.

For several years, RFFI took an innovative lead by field processing biochar from hardwoods and logging residues. Experiments lead to commercial production at an old mill site on the South Fork Eel River near Piercy (pop 51). Biochar (charcoal) is placed in the soil to improve soil, save water, and store carbon for hundreds of years. After years of promising gains, in the end the cost of upgrading to optimal equipment was not supported by the potential income, and the facility was shut down.

Usal Redwood Forest Company continues to apply conservative silviculture while restoring substandard roads, as well as thousands of kilometres of heavily impacted but still-functioning stream courses that support an anadromous[12] fish ecosystem. RFFI's ambitious, ongoing, and expensive silvicultural practices – community involvement, local education, recreation, provision of local jobs, and institutionalising a prescriptive burning programme to accomplish ecological goals – are all financially dependent on timber income, sales of carbon credits, and charitable giving. If the California Carbon Exchange closes in 2030 as scheduled, RFFI would be hard pressed to continue its efforts in acquiring and preserving more forests for the local community.

Conservation forests

Two forests are recognised in this chapter for providing community benefits without being called community forests or having a primary emphasis on the local community.

Garcia River Forest

Like the Usal Forest, Garcia River Forest (GRF) in southern Mendocino County was acquired by local activists to better manage degraded timberland. The 9,623 ha property was acquired in February 2004 by (NGO) The Conservation Fund (TCF) in partnership with the Nature Conservancy, the State Coastal Conservancy, and the Wildlife Conservation Board. The project seeks to demonstrate that a large, understocked tract of coastal forest can be returned to ecological and economic viability through patient, adaptive management by a non-profit organisation in partnership with private and public entities and community stakeholders.

A 150-year history of forest harvesting has created a young redwood/Douglas-fir forest with a high component of tanoak. The comprehensive Integrated Resource Management Plan (IRMP 2006) contains no specific timber harvest targets but does contain exhaustive material on inventory data, forest conditions, wildlife, cultural resources, community involvement, desired future conditions, infrastructure, and more. In 2009, TCF acquired the Big River (4763 ha) and Salmon Creek Forests (1,720 ha) in the same area as GRF, which will be managed under the same regime (see Figure 13.1).

California van Eck Forest

The van Eck California Forest (there is also a van Eck Oregon Forest) includes four tracts north of Arcata totalling 877 ha, the heart of productive redwood country. These tracts were initially clear cut between 1910 and 1920. Portions were converted to pastureland before reverting back to forest. A second harvest occurred in the 1960s when stands were selectively logged or high-graded. Fred van Eck acquired the property in 1969, and a third entry occurred in the early

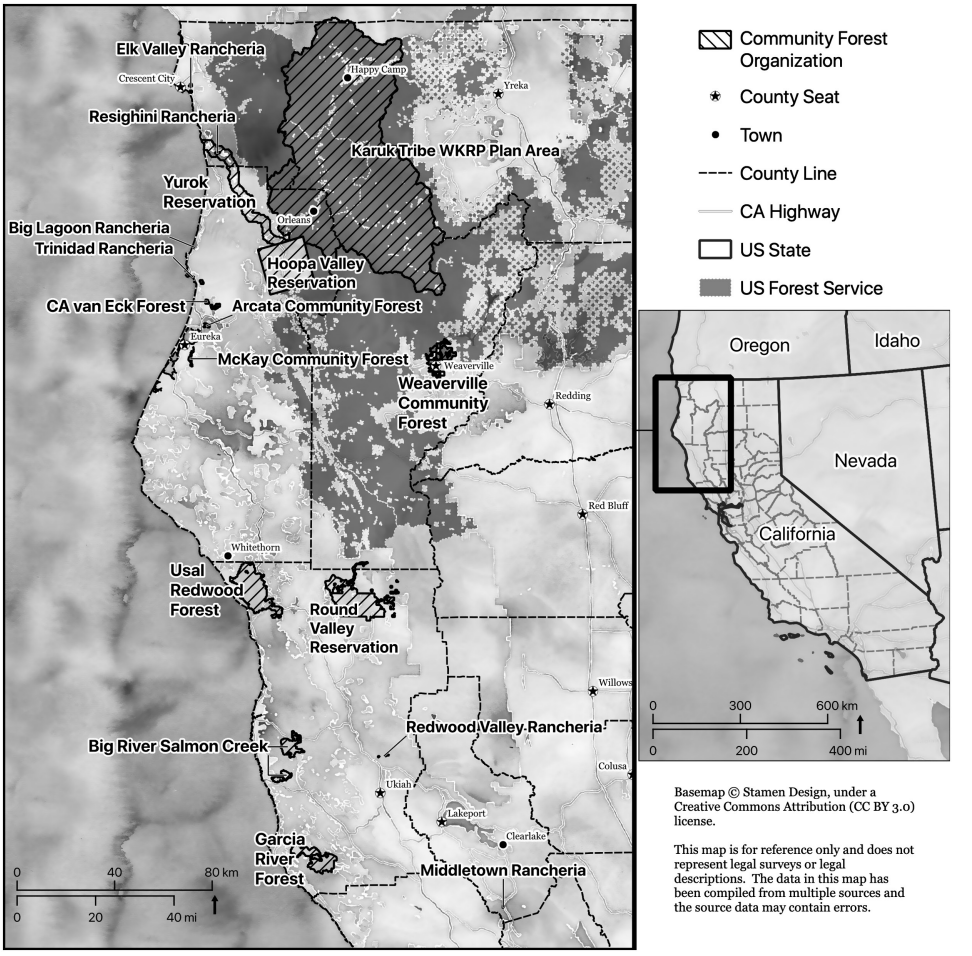


Figure 13.1 Map of featured community, conservation, and Tribal forests here. Source: Map prepared by April Sahara.

1970s when the stands were again selectively logged or high-graded. Since then, thinnings have occurred on portions of all four tracts. A conservation easement was placed on the property in 2001 by Pacific Forest Trust, which also manages the property.

The van Eck Forest is located within the rural suburban enclaves of Fieldbrook and Moonstone. Each parcel borders Green Diamond as well as numerous occupied homesites. Though closed to public entry, it provides residents with an undeveloped forested backyard stocked with mature timber, the only example of such in the vicinity. Wildlife includes Pacific fisher, mountain lion, black bear, northern spotted owl, coho salmon, and peregrine falcon.

The van Eck property is economically self-sustaining, with revenues covering all operating expenses while returning income to the van Eck Foundation to support research and graduate scholarships at Purdue University. The properties also provide local, sustainable employment for loggers, truck drivers, mill workers, timber cruisers, biologists, and foresters.

Management goals for van Eck CA include:

- Restoring the native redwood ecosystem.
- Creating or maintaining habitat for species such as the northern spotted owl dependent upon older forests.
- Enhancing the landscape's ability to absorb and store atmospheric carbon.
- Carbon emission reductions representing the equivalent of taking 123,000 cars off the road for a year.

Economic returns include:

- US$2M from the sale of 185 tCO2e of registered emissions reductions (2005–2009).
- High-quality timber, yielding US$3M from sustainable timber harvests (2005–2009).
- Timber income over 30 years projected to generate an internal rate of return between 5 and 8 per cent.
- Over the next 40 years, standing timber volume expected to generate 225,000 m^3 of timber (@USD 50/m^3 income would be USD 0.3M/year compared with USD 0.6M/year during 2005–2009 for even-flow harvests).

Small Indian Reservations ('Rancherias')

California contains over 100 of the 326 Indian Reservations nationwide. California was densely populated before the White settlement, and even though the Native American population had decreased by about 90 per cent by the end of the 19th century, enough Native Americans survived so that coping with 'the Indian Problem' continued to preoccupy many minds. The history of the Federal Government–Indian relationship in California included the unprecedented magnitude of non-Native migration into California after the discovery of gold and the Treaty of Guadalupe Hidalgo that settled the border with Mexico, both in 1848. Under pressure from the California Congressional delegation, the United States Senate not only refused to ratify the 18 treaties negotiated with California tribes during 1851–1852, but they also took the extraordinary step of placing the treaties under seal. The combined blows of the un-ratified treaties and the Land Claims Act of 1851 reduced most California Indians to homelessness.

Major shifts in federal Indian policy at the national level during the late 19th century exacerbated 'the Indian problems' in California. Passage of the General Allotment Act in 1887 opened part of the limited lands in California to non-Indian settlement. Some destitute Native Americans were rounded up during the years following the Civil War and sent to Hoopa, Round Valley, or other large reservations. The Rancheria system was developed to accommodate small homeless groups. Citizens sympathetic to the economic and physical distress of California Indians encouraged Congress to pass legislation to acquire isolated parcels of land for homeless California Indians. Between 1906 and 1910, a series of Congressional appropriations were passed that provided funds to purchase small tracts of land in central and northern California.

In some cases, rancherias were located on the sites of former villages. Sometimes these locations had agricultural or commercial potential, but more often they were on lands so infertile, isolated, or degraded that no White person wanted them. The federal government did require that a tribal government be organised for each rancheria, and granted the new tribes limited sovereign status and a government-to-government relationship with the Department of the Interior. The federal government also managed food, health, and education for rancherias. This

relationship has persisted into the present day, although with casinos and a more savvy tribal membership, many rancherias are undergoing positive change.

Most rancherias include some wildland, and a few have commercial forests. The Bureau of Indian Affairs (BIA), under the National Indian Forest Resources Management Act 1990 and the American Indian Agricultural Resource Management Act 1993, is charged with the development of planning documents for forest, rangeland, and fire management for the open space lands of all recognised tribes. In the past the BIA exerted almost total paternalistic control of all tribal documents. However, since the Indian Self-Determination Act of 1975, such activities have increasingly devolved to tribes themselves, and to a phalanx of consultants who do such work for both tribes and the BIA.

Within our area of interest there are 16 rancherias; however, this chapter addresses only 6 of these (which the author is familiar with from management planning work). Note that these rancherias are tiny in area, in AAC, and in the number of affected Native Americans. The recognition of Native American tribes as sovereign nations has been a thorn in the side of conservative politicians for decades. From 1956 through 1958, Congress passed three laws specifically targeting 41 California Indian rancherias for termination. The laws required that the rancheria lands be divided up among tribe members and issued under the individual title. The idea was that by becoming property owners and taxpayers, Native people would assimilate more quickly into American society. Some Native people accepted the idea of termination, in part because the Federal government offered assurances of greater education funding and infrastructure improvements to native communities in return. As those promises went largely unfulfilled, opposition to termination grew among both Natives and settlers. The issue gained enough prominence that both Presidents Lyndon Johnson and Richard Nixon publicly called for a repeal of termination policies.

Elk Valley Rancheria

Elk Valley Rancheria (the Tribe's legal name) has 96 tribal members[13] and occupies 200 ha near Crescent City in Del Norte County. The Rancheria is located within the customary territory of the Tolowa Tribe. Members are descended from them and other tribal groups. The Tribe owns and operates the Elk Valley Casino.

The Rancheria contains 74 ha of forest, of which 25 ha are stocked with mature red alder and 49 ha with mature Sitka spruce. The AAC is set at 80 per cent of growth in order to account for Watercourse and Lake Protection Zones (WLPZs) and logistical difficulties, leaving room for timber stand improvement activities and free use and paid permit harvesting. The AAC is 124 MBF/year (293 m^3/year) of conifer sawtimber and 124 cords/year (449 m^3/year) of hardwood firewood.

Resighini Rancheria

About 32 km south of Elk Valley, the Resighini Rancheria borders the south bank of the Klamath River. The rancheria is comprised of 185 ha, of which 136 ha are forested. The tribal membership is around 150, mostly of Yurok descent, with around 30 residing on the rancheria. The Tribe opened one of the first Native American casinos in the 1990s, but that business closed for the third time in 2008.

In the heart of redwood country and surrounded by some of the most productive forests in the world, the rancheria nevertheless contains very little commercial forest, being occupied by riparian species including Sitka spruce, alder, willow, and cottonwood. The AAC is equal to growth: about 9 MBF (21 m^3) of conifer sawtimber and 186 cords (673 m^3) of hardwoods can be sustainably harvested from rancheria forestlands annually for growth and harvest to balance out.

Big Lagoon Rancheria

Situated 30 km south of Resighini Rancheria, Big Lagoon Rancheria was established in 1918 by the enactment of the United States Congress. The 24 tribal members in 2011 have ancestral ties to the Yurok and Tolowa peoples. The Tribe owns both fee[14] and trust land[15] to a total of 17 ha, of which 9 ha are forested. Potential AAC from the commercial timberland is estimated at approximately 28 MBF (66 m^3) of conifer sawtimber. However, given the small potential earnings from timber harvest, the Tribe has chosen to concentrate on the provision of amenity values including open space, outdoor recreation, and visual and auditory mitigation.

Trinidad Rancheria

The Trinidad Rancheria, established in 1906 by the enactment of the United States Congress, contains 37 ha of trust and 2.4 ha of fee land (2011); 'fee lands' were originally tribal trust lands but are now under freehold or fee simple land tenure. The aboriginal territory is Yurok, but the membership has ancestral ties to the Yurok, Wiyot, Hoopa, Chetco, Karuk, and Tolowa peoples. 132 members were on the tribal roll in 2010.

The tribal forest occupies portions of four parcels for a total of 19 ha, of which 13 ha are redwood forest and 2 ha Douglas fir, with the rest in spruce and hardwoods. These parcels are surrounded by urban development. Urban forestry, a blend of forestry and landscape design, is the management philosophy, especially near the Cher'ae Heights Casino, where the scenic beauty of the site is important to both residents and patrons of the tribal enterprises.

The AAC for conifer timber is estimated at 25 per cent of growth in order to account for riparian protection areas, accessibility, terrain, and other limiting factors. The AAC is estimated at 6,415 BF (15 m^3), while the hardwood AAC is 1.6 cords (6 m^3).

Redwood Valley Rancheria

The community of Redwood Valley (pop 1,729) lies just north of the Mendocino County seat of Ukiah (pop 16,177). Here, the bustling Coyote Valley Casino welcomes visitors from its highway frontage. Owned by a branch of the Pomo tribal group, the casino gives no indication that within a few miles is another Pomo reservation, which includes in its IRMP a comprehensive Forest Management Plan.

The Redwood Valley Rancheria was terminated in the 1960s as a result of the Reservation Act of 1953 (HCR 108). In 1983, the rancheria and its Little River Band of Pomo Indians were formally recognised as an Indian Tribe and sovereignty was reinstated. Tribal lands at that time included only the 'old Reservation', located about 3 km north of the town of Redwood Valley.

In 1984, following approval of a block grant,[16] the Little River Band acquired jurisdiction over the 67 ha 'New Reservation'. Located approximately 3 km NE of Redwood Valley, the 57 ha of wildlands of the Rancheria provide a remote, steep, and scenic backdrop to concentrated housing at the bottom of the mountain. The terrain is dominated by Little Bird Creek, a perennial stream which rises within the rancheria.

No commercial timber exists on these steep and arid foothills; however, in keeping with BIA policy, the Management Plan contains an AAC of 11 board feet conifer (equivalent to one single tree) and 18 cords (65 m^3) of hardwood. The rancheria was badly damaged in the wildfires of 2017. Since then, the Tribe has been active in taking preventative measures against any future wildfire. The wildlands are rarely used by the membership but are treasured for being their own.

Middletown Rancheria

Lake County is the ancestral home of many Native Nations, including the Elem Indian Colony, Little Lake Band of Pomo Indians, Lower Lake Rancheria, and, just south of Clear Lake, Middletown Rancheria. The Middletown Rancheria of Pomo Indians of California was established with the purchase of 44 ha by members of the small Tribe in 1910. The original ancestors of the Middletown Rancheria, also known as Lake Miwok Indians, found themselves landless and homeless during the 1800s as newcomers settled in the area of Middletown and throughout Lake County. The Tribe was recognised as a sovereign entity by the Congressional Act for California landless Indians in 1906. Following the establishment of the Middletown Rancheria, members of other Tribal groups, including Pomo, Wappo, and Wintun, joined the Pomo, either through marriage or customary adoption.

The 80 ha commercial forest owned by the Tribe contains 50 ha of relatively good stocking of commercial timber. Because these forests have commercial value, a series of inventories has been commissioned by the BIA. Commercial salvage harvest of dead or dying timber has been conducted over the years, and the AAC was updated in 2019. The AAC for Middletown is 38,417 BF (89 m^3) conifer and 54 hardwood cords (195 m^3) of firewood. However today the Tribe has little interest in timber management, preferring to concentrate its efforts on its Twin Pine Casino and Hotel.

Large tribes and Indian reservations

Indian Country

Along its 237 km length from Willow Creek to Yreka State Highway 96 passes through some of the most isolated landscapes in California. It also passes through a major cultural divide between rural White California and lands still dominated by Native American people: The Hupa (preferential spelling of the Tribe's name, the Reservation is 'Hoopa Valley'), Yurok, and Karuk tribes. These large tribes – Hupa 2,500 members, Yurok 6,357, Karuk 3,751 – share a similar culture despite their very different language families (Hupa Athabascan, Yurok Algonquin, and Karuk Hokan).

These tribes managed to remain in their ancestral territories during European incursions partly because of the forbidding terrain of the Klamath Mountains. This area is the purported homeland of Bigfoot, who features in Native American myths and is called *Omah* in the Yurok language, meaning 'creek devil', and *tintah-k'iwungxoya'n* in the Hupa language, meaning 'hair-covered boss of the mountains'.[17] During White incursions, these tribes benefitted from their territories not having significant amounts of gold. However, the Gold Rush was their first major contact with White settlers and posed an existential crisis. They did fight back. The Hupa, in particular, became adept at guerrilla warfare and reached a draw with, if not total victory over, the US Army in July 1864[18].

This sparsely populated area contains a high percentage of Indian Reservation land, the remainder being the mostly federally controlled Six Rivers and Siskiyou National Forests. The major political bodies are the three tribal governments (Hupa, Yurok, and Karuk), and tribal affairs affect non-natives as well as tribal members. Hunting and fishing are governed by tribal regulations. The three tribes employ over 1,500 people, rivalling federal employment. Few places in the USA outside of the Dakotas or Wyoming are as notably Native American as this area.

Hoopa Valley Reservation

From the establishment of the Hoopa Valley Reservation in 1864, logging of the great quantities of old growth Douglas fir has been an important economic activity. The Hoopa Valley

Reservation contains approximately 35,410 ha of commercial timberland and about 130 MMBF (300,000 m^3) of commercially important timber species. The Forest Management Plan has been certified since 1998 by the Forest Stewardship Council® (FSC®). The current AAC is 9.5 MMBF (22,000 m^3).

In addition to timber and logging jobs provided by Hoopa Timber Corporation, ancestral lands are extensively used for hunting and gathering. The Hupa are known for their basketry skills, the material for which craft is managed by cultural burning. Acorns are still gathered yearly for subsistence and ceremonial use. Tanoak acorns are considered the most delicious, and tribal forest managers have a love/hate relationship with this dynamic species because its shade tolerance allows it to lie in wait in the understorey until being exposed to sunlight, when it can achieve very high growth rates and dominate the post-harvest timber stand. Unlike conifers, tanoak (as well as other sclerophyllous species, e.g., Pacific madrone) stores great quantities of sugars in its root collar and can resprout numerous times if coppiced. For decades the BIA sprayed herbicide to allow conifers to compete with hardwoods, but when the Tribe took over forest management in 1989, it instituted a complete ban on the use of herbicides. The release of conifer seedlings is accomplished by the laborious and expensive manual removal of hardwoods and subsequent sprouts.

The Karuk Tribe, the WKRP, and the TEK

As with the Hupa and Yurok, a sense of place is a hallmark of Karuk culture. In every direction from their riverine villages, spiritual sites are visible and still used. The Karuk Tribe has lived for centuries in a bio-diverse mecca known today as the Klamath Mountains region. The Karuk call the place between the Klamath River and the Salmon River *Katimin* or 'the centre of their world'.[19] Karuk Ancestral Territory spans 426,376 ha. Because its draft treaties were not ratified by the US Congress, the Karuk were not granted a reservation. Starting in 1977, the Karuk began purchasing property for the benefit of its members, starting with 2.7 ha in the Orleans community and 4.3 ha in Happy Camp. The Happy Camp property was designated a 'Proclaimed Reservation'[20] under federal law in 1989. The Tribe has worked hard to accumulate more Trust land over the years. The current total is 370 ha of Trust land and 333 ha of fee land, mostly within the communities of Orleans, Happy Camp, and Yreka. Forest management on tribal lands is codified in a Forest Management Plan commissioned by the BIA.

Because so little of the surrounding land is under its control, the Tribe has been assertive in engaging with the owner of most of its ancestral territory, the United States Forest Service (USFS), to develop co-management strategies. The Karuk traditionally used controlled annual or semi-annual ground fires in small patches to reduce live and dead forest woody debris, shrubs, and small trees, thereby regulating vegetative growth and composition, decreasing fuels, and promoting cultural natural resources. However, after over 100 years of fire suppression by government agencies, much of the land that previously was treated with low-intensity fire has now become too densely stocked, crowding out trees and plants tribal people used for medicinal and spiritual purposes and religious activities. As a result, the land now experiences more regular, severe wildfires, often with catastrophic consequences.

'The federal government has taken fire from the people. Now we have to take it back', commented Leaf Hillman, Natural Resources Director (Oliver, 2019).

The Tribe has joined the Western Klamath Restoration Partnership (WKRP), developed in 2014 to develop a collaborative effort between local stakeholders and the USFS. The

goal is to integrate traditional ecological knowledge (TEK) and Western science to achieve three goals:

- Resilient landscapes.
- Fire-adapted communities.
- Safe and effective wildfire response.

In 2019, the WKRP was awarded US$5M from California's Climate Investments (CCI) state-wide programme to jumpstart its pilot project: the Somes Bar Integrated Fire Management Project. This project encompasses 2,226 ha that mixes national forestland and private landownerships in an area historically (and currently) populated and utilised by indigenous Karuk people, who are also co-leads of the WKRP. Innovation by planners of this project is rooted in decades of working knowledge designed to increase forest health and fire resiliency, and also from integration of the Karuk people's TEK. The uniqueness of WKRP is the long-ongoing collaboration amongst many local organisations, Fire Safe Councils, residents, and private landowners.

Yurok Indian Reservation

The Yurok Reservation runs from Weitchpec on the Klamath River, and then along it west to the

river's mouth, one mile wide on either side of the Klamath, thus, exemplifying the riverine nature of the Yurok culture. Reservation boundaries originally encompassed 23,876 ha, but over two-thirds were lost to the Tribe when it was allotted and lost to outside parties.[21] Reservation Trust forestland totals only 1,335 ha. Allotments (Trust land owned by individual Indians) total 890 ha. The Cook and Koppala Tract – fee land within the Reservation owned by the Tribe – totals 1,368 ha.

An early carbon sequestration project on Cook and Koppala was finalised in the early 2000s, making the Yurok Tribe the first Native forest landowners to take advantage of the market for carbon credits.

Over the last 20 years, the Tribe (6,311 enrolled members) has conducted an aggressive effort to acquire additional forestland in and around the Reservation. In 2011, the Tribe finalised the purchase of 9,000 ha of land from Green Diamond Resource Company. This Phase I purchase was followed by Phase II when, in 2019, an additional 20,234 ha were acquired from Green Diamond. These purchases were facilitated by Western Rivers Conservancy and included funds from the Hoopa-Yurok Settlement Act; the New Market Tax Credits programme; the Kendeda Fund; the David and Lucile Packard Foundation; the Wyss Foundation; National Fish and Wildlife Foundation/Acres for America and Walmart Stores, Inc.; the Wildlife Conservation Board and California Coastal Conservancy and other private, state and federal grants; as well as loans from the California State Water Quality Control Board and Indian Land Capital Company and the sale of carbon offsets.

The Tribal Natural Resource Department manages both trust and fee lands out of its offices in Klamath. Thirteen timber sales have been prepared on trust lands for harvest during 2012–2022, totalling 22.8 MMBF (52,800 m^3). Harvest plans on fee land for the same period estimate a harvest of 52.4 MMBF (121,300 m^3).

The Yurok Tribe, like the Hupa, is opposed to herbicide use. Forest management is oriented toward the restoration of forests and the reintroduction of traditional methods of forest management, particularly landscape burning.

Round Valley Indian Reservation

Between them, Mendocino and Lake Counties are home to 20 sovereign Indian nations, of which all but one, the Round Valley Indian Reservation, are small rancherias. Round Valley Indian Reservation, established by Presidential Order in 1870 in Mendocino County, was the ancestral home of the Yuki People. From the mid-19th century, hundreds of other tribal members from the Wailaki, Pomo, Nomlaki, Concow, and Pit River Tribes were literally rounded up and brought to Covelo, where, with the Yuki, they formed the Confederated Tribes of Round Valley Indian Reservation (RVIT), the federally recognised tribe that owns and governs the Reservation. There are currently 1,582 enrolled tribal members.

The original acreage of the Reservation was 41,326 ha, but this was reduced by Acts of Congress and the conversion of allotments to fee land so that today the Reservation comprises 11,854 ha, of which 8,966 are timberland.

The current Forest Management Plan was approved in 2006 and specifies an AAC level of 1,100 MBF (2,550 m^3). However, due to the scattered nature of the timbered parcels as well as environmental constraints, the Attainable Harvest Level (the harvest that can be attained without obtaining right-of-way through adjacent private landowners, or without causing potential environmental harm) is 475 MBF/year (1,100 m^3). In addition to forestry, the Tribal Natural Resources Department manages rangeland grazing, fire prevention, water, and wildlife.

Around 2010, the RVIT became aware of the potential to sell carbon offset credits, which would be marketed on the Climate Registry, which manages sales of carbon offset credits worldwide under Compliance Offset Protocols set by the California Air Resources Board. Because commercial forestland on the Reservation is typically managed conservatively, it tends to sequester more carbon than it emits. After negotiation and approval by the BIA Pacific Regional Office in 2013, the RVIT entered into a contract with the company New Forests, aka Forest Carbon Partners, L.P., to implement an Improved Forest Management project on 2,246 ha (or about half of the commercial forestland and one-quarter of the timberland on the Reservation). This was the first and still the only 'carbon project' situated on federal trust rather than fee property and required the (reluctant) permission of the BIA to take effect.

Summary

Native initiatives. The ten Native American tribes profiled here have long-term objectives to regain control over ownership and management of their ancestral territory and to reinstitute aboriginal land management practices. They own significant acreages of tax-free land that is held in trust by the federal government (trust land); some of them also own taxable (fee) land. In some cases, tribes have leveraged state and federal funds or have worked with NGOs to attain grants or loans to purchase additional forest lands. None have used casino profits to purchase land. The Karuk Tribe, owning a limited forest area, has entered into a co-management arrangement with the BIA on adjacent National Forest. In some cases, management objectives include timber harvesting and conservation. In those cases, timber harvesting is necessary to meet management costs. Ownership is a mix of Trust and Fee lands. Co-management is also practised in those cases where customary lands are owned by other entities.

Ownership. ACF and van Eck are owned outright by the City of Arcata and the van Eck Foundation, respectively. WCF and the Karuk co-management areas include only federal property. Redwood Forest Foundation Inc. (RFFI), Garcia River, McKay, and Big River/

Salmon Creek are leveraged with a variety of loans. RFFI carries a significant debt that impedes its management options.

Herbicide use. While herbicide use would be a logical silvicultural prescription to suppress hardwoods and give Douglas-fir regeneration space to grow, both Native American (Hupa and Yurok) and non-Native American (RFFI) managers reject its use. This decision suggests a shared dislike of some of the practices of industrial logging, together with a desire to manage a variety of non-timber forest products such as forage grass, fruits from bushes, and nuts from hardwood species. Other operations (Garcia River, McKay) allow limited use of herbicides to facilitate stand management for ecological restoration.

Funding. One large community forest (RFFI) carries a burden of long-term commercial debt. Several other operations (Yurok, Garcia River, McKay) have utilised a mix of NGO and other partnerships to buy up tracts of forest and prevent further industrial-scale logging. For example, in 2011, the Yurok Tribe received a US$18.8 million, zero-interest loan from the US Environmental Protection Agency's (EPA) Clean Water State Revolving Fund (CWSRF) to purchase former industrial timberland.

Carbon offset sales. Many of the more productive (in terms of timber) forests profiled here have utilised the sale of carbon offsets to help support their operations, including ACF, Hoopa Valley, Yurok, Round Valley, RFFI, Garcia River, and van Eck. These operations have successfully negotiated the bureaucratic maze and in one case (Round Valley) obtained federal permission for a carbon project. This funding source has added greatly to the financial viability of the operations. However, the future of carbon offsets is uncertain as the California Carbon Exchange is set to expire in 2030.

Conservation easements. van Eck, ACF and RFFI have sold conservation easements, to their significant profit. McKay and Big River/Salmon Creek plan to sell easements. Tribal operations carry no easements per se, though the Yurok CWSRF places restrictions on land management.

Notes

1 *Rancheria* is the Spanish term for small Indian settlements. Rancherias are a particular California institution. A small area of land was set aside around an Indian settlement to create a rancheria. Some rancherias developed from small communities of Indians formed on the outskirts of American settlements who were fleeing Americans or avoiding removal to the reservations. With the passage of Public Law 83-280 in the mid-1950s, terminating federal supervision and control over California tribes, some 40 rancherias lost the right to certain federal programmes, and their lands no longer had the protection of federal status. In 1983, a lawsuit resulted in restoring federal recognition to 17 rancherias, with others still waiting for the reversal of their termination (California Indians and Their Reservations: An Online Dictionary. San Diego State University 2020).

2 An Indian reservation is a legal designation for an area of land managed by a federally recognised Indian tribe under the US Bureau of Indian Affairs rather than the State governments of the United States in which they are physically located. In 1851, Congress passed the Indian Appropriations Act, which created the Indian reservation system and provided funds to move Indian tribes onto reservations and hopefully keep them under control. Indians were not allowed to leave the reservations without permission. The Native American tribes were treated as independent sovereigns at the time the US Constitution was ratified. Thus, the early peace treaties (often signed under duress) in which Native American tribes surrendered large portions of land to the USA also designated parcels 'reserved' for the tribes. The term remained in use even after the federal government began to forcibly relocate tribes to parcels of land to which they had no historical connection (https://www.nj.com/gloucester/voices/index.ssf/2010/11/the_kepharts_cohawkin_raccoon.html 9). In 2012, there were over 2.5 million Native Americans, with about 1 million living on reservations.

3 'An old-growth forest – also termed primary forest, virgin forest, primeval forest, late seral forest, or forest primeval – is a forest that has attained great age without significant disturbance and thereby exhibits unique ecological features and might be classified as a climax community' (Wikipedia).

4 On 23 June 1990, the US Fish and Wildlife Service added the northern spotted owl to its list of threatened species under the Endangered Species Act.

5 The Bureau of Land Management (BLM) is an agency within the United States Department of the Interior responsible for administering public lands. With oversight over 1,001,000 km^2, it governs one-eighth of the country's landmass.

6 A Timber Investment Management Organisation (TIMO) is a management group that aids institutional investors in managing their timberland investment portfolios. A TIMO acts as a broker for institutional clients to find, analyse, and acquire investment properties that would best suit their clients.

7 California's cap-and-trade programme is a key strategy for achieving reductions in greenhouse gas (GHG) emissions under AB32, the California Global Warming Solutions Act. Landowners who successfully implement an Offset Forest Management Project as developed under the California Air Resources Board Compliance Offset Protocol may sell carbon credits which would be marketed on the Climate Registry, which manages sales of carbon offset credits worldwide, under Compliance Offset Protocols set by the California Air Resources Board.

8 'In the *United States*, a **conservation easement** (also called **conservation covenant**, **conservation restriction** or **conservation servitude**) is a power vested in a qualified *private land* conservation organization (often called a "*land trust*") or government (municipal, county, state or federal) to constrain, as to a specified land area, the exercise of rights otherwise held by a *landowner* so as to achieve certain conservation purposes. It is an interest in *real property* established by agreement between a landowner and land trust or unit of government' (https://en.wikipedia.org/wiki/Conservation_easement).

9 https://www.fs.fed.us/restoration/Stewardship_Contracting/overview.shtml

10 An unincorporated community is one that is not within any incorporated municipality, but is within the jurisdiction of a county or other political subdivision.

11 It is not known whether the word *yoshol* is derived from these Pomo elements.

12 Anadromous fish migrate from the ocean into fresh water to spawn. The Pacific Northwest, including Northern California, is home to significant populations of anadromous fish, which were a primary food source for Native Americans. Anadromous fish include salmonids, striped bass, and lamprey eels – important dietary elements for and culturally significant to Native Americans. Anadromous fisheries have been heavily damaged by mining, timber harvest and subsequent erosion, and overfishing. Over the last several decades, significant effort and funding has gone into restoration of anadromous fish 'runs'; however, in most cases, fish abundance does not approach pre-contact levels (Waldman et al., 2016).

13 Legally enrolled members of Native Nations are entitled to share in group benefits – including the benefits conferred by higher levels of government, the right to live on titled lands (including Reserves), and the right to a share of profits from communally administered businesses (Bulkan, 2017).

14 'Fee simple land is usually known as the highest possible type of property ownership. Land held under fee simple is under complete control of the owner (a person or an entity such as a tribe) who holds the title to it. He or she or the tribe, for example, can sell, lease or develop the land as they see fit' (US Department of the Interior, n.d.)

15 'Trust land is land that the United States government holds in trust on behalf of an American Indian or Alaska Native individual or a federally recognized tribe. Unlike with fee simple land, the federal government, instead of the individual or tribe, holds the title for the trust land' (US Department of the Interior, n.d.).

16 A Block grant (United States) refers to a grant-in-aid of a specified amount from the federal government of the United States to individual states and local governments to help support various broad purpose programmes, such as law enforcement, social services, public health, and community development (Wikipedia).

17 http://www.bigfootencounters.com/creatures/yurok_terms.htm

18 https://www.northcoastjournal.com/humboldt/an-american-genocide/Content?oid=4116592

19 Laurence du Sault. *High Country News*, '*The Karuk Tribe fights a growing wildfire threat and a lack of funding*. Surrounded by forests they often can't manage without breaking the law, California tribes struggle to protect themselves from wildfires'. March 12, 2019.

20 Reservation Proclamation: A formal declaration issued by the Secretary of the Interior or her designee proclaiming that certain lands are a new reservation or an addition to an existing reservation. A reservation proclamation can encompass multiple trust parcels or a portion of a parcel taken into trust (Fee to Trust Handbook, Bureau of Indian Affairs. www.bia.gov.)

21 The General Allotment Act of 1887 forcibly divided reservation tribal lands, doling out small parcels to individual Indians and their families. If the allottee built a house, engaged in farming or ranching,

sent his children to government Indian schools, and renounced his tribal allegiance and otherwise pleased the agent, he would (after 25 years) receive title to his land and citizenship. Unlike tribal lands, these parcels would become taxable. The programme was inaugurated in California in 1893. By 1930, approximately 2,300 allotments had been carved out of the tiny communal tribal reservation lands. Traditional Indians opposed the detribalising goals of allotment. The uneven and unequal distribution of allotments was used by Indian agents to keep tribal populations divided and politically impotent. Nevertheless, considerable tribal resistance and pan-tribal organising developed in opposition to allotment. The programme ground to a halt in 1930 due to Indian opposition and the failure of the BIA to complete the necessary paperwork. The law was repealed in 1934. Thousands of acres of California Indian lands and millions of acres nationally were lost to this destructive and ill-conceived policy.

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PART IV

Voluntary forest certification schemes in community forestry



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Rethinking certification for smallholders in Southeast Asia

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Introduction

The smallholder tree farms of Southeast Asia are generally integrated within broader agricultural landscapes and usually comprise less than 5 hectares of planted commercial trees. They have generally been regarded as minor players in global supplies of commercial wood, but they are emerging as important agents in meeting global demand for sustainable, plantation-grown wood (Midgley et al., 2017). For example, most of the 2.1 Mha acacia estate in Vietnam is grown and managed by smallholders, generating US$500 million for growers (Nambiar, 2021), and in Thailand, it is estimated that the current eucalypt estate of 900,000+ha is almost entirely on private land (Midgley & Ruenrith, 2020).

However, increased demands to adopt sustainability and legality standards as a requirement to access markets limit opportunities to expand this resource. These requirements include forest certification (where standards are predetermined by a certification organisation); chain-of-custody (CoC is used to verify the integrity of the source and supply-chain inputs[1]); and legality-based systems (e.g. the *European Union Timber Regulations;* the *Australian Illegal Harvesting Prohibition Act 2012*, and the United States *Lacey Act 1900*).

Essentially, these standards are designed to reduce or mitigate environmental and social risks associated with the exploitation of large-scale forest resources and to exclude illegal or poorly managed timber products from supply chains (Auld et al., 2008). However, in Southeast Asia they often fail to fully meet their own standards because inherent complexities prevent full compliance (Smith, 2014; Susilawati et al., 2019). When these are applied to smallholders, they can have unintended or perverse outcomes that disadvantage these growers (Susilawati et al., 2019) as the stringent requirements do not reflect the low-risk profile of smallholder-sourced wood (Flanagan et al., 2019a).

Voluntary certification schemes have been developed to provide a framework for achieving broader management standards and to address perceived regulatory deficiencies (Auld et al., 2008). The Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) are the two dominant schemes globally. These schemes are promoted as delivering sustainability standards that incorporate tangible financial, environmental, and social benefits for growers, retailers, and communities (Moffat et al., 2016). Some elements within these schemes have been modified to accommodate the needs of some smallholders in

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Europe and North America. However, they retain many of the original Criteria and Indicators (standards), making them complex, expensive, and inappropriate when applied to smallholders in Southeast Asia, whose plantations are often established on land that is degraded, marginal, or unsuitable for agriculture or other commodity crops.

Most schemes provide limited opportunities for smallholders to actively engage in or influence their development and implementation. They are rarely available in local languages and the benefits promoted are frequently exaggerated and difficult to quantify or validate (Blackman et al., 2017). The high costs and low benefits associated with their adoption have also been recognised as impediments to adoption (Maryudi, 2017). Poynton (2015) argued that the positive aspects of certification do not outweigh its deficiencies when applied to smallholders. Moreover, imposing these schemes on smallholders through mandatory market access requirements demonstrates fundamental ignorance, underestimation, or discounting of the role of these growers in supply chains (Midgley et al., 2017) and are inappropriate frameworks for the smallholders of Southeast Asia.

Despite investments over many years, the uptake of certification across Lao People's Democratic Republic (Lao PDR), Thailand, and Vietnam remains a fraction of the total plantation forest estate despite being a significant contributor to national wood production: Lao PDR (50 per cent), Vietnam (70 per cent), and Thailand (95 per cent) (FAOSTAT, 2019). In March 2021, the PEFC reported there were no forests certified to their standards in these three countries (PEFC, 2021). In April 2021, FSC reported a total of 76 certificates covering 415,772 ha across all three countries (FSC, 2019), with smallholders comprising an insignificant proportion of this total (Lao PDR <0.1 per cent, Thailand <1 per cent, and Vietnam 1.5 per cent).

Across Southeast Asia, the acceptance of these systems is undermined by complex obligations; the absence of local technical, administrative, management, and governance capacity; poor transfer of knowledge; and a general aversion to formal, government-supported processes that are administratively complex, inconsistently applied, or have the potential to be corrupted. Consequently, the certification of smaller-scale operations often fails or lapses at a local level when external technical and financial support ceases.

The major certification schemes are yet to fully accommodate smallholders; FSC took more than a decade to reluctantly recognise the need to do so. The FSC has developed a Community and Family Forestry Program (CFFP), while PEFC has the Smallholder Group Certification Programme for smallholders and communities (SGCP) (PEFC, 2019). Despite these efforts, accommodating the needs of smallholders is challenging when the current standards are complex and full compliance requires significant technical and administrative capacity. An example of this complexity is found within the Lao PDR interim national standard,[2] which contains 70 Criteria and 216 Indicators (currently only available in English). Consequently, it is difficult to see how a smallholder would be expected to meet these standards unless they are significantly simplified; Flanagan et al. (2019b) suggest that an appropriate model should incorporate standards or obligations that reflect the scale, intensity, and risk profile of smallholders.

Converting trees into cash

Knowledge of supply-chain trade and market dynamics can support decisions on when and how to convert trees into cash and help to determine if a grower receives a 'fair' or 'profitable' price. However, unlike their counterparts in countries such as Australia or Sweden, most smallholders in Southeast Asia cannot access technology or information in their local language. In addition, there are few established support networks that link them to processors and provide knowledge of markets or institutions that can finance expansions. These differences are important and

should be reflected within certification standards. The Appendix highlights differences between smallholders in developing and developed economies by comparing a range of economic, social, and environmental factors influencing the management of trees.

This comparison illustrates how, for example, smallholders in Southeast Asia do not have access to established institutional frameworks that their counterparts do, or the same access to working capital, or familiarity with commercial and logistical systems. They are more reliant on timber traders to provide services such as harvesting, transport and payments, and efficiencies associated with consolidating small amounts of wood from various smallholders into commercially attractive consignments (Laity et al., 2016; Smith, 2021). This dependency is often overlooked within legality and certification processes. As discussed later, incorporating traders within these processes would provide an opportunity to simplify costs by having these traders 'guarantee' the wood they trade is both legal and verifiable.

Five important certification questions

Given the expanding role of smallholder tree farms in Southeast Asia in wood supply chains, it is important that certification standards or sustainability systems deliver real benefits to these growers. When determining whether, or to whom, such benefits are delivered, there are five questions to consider:

1. ***Is certification voluntary?*** Forest certification is promoted as a voluntary system whose adoption is freely accepted and verifies whether predetermined management standards are being met. Promoters of certification schemes use terms such as 'responsible', 'discerning', and 'credible' in association with 'voluntary' (e.g., Mallet et al., 2019). Businesses often adopt these terms and systems as a strategy for market positioning (Trishkin et al., 2014); as a mechanism to improve management processes (Morrow & Rondinelli, 2002); and as a response to counter pressures from activist non-government organisations (NGOs) (Sasser, 2003).

   Importantly, the World Trade Organization General Agreement on Tariffs and Trade is clear that voluntary standards should not be used to regulate or restrict access to markets (WTO, 2010). However, there are many market access processes for wood-based products, and often multiple ones operate within the same market (Guan et al., 2019). This creates a significant challenge for smallholders in Southeast Asia when choosing which system to adopt, or risk being excluded from these markets; in effect, certification is being used as a regulatory instrument, with market participation reliant on the adoption of such schemes. Consequently, to claim that these schemes are 'voluntary' is inappropriate in this context.

   Another measure of whether a process is voluntary is whether it incorporates Free, Prior and Informed Consent (FPIC) processes to achieve consensus. The FSC Guidelines (FSC-GUI-30-003 V2.0[3]) definition of FPIC includes 'the right to grant, modify, withhold or withdraw approval'. It is difficult to identify where smallholders in Southeast Asia have been active participants in processes for establishing certification standards. At best, these processes only involve peripheral consultation or consideration of local operational environments. Cashore et al. (2006) report that they mirror government processes, while Vandergeest and Unno (2012, p. 1) report that they are often conducted by external experts who 'have much in common with colonial-era extraterritorial empires', and Scott et al. (2009, p. 63) found they 'often benefit corporate objectives' rather than local ones.

   While major forest certification schemes are seeking a broader and more inclusive engagement with smallholders to ensure they are not disadvantaged, there remain substan-

tial challenges when engaging with thousands of diverse, disparate, and dispersed smallholders. However, while certification proponents and associated market players maintain exclusionary policies that alienate smallholder participation, these coercive pressures make it difficult to conclude that certification schemes are truly voluntary.

2. ***Is certification accessible or necessary?*** Although certification is promoted as accessible (i.e., readily adoptable) to all forest owners, it is difficult to achieve in practice (Lewin et al., 2019). The acceptance and adoption of certification-based practices require a relatively high level of technical and management skills to implement and maintain. Where technical standards can be met, many smallholders find the administrative and quality-control systems beyond their management capacities (Bronkhorst et al., 2017).

   Smallholders in Southeast Asia are also often encouraged to adopt a specific certification scheme with the incentive that the implementing and administrative costs will be offset through direct support (often channelled through group certified bodies rather than to individuals), and a promised premium and improved market stability. However, such systems are often administratively cumbersome. This is exemplified by the organisational structure established in 2015 by the Quang Tri Provincial Peoples Committee (Vietnam) to administer and provide technical support for smallholders under an FSC group certificate. More than 190 people are involved in the provision of certification-related services, at some level, to the committee's 517 members, who collectively own only 1,392 certified hectares (Quang Tri, 2015). It is unclear what services these 190 people provide, although it appears the majority are involved in administrative functions that include participation in meetings or preparing reports. Similar groups in Southeast Asia often suffer cultural and internal conflicts that ultimately undermine their effectiveness (Ling et al., 2018), and their effectiveness, efficiency, and self-sustainability are questionable given the small size of the resource being managed within each group.

   It is necessary to streamline and simplify the administration of such schemes. Ha (2017) proposes that an alternative structure may be achieved through 'cooperative alliances' which use existing official structures to build capacity to deliver training and extension activities; reduce administrative, management, and audit costs; and secure operational and purchasing discounts associated with scale. However, it is also important to ask whether these systems are necessary to support smallholders in Southeast Asia. Many markets in Asia do not require certification as a mandatory or preferential prerequisite and operate independently from international markets. For example, certification is not required to access the Chinese woodchip or furniture market. For many smallholders there are no market access benefits in adopting certification standards. Consequently, it is difficult to conclude that, for relatively low-risk smallholder enterprises, certification is both accessible and necessary in its current form, and questionable for groups which currently rely on external support rather than being self-sustaining enterprises.

3. ***Does certification assist sustainability?*** Certification schemes generally offer assurances that a forest product is 'sustainably' sourced. However, it is difficult to ascertain exactly what parameters of sustainability are being measured (Dasgupta, 2017). This is because systems such as those developed by FSC and PEFC were created as rule-based standards (prescribing activities as 'required' or 'prohibited') rather than outcome-orientated standards. These schemes do not adequately address sustainability, nor do they incorporate the maintenance of productive capacity within the management standards they promote. Tröster and Hiete (2018) reviewed 226 forest certification audit reports and noted that, while social and economic outcomes are often reported, sustainability outcomes are generally not assessed.

If a forest enterprise is to be a sustainable resource, it requires productivity to be demonstrated (which includes measurable parameters such as site productivity, tree growth rates, trends in soil nutrients, and other soil characteristics) and maintained or increased over successive rotations (Nambiar & Sands, 2013), and it should have the potential to incorporate broad ecological capability and to address landscape, social, and economic outcomes (Harwood & Nambiar, 2014). Without rigorous monitoring using measurable productivity parameters, an auditor cannot assess the sustainability of the management practices in a single short field inspection. Such an assessment requires long-term monitoring plots which are outside the capacity of most smallholders to implement or maintain. Consequently, the sustainability benefits promoted by certification schemes are unlikely to be demonstrated by smallholders unless these schemes establish long-term alliances with extension services and/or research organisations.

4. ***Is certification profitable?*** A fundamental rationale for certification is that products from sustainably managed resources deliver net benefits to growers by enhancing or stabilising market access (Lewin et al., 2019) and/or through price premia. Certification processes are complex, and costs are magnified when applied at a small scale. The economies of scale disadvantage smallholders, with current systems requiring a resource of 3,000–5,000 ha to achieve production efficiencies and deliver a net benefit (Flanagan & Laity, 2015; Maraseni et al., 2017). These higher unit costs often require direct or in-kind subsidised support to incentivise adoption. However, such support often fails to fully offset costs and is ultimately finite (Laity et al., 2016; Ha, 2017).

   Nguyen et al. (2017) reported that smallholders in Vietnam received price premia of 10–18 per cent over uncertified wood, although these figures excluded contributions of supporting agencies and implementing and verification costs, making this claim difficult to substantiate. While donors and projects that support the adoption of certification schemes would be expected to possess records of actual and full support costs, these are usually not published, which makes it difficult to estimate the actual costs of technical and operational management inputs. This lack of transparency results in net benefits being difficult to identify, as information and reliable data associated with certification-related financial models are often fragmented and limited (Dasgupta, 2017; Maryudi et al., 2017). Meir-Dörnberg and Karmann (2015) found that net benefit analysis is often superficial, assessing profitability in terms of revenue less direct costs before the sale and excluding the initial investment, operating, and indirect costs.

   This issue is also reflected in other primary production sectors. Blackman and Rivera (2011) assessed 46 published studies relating to certification across five sectors: bananas, coffee, fish, forest products, and tourism. For the 11 forest products, the authors concluded that certification delivered limited economic and environmental benefits and that most studies 'use simplistic counterfactual outcomes that likely bias their results' (p. 1178). Kuit and Waarts (2014) reviewed 270 schemes for the cocoa, coffee, cotton, fruit, and vegetable sectors and noted that there was an 'absence of overwhelming positive evidence at farm level of the benefits to farmers of certification' (p. 90).

   There is limited evidence to support the claim that market access is either enhanced or stabilised by certification, or that where a consumer pays a premium it is passed down supply chains and ultimately benefits smallholders (Boakye-Danquah & Reed, 2019; Michal & Sujová, 2016). Moreover, Maraseni et al. (2017, p. 1) note that the price difference between certified and non-certified wood 'is narrowing and this may discourage farmers from obtaining certification'.

A determination of the true net benefit of certification for smallholders must include assessment of direct (initial and ongoing) and indirect (opportunity, external support, and subsidy) costs, along with trade and revenue variables (Guan et al., 2019). These include:

- Initial investment costs, which are strongly influenced by scale, the complexity of forest management systems, the level of engagement of specialists, and government approval fees and requirements. The authors estimate that the direct cost associated with developing administrative systems averaged US$ 60 ha^{-1} $year^{-1}$ for smallholder tree farms of Southeast Asia, while total initial (one-off) costs are, on average, US$600 ha^{-1} for a medium-sized FSC-certified estate (defined in this paper as 2,000–5,000 ha) and significantly more per unit area for smaller areas.[4]
- Ongoing costs, which are generally associated with activities necessary to maintain certification. These include the cost of implementing management; monitoring and reporting commitments; identifying and protecting areas requiring restoration and rehabilitation; the establishment and protection of conservation areas for community benefits; and changes in the use of chemicals and fertilisers to address perceived risks to living (soils and fauna) and non-living values (water and air). In addition, there are ongoing audit, training, and administrative costs.

  For smallholders in Vietnam, these costs are estimated at US$17–40 $ha^{-1}year^{-1}$ (Xuan To, 2012): for a medium-sized estate, the annual costs are reported at around US$10,000. Ongoing auditing costs in the Quang Tri project (Vietnam) were estimated by Nguyen et al. (2017) at US$8.62 ha^{-1} $year^{-1}$ over four years. In Lao PDR, the cost of certifying sales volumes of 313.8m^3 over five years was US$25,879 (US$82.47/m^3)[5]. These costs exclude government compliance costs and those associated with establishing a new programme. Nguyen et al. (2017) noted that smallholders would not seek certification if they had to pay the full costs and, without donor support, are unlikely to be able to maintain group certification.
- Opportunity costs, which are the most difficult to quantify. They may include both production losses (e.g., restrictions associated with the establishment of buffers and conservation areas or the avoidance of steeper slopes, and reduced reliance on chemical weed control) and those associated with administrative requirements, including the loss of income from unpaid time commitments (e.g., for monitoring, record-keeping, physically preparing and managing audits, attending group meetings, and associated costs).
- Supply-chain costs, which are ultimately passed down to growers as lower returns and up to consumers as higher prices. Laity et al. (2016) noted that the national annual cost of FSC certification in Vietnam (estimated at US$1.5 million for around 200,000 hectares) has been absorbed across the supply chains, and market differentiation has not been reflected in premia sufficient to offset the cost of certification. By contrast, CoC may deliver increased operational efficiencies and reduce costs and appears to be relatively independent of scale, starting at around US$3,500 per certificate, with annual audit costs of around US$1,800. However, processors have stated that their benefits can often be delivered through internal reviews and changes in practices.

This conjunction of factors was summarised by The Forest Trust when explaining its decision to discontinue its work on certification with Lao smallholder teak-farmers: 'the lack of FSC markets and costly and bureaucratic audits … don't align to the economic reality of smallholders in Lao PDR'.[6] More generally, the failure of certification schemes to deliver on expectations is reflected in their low rates of adoption by smallholders in Southeast Asia (Boakye-Danquah & Reed, 2019). It is evident that the adoption of certi-

fication schemes alone is unlikely to enhance the profitability of smallholder enterprises (Maryudi et al., 2017).

5. ***Does certification deliver a social licence?*** The term *social licence* is not a concept that readily applies to smallholders. This term describes the broad approval or acceptance that the public or community of stakeholders affords to the operations of a company or industry. It may be a social contract that includes active stakeholder engagement (Lacey et al., 2016) and social and ethical objectives (Dare et al., 2014). Duff (2017, p. 67) stated that a social licence can only be achieved when an entity 'is viewed as a socially responsible, legitimate and trusted contributor to the host community and to society more broadly'.

An example of the complexity associated with the promotion of a social licence is the role played by the Sweden-based furniture company IKEA (a major player in international supply chains), which works with the World Wildlife Fund (WWF) (who have no functioning role in supply chains) to directly support procurement initiatives to promote the adoption of FSC by smallholder tree farms in Southeast Asia[7]. It is difficult to identify how this arrangement will benefit smallholders and deliver improved livelihood outcomes. For example, the IKEA Partnership Agreement requires Vietnam-produced wood to be certified (Nguyen et al., 2017). However, only about 200,000 ha of the total acacia plantation estate is certified, with less than 2 per cent being held by group certificates.[8] Consequently, the non-certified resource (of which in excess of one million smallholders collectively mange over 1.8 Mha) would be excluded from participating under IKEA's policy or required to absorb substantial additional costs by adopting certification standards.

It would therefore appear that the 'social licence' benefits under this Agreement accrue to IKEA rather than smallholders. A stronger claim to having a social licence could be expressed through the adoption of alternative procurement policies that integrate more equitable, participatory, and lower-cost systems. The mutually beneficial relationships between smallholders, traders, and wood processors are enhanced if they are based on trust generated through a social licence. Consequently, it is questionable whether an organisational or industry 'social licence' exists where participation by smallholders in supply chains requires that they adopt complex and costly certification schemes.

Alternative approaches – self-assessment statements

Often, multiple verification systems operate within the same market and alongside non-certified products. The FSC and PEFC dominate forest certification systems globally, but the British Columbian 'naturally wood' initiative reports that there are over 50 forest certification standards worldwide,[9] while the Ecolabel Index lists 455 ecolabels across 25 industry sectors which operate in 199 countries and 25 industry sectors.[10] For smallholders it is difficult to identify which, if any, system delivers tangible benefits. Practical and affordable certification supply chains should be able to incorporate small groups of trees, or even single trees, at minimal cost, irrespective of where they enter such chains.

Simplified systems should be based on five elements: (i) clear ownership of trees and unequivocal rights to grow, harvest, and trade them; (ii) accurate, timely, and reliable knowledge of, and access to, markets; (iii) an adequate technical package of practices which help to minimise risk and support productivity; (iv) clear, consistent, and sympathetic legal and regulatory frameworks; and (v) low cost (Flanagan et al., 2019b). Achieving this will require standards and procedures which reduce administrative and management costs (Nambiar, 2021) and policymakers to remove barriers which inhibit market access by smallholder tree farms in Southeast Asia.

One approach could be to develop flexible processes that integrate self-assessment 'statements' whereby smallholders confirm that their management practices meet specified environmental and legal standards. This approach can reduce costs and incorporate verifiable processes (that could include wood traders) if required. A self-assessment framework provides a cost-effective solution and should be part of any review process, especially as Susilawati et al. (2019, p. 46) note that these growers are 'not a target for illegal logging or its regulation'.

Certification schemes should also be revised to primarily promote sustainable productivity outcomes, with additional practical standards applying where appropriate to the risk profile of these growers. Achieving this will require certification schemes to completely redesign current approaches to be more sympathetic to, and consistent with, smallholder realities. This may require these organisations to relinquish elements of the control they exercise within the verification process (including limiting auditing accreditation), as wood traders may be able to provide this service where verification is based on self-assessments. Table 14.1 has been developed as a simplified 'self-assessment' checklist for smallholder-sourced wood in Southeast Asia.

This type of checklist is relatively easy to translate into local languages and adapt to reflect local management practices and their associated risks and, importantly when seeking agreement, local priorities.

Table 14.1 A self-assessment checklist for smallholder-sourced wood in Southeast Asia

Laws and regulations

Does the smallholder tree-farmer

- possess the legal right to use the land and grow trees?
- have legal ownership of the trees?
- have the legal right to harvest and trade trees for commercial purposes?

Community health, safety, and livelihoods

- Do forest activities have known and identifiable risks and impacts to community health or livelihoods, and have they been documented, discussed, and recorded?

Labour and working conditions

- Do operational activities and the use of labour comply with national laws and local standards, including those related to the use of children?
- Is the use of chemicals legal, and does it follow the manufacturer's recommended rates and storage and application practices?

Biodiversity conservation and sustainable management of natural resources

Have known and identifiable destructive environmental and health impacts been identified and avoided, mitigated or minimised for

- Soil erosion and soil values?
- Biodiversity and ecosystems?
- Air, waterways, and water sources?

Safe use of resources and the control of environmental impacts

- Have known and destructive impacts been identified and avoided, mitigated, or minimised for (i) fuels, oils, chemicals, fertilisers, pollutants, and other hazardous materials; (ii) pests and weeds; (iii) fire; (iv) roads, tracks, and associated earthworks to avoid soil erosion.

Traceability and wood purchaser commitments

- Has the purchaser of smallholder wood ensured that they can trace to source and verify when required?
- Have sale prices been fair, equitable, and competitive?
- Do purchasing systems minimise the intensity of complaints and disputes, and incorporate low-cost resolution practices?

Conclusions

Certification-based systems continue to be developed and promoted without effective engagement and participation of smallholder tree farms in Southeast Asia. It is inappropriate to simply adapt systems originally developed for larger forest enterprises or to base them on those adopted by their counterparts in developed economies. There are considerable differences between smallholder tree farms in Southeast Asia and those in developed countries (see Appendix), and these differences need to be acknowledged for meaningful change to occur. The resource represented by smallholder tree farms in Southeast Asia has the potential to expand significantly where favourable market access conditions exist. Realising this potential requires targeted technical and specialised support that promotes productivity gains and, where necessary, changed management practices that provide confidence within markets that wood supplies are sustainable. However, this potential could be undermined where certification-based management practices fail to prioritise sustainable productivity outcomes, and where discriminatory procurement policies exclude participation and reduce profitability.

Current certification schemes are not practical, cost effective, or appropriate for smallholders whose environmental and legality risk profile is negligible. New approaches need to be adopted, and a simplified 'self-assessment' reporting system provides a framework that is appropriate, affordable, and practical for smallholders. A 'self-assessment' approach allows smallholders to make statements relating to their management practices and the legal status of their wood. It should be the responsibility of traders and/or purchasers to verify such statements where there is a clear and identified need. Until smallholder-friendly systems are developed to replace current certification standards, businesses should avoid adopting discriminatory procurement policies. As an interim approach, they should adopt a risk-based approach and develop mutually supportive partnerships that remove barriers to smallholder participation.

Appendix: A comparison of factors influencing the management of smallholder tree farms in mature economies and in Southeast Asia

Characteristic	*Developed-country smallholder tree-farmers*	*Smallholder tree-farmers in Southeast Asia*
THE PEOPLE		
Family size	Two adults and two to three school-age children. Children may occasionally provide unpaid labour, depending on local laws.	At least two adults and two to six school-age children, with an extended family comprising several generations. Children routinely provide unpaid labour.
	Paid non-family labour or specialists are commonly used.	The use of paid, non-family labour or specialists is uncommon.
Incomes	Families generally possess diverse, accessible and stable on- and off-farm incomes and can access asset-building finance and external support schemes on acceptable conditions.	Household livelihoods are dependent on on-farm incomes, which are often variable and insecure. Access to asset-building finance is rare.
	Profits from trees provide 'superannuation' and/or supplemental income and assets.	Profits from trees provide major capital injections and may provide the only alternative investment opportunity.

(*Continued*)

Characteristic	*Developed-country smallholder tree-farmers*	*Smallholder tree-farmers in Southeast Asia*
	Financial decisions are made within an integrated, planned approach that takes account of market and productivity objectives.	Financial decisions are usually based on immediate need, regardless of best technical practices or market conditions.
	Forest holdings can be valued separately from other farm assets.	Forest assets are difficult to value because trees may be scattered within broader farm landscapes.
	Valuations are reliable and based on demands from stable markets, and available as collateral.	Formal valuation services are rarely available, increasing the risk profile of tree assets.
Education, training, and access to science-based knowledge	Access to knowledge and training is common, and technical skills can be rapidly improved.	Access to knowledge and training is limited, and the capacity to acquire new skills is limited.
	Family members often have a high level of education and access to digital-based knowledge in technical and local languages.	Adults are usually poorly educated, and children are rarely educated beyond mid-level high school. Access to digital knowledge is limited and often unavailable in local languages.
	Most family members are able to understand and adopt science-based land management prescriptions and have a moderate level of environmental consciousness.	Some family members might have a moderate understanding of technical, science-based knowledge, but only minimal understanding of environmental risks and management.
Availability of health services	Individuals are generally healthy, minimising productivity losses.	Dietary insecurity produces poor health, with direct impacts on productivity and income-generating capacity.
	Impacts of any poor on-farm health management practices are usually limited, with ready access to high levels of professional care and support services.	Access to health and support services is limited, inconsistent, and often unreliable; direct access and opportunity costs are generally high.
	Such services are generally subsidised under state structures or through insurance.	Payments for health services may require the liquidation of farm assets.
Cultural and social contexts	The influences of cultural and social contexts within and between countries on smallholder forestry are too variable to characterise here.	
	Generally, harvesting decisions are personal ones and are made independently of broader social or cultural expectations.	Generally, high levels of social pressure to conform exist, which may necessitate harvesting trees for funding to meet cultural obligations.
THEIR FORESTS		
Size	5–50 ha, usually managed as distinct units.	Mostly smaller than 5 ha, generally integrated with agricultural crops and small livestock as agroforestry lines or small blocks, along field boundaries, or even as single trees.

Characteristic	*Developed-country smallholder tree-farmers*	*Smallholder tree-farmers in Southeast Asia*
Nature of the holding within a landscape	May include natural forests (including modified natural forests) or plantations.	Usually monocultural plantations with very limited areas of natural forests, often in swidden systems.
	Frequently contiguous with other similar blocks in a landscape, together comprising a substantial forest area which increases the efficiency of harvesting and transport and makes technical support more accessible.	Plantings are located within broad agricultural mosaics that are usually below commercial scale in size and intensity, which limits access to affordable technical services and increases transportation costs.
	Landscape management is consistent with concepts of natural resource management, and public benefits (such as hunting) are integrated into silvicultural practices.	Management is commercially driven, with limited integration of broader objectives for public or natural resource management.
Flexibility in forest management	Management objectives are usually based on plans that integrate longer rotations (eg a focus on sawlog production).	Management objectives are usually based on financial considerations that can respond quickly to immediate needs (eg a focus on pulp log production).
	Decisions are usually based on optimal productivity and financial benefits, which take into account environmental impacts.	Management is based on low-risk, short-rotation cycles. Plantations are 'liquid assets' that can be harvested to meet urgent financial needs.
	Regulatory structures are often well developed, with strong compliance processes.	Regulatory structures are either minimal/simplistic and easily understood or complex, which results in processes being ineffective, poorly enforced, or deliberately ignored.
	Regulations often prevent liquidation, and approval includes minimum standards and broad community consultations.	Decisions to liquidate can be implemented immediately and made independent of regulations.
	Short-term funds are generally accessible, using trees as security. This can buffer against changed market conditions and immediate financial needs and avoid the need to liquidate plantations or change land use.	Access to alternative funds is limited and plantations can be readily liquidated and/or replaced if other crops generate higher financial returns, or if market conditions change.
THE WIDER CONTEXT		
Infrastructure, communication, management, and harvesting and haulage logistics	Infrastructure is mature and integrated, offering access to information and market centres and services, enhancing off-farm income-generating opportunities.	Infrastructure is undeveloped, restricting access to information, technical, and other support services or opportunities.
	Adequate infrastructure helps to improve management techniques, reduces transportation costs and facilitates market access, and fosters diversification opportunities such as tourism.	Poor infrastructure increases costs, limits market access, and reduces opportunities for diversification.

(*Continued*)

Characteristic	*Developed-country smallholder tree-farmers*	*Smallholder tree-farmers in Southeast Asia*
Availability of outreach services and technical support	Access to outreach services is usually good, with government agencies, educational facilities, and industry bodies often developing and delivering these services.	Such services are limited, fragmented, uncoordinated, and restricted by the number and quality of technical staff.
	Roles are generally clear and promote adoption of better practices: government agencies often promote market intelligence; educational facilities actively research new approaches and innovation; and industries may provide knowledge and advice to growers.	Roles are unclear across participants: government agencies rarely have access to market intelligence or understanding of supply-chain dynamics; educational facilities have limited capacity to undertake sustained research and have few resources to promulgate findings; and industries may be fragmented, competitive, and reluctant to engage directly with growers.
Grower groups	Smallholder tree-farmers are generally members of professional support groups that can access knowledge and experience.	Group membership is usually low and fluid. Groups might be government controlled and viewed with suspicion by smallholders.
	Groups are generally funded by member contributions and can include government, education, and industry participants.	Groups are generally reliant on external donor support and have high administrative costs and low technical and outreach capacities.
	Technical and information support is usually active. It may be locally focused but will integrate broader regional and national environmental and industry objectives.	Group objectives often reflect broader political or development objectives rather than the priorities of local members.
	Groups can deliver efficiencies through market and supply agreements and 'bulk' purchase or service agreements.	Market access and other supply services, including bulk purchases, are usually very limited.
	Democratic transparency and accountability promote active involvement by members and ownership of decisions.	Group structures often reflect political structures with low levels of transparency and accountability. Members have limited capacity to influence and direct such groups, and decisions are often imposed rather than owned through consensus.
Knowledge of forest certification and associated management standards	These systems are viewed as positive and incorporate on-farm practices.	These systems are viewed with suspicion and are disconnected from traditional on-farm practices.
	There is a high level of awareness and acceptance of the management framework, reinforced by strong market pull.	There is negligible understanding within communities, apart from some co-operatives and specialised government units.

Characteristic	*Developed-country smallholder tree-farmers*	*Smallholder tree-farmers in Southeast Asia*
	Market and verification requirements are implemented through participation in grower groups using proven technical knowledge and by minimising additional costs.	Verification requirements are complex and too technical for local educational standards and are incomprehensible and inappropriate. Costs are high per unit area and are not fully offset or minimised by market premiums, donors, or other benefits.

Source: Compiled from the authors' observations and experiences in Southeast Asia and elsewhere.

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Notes

1 We recognise differences in the meaning of *supply chain* and *value chain* but, for the sake of simplicity, we use *supply chain* throughout this chapter.
2 file:///C:/Users/Advice/Downloads/FSC-STD-LAO-01-2020%20EN%20.pdf Accessed 10 April 2021.
3 file:///C:/Users/Advice/Downloads/FSC-GUI%2030-003%20EN%20V2-0%20FPIC%20Guidelines.pdf. Accessed 12 June 2021.
4 Based on information from personal communications with Australian Centre for International Agricultural Research (ACIAR) researchers and Luang Prabang Teak Program (Lao PDR) staff.
5 Luang Prabang Teak Program (https://www.slideshare.net/mrlgregion/luang-prabang-teak-program-presentation). Accessed 24 April 2021.
6 https://www.earthworm.org/fr/news-stories/luang-prabang-update-1?token=w3yxxH0Ed-lwmjavsrgXQtgTlCTENW4Q. Accessed 22 April 2020.
7 https://www.ikea.com/ms/en_JP/about_ikea/our_responsibility/partnerships/ikea_and_wwf_conservation.html. Accessed 10 September 2019; and https://about.ikea.com/en/sustainability/responsible-sourcing/being-forest-positive. Accessed 9 April 2021.
8 The first group is managed by the Forest Sector Development Project and supported financially by the World Bank, with 852 ha certified under group certification for smallholders in four provinces (Binh Dinh, Quang Ngai, Quang Nam, Thua Thien Hue), including 323 smallholders. The second group is managed by the Association of Quang Tri Smallholder Forest Certification Group, closely supported by WWF Vietnam and funded by the Swiss State Secretariat for Economic Affairs, with a total of 1,392 ha (as reported in FSC 2016 audit). The project started in December 2007 with 108 households, and increased to 516 in 2016.
9 https://www.naturallywood.com/wp-content/uploads/2020/08/forest-certification-in-british-columbia_factsheet_naturallywood.pdf. Accessed 3 July 2021.
10 http://www.ecolabelindex.com/. Accessed 3 July 2021.

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15

AN ASSESSMENT OF FSC CERTIFICATION SOLUTIONS FOR SMALLHOLDERS AND COMMUNITY-MANAGED FORESTS

Marion Karmann, Zandra Martinez, Joachim Meier-Dörnberg, and Vera Santos

Introduction

The Forest Stewardship Council (FSC) has been in existence for 25 years. Embedded in FSC's vision and mission is caring for the world's forests, including 'small forest operations' (whether community-based or not), together referred to as *smallholders.* Smallholders are known by different names – woodlot owners, family forests, small non-industrial private forests, small forest enterprises, and non-timber forest product (NTFP) harvesters. Collectively, small forest operations face cost and procedural barriers to certification (FSC, 2009).

The FSC system

Founded in 1993, the FSC is an international association for quality assurance of responsible forest stewardship, governed by its members. At present more than 1,100 individual and organisational members (compared to 800 in 2015) in 89 countries are organised into three chambers. All three chambers have individual and institutional members. In the Social Chamber are representatives of Indigenous Peoples' organisations, labour unions, and social scientists; in the Environmental Chamber are international and local NGOs, with the application of environmental policies and principles as their focus. Forest owners and managers and industry representatives such as retailers and manufacturers or individual entrepreneurs usually belong to the Economic Chamber (See https://fsc.org/en/members).

Facts and figures

In September 2021, FSC had 1,808 forest management (FM) certificate holders (compared to 1,300 in 2015), with more than 228 million hectares (Mha) of the certified area in 81 countries,

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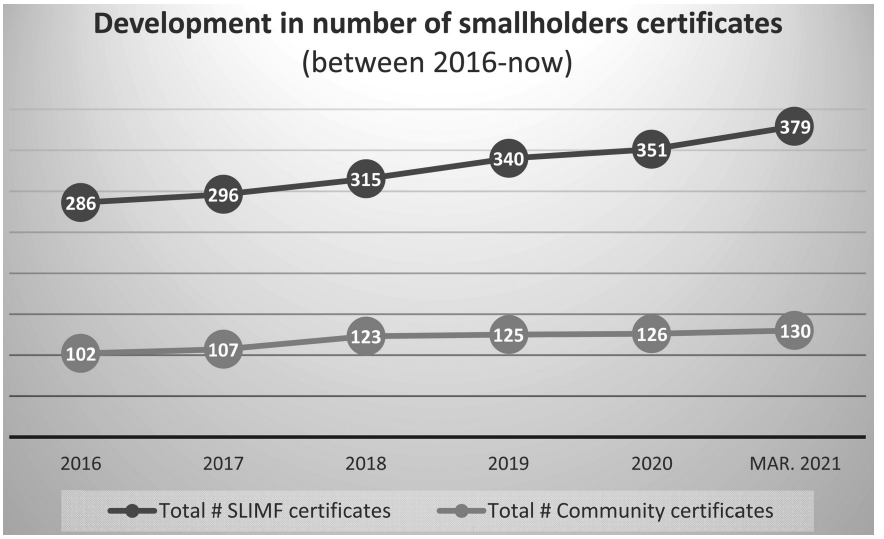


Figure 15.1 Development in numbers of FSC certificates, December 2016 to March 2021. Source: FSC Database (info.fsc.org), FSC Facts & Figures (https://fsc.org/en/facts-figures), New Approaches project FSC (2019 b); March 2021.

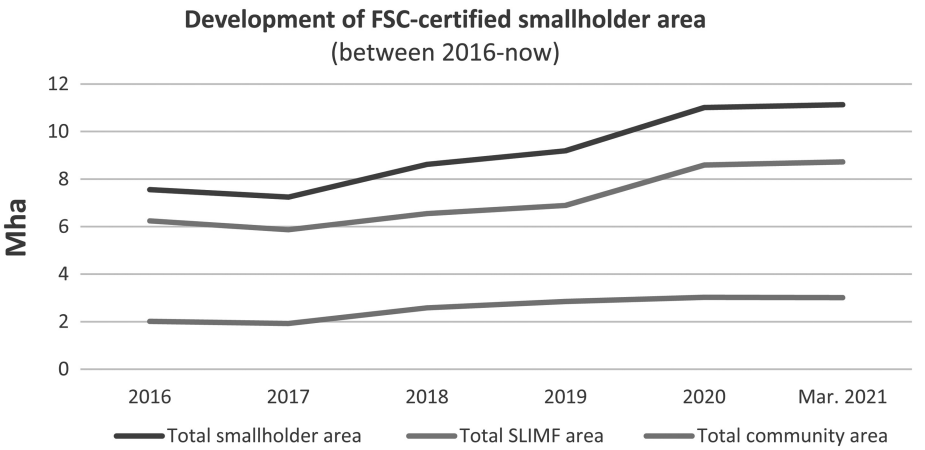


Figure 15.2 Development of FSC-certified smallholder area, December 2016 to March 2021. Source: FSC Database (info.fsc.org), FSC Facts & Figures (https://fsc.org/en/facts-figures), New Approaches project FSC (2019b); March 2021.

and around 49,000 Chain of Custody (COC) certificates (27,000 in 2015) worldwide. Many of the certificate holders are organised in groups, each with a single certificate, benefitting from the economy of scale. Based on FSC internal reporting we differentiate in Figures 15.1 and 15.2 between small and low intensity managed forests (SLIMF) and community-managed areas, since these are the internal reporting categories of the FSC system.

From 2016 to 2021 we see an overall trend in growing numbers of certificates and certified area managed under these categories. The number of SLIMF certificates grew from

286 to 379 certificates between December 2016 and March 2021 (a growth of more than 30 per cent). A similar increase was observed in the number of community certificates from 102 to 130, almost 28 per cent (Figure 15.1). Certified SLIMF area grew around 39 per cent between December 2016 (6.24 Mha) and March 2021 (8.72 Mha), while certified community area increased by 50 per cent from 2.01 Mha to 3.01 Mha during the same time (Figure 15.2). While FSC acknowledges the growth in area and number of smallholdings and community-managed certified operations, it is clear that these still represent only a small proportion (around 5 per cent) of the total forest managed according to FSC rules (228.33 Mha).

Early initiatives to support smallholder access to certification

From the beginning in 1994, the FSC Principles and Criteria (P&C) for Forest Stewardship were meant to guide managers of small- and large-scale holdings, and of high and low intensity managed forests, globally. In 1998, FSC approved a Policy on Group Certification that allowed one entity to manage a group of management units under a single certificate, allowing all the benefits of the economy of scale.

Even though forest-managing communities like Ixtlán (see later) were among the early adopters of FSC certification, FSC realised that smallholders needed more support than larger entities to achieve certification. See, for example, the evaluation *Increasing access to FSC certification for small and low intensity managed forests* commissioned by FSC, conducted by Robinson and Brown (FSC, 2002). *FSC Social Strategy Version 2.1* (FSC, 2003) was endorsed at the 26th meeting of the FSC Board of Directors and aimed to guide the FSC secretariat, with dedicated work streams, e.g., 'Addressing issues of scale and intensity' and 'Capacity-building and support for community use and management of forests'. The Social Strategy refers to 'small scale forest operations', and emphasises that

> these same groups [Indigenous Peoples, forest workers and their communities mentioned in the FSC P&C], plus 'small forest operations' (whether community-based or not) are repeatedly identified as experiencing particular challenges to participate in the certification process (including standards development), to obtain and retain forest management and chain of custody certification and to realise the benefits of certification and improved forest management.
>
> *(FSC Social Strategy V2.1, p. 10, FSC, 2003)*

FSC introduced in 2004 the *Small and/or Low Intensity Managed Forests (SLIMF) eligibility criteria*[1] (FSC-STD-01-003). This Standard was developed to provide consistent definitions of 'small' and 'low intensity' managed forests to reduce direct and indirect costs of stewardship and audit. All certified forest operations must conform with all FSC P&C, but the ways of achieving conformance may differ depending on the scale and intensity of management activities, and on the risk of negative impacts related to activities conducted.

An early FSC Group Certification Toolkit was developed and tested in Estonia (Hain, 2005) with recommendations for adaptation in other countries. In 2005, FSC started a review process of the Group Forest Management Policy in order to incorporate streamlined requirements for both forest managers and certification bodies. FSC's Board of Directors approved the first version of *FSC Standard for Group Entities in Forest Management Groups* (FSC-STD-30-005 V1-0) in 2009.

FSC Social Policy Manager and Smallholder Support Program

In 2007, FSC commissioned an evaluation, conducted by Arboleda and Perez, of the uptake of the SLIMF eligibility standard (FSC-STD-01-003 and FSC-STD-01-003a, 2004), introduced in 2004, to help smallholders get certified. The findings suggested that more needed to be done to empower smallholders, for example, through additional support for market development of their forest products (FSC, 2008).

Three versions of an FSC Social Strategy were developed in 2002–2003, implemented with varying levels of staff and budgetary support until 2011. The role of Social Policy was complemented through the establishment of the Smallholder Support Program (SSP), active between 2011 and 2015 (FSC internal information; no public documentation). The SSP was established to provide additional guidance and tools, supporting smallholders and community producers to improve their forest management activities, achieve and maintain FSC certification, strengthen their ability to benefit from the FSC system, and access better markets, all aimed at improving their economic gain. Between 2012 and 2017, FSC invested in three full-time positions, assisted by a global advisory committee, and significant financial resources to directly support smallholders and forest-managing communities. In 2013, the 'Small and Community Label Option' (SCLO) was introduced to help in marketing their certified products by differentiating from the industrial-type FSC labels (more details later). During this period, local and regional NGOs were also working with FSC offices to improve and document smallholder and community forestry; notably the Tropical Forest Trust (TFT) in south east Asia which produced a substantial *Practical Guide to FSC group certification for smallholder agroforests* (Barr et al., 2012).

Technical series

FSC had a number of partners in its efforts to support smallholders to understand and to make use of the different tools of FSC certification. One example is the publication of two guidance documents, the *FSC user-friendly guide to FSC certification for smallholders* (FSC, 2009b) and the *FSC step-by-step guide* on biodiversity and forests with high conservation values (FSC, 2009a). The development and dissemination of the guides in English, Spanish, and French languages was financially supported by the Global Environmental Facility (GEF). Institutional support was provided by the Center for International Forest Research (CIFOR), the Proforest Initiative (Proforest), and the United Nations Environment Program (UNEP).

Group certification toolkit

The *FSC Group Certification Toolkit* (FSC, 2016) was a revised edition of the group certification toolkit prepared for Estonia via a collaboration between WWF and IKEA (Hain, 2005). The updated version included changes in the relevant FSC standards such as FSC-STD-30-005 (V1-0) *Standard for Group Entities* (2009), FSC-STD-01-001 V5-1 FSC *Principles and Criteria* (2018) and FSC-STD-60-004 V1-0 *International Generic Indicators* (2015). The 2016 *FSC Group Certification Toolkit* better communicates the benefits of group certification for smallholders and was designed as a user-friendly reference for anyone who wanted to create an FSC-certified group.

Regional portfolios

Regional portfolios were a set of outreach and education materials aimed at uncertified smallholders interested in FSC. The materials were available in four regional formats and six lan-

guages, and were distributed in an editable format for FSC Network to use. Despite all culturally appropriate considerations, these materials were not used to the extent FSC originally foresaw and are no longer available on the FSC website.

FSC Smallholder Fund

The FSC Smallholder Fund secured access to finance for smallholders, covered by direct reinvestment from the *FSC Annual Accreditation Fee* (AAF) (FSC-POL-20-005, 2019). This small grant scheme, launched in 2013 and again in 2015, supported 41 smallholder projects worldwide by investing in activities that enabled them to conform with FSC requirements or to generate more value from certification. The geographical distribution of the projects is shown in Figure 15.3.

FSC concluded after internal analysis that prior to any investments in smallholder or community certification, the business case should be assessed. Another conclusion was that facilitating easier access to certification through a funding subsidy for audit costs and and/or simplifying certification requirements (such as dropping requirements for set-aside areas, and reduced documentation requirements) will not solve all smallholders' problems if other substantial elements for a sustainable business are missing. A 2017 study found that

> Certification is more viable for larger forest areas than for smallholders and community forests due to fixed costs. And community forest managers and smallholders are rarely linked to export markets where demand exists for sustainably produced timber. So, efforts need to be made to link them to such markets, and certification schemes need to be adapted for them.
>
> *(Westerlaan, 2019, p. 8)*



Figure 15.3 Geographical distribution of the 41 FSC Smallholder Fund beneficiaries 2013–2018. Source: FSC internal reporting.

Small and Community Label Option (SCLO) and 'Made with Heart' campaign

The SCLO was introduced in 2013 to improve market access specifically for products from small and/or indigenous or traditional community forest entities, to distinguish them in the marketplace through labelling (Figure 15.4). It was rolled out together with a marketing campaign called 'Made with Heart' that encompassed the connection between the prosperity of local communities and the earth-smart choices of consumers. However, the uptake of the SCLO label was scant. FSC's internal analysis showed a major challenge with these initiatives: only community and small producers were eligible to use the new label text. Three general categories were considered: 1) producers of final products (e.g., furniture, Brazil nuts, utensils); 2) producers of primary and secondary products (e.g., logs, boards, resins); and 3) producers that sell standing timber. Also, two types of companies could utilise the SCLO label text: 1) companies who purchase standing trees and raw materials from eligible producers and pass this material through the supply chain; and 2) companies who sell final products with 100 per cent content from eligible producers. Although well intended, the restrictions created a differentiation in FSC labelling that Certification Bodies were hesitant to promote. No incentive was proposed by FSC International, and FSC Network had limited capacity or interest. 'Made with Heart' was later replaced with other marketing campaigns with wider and more updated scope, e.g., 'Together We Are FSC' (see https://marketingtoolkit.fsc.org/).

Ecosystem services project and procedure

FSC's work on ecosystem services (ES) began with the 'Forest Certification for Ecosystem Services' (ForCES) project in 2011, with the overall goal to incentivise the preservation and/or creation and/or restoration of valuable forest ES by facilitating access to Payment for Ecosystem Services (PES) markets. A core mechanism is to provide evidence that responsible forest stewardship has positive impacts on ES, compared to business-as-usual forestry. Such positive impacts are context-specific, do not need to exclude harvest of timber, and can be related to biodiversity



Figure 15.4 Wooden product, labelled with SCLO and 'Made with Heart' campaign (Brazil). Source: FSC archives.

conservation (for example, the establishment and/or maintenance of conservation zones, water regulation services, soil conservation, carbon sequestration, and recreational services [examples in Annex B in FSC-PRO-30-006]). The project is an early example of FSC efforts aiming to facilitate access for smallholders, among the broad range of potential beneficiaries. After testing a draft procedure to establish whether there was additionality from FSC certification on forest ES in ten pilot sites, the ForCES project was completed in 2017. Among the ten test sites, two were community-managed (in Nepal and Indonesia), and one was managed by a smallholder farmer in Chile.

In 2018, FSC launched the final *FSC Ecosystem Services Procedure* (FSC-PRO-30-006) with examples of templates for assessing, monitoring, and evaluating certain ES, which can be readily applied by managers of FSC FM-certified areas without the need to set up a monitoring system from scratch. In June 2021, 12 FSC-certified operations have 'verified impact' for at least one ES, in addition to their FSC certificate. Three of them are managed by smallholders and communities, (ranging from 40 Ha to 45,000 Ha): the Indonesian KMPH Mitra Sesaot, restoring watershed services (FSC-C134304; SCS Global Services, 2017); the Italian ERSAF, restoring forest carbon stocks and maintaining water quality (FSC-C084190; ICILA, 2019); and the Mexican Ejido Nuevo Becal, conserving biodiversity (FSC-C130131; NepCon, 2016).

The turning of the tide

Since the article by Meier-Dörnberg and Karmann (2015), FSC has launched several initiatives to support equity for smallholders', communities', and Indigenous Peoples' access to certification.

New approaches for smallholders and communities' certification project

Following membership support at the FSC General Assembly 2014 (FSC, 2014), and integrating prior experiences, the 'New Approaches' project was started in 2016 and lasted until 2020. The project bundled the different work streams of FSC's Social Policy and Smallholder Support programmes and in full alignment with the new strategic positioning captured in FSC Global Strategic Plan 2015 – 220 (FSC, 2015). The project's main goal was to deliver positive impacts for smallholders and communities through fit-for-purpose policy solutions (see the FSC Normative Framework in FSC Document Center), facilitating access to markets while growing the engagement with these constituencies. This new line of action is explained in the project's annual documentation 2017–2020 (FSC, 2017b, FSC, 2018, FSC, 2019a, FSC, 2020a). All of the initiatives are described in Fact Sheets (FSC, 2020 c–f) and later.

Forest Management (FM) Groups Standard

The *FSC Forest Management Groups Standard* (FSC-STD-30-005) is of major relevance for smallholder certification, since membership of a group is the main way to access FSC. Motion 46, 'Expand FSC to Smallholder Forests' (FSC, 2017a), passed at the FSC General Assembly in 2017, reinforced the New Approaches work plan, and mandated a revision of the previous Group Standard. The current version was approved in November 2020 and published (FSC.org Current processes (n.d.1).

FSC-STD-30-005 allows several management units to form a group under one FSC certificate. This streamlines tasks, alleviates administrative burdens, and can help reduce costs, thanks to the economy of scale. It is the main tool used in FSC certification of small forest

properties. The revised standard maintains the basics of the previous version but presents the requirements in a simplified manner and opens options for the group manager to manage the group more flexibly. New in this standard is incorporating a risk-based approach for the internal monitoring of the group, so that the monitoring intensity is adapted to the level of risk associated with the implementation of the forest management activities. Forestry contractors can also be included in the groups (FSC-STD-30-005 section III, 'Optional Inclusion of Forestry Contractors').

Continuous Improvement Procedure (CIP)

FSC built on previous experiences, such as the withdrawn Modular Approach Program (see for example Gauli et al., 2014), and benchmarked with other certification schemes, such as described in 'Alternatives to facilitate FSC certification for Community Forestry Operations' (Cariño Fraisse, 2018). This initiative had two distinct phases: a testing phase, followed by two regional approaches – in East Africa (FSC.org Current processes, n.d.2) and in Latin America (FSC.org Current processes, n.d.3). Based on the results of the testing and the comments received during the public consultation, FSC launched the development of an international procedure (FSC.org Current processes, n.d.4) that allows its users to be certified based on conformity to only a subset of requirements, offering flexible steps towards conformity with the remaining requirements within five years. The CIP concept distinguishes between Core, Continuous Improvement, and Chameleon Criteria, which shall be conformed with at different points in time. The CIP user shall meet the Core Criteria and have an Action Plan to obtain FSC certification at the initial stage of the process. To maintain certification, the Continuous Improvement and Chameleon Criteria shall be met in accordance with the path established in the Action Plan during the first certification cycle of each Management Unit (FSC, 2019b).

Three initiatives that propose the simplification of forest management standards

Initiated by the New Approaches Project, three initiatives that proposed the simplification of forest management standards were field tested between 2018 and 2020, focusing on the context of smallholders and communities in different parts of the world.

Asia Pacific (AP) Regional Forest Stewardship Standard (RFSS) for smallholders

In India, Indonesia, Thailand, and Vietnam, a streamlined regional standard was developed. This is a standard that, while following the traditional procedural requirements for National Forest Stewardship Standards (NFSS), focused on a specific user (small forest management units below 20 ha, a subset of the SLIMF threshold), which was the basis for applying a risk-based approach and simplifying the set of applicable requirements. The reduced number of requirements of the Regional Forest Stewardship Standard for Smallholders in Asia Pacific (hereafter referred to as AP RFSS) for smallholders is adapted to smallholders in the region and allows users to benefit from concise indicators, written in plain language, aiming to translate their responsibilities in a manner congruent with their reality.

The AP RFSS for smallholders was field tested as any other national FM processes in the four countries included in the scope. The field test results were incorporated in the second draft and publicly consulted over a period of 60 days (FSC, 2020d). In December 2020, the Policy and Standards Committee (PSC) conditionally approved the FSC-STD-RAP-01-2020 V1 FSC AP RFSS and recommended its implementation in a controlled manner: as a pilot

(FSC-POL-01-001 FSC Policy for Pilot Tests of Draft FSC Standards), which was also approved by the FSC Board of Directors in June 2021 (FSC.org Current processes, n.d.5).

Chinese NFSS (6.5) pilot test

Criterion 6.5 of the FSC Stewardship Standard requires that certified forest operations 'shall identify and protect representative sample areas of native ecosystems and/or restore them to more natural conditions', with 10 per cent of the certified area as minimum threshold for these set-aside areas. FSC Group organisations can meet the 10 per cent at Group level, i.e., not each of the group members has to set 10 per cent areas aside for conservation or restoration (FSC International Generic Indicator 6.5.5). The 10 per cent set-aside requirement for conservation areas has been flagged by the Chinese Standard Development Group as a limiting factor to the growth of forest management certification, especially in smallholders' groups. FSC China has developed four alternative options to allow smallholders to work with local partners, neighbours, and resource managers to eliminate this certification requirement, and these were tested during 2019 and 2020:

1. Rather than setting aside specific areas, forest owners should seek to include partners who can integrate their conservation land in the scope of FSC certification.
2. Forest owners would work with partners on a series of activities with a key focus on conservation, for example, remediation of water courses. Auditors would have to decide whether such activities are sufficient to conform with the criterion's goals.
3. Forest owners could be allowed to make a financial contribution to activities that might be carried out across different forest biomes to compensate for what they are not able to achieve on their own. This would involve applying the aforementioned FSC Ecosystem Services Procedure (FSC-PRO-30-006).
4. Finally, exemptions should be built in for smallholders where the options mentioned earlier are not feasible.

The pilot test terminated by the end of 2020 and the results were presented to PSC. It was concluded that the assumption that smallholders' groups in some regions of China would not be able to conform with the new NFSS was not proven. All pilot test participants were able to achieve 10 per cent conservation area within the scope of their certificate (FSC, 2020f, FSC internal information). However, the learnings will serve as one of the sources of information for a broader study being launched by FSC's Performance and Standards Unit (PSU).

Smallholder Access Program (SAP) pilot test

In the Appalachian region of the United States of America, the Smallholder Access Program (SAP) has been being pilot tested since 2019 (FSC, 2020e). This two-year initiative was designed to boost access to certification for woodland forest owners with less than 100 Ha. The SAP pilot test is a bottom-up proposal launched by Rainforest Alliance's Appalachian Woodlands Alliance, framed with three years of engagement and research, with the involvement of FSC US and later the New Approaches project. A set of critical indicators (31) are defined as a proxy for FSC's full set of requirements, based on the types of forests and landowners' profile in that sub-region. It focuses on critical regional issues of importance to both the environment and forest owners. It recognises that in this region, and with this type of smallholder, there is a low risk of negative

impacts on many of the social and environmental values that are addressed in FSC's stewardship standards. The SAP pilot test also builds on the FSC Group certification framework, with forest owners encouraged to join regional organisations that already have experience with FSC certification. The difference in this case is that the forest owners join the FSC Group certificate only for the short period just before, during, and after a harvest. Depending on the pilot test results and endorsement, this approach can be replicated in other regions (FSC, 2020e).

Value chain versus systemic approaches

Over the years FSC has developed market access plans for several FSC-certified forest operations. However, it became clear that a large number of different disabling conditions in each case made it difficult to implement these projects with an individual value chain approach. Also, other organisations, such as the WWF and Rainforest Alliance, confirmed that many enabling conditions needed to be addressed before a value chain approach could be successful. More recently, ISEAL clearly stated that

> impact studies often show that the uptake and direct impact of sustainability systems is highly influenced by contextual factors in the broader environment in which they operate. These improvement strategies can focus on influencing the actions of target enterprises directly (value chain strategies) or can seek to influence the enabling environment in which those enterprises operate, to create the system conditions for the enterprises to improve (systemic strategies).
>
> *(ISEAL, 2020)*

Between 2018 and 2019, FSC partnered with the Swedish organisation The Eco Innovation Foundation, which operated a global program, 'The Good Wood Program', that aligned with FSC's vision. The programme's goal was to create a transformative, global market for wood products from locally controlled and sustainably managed natural forests in the global South that were under threat of degradation. The foundation of the programme was an innovative value chain developed for hardwoods from tropical forests with the potential to provide an attractive business opportunity for all actors in the chain.

More recently, and in order to scale up the benefits for smallholders and communities, FSC has adopted the 'Collective Impact methodology' (FSC, 2020b; FSC, n.d.4), which facilitates the use of systemic strategies to support value chain efforts for small-scale or community producers. This methodology has been used in three case studies – Brazil, Chile, and Mesoamerica – and the preliminary findings can be found on the FSC website (FSC, n.d.3).

Community and Family Forests program

Aiming to increase the footprint of making the FSC system more attractive to small-scale and community forests, the New Approaches project was consolidated into a full-fledged programme in early 2021. This change is indicated by a new and more explanatory name: the Community and Family Forests (CFF) Program.

FSC aims at doubling the current FSC-certified forest area (11.03 Mha) managed by smallholders and communities within the coming five years to meet the growth objective as laid down in the *FSC Global Strategy 2021–2026* (FSC, 2020k). Beginning now, our core activities will shift from policy to business and market development–related initiatives. The focus will also change from developing and testing different alternatives to supporting the FSC Network in rolling out the solutions and the tools that have achieved proof of concept.

Indigenous communities and their engagement with FSC

Indigenous Peoples make up some 5 per cent of the world's population (World Bank estimation). Belonging to around 5,000 different groups or communities, Indigenous Peoples usually have (or had) their own language, cultures, and traditions, influenced by their ancestral homelands.

Many of these Indigenous Peoples' livelihoods are dependent on forests. They are important stewards who also face challenges similar to the ones mentioned for small producers and communities. Since its beginning, FSC has actively supported the rights of Indigenous Peoples and prioritised these rights in relevant policies. In fact, one entire principle of FSC's core standard for responsible forest stewardship is dedicated to that topic (Principle 3 of the FSC P&C) and requires all FSC-certified forest owners and managers to identify and uphold Indigenous Peoples' rights of land ownership, access to, and use of land and resources. The FSC P&C also require FSC-certified businesses to uphold principles of free, prior, and informed consent (FPIC), whereby a community has the right to give or withhold its consent to proposals that may affect the lands it customarily owns, occupies, or otherwise uses. This position is also supported by the United Nations Declaration on the Rights of Indigenous People (UNDRIP, 2007) and the International Labour Organization's Convention 169.

Free, prior, and informed consent

The concept of *the right to free, prior, and informed consent* (FPIC) in UNDRIP, 2007 is seen as one of the key principles of international human rights law to protect Indigenous Peoples from destruction of their livelihoods and cultures (see for example FAO, 2016). Increasingly it is also seen as a right for local communities to protect themselves from significant negative impacts on the resources and territories on which they can make a justified claim for long and established use. Indigenous Peoples' organisations are among FSC founding members and are active in national and international FSC committees. Obtaining FPIC from Indigenous Peoples (Criterion 3.2 in FSC-STD-01-001, 2018) and local communities (Criterion 4.2, ibid.) before undertaking forestry operations on lands which they legally or customarily own and/or use is therefore an important requirement since the FSC published its original Principles and Criteria for Forest Stewardship (P&C) in 1994. In 2012, the fifth version of the FSC P&C was approved, with a broadened scope for the right to FPIC, being more specific when consent is needed. This includes the more explicit requirement of recognising and addressing the right to FPIC for local communities whose rights or resources are or may be affected by the applicant or certified organisations. In March 2021, FSC published the revised version (Version 2.0) of the *FPIC Guidelines* (FSC-GUI-30-003, 2021), replacing Version 1.0 from 2012. The guide aims to support the implementation of FPIC on the ground. It is written primarily for forest managers of organisations seeking FSC certification, and it can also give orientation to affected communities and to standard development groups for the development of national standards, as well as to certification bodies and other stakeholders, on how to run and evaluate a legitimate FPIC process.

The Permanent Indigenous Peoples Committee

In 2013, the Board of FSC International established a Permanent Indigenous Peoples' Committee (PIPC) as an advisory committee to the board. The PIPC advises the FSC Board on all issues related to Indigenous Peoples' involvement in FSC, including policies, standards, organisational presence, certification, and forest sector engagement. It is designed to create a genuine voice

for Indigenous Peoples inside FSC, which will help strengthen and renew their engagement with FSC. PIPC consists of representatives of Indigenous Peoples from all regions of the world, including Canada, Nicaragua, Ecuador, Cameroon, Tanzania, Finland, Sweden, Russia, Malaysia, and New Zealand.

FSC Indigenous Foundation

Strengthening its commitment to Indigenous Peoples, in 2020 FSC established the FSC Indigenous Foundation. The Foundation is an extension of FSC's efforts to work with Indigenous Peoples on finding solutions for the sustainable management of forests and maintenance of their livelihoods. It is a strategic and operational unit established to develop solutions to support Indigenous communities and to build and guide the sustainable management of their land.

Later that year, the FSC Indigenous Foundation launched the Indigenous Peoples Alliance for Rights and Development (IPARD), a five-year, US$13 million partnership to support the world's Indigenous Peoples. The IPARD is part of a Global Development Alliance (GDA), a unique partnership between the US Agency for International Development (USAID) and FSC International.

Ixtlán: A case study

The very first FSC FM certificate was issued in 1993 to the Ejido Noh-Bec in Quintana Roo, Mexico. In 2020, approximately 1.3 Mha of forestlands in Mexico are FSC certified; nearly 90 per cent of the certified area is managed by around 90 communities. Although communities have invested in FSC certification in the last 25 years, challenges such as the lack of governmental investment, lack of technical support, and low prices (Valdes & Negreros, 2010) remain relevant to the recognition of responsible FM, not only in markets but in society in general.

In the last 25 years, Mexican communities have been polishing their entrepreneurial skills through community social enterprises (CSE).

Oaxaca is the state with the highest biological diversity in Mexico, with two-thirds of the territory covered with 6.3 Mha of forests (SEMARNAT, 2016). In the 1940s, this rugged rural area was exploited intensively by a paper factory due to a concessions system in which the forest service awarded large-scale, long-term forest licenses to industrial logging units, the *Unidades Industriales de Explotación Forestal* (UIEF), which prevailed in Mexico for decades. The battle of the local people to regain control over the use of their resources took decades. The agrarian law reform in 1917 recognised collective property, allowing communities to use the forests and the land. However, in the 1950s, the government awarded forests of great value as concessions to private and state companies. It imposed restrictions on communities over the use of the forests and their resources. Initial forest movements in the 1960s were aimed at protecting natural resources; it was not until the 1980s that communities started to focus on a holistic approach to forest management. In the 1980s, some communities organised themselves into the ODRENASIJ (Organization from the Sierra Juarez for Protecting Natural Resources) (Barton Bray & Merino, 2004), whose mission was to rescue their forests and to stop the industrial-scale forest concessions given to private companies. ODRENASIJ was the starting point of a set of grassroots developments to integrate the value of forests holistically. Today, it is a national and global example of sustainable use of forests and community development (Chapela, 2018).

One noteworthy community is Ixtlán de Juárez, located 60 km from Oaxaca City. Ixtlán is an indigenous community governed by the Assembly of Citizens through traditional and customary practices. In addition, 521 inhabitants make up the Assembly of Community Landowners – also

governed by traditional and customary rights – who own 19,300 Ha of forests. The Assembly of Community Landowners decides on uses of the natural resources, and the Assembly of Citizens supports its decisions. In 1974, Ixtlán together with other communities set up a sawmill, and later, in 1988 it integrated the Agroforest Community Unit and Services of Ixtlán (Anta & Mesa 2018), where they developed their management plans, with a holistic approach to FM (Barton Bray & Merino, 2004). Ixtlán achieved FSC certification in 2001 (NC-FM/COC-000147 for the period July 2015–July 2022, see info.fsc.org). In 2020, the community had approximately 16,000 Ha FSC-certified with almost 3,000 Ha set aside due to their high conservation values (HCV). Within the scope of the certificate, circa 11,400 Ha are considered under restricted management and under conservation. This means that almost 3,000 Ha are set as natural protected area where HCV are identified. These forests are 3,000 metres above sea level and are classified as mountain mesophilic forests. The other areas are used as recreational forests, non-commercial vegetation, or secondary vegetation. (Rainforest Alliance, 2012).

In founding community companies, the members of Ixtlán established the Surveillance Council, an inspection body responsible for reviewing and monitoring the agreements of the Assembly. Social and working conditions in the community are governed through their social organisations. As a community landowner, all profits are cautiously invested for future development or fairly divided among the owners, depending on agreements reached by the Assembly. Working conditions comply with health and safety regulations under Mexican law, and equal opportunities exist for men and women. In September 2005, as a demonstration that social development can be achieved through the responsible use of forests resources, the community started a furniture factory to supply the government with chairs and desks for public schools in Oaxaca, made using wood from the FSC-certified forest.

The UCFAS (Furniture Factory of Forest and Agricultural Community and Services Unit) was possibly the only one of its type in Latin America at the time. It had the latest technology and only processed timber coming from FSC-certified forest management. It was also mostly self-funded. Of the total US$1 million required to start the factory, some 75 per cent came from the community itself. People from Ixtlán conceived the idea of the factory in 2003 as a result of an old dream.

> In Ixtlán, the old peoples' vision was that we do not just sell logs – that is what we sold when the paper factory was exploiting our forests, at that time the community sold logs and they could live. After that, people had the vision to transform the logs and then to sell sawn timber.

In 2005, Alberto Jesús Belomente, the UCFAS General Manager, was interviewed: 'Six years ago, we bought a kiln with a capacity of 75,000 board-feet' (FSC, 2006, p.15). In 2021, Ixtlán had three drying kilns with an annual capacity of drying 283 m^3.

In 2005, the community wanted the factory to carry out secondary processing, to allow them to add more value than the 30 per cent recovered which they sold as sawn timber. In that way, they wanted to generate jobs while adding value to the products, instead of selling only sawn timber. In 2007, Ixtlán was on the threshold of a big industrialisation process.

The community carpentry shop employs six men and six women and produces 250–300 doors per month. This job creation offered the possibility, for instance, to women to contribute to the family income. 'As in the entire state of Oaxaca, the community has high levels of migration. This has paved the way for many women to do something else – in this case, working in the factory' (FSC, 2006, p.15).

In 2008, the Assembly discontinued the Agro-Forestry Community Unit and split its functions into new community companies, thereby increasing its productivity and profits. The idea was that

the new companies would function independently, being managed by several bodies inside the Assembly. The companies include forest management and Forestry Technical Services, a petrol station, a furniture factory (wood transformation, wood stove, and furniture production), a community market, an ecotourism agency, a credit line to the community members and workers, a water bottling plant, and an alliance with other communities to trade furniture. These companies created 178 full-time jobs for community members, compared with the previous 12 full-time jobs.

However, despite all these efforts, Mexican forest communities still face serious challenges related not only to the lack of market for FSC-labelled products but also to barriers linked to severe risks for production. In the case of FSC-labelled products, the value chain has been poorly developed in the country, especially in Oaxaca, and this has been an inhibiting factor for the sale of FSC products and the lack of awareness of FSC. In addition, marketing efforts are expensive, and communities are not investing in that area. In relation to the risks of production, the high levels of corruption generate uncertainty and higher costs. Moreover, high levels of violence have plunged territories into illegality and unconstitutionality, and an external trade policy not only with North America but also with other countries in the region has created unfavourable conditions for national production. Other challenges include poor infrastructure and public services that put pressure on communities to invest scarce monies into these areas that legally are the government's responsibility (Chapela, 2018).

Nevertheless, in 2005, the Oaxaca government announced that by 2012, all public schools in the State of Oaxaca would have furniture from FSC-certified forests and the communities would benefit from public procurement policies. However, in 2021, the Oaxaca government was no longer a buyer of the products of Ixtlán's furniture company due to political power changes. The communities are still fighting to pressure the State government to commit to continued purchasing from FSC-certified operations.

Communities like Ixtlán have shown that FSC certification is a useful tool they can use to prove their commitment to be the guardians of the forests. However, additional effort is needed to grow the market for FSC-certified products. The internal expanded governance structure has allowed autonomous community companies to increase the value of their forests through diversification and by professionalising their local human capacity. Ixtlán has been able to close a circle by responsibly managing their natural resources and providing economic and social benefits. Initially, the timber and NTFPs were at the centre; today, the community is looking to broaden the market appeal of FSC certification by including the environmental services the forests offer, and to commercialise those ES.

In the last 55 years since the end of the pulpwood concession, awareness has increased among the residents that, if there are forests, there will be food (FSC, 2006). This interconnection between the community and their forests is the guarantee for their conservation, based on both food and income from forest products. FSC certification has supported the process to bring economic, social and environmental value to the community. At the same time, there are substantial challenges related to increasing the awareness of the value of forests into the larger Mexican society. Community groups ask for a holistic governmental policy that could favour their activities and a more robust presence of FSC by combining alliances at different levels (national and international) to grow the local market.

Discussion and conclusions

The challenges for small forest producers and communities to strengthen their business case for sustainable forestry have been discussed for many years, as described earlier (for example in Meier-Dörnberg & Karmann, 2015; Westerlaan, 2019): few economies of scale, remote loca-

tions, lack of experience and of expertise, and limited starting capital are common challenges. The political and social context is often beyond the reach and scope of any single community and their single or collective governance (as in a trade association) to deal with effectively. Corruption, perverse market incentives, and competition from illegal economic activities tend to inhibit progress in the conservation of natural resources. The diversity of settings and conditions for what we here call smallholders are huge and make it difficult to come up with easy and streamlined solutions on an international level. Locally adapted and encompassing strategies to respond effectively to these diverse situations are necessary.

The FSC statistics show – and researchers with a focus on tropical forests highlight – the slow growth of FSC in the Global South. Further, those who focus on social forestry raise concerns about the small proportion of certified community-managed forests globally. But Di Lallo et al. (2016, p. 395) also recognise

> that there is awareness that the FSC scheme has been customized for the small-scale forestry (…) indeed, the certificates issued annually are increasing – but the need to make further progress and to provide adequate technical-managerial support to smallholders during all certification phases still emerge.

Rantala (2017) concludes that it is crucial that smallholder organisations engage effectively in partnerships with civil society groups and international allies to respond to the multiple and diverse needs catalysed by climate change. Access to markets through certification is seen as promising, but lack of access to finance continues to be a major challenge to smallholders and communities interested in becoming certified. Without additional financial resources, either being offered as donations initially or longer-term investments through adequately designed loans until reaching the break-even point (according to WWF [2015] an average of six years), certification is often not achievable or retainable for smallholders and forest-managing communities. Further, technical support is still needed, for instance, at the beginning of the process, to meet the requirements of FSC's certification standard. On the other hand, the markets for small forest owners and communities are often local or domestic, which usually do not require third-party certification of responsible forest management. Connecting small forest owners and communities with international markets and access to finance are both necessary.

From the launch of FSC (Synnott, 2005), and continuing for example with the Accreditation Manual in 1998 that set out group requirements (no public document available), and through the New Approaches project, FSC is addressing the challenges facing smallholders. The New Approaches initiatives did so not only in adapting the normative framework but also in developing a wide range of business and market-related tools that consider the value chain of the products from certified smallholder management. A lesson learned and integrated into the Community and Family Forests program is that the uptake and the effects of the new initiatives are now systematically monitored and analysed by multi-disciplinary FSC expert teams. This systematic approach to monitoring and evaluation was not fully applied in some of the earlier initiatives to strengthen smallholder certification. Some of the earlier initiatives (the Train the Trainers program [ca. 2012 –2015], the Modular Approach program [ca. 2011 to 2014]) did not extend beyond their pilot test phase, while some others (the SLIMF standard [from 2014], the [1996] Group Certification options and the [2013] Smallholder and Community Labelling options) are still in use, or are now being revised. Lessons learnt from the FSC Smallholder Fund show the need to offer on-the-ground support to build capacities or target supply chain interventions. The Ixtlán case illustrates the challenges and opportunities for forest managing communities. FSC analyses and learns from the weaknesses and builds on the strengths of these examples.

The relatively young Ecosystem Services Procedure is very promising. There is an expectation that this ES procedure will be applied by more smallholders and communities to attract and engage in long-term partnerships for long-term financial and technical support of smallholder forest stewardship. Time, along with monitoring and evaluation, will show whether these expectations will manifest in benefits for forest-managing smallholders and communities. Also, the initiation of the FSC Indigenous Foundation with its unique governance structure (a strategic and operational unit lead by and composed of Indigenous leaders, and with advisory function for the Board of Directors [see FSC, 2020i]) is welcomed by broad stakeholder groups including donors, FSC membership, and government aid agencies, as well as the Indigenous Peoples and communities themselves. The expectation is that the Indigenous Foundation will develop creative and innovative solutions to support Indigenous communities and enable them to build, guide, and lead sustainable management alternatives of the territories by means of the FSC certification scheme. The Community and Family Forests program can also support the FSC Indigenous Foundation. Beyond FSC's input of resources, strategic partnerships with the financial and rural development sectors, corporate companies and like-minded organisations are seen as necessary to bridge that gap. Through the invigoration of the FSC Indigenous Foundation, Indigenous Peoples' rights as well as their share within FSC-certified areas and operations will significantly increase, which will help to preserve the world's remaining natural and mostly intact forests and increase the socio-economic and environmental impact in the respective countries.

It is obvious that FSC certification cannot solve all problems and find all solutions alone, nor can FSC quickly fix complex, long-lasting, and deep-rooted social problems. The establishment of a full-fledged programme that will take a process approach with a medium-long term intended outcomes is FSC's most recent commitment to smallholders and communities. FSC also can and intends to play an even greater role as a partner for larger development alliances, with its specific expertise by adopting activities related to FSC's mission, to 'to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests', including equitable access for small-scale forest operations and forest managing communities.

Note

1 *Eligibility criteria for small and/or low intensity managed forests (SLIMF)*: To achieve certification under streamlined procedures for SLIMFs, a forest management unit must be either 'small' and/ or 'low intensity': *Size:* context-specific: usually less than 100 hectares; in some countries up to 1.000 hectares. *Intensity:* The harvesting rate is less than 20 per cent of the mean annual growth in timber (Mean Annual Increment – MAI), *and* the annual harvest is no more than 5000 m^3, and/or the forest is managed exclusively for non-timber forest products (FSC Standard FSC-STD-01-003 and related policies.

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16

ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS OF COMMUNITY FORESTRY AND INDIVIDUAL SMALL-SCALE LOGGING IN CAMEROON

Raphael Tsanga, Paolo Omar Cerutti, Paule Pamela Tabi Eckebil, and Edouard Essiane Mendoula

Introduction

In the tropics, sustainable forest management (SFM) has been widely promoted by institutions such as the International Tropical Timber Organisation (ITTO), which in 1992 developed a set of criteria and indicators for tropical forest management. Since the mid-1990s, SFM has been adopted by all forest countries in the Congo Basin, incorporated into their forest legislation (Cerutti & Lescuyer, 2011b), and broadly applied to 'permanent forest domains', i.e., forest areas which are mandated to remain forested in the long term. In general, this includes both protected areas and forest reserves, as well as large-scale logging concessions which must adopt and implement sustainable management plans. Management plans are currently the basis for the exploitation of 24 million hectares of forest concessions in the Congo Basin (Cerutti & Nasi, 2020), although the jury is still out as to whether they have so far been able to steer the eyes of both foresters and governments away from pure timber extraction and in the direction of more sound environmental and social performances (Cerutti et al., 2014; Cerutti & Lescuyer, 2011; Eba'a Atyi et al., 2013; Karsenty & Gourlet-Fleury, 2006; Nasi et al., 2012).

SFM refers to the sustained production of goods and services, including timber but also social and environmental, without undermining their intrinsic value or compromising their future productivity (Atyi, 2001; OIBT, 1998). In practice, sustainable timber production must go hand-in-hand with the effective protection of biodiversity and the safeguarding of the socio-economic rights of local and indigenous peoples (Leroy et al., 2013; Nasi & Frost, 2009). In this paper, SFM is intended as a way to achieve social and environmental sustainability as well as sustainable timber production. Although the implementation of SFM usually gives an important role to industrial logging companies, the contribution of local communities and small-scale producers is also widely recognised.

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The practice of community forestry in Cameroon

In Cameroon – the focus of this chapter – social forestry has taken the form of non-concessionary agreements called Community Forests (CF). Conceptually, community forestry refers to an approach to forest management whereby

> local communities control a clearly and legally defined area and are supposed to be free from all sorts of immediate state influence on resource utilization. Provision of tenure rights over the forest enables the participants to be involved with the forest apart from ensuring sustainable resource management.
>
> *(Lata & Rashid, 2020, p 2)*

In this perspective, CFs encompass a variety of activities including agroforestry practices, management of hunting areas by local communities, and sharing of benefits resulting from logging operations (Egbe, 2001). It is therefore a generic concept that refers to forestry-related activities carried out by local communities in order to generate the income needed to improve their living conditions (Lata & Rashid, 2020).

The Cameroonian regulatory framework defines CFs as

> a forest in the non-permanent forest domain, subject to a management agreement between a village community and the Forest Administration. Management of this forest is the responsibility of the village community concerned, with the support or technical assistance of the Forest Administration in charge of forests.
>
> *(Republic of Cameroon, Section 37)*

CF also refer to the participation of local communities in forest management through commercial logging operations, subject to the requirements of sustainable forest management. Natural resources within the borders of CFs can thus be harvested following a simple management plan. In the case of timber, which has been by far the most sought-after resource, CFs can be harvested directly (*en regie*) by the community, or via contracts established between the community and logging operators. Although in theory all logging operators could sign contracts with CFs, the legislator has over the years tried to encourage Cameroonian nationals to actively participate in the forest sector. This has resulted in individuals and small and medium-sized enterprises entering into contracts with CFs and – to a large extent – in CFs serving the regional and national timber markets, leaving the international market to long-established concessionaries.

CF and small-scale logging (SML) refer to different realities in the forestry sector, but because CFs remain very much focussed on timber harvesting, the two realities meet on the ground when it comes to access, harvest, process, and trade timber. CF is a forest title that allows logging operators – i.e. individual artisanal small-scale producers or small and medium enterprises – to harvest timber in the dedicated area. SML refers to an activity, i.e. the harvesting of timber using limited and non-industrial equipment for felling, processing, and transportation. SML can be carried out in CFs but also in other forests in the non-permanent domain, largely through informal processes.

Over the last two decades, the regional (e.g. Chad) and national demand for timber has grown much faster than what the largest number possible of CFs – even if unsustainably harvested – could supply. This has caused individual, small-scale loggers to look for resources well beyond CFs. Currently, artisanal production has largely replaced industrial production as the

main source of sawn timber in the markets of Central African cities (P. O. Cerutti & Lescuyer, 2011b; Lescuyer et al., 2014). What remains very much under-researched are the contributions made by CFs and SMLs to SFM and their impacts on forests and people (Burivalova et al., 2017). The contribution of CFs to sustainable forest management is controversial compared to artisanal logging harvesting. A review of experiences in Canada, Bolivia, the United States, and Mexico reveals that community forest management is a viable approach to forest conservation (Charnley & Poe, 2007). While stressing that the environmental impacts of community forest management require in-depth studies, other authors argue that deforestation and degradation rates in community forests are generally low (Burivalova et al., 2017).

Conversely, other studies, notably on Cameroon, point out that community forests are not an effective tool for reducing deforestation (Bruggeman et al., 2015). On the contrary, the implementation of community forestry has often been shown to accelerate deforestation and degradation due to illegal logging (Minang et al., 2007). To some extent, CFs have indeed sometimes been perceived by communities as a quick way to access financial resources (Oyono, 2004), and so far the socio-economic impacts of CFs have not lived up to the expectations stemming from their inclusion in the legal framework almost three decades ago (Lescuyer et al., 2016).

In contrast, the existing evidence suggests that SML – for the vast majority occurring outside the legal framework – have positive economic impacts, with contributions to rural economies in terms of employment and income for rural communities. Yet similarly to CFs, impacts on forests and SFM remain very difficult to assess, not least because of their unclear legal standing vis-à-vis SFM. In this chapter, we will look at the practical implementation of both CFs and SML and how it is conducted in the daily realities of communities and small-scale loggers, and we will discuss the implications of such reality for SFM, with a focus on the socio-economic and environmental effects.

The chapter is organised as follows: the next two sections present the legal framework for community forests and small-scale logging. Then, we discuss their social and environmental performance. The last section concludes with a discussion about the relationship between SFM, community forests, and small-scale logging.

The legal framework of community forests and individual small-scale logging

CF and SML have in common that they are located in the non-permanent forest estate. However, both CF and SML are legally distinct in several aspects, including the modalities of allocation and the respective management requirements.

Legal framework and status of community forest

The legal recognition of community forestry is the result of active support from partners such as the World Bank and numerous conservation NGOs. According to Decree No. 95/531 of 23 August 1995, *community forestry* refers to the transfer of a portion of the national domain from the state to the village community, which is responsible for its management. The forest intended for community management is the subject of a management agreement between the state and the community concerned, which can use and manage it on the basis of a simple management plan.

The agreement has a duration of 25 years and it determines the surface area of the forest, which is a maximum of 5,000 hectares; its boundaries; the beneficiary communities; and the prescriptions for the management of forest stands or wildlife. The management plan defines the modalities for the exploitation of the forest, and the communities must comply with it throughout the duration of the agreement. The forest products resulting from forest exploitation

belong to the community, which also has a right of pre-emption over any other permits, title, or products found in the forest. The State is the guarantor of compliance with the implementation of the management rules and can suspend the CF in case of failure or withdraw the right of exploitation in cases of serious violations of the prescriptions of the management plan.

The number of applications and the area of granted community forests has increased significantly over the last two decades, as the combination of support from donors and civil society has generated enthusiasm among the people living in forest areas. The first 82 applications were made in 2000 for a total area estimated at 272,935 hectares (Djeumo, 2001; Lescuyer, Tsanga, et al., 2016). As of 2018, about 683 communities – representing about 2.2 million hectares – had issued requests for attribution to the Ministry, of which only 275 (or about 940,000 ha) had been granted a permanent title (*convention definitive*) (MINFOF, 2018).

Yet data indicate that having a permanent title is still a long way from actually operating the CF, as bureaucracy tramples practicality. For example, in the same year (2018), only about 40 per cent of valid CF requests received annual harvesting titles (or about 28,000 ha of annual harvestable areas), from which communities eventually harvested only 25 per cent of authorised allowable cut (MINFOF, 2018).

Legal framework and status of individual small-scale logging

Along with the initial implementation of CF in the mid-1990s, individual artisanal logging emerged almost concurrently in response to the limits of the newly approved forest law (1994) and its implementing decree (1995), which had a strong focus on large-scale, export-oriented industrial logging. Since then, artisanal exploitation has been a practical response to the absence of industrial sawn timber on the national market – as well as the lack of sufficient stocks coming from CFs – in a context of strong and fast-growing demand.

Legally, artisanal exploitation can occur in three forms: i) personal cutting authorisations, which are valid for 3 months and authorise the extraction of a volume of 30 m^3; ii) the right of use that authorises the populations living near the forest areas to harvest timber for their personal needs, without commercial activity; and iii) timber exploitation permit (*Permis d'exploitation de bois d'œuvre* or PEBO), which is exclusively reserved for nationals and should be awarded through periodic calls for tenders. The PEBO is located in the non-permanent forest estate and authorises one individual or company to harvest a maximum volume of 500 m^3 per year. The products resulting from the exploitation of the PEBOs are only intended to supply the national market. There is no legal limit to the maximum areas dedicated to artisanal exploitation in the non-permanent forest domain. Exploitation is possible after an inventory has been conducted to estimate the volume of available standing trees.

Though different from CFs, the bureaucratic history of PEBOs has followed a similar and very complex path, with the result that over more than two decades of existence, only a handful of PEBOs have been granted. First, the delivery of all authorisations and permits for artisanal exploitation was suspended in 1999 by the administration in charge of forests, allegedly because these logging permits had led to corruption and laundering of illegally harvested timber from forest concessions (Cerutti et al., 2013), with timber traded on the international market in violation of legal provisions. As often occurs with similar bans in cases of very weak local governance, artisanal exploitation did not stop during the years of suspension because demand kept growing and control was non-existent. In fact, what the suspension did was to send an entire sector into the informal market, as artisanal loggers were no longer able to access any legal title. During the ban period, the volume of artisanal sawing in Cameroon's major cities was estimated at 1 million cubic metres of roundwood equivalent (Koffi Yeboa, 2005; Plouvier et al., 2003).

Comparative benefits of community forests and individual small-scale logging

The establishment of CF in the Cameroonian context aims to provide local communities with an instrument for local development. In this respect, article 35 (3) of the Cameroonian forest law states that 'forest products of any kind resulting from the exploitation of community forests belong entirely to the village communities concerned'. Notwithstanding the existence of other forest products and services, timber exploitation remains the preferred option for local communities to earn income from the forest. Case studies conducted in recent years suggest that where community forests exist, the local population derives substantial financial and economic benefits from them.

Financial profits of community forest

Community forestry is a financially profitable activity, at least as long as resources last. The bulk of CF activity involves the harvesting of timber, the majority of which is exported. Each year, the CF generates a turnover of approximately US$1.9 million (CFA1.3 billion) for a net profit estimated at US$762,327 (CFA413 million) (Lescuyer, Cerutti, et al., 2016). Although practical examples remain rare, CFs can provide other benefits, such as the exploitation of non-timber forest products, the reduction of carbon emissions and the conservation of biodiversity. Socially, the exploitation of CF provides benefits that are both individual and collective. At the individual level, the benefits of CF are identical to those of SML. These are essentially the wages of the workers and the remuneration of the trees' customary owners. At the community level, the income generated by CF enables communities to build community infrastructure and finance income-generating activities (Nzoyem et al., 2010). However, the positive impact of CF on improving the living conditions of local communities is rather questionable. In most cases, the lack of financial means forces communities to establish partnerships with private actors. It has been established that these private operators monopolise the majority of the revenues from logging, to the detriment of the communities. A significant part of these revenues is also captured by political and administrative elites.

The community forestry model is not homogeneous. Its implementation and results depend on many variables that need to be simplified for the purposes of economic analysis (Ezzine de Blas et al., 2009). For example, we will retain an average CF size of 3,440 ha, which is the average size of CFs allocated until 2011. In addition, the number of active CFs is set at 150, which is a close estimate of the number of annual harvesting certificate (AHC) issued per year over the last 3 years by the Ministry of Forestry and Wildlife (MINFOF). Also, a large majority of active CFs are operated under subcontract by private operators (Cuny, 2011). This trend has changed little over the years; in the following estimate, 25 per cent of active CFs are operated by the state and 75 per cent are subcontracted to private operators. All these unit estimates are shown in Table 16.1 and applied to the case where (i) the timber is exploited by the community and (ii) the situation where the timber exploitation is subcontracted, both with an average area of 3,440 ha and an annual production of 60 m^3 of sawn wood.

The average turnover of a CF – under the hypothesis of exporting all its production – is estimated at around US$12,920 (CFA8,500) per year, i.e., an overall turnover of this sector of around US$1.8 million (CFA1.2 billion) for 150 active CFs. Exporting all its production is the only real possibility for the CF to make profits. Current exploitation costs make CF production uncompetitive on the local market compared to that of individual artisanal logging. Thus, CF timber is deprived of its main market.

The financial benefits from the exploitation of community forests are distributed between local communities, state officials, and private operators when the CF is managed by a private

Table 16.1 Financial benefits and operating costs of CF for communities

Costs	*Timber exploitation by the community US$/m³*	*Timber exploitation sub-contracted US$/m³*
Turnover	**219**	**28**
Start-up costs		
Preliminary studies and allocation	6	0
Preparation of the MTP	5	0
Environmental Impact Assessment	8	0
Operating costs		
Preparation of the operation	**18**	0
Harvesting and processing whitewood	58	0
Harvesting and processing redwood	83	0
Operation of the management entity	14	0
Miscellaneous administrative costs	4	0
Profit		
Formal profit for the community	23	28
Real profit (with informal income) for the community	28	28
Profit for the private operator	0	55

Table 16.2 Beneficiaries of community forests

Beneficiaries	*Sources of revenue*	*Amount (US$/yr)*
Local communities	Wages, profit from timber sale	1,043,450
Administration	Formal and informal costs	172,657
Private operators (logging companies, consultants, NGOs)	Profit from timber sale, design of CF management documents	547,514

partner (Table 16.2). The shared revenues come from the sale of trees and wages, but a significant part also comes from informal payments and trafficking in official logging and transport documents. Thus, community forestry is also a source of corruption.

Financial profits of individual small-scale logging

As it is often the case in informal markets, it is difficult to gauge a comprehensive and detailed picture of the socio-economic impacts of individual, small-scale logging. Yet a cursory consideration of our research over more than a decade in most countries of the Congo basin indicates that such impacts have been overall real and positive since about the turn of the century.

In a more practical way, individual SML benefits four groups of actors: rural populations, urban populations, representatives of government or council authorities, and council authorities.

There are various dimensions to those impacts, which we describe here. First and foremost, the annual consumption of artisanal sawn wood is estimated at 662,000 m³ in Cameroon. Estimates by Cerutti and Lescuyer (2011) show that multiplying this volume by the average

Table 16.3 Components of sales price of sawn wood in domestic markets (US$/m^3)

Components of final sales price	*Estimation (US$/m^3)*	*%*
Wages (rural and urban areas)	56	34%
Transportation and equipment	28	18%
Consumables and miscellaneous in rural areas	20	13%
Informal payments (rural and urban areas)	20	13%
Payment to customary owners	8	5%
Official taxes	0.12	0%
Rent for outlet	0.6	0%
Profit (rural and urban areas)	**26**	**17%**

Table 16.4 Beneficiaries of individual SML

Beneficiaries	*Sources of revenue*	*Amount (million US$/yr)*
Rural populations	Wages	37
	Tree sales	
	Profit on sale of sawn wood to urban traders	
Urban populations	Wages	21.5
	Outlet rental	
	Profit from sale of lumber to end user	
Representatives of government or council authorities	Informal payments at council level, during transport and in urban markets	13
Council authorities	Final taxes	0.08

price of a cubic metre of sawn wood on the national market (US$153/CFA82000) shows that the total value of this market is approximately US$101 million (CFA55 billion) (see Table 16.3).

Second, small-scale timber operations generate both (very much needed) employment and profits for a large section of both rural and urban societies where the resource is harvested and eventually sold. This means not only for the operators directly engaged in harvesting or selling, but also rural and urban institutions such as Councils, Regions, decentralised agencies and State officials in terms of informal payments at the commune level, on the road, and in urban markets; they all have been able to adapt and capture (both legally and outside the legal framework) at least part of the benefits derived from a booming value chain. For example, we documented how most Councils have adopted ad-hoc 'taxes' applied to the tools used by operators (e.g. a 'tax' on chainsaws), their produce (e.g. a 'tax' per product, such as planks, beams, etc.), and the operators themselves (e.g. a 'tax' to enter the forest).

Third, and very much linked to the previous point, small-scale timber operations provide jobs, most of them based in rural areas where they are very much needed. In 2010, at least 40,000 people made a living directly from small-scale chainsaw timber production (Cerutti & Lescuyer, 2011b). One can only understand the relative importance of such information by comparing it to the industrial sector. For example, although solid data are hard to find, the available literature suggests that over the past decades, the number of direct jobs has not increased much from the 10,000–20,000 claimed by large-scale industries (see Table 16.4).

Of course, one cannot compare the two sectors on several other indicators, such as the contribution to the state's coffers, which is pretty much nothing in the case of small-scale timber operators. And yet it is exactly this type of information that needs discussing in order to understand the real socio-economic impacts of small-scale harvesting. For example, it is difficult to cost the social and administrative support provided – and the 'taxes' applied – by decentralised entities to what are ultimately activities conducted outside the legal framework, unless one considers in parallel the centralised management of forest-related taxes paid by industrial companies and CFs, which does not result in a regular redistribution back to the local populations.

Also, to the extent that Councils and other entities do collect 'taxes', it is rare that there are any records kept. SML operations are a major source of personal income for many government officials, who have created a huge, obligatory payment system to 'launder' the timber sold on local markets; this system brings in about US$12,1 million (CFA6,5 billion) per year. Nearly 9 per cent of the sawyers' costs comprise payments to various types of public authorities on the logging site or somewhere along the timber transport route. In addition to payments to council representatives, chainsaw millers set aside money for 'wayside payments' that 'facilitate' the transport of chainsaw timber to the urban markets. Such payments are for the personal benefit of the government agents located at checkpoints along the road rather than for any public fund, and must be made to all the government services that have such checkpoints.

More socio-economic impacts are indirect in nature. About half of the operating costs incurred by individual and small-scale entrepreneurs are spent in the villages or small towns where the resources are cut and processed (e.g. see also Djiongo, 2005). These include food, local salaries for helpers, payments to customary owners, replacement equipment, etc. In other words, for every US$1 that the law promises to be redistributed back to rural areas for their development, rural communities get at least US$3.6 (CFA2,000) not in promises, but in cash. By way of illustration, the total amount of the annual forestry fee collected in 2016 was theoretically US$34.2 million (CFA18.5 billion) (Cerutti et al., 2016). According to the 2016 finance law, the share for local actors is 45 per cent, i.e., around US$7.7 million (CFA4.1 billion). At the same time, artisanal logging directly benefits local communities to the tune of US$39.1 million (CFA21.1 billion).

Environmental impacts of community forestry and small-scale logging

Environmental sustainability refers to a wide range of aspects including biodiversity conservation, carbon stock management, provision of ecosystem services, and the health of ecosystems (Brummett et al., 2009; Karsenty & Gourlet-Fleury, 2006; Nasi et al., 2009). The consideration of these aspects is essential for SFM, but their implementation is complex, especially at the local community level. The direct relation between legality and sustainability is more often theoretically assumed than practically verified. The same applies to the relation between illegal and unsustainable logging. In practice, this means that the exploitation of industrial concessions is necessarily sustainable since it takes place within the framework of management. That is to say, artisanal exploitation, which takes place mainly in the informal sector, must be unsustainable. Just as the positive impact of regulatory instruments such as the development plan on sustainable management needs to be put into perspective – if we consider the environmental damage resulting from logging and the opening of roads – the supposedly negative impacts of artisanal exploitation need better qualification.

The potential ecological impact of artisanal logging includes several elements. Unless it is occurring inside CFs and the prescriptions of their management plans, artisanal exploitation takes place mainly in the non-permanent forest domain, which can be converted to other uses,

notably agriculture. Previous findings indicate that about two-thirds of the harvesting operations take place in the agroforestry zone.

Yet about 33 per cent of operations still happen in old-growth forests, which albeit legally convertible, maintain a multitude of environmental services. As is the case for CFs – and indeed logging concessions – SML have low extraction rates. This is more a consequence of the general historic focus of the timber market on a handful of species, than of a voluntary choice by artisans and communities alike. Yet, as the experience of countries such as Côte d'Ivoire shows (Tsanga et al., 2020), things may change fast, and degradation and deforestation readily increase if no clear rules exist, as is the case at present (Cerutti et al., 2015).

Similarly, there still exists an economic preference for large-diameter trees, as more products and dimensions can be extracted, and fewer kilometres walked, as compared to a larger number of smaller trees. For the time being, this spares smaller trees which can potentially regenerate the stands of trees, unless (as examples from many countries show, and in the absence of clear regulations) the cycles become quicker and shorter, in which case loggers will use ever smaller diameters.

In terms of impact on permanent forest estate, results also show that there seems to exist no immediate risk of artisanal logging entering the permanent forest estate, where SFM is mandatory. Yet two major risks exist in the longer term (Cerutti & Lescuyer, 2011). The first risk relates to the lack of management measures for commercial species. According to Cameroonian law, the tree officially belongs to the state. It is up to the administration to organise the modalities of access and felling of trees in the national forest estate. In practice, the state is rather like an absentee owner in the non-permanent forest estate. Ownership of trees is therefore the responsibility of customary rights holders who sell them to artisanal loggers. In the majority of cases, customary owners are not concerned with sustainable management practices. Such practices undermine the long-term commercial value of forests through the intensive exploitation of high-value species and accelerate the displacement of sawyers to increasingly remote areas, including penetration into the permanent forest estate.

The second risk is directly related to demography and the increasing demand for sawn wood in urban areas. Cameroon, like many sub-Saharan African countries, will see its population increase significantly over the next 30 years. Cameroon's population, which was estimated at 24 million in 2017, is expected to double by 2050 to around 50 million (UN-DESA, 2017). The trend in the future will therefore be to gradually increase the production of artisanal sawn wood to supply the increasingly demanding domestic markets (Marien & Bassaler, 2013). Also, with economic growth, the national demand for timber is expected to increase significantly in the coming years. With the increase in demand and a decreased availability in the non-permanent domain – and a competition for the same species – there is a risk of gradually shifting logging to the permanent domain

Discussion

Community forestry should fulfil at least three objectives, notably i) the provision of goods to meet basic needs at rural household level, ii) employment and income generation in the community, and iii) the provision of environmental stability (Lata & Rashid, 2020). In practice, the model has many weaknesses (Duguma et al., 2018). With regard to the socio-economic objectives, it can be said that they have been achieved by community forestry in Cameroon. The question that arises is the extent to which the benefits obtained are in line with initial expectations. When comparing the socio-economic benefits of community forestry with other forms of decentralised income, the results suggest that these are limited. According to Oyono (2004)

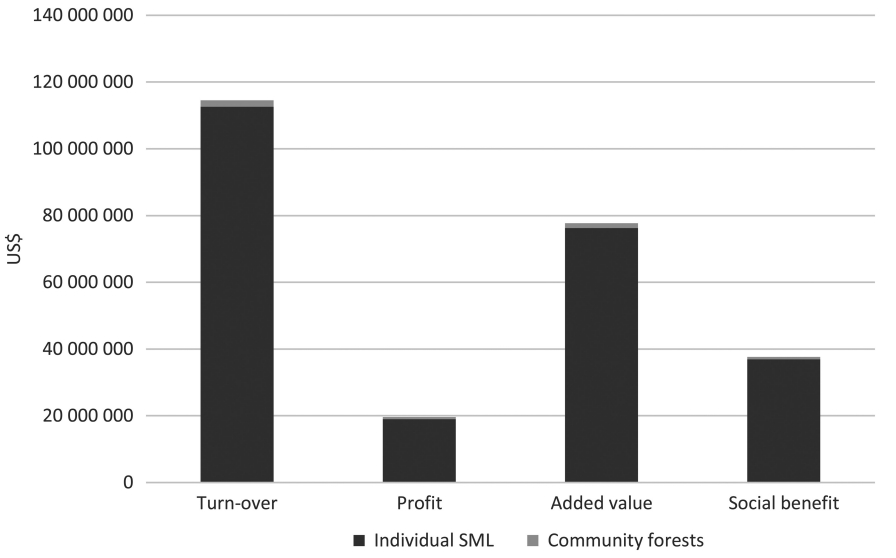


Figure 16.1 Respective financial benefits of community forests and SML. Source: Lescuyer, Cerutti, et al., 2016.

'its potential for individual or collective accumulation is limited and, thus, underestimated by local communities – particularly in comparison with forestry fees and royalties'. The moderate contribution of community forests can also be seen when the financial benefits of community forests are compared with those of individual small-scale logging.

Recent developments in CF and SML show that, as far as SFM in its broadest sense is concerned, there is plenty of room for improvement (Fomou et al., 2017, 2020). By their nature and background legal framework, neither the current management of CFs nor artisanal logging in the non-permanent forest domain seem conducive to SFM.

Community forests remain trapped between a legal requirement for sustainability and their creation in the non-permanent forest estate, which is not legally mandated to remain forested and can be converted into agricultural land. Hence, in the absence of a strong supervision and facilitation from the government (Cerutti & Nasi, 2020), this framing brings a natural weakness to the overall process, and keeps the requirements for operating a CF sustainably beyond the reach of local communities. Also, as the legal framework for conducting forest operations inside community forests has been largely influenced by the management practices of large-scale forest concessions, it remains very expensive, administratively over-complex, and ultimately unsuitable, also for small-scale loggers who could have access to CFs.

This is a constant and very important trend, because if the legislator introduced for the first time an innovative concept in the law, in practice the bureaucratic machine that should have led to communities actually benefiting (financially at least), has not been able to deliver a smooth, functional, and efficient procedure that enables those benefits. Frustrated, many communities resort to alternative ways of benefiting from a resource they consider theirs, with less than optimal environmental, social, and long-term economic results.

The general conditions under which the wood market is organised introduce further complexity to the system. Community forests are very often located in degraded areas. These areas are often poor in commercially useful species, partly because the annual area authorised for logging is small and partly because the volume of commercial species requested by market demand

is rarely available when needed. The result is a configuration whereby a small number of species are over-exploited without respecting minimum forest management standards, e.g., by logging outside annual allowable cuts or simply outside the CF perimeter.

For all the positive impacts that have been described here, there remains a very big open question as to the sustainability of these operations. Of course, if one extrapolates from the local reality, recommendations to tackle the development of this sector urgently and head-on are as easy to make as it is easy to see that – given recent and current consumption trends – demand cannot be sustained as such for another 20–30 years. Resources are being extracted at a pace well beyond any regeneration potential, mostly in already-degraded areas with no solid restoration/reforestation plan in sight.

The socio-economic impacts briefly described here must be read with the eyes of the thousands of people currently deriving their livelihoods from those resources. This must not exclude, of course, the eyes of the hundreds of state officials who are currently deriving a private rent from bribing their way into the sector. And although one should always look into the details of the trade-offs generated by one proposed solution or another, there are necessary conditions that need to be fulfilled first and foremost for those trade-offs to be put on the table of democratic discussions between the Government and private operators.

One of the conditions is that individual and small-scale operators must be provided a safe space where their voices can be heard and listened to. It is indeed encouraging to see that, in the last decade, several attempts at creating organised and coherent groups of operators have emerged across the national territory.

Another broad condition is that if small-scale operations (as well as Community Forests) must also become part of the various national pledges towards sustainability in general and SFM in particular, they must be provided a coherent and supportive legal framework within which they can operate, if they so choose. On this topic, it is much less encouraging to see that the process launched by the Government more than a decade ago and aimed at revisiting the forest law also to make it more conducive to small-scale operators to function legally has resulted in no change so far.

Conclusion

This chapter has discussed community forestry and artisanal small-scale logging as conducted in Cameroon and has assessed the existing evidence on both models' socio-economic and environmental impacts (through both secondary and primary data collected by the authors over more than a decade). Though different in theory and in the law, CF and SML have become over the years synonymous with illegal and/or unsustainable logging, both conducted in the Cameroonian non-permanent forest domain.

We believe that, as the government of Cameroon clarifies its aspirations and objectives via selected development paths, and as it increases its pledges and international engagements towards combating deforestation, forest degradation, and illegal logging, a clarification and improvement of the regulatory framework surrounding CFs and SML are a must.

The existing evidence shows that the impacts of community forestry on local development are mixed. These data run counter to the view that the transfer of forest resource management to local communities is synonymous with community development, biodiversity conservation, and the rational exploitation of timber. In practice, the legal framework for community forestry is ambivalent and it must be redressed. On the one hand, it advocates the sustainable management of community forests through the establishment of management standards. On the other

hand, the complexity and costs of acquisition and procedures have put sustainability objectives beyond the reach of most local communities. Furthermore, the location of community forests in the non-permanent forest estate does not encourage long-term, sustainable management practices, while persistent corrupt, albeit largely unsanctioned, behaviours have continued for decades. As a result, many illegal and unsustainable practices have developed over the years.

Individual artisanal logging, on the other hand, largely exploits the same geographical space and it does not carry all the hassles needed to proceed with CFs, yet it remains almost entirely in the informal realm. While it is thus financially more profitable for both the sawyers and the individuals among local communities than CFs, information on its environmental sustainability are scant. Yet most of the sawn timber consumed on the national market comes from this activity, and if urgent improvements of the regulatory framework are not adopted, the damage to both forests and communities' livelihoods in the medium to long term can follow pathways already observed in countries such as Cote d'Ivoire.

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PART V

Indigenous forestry/all forest values including Traditional Ecological Knowledge (TEK)



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17

THE MISTIK STORY

A community forestry approach to large-scale industrial forest management and production

Sheri Andrews-Key, Stephen Wyatt, and Harry Nelson

Introduction

Community forestry, whether in the Global South or North, is often associated with images of small-scale management and artisanal approaches to harvesting and product transformation. Setting a deliberate contrast, this chapter examines the example of the Meadow Lake region in Saskatchewan, Canada, where 1.9 million hectares (Mha) of forest, a sawmill processing about 500,000 cubic metres (m^3) of wood annually, and a variety of other businesses are managed by a group of nine Indigenous communities through the Meadow Lake Tribal Council (MLTC). The forest is managed by Mistik Management Ltd., an equal partnership between a sawmill owned by the Indigenous communities (NorSask Forest Products Inc.) and a multi-national forest products company (Meadow Lake Mechanical Pulp Inc.). A number of harvesting businesses are fully owned by the Indigenous Dene and Cree peoples (both collectively and individually). As a community forestry case study, the Meadow Lake model (incorporating all these elements) demonstrates that community forestry need not be small-scale and highlights the importance of relationships between the community and external partners, and with the land itself.

The long history of communal management of forestlands around the world is now well established (Ostrom, 2005). Charnley and Poe (2007) trace the evolution of community forestry theory since the 1970s, noting that wide variation makes generalisations difficult. Nevertheless, they distil three essential characteristics of successful community forestry on State-owned forestlands: 1) the government grants some degree of authority and responsibility for forests to a local community; 2) these forests are managed to provide social and economic benefits to these communities; and 3) management and uses are sustainable. Local access to forestlands is usually intimately linked to community forestry, with Ribot and Peluso (2003, p. 153) noting that access signifies 'the ability to derive benefits from things' and implies power and responsibilities, not just possessing the rights to the things. These characteristics have been confirmed in a multitude of case studies and in several meta-studies (eg. Glasmeier & Farrigan, 2005; Padgee et al., 2006; Porter-Bolland et al., 2012), along with a variety of other characteristics that have been identified as critical in specific situations. Several authors (Glasmeier & Farrigan, 2005) note that community forestry is often promoted as an alternative management process that can provide communities with better access and benefits than would be available from forests managed by government or private enterprise. Remembering that forestlands were often com-

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munally managed before current state-managed regimes, community forestry is also a way of re-appropriating pre-existing rights, responsibilities, and benefits.

We examine the Meadow Lake experience using a framework of four principles proposed by Teitelbaum (2017) based on a global literature review and Canadian case studies. The first principle, *participatory governance*, requires not only that local people participate in decision-making, but also that good governance provide clear rules, accountability, redress, and options for community engagement. Secondly, *rights* go beyond a simple matter of tenure to consider how the community can access, use, or transfer resources; what limits are imposed (and by whom); and how these rights are operationalised in practice. The third principle, *local benefits*, includes economic benefits such as employment, income, development, and diversification, as well as socio-cultural and ecological benefits and the equitable distribution of these benefits throughout the community. Fourthly, *ecological stewardship* calls for protecting a range of values associated with forestlands and often represents a community desire for an alternative to industrial harvesting techniques, supported by new paradigms for ecosystem resilience and adaptive management. The Teitelbaum (2017) framework highlights both the simplicity of the idea of community forests and the complexity of the various issues that need to be addressed if this is to be successful. However, we consider that Meadow Lake also exhibits a fifth principle, that of sound *relationships*, between people and with the land itself, enhancing the other four principles and providing the soul of community forestry.

The evolution of the Meadow Lake forestry model

The forestlands of the Meadow Lake area are the traditional lands of two Indigenous Peoples – the Dene in the north and the Cree in the south. The boreal forest, dominated by spruce (*Picea*), jack pine (*Pinus banksiana*), alder (*Alnus*), and poplar (*Populus*), and the northern fringe of the Great Plains support a rich and varied wildlife, and so the Dene and Cree peoples typically lived in small family and hunting groups. Survival through northern winters required strong communal ties; detailed knowledge of the land, the animals, and other resources; and respect for these (Mistik, 1996). European settlement began in the late 1800s (after an earlier trading post) as the Canadian federal government sought to sign treaties with the Indigenous nations that occupied specific territories with the goal of facilitating European settlement and of 'civilising' the Indigenous Peoples. While land was cleared for agriculture, the forest resources were not especially valued by the settlers, and it was not until 1930 that Saskatchewan received the right to manage its natural resources from the Federal government (Warnock, 2001).

Initially the provincial government was concerned with managing the impacts of drought and overcutting by small private sawmills and, following WWII, was directly managing its forests. However, similar to the rest of Canada, the government was seeking to attract capital to further develop its forest sector through the issuance of long-term forest agreements as well as directly owning manufacturing facilities (Warnock, 2001). This happened in Meadow Lake in 1971 when a US company built a sawmill, partly to supply woodchips to a paper mill in Prince Albert (about 300 km further east). The sawmill faced numerous operational problems, and in 1986 the Government of Saskatchewan, seeking to support economic development in the region, bought the mill (Anderson & Bone, 1995). Negotiations over the next two years resulted in the mill being purchased by a partnership between the MLTC (comprising four Dene and five Cree First Nations) and a company formed of mill employees and renamed NorSask. Two other conditions were important in these negotiations: MLTC sought control of the forestlands through the acquisition of a long-term Forest Management Agreement (FMA) from the provincial government, and the government required that MLTC agree to seek other partners to use the hardwood resource (Anderson & Bone, 1995). By 1992, Millar Western Pulp

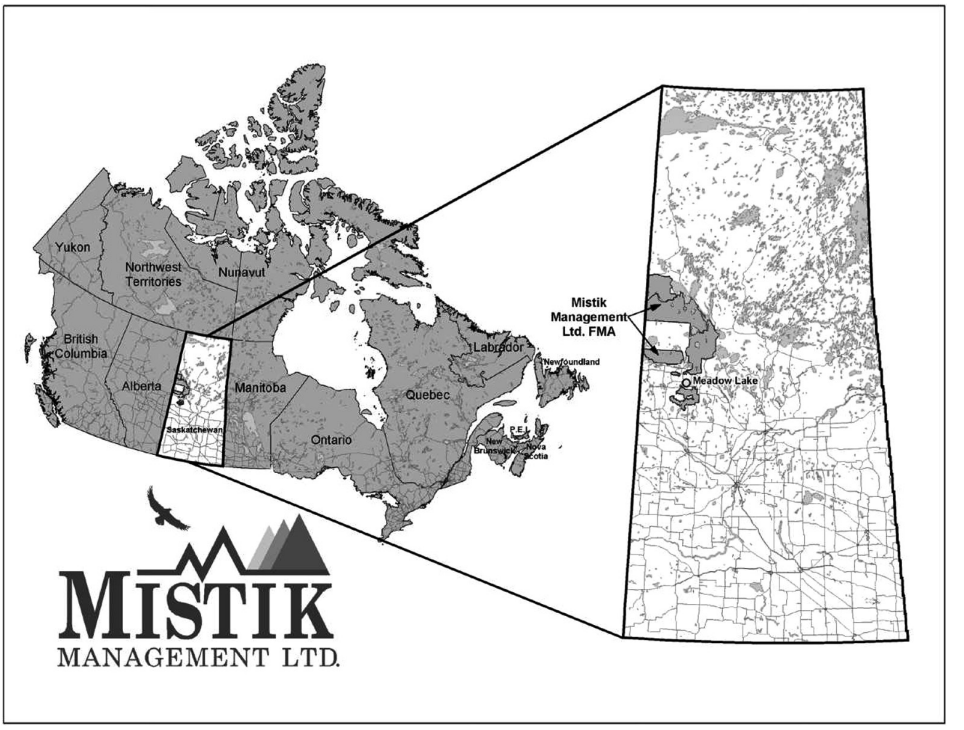


Figure 17.1 Map of Mistik Management Ltd. Forest Management Agreement Area (FMA) location in Saskatchewan, Canada (Mistik, 2007).

(MWP – a non-Indigenous paper pulp company) had built a pulp mill capable of treating about 600,000 m^3 of hardwood logs per year, and MWP joined with NorSask to establish Mistik Management to manage 3.3 Mha of forests (*Mistik* is a Cree word for wood). Figure 17.1 illustrates the land area, while the history is summarized in Table 17.1. Since 1992, NorSask has remained the largest Indigenous-owned sawmill in Canada (and possibly the world).

While key elements of the 1992 arrangement remain in place, changing circumstances and management have led to evolution in community roles, partners, governance, practices, and benefits. One of the most significant of these took place in 1992, when the Canoe Lake First Nation (the most populous member of MLTC) protested logging operations carried out by Mistik, blockading roads and filing a complaint with the provincial Human Rights Commission. The crisis was resolved by establishing co-management boards in 1994, comprising members of the communities who live and work there and are sensitive to local issues such as fishing, trapping, and logging. However, the events of 1992 demonstrate that community ownership is not sufficient to avoid conflicts and that effective engagement mechanisms are needed (Beckley & Korber, 1996). Other important events include changes in ownership: in 1998 MLTC became the full owner of NorSask (buying the shares held by employees), while MWP was acquired by Paper Excellence (an Asian-based conglomerate) in 2007 (Interview 2; SJRS, 2016). The government also reduced the area of the FMA by 1.4 Mha in 2002 to encourage the establishment of another mill to process the hardwood, with MLTC being a minor partner in this mill.

MLTC has also continually refined its governance and ownership structure, notably to distance operational management from political influence, as discussed here. Mistik has col-

Table 17.1 Timeline of Meadow Lake Tribal Council (MLTC) forest sector development

Year	*Events*
1971	Parsons and Whittemore build the first sawmill in Meadow Lake
1981	The Province of Saskatchewan acquired all mill assets from Parsons and Whittemore
1988	NorSask Forest Product Ltd. established and the first FMLA signed (3.3 million ha)
1990	Millar-Western Pulp mill built and Mistik Management Ltd. created
1992	Canoe Lake crisis erupted
1993	Co-management boards established
1994	MLTC transferred its business holdings to MLTC RDI;
1997	NorSask 20-Year Forest Management Plan (1997–2017)
1998	MLTC acquired 100 per cent ownership of NorSask Forest Product Ltd.
2002	Forest legislation changes, change to a Forest Management Agreement for 1.8 million ha
2004–07	Forest certifications – ISO 2004, CSA 2005, FSC 2007
2007	Mistik's 20-Year Forest Management Plan (2007–2027)
2007	Paper Excellence buys pulpmill, now named Meadow Lake Mechanical Pulp (MLMP)
2013	MLTC RDI launched MLTC II
2018	MLTC RDI purchased L & M Wood Products, a small timber mill near Meadow Lake
2019	Mistik's 20-Year Forest Management Plan (2019–2039)

laborated with several universities in research to improve forest management and sought independent third-party certification of their forest management under several schemes, including the Forest Stewardship Council in 2007 (Mistik, 2007). What has remained constant throughout this period, however, is that MLTC has applied a concept of 'anchor businesses' to its forestry endeavours, using the experience and resources gained in that sector to expand its business interests, both in forestry and in other sectors, and in encouraging First Nation members and individuals to establish other enterprises.

Methods

This case study is based on a collaborative project (2017–2020) between MLTC and researchers from four universities, with the goal of identifying factors that have contributed to the success of the Meadow Lake forestry model, as evidenced by its growth over more than 30 years. MLTC, its companies and partners, encouraged us to interview past and present employees and collaborators, in addition to giving us extensive access to documents describing the activities of these organisations. A total of 16 interviews are used in this chapter, representing a variety of positions in commercial enterprises, community leadership, and other stakeholders, both past and present, as summarised in Table 17.2.

Large-scale industrial forestry in a community forestry framework

Participatory governance

Governance, at its most fundamental level, is about how groups come together to collectively solve problems, addressing questions as to who holds power, how decisions are made, what role other actors play, and how those that make decisions are held accountable (Howlett et al., 2009). As an example of community forestry at an industrial scale, the Meadow Lake model

Table 17.2 Dates and participants for interviews cited in this study

Interviewee code	*Participant role*	*Date*
Interview 1	MLTC, previous employee	23 March 2017
Interview 2	MLMP, current employee	15 February 2018
Interview 3	Mistik, current employee	17 January 2019
Interview 4	Mistik, current employee	17 January 2019
Interview 5	Mistik, current employee	17 January 2019
Interview 6	NorSask/MLTC II, current employee	17 January 2019
Interview 7	MLMP, current employee	18 January 2019
Interview 8	L & M Wood Products, current employee	18 January 2019
Interview 9	Mistik Board Director	21 February 2019
Interview 10	Mistik, previous employee	21 February 2019
Interview 11	NorSask, current employee	21 February 2019
Interview 12	PAG member, community member	8 April 2019
Interview 13	Trapper, community member	8 April 2019
Interview 14	MLTC, current employee	8 April 2019
Interview 15	MLMP, current employee	12 April 2019
Interview 16	PAG member, community member	24 April 2019

has several governance characteristics, each of which must balance community control with business objectives. Firstly, the political-legal structure establishes the fundamental parameters of control, objectives, and the distribution of benefits. Secondly, operational management of the forest and of manufacturing processes are closest to the interests of the parties – the community, individuals who work or use the forests, commercial partners, and a multitude of others. Thirdly, a variety of participation and consultation processes have been established to enable both Indigenous and non-Indigenous parties to engage in decision-making. This governance structure, including shareholdings in various companies, is illustrated schematically in Figure 17.2, demonstrating the complex arrangement that has evolved to balance both community and business objectives.

At the heart of *political governance* is the Meadow Lake Tribal Council (MLTC), created in 1981 by ten First Nations (initially named Meadow Lake Tribal Chiefs) to strive for common goals on protecting and continuing to preserve their way of life. Economic development and management of resources on traditional lands were seen as a priority for benefitting all MLTC nations (Anderson & Bone, 1995). The council of each individual nation is responsible for community affairs and political negotiations with federal and provincial governments, while MLTC has jurisdiction over common affairs and a variety of social programmes for all member nations. As a council, MLTC consists of the elected chiefs of each of the member nations who determine policies and by-laws, with an elected Tribal Chief and Tribal Vice-Chief who are responsible for the overall leadership (Wyatt & Dumoe, in press). Commercial operations, including those in forestry, are held by MLTC Industrial Investments (MLTC II), whose shareholders are the ten member nations but whose board is comprised of seven independent directors. MLTC II is at 'arms-length' from the politics of MLTC, and the Board of Directors does not include elected officials from any of the MLTC Nations (Interview 1). This separation of operational and political roles was a key lesson from the Harvard project on American Indian Economic Development (Cornell & Kalt, 1992), and MLTC business activities have also been delegated to a separate for-profit organisation.

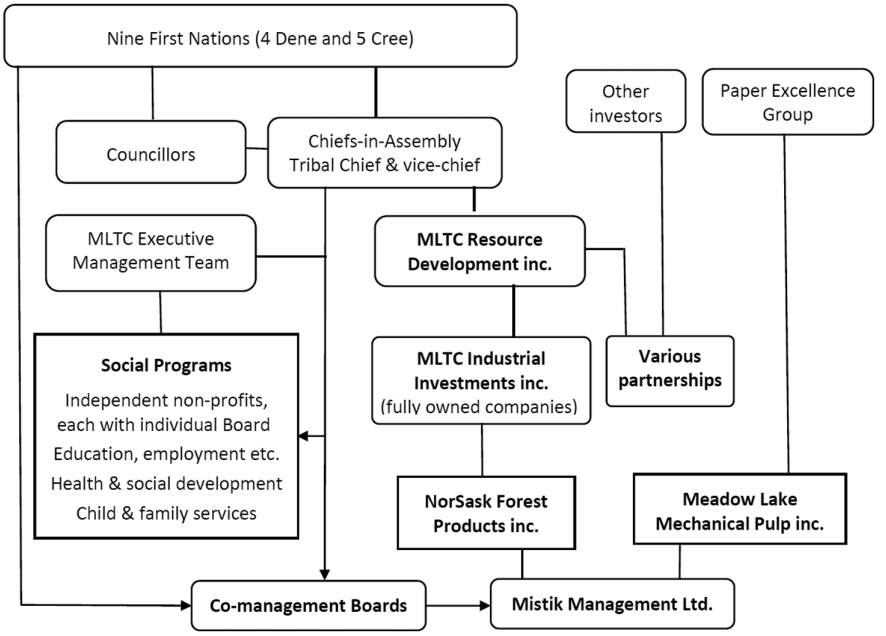


Figure 17.2 MLTC governance structure and relationship with various entities comprising the Meadow Lake forestry model.

Operational management and profitability of Indigenous forestry businesses benefit from strong separation from band governance (Trosper et al., 2008), highlighting the challenge of reconciling business economics and community governance. In addition to separating political and programme roles, Meadow Lake provides clearly distinguished roles in managing the forest and manufacturing processes. Mistik Management is a not-for-profit forest management company and is owned in exactly equal shares by NorSask sawmill (fully owned by MTLC II) and by the Meadow Lake Mechanical Pulp (MLMP) mill. MLMP is fully owned by Paper Excellence. Mistik has the responsibility of providing services and wood supply to each mill and negotiates a price for providing those services and wood on an annual basis. These distinct roles are unusual in Canadian commercial forestry, which is characterised by vertically integrated operations in which the tenure holder is often the primary processor (although there are many variations). NorSask and MLMP have quite different corporate and governance structures. NorSask is fully locally owned, and approximately 75 per cent of the staff are Indigenous. They see themselves with 'skin in the game' and operating in 'their backyard' (Interviews 3 and 6). In contrast, MLMP is a part of a larger, international group with a top-down corporate structure and roots in Asia, although they recruit extensively from Meadow Lake and the surrounding communities, including the MLTC member nations. To reconcile these very different approaches to running a forestry business, the Mistik Board is comprised of four directors from NorSask and MLTC plus another four from MLMP and Paper Excellence, with a non-Indigenous person based in Meadow Lake as Chair. Importantly, decision-making in the Mistik Board is based on obtaining a consensus.

> For the governance structure, unanimity is required by the Mistik Board of directors and the Board operates under a set of bylaws. This has sometimes caused a deadlock on

> controversial decisions but forces us to find a way to move beyond conflicts to find a resolution that balances values.
>
> *(Interview 9)*

Recognising shared objectives and a common need for wood fibre has helped the partners reconcile profit goals, an international vision, local benefits, and a commitment to ecological stewardship.

Mistik uses a variety of *participation and consultation mechanisms*, both formal and informal, to communicate with and solicit input from both Indigenous and non-Indigenous stakeholders (outfitters, trappers, traditional users, grazing permittees, wild rice growers, cabin owners, etc.), each with legal rights or customary claims on the same land area. This is a priority for managers. 'Human value concepts are embedded in every part of our system and planning' (Interview 10). Co-management boards, established in 1994 following the Canoe Lake crisis, provide a formal way of discussing plans with community members and of determining priorities for financial returns from Mistik to the communities as owners. In 1994, Mistik established a Public Advisory Group (PAG) as a higher-level forum with all major stakeholders who have an outside interest or are somehow affected by forest practices in the FMA, including representatives of the co-management boards. Informal mechanisms are more difficult to characterise but benefit from the fact that many staff of Mistik and the forest harvesting companies are members of their communities. Informal mechanisms are more difficult to characterise but benefit from the fact that many staff of Mistik and the forest harvesting companies are members of their communities, providing important informal mechanisms for a two-way flow of information and hearing community concerns, providing important informal mechanisms for a two-way flow of information and hearing community concerns.

Three attributes of the Meadow Lake governance model appear to have contributed particularly to its success. Firstly, the separation of political and operational decisions provides transparency and insulates both managers and political leaders from decision-making that could reduce profitability or have a political cost. However, Meadow Lake also has to balance this against the risk of too much separation, whereby the forestry businesses may be seen as no longer working to benefit the community, which can create community conflict (Hotte et al., 2018), as happened with the Canoe Lake crisis. Secondly, as a forest management company, Mistik has benefited from flexibility in developing their own operational practices that balance community expectations, provincial regulations, and financial viability. This is consistent with several of Ostrom's principles: matching rules governing use of common goods to local needs and conditions; ensuring that those affected by the rules can participate in modifying them; and ensuring that those who benefit from these decisions also bear the costs (Ostrom, 2005). 'Local level governance systems help ensure that non-timber values are included and that economic benefits are realised by the communities and people' (Interview 14). Communities participating in co-management boards can consider both the non-timber values in the FMA, employment opportunities for members, and financial returns, while elected leaders of MLTC must balance goals for social programmes, business viability and long-term development.

Rights

The Dene and Cree peoples of the MLTC communities hold a variety of rights flowing from different legal traditions and jurisdictions. Firstly, as occupants of the land 'since time immemorial', they have intrinsic rights that are recognised in the major inter-governmental processes. They are traditional stewards of the land, both responsible for it and having the right to use

it respectfully. In the Canadian legal system, this prior occupation of the land is recognised as Aboriginal title to the land, but this is not absolute, and the extent to which governments can authorise infringements is regularly debated in the Supreme Court (Isaac, 2012). As a related but distinct concept, Aboriginal rights have been recognised and affirmed (but not defined) in the Canadian Constitution since 1982. Legal rulings and government policies since then have led to a view that these include a range of cultural, social, political, and economic rights, including the right to land, as well as to fish, to hunt, to practice one's own culture, and to establish treaties (Isaac, 2012). However, Provinces have the legal right to Crown land and resources under the Constitution.

The historic treaties negotiated with Indigenous nations from the 18th to the early 20th centuries were eventually to cover more than half of Canada's land area. Treaty 6 (signed between 1876 and 1889) covers the southern part of the MLTC area, while Treaty 10 (1906) covers the northern part. While there are differences, the treaties established that Indigenous nations would share the land with settlers and that government would protect them from encroachment by settlers. Importantly, Indigenous negotiators sought assurance that they would be able to maintain their way of life. Despite traditional rights to land and promises in the treaties, however, provincial governments have continued to allocate property rights to other users such as the forestry and mining industries, and Indigenous groups are forced to undertake legal actions to try to secure recognition of their rights.

Given this background, it is perhaps surprising that the forest tenure held by Mistik Management is not based on recognition or assertion of traditional rights of the Cree and Dene peoples. Instead, Mistik holds a Forest Management Agreement (FMA) issued by the Saskatchewan Ministry of Environment, one that is broadly similar to other FMAs issued to other forest industry companies. Under FMAs, the holder is delegated responsibility for preparing a 20-year forest management plan that covers inventory, harvesting, renewal, roads, and public consultation; and for revising the plan every ten years (Mistik, 2007). This form of long-term, large-scale management tenure is one of the strongest types of tenure granted to Indigenous groups across Canada (Brubacher, 2007), short of co-management and sovereignty options that have been achieved only in a very small number of cases (Mabee & Hoberg, 2006).

Schlager and Ostrom (1992) provide a classification of four levels of rights relating to use and management of resources such as forests: accessing and using the resource, managing the resource, excluding others, and alienation (the right to sell or lease these rights to another). Mistik can access, use and manage timber resources on the land (but not water, mineral or other resources). However, Mistik cannot transfer their rights and the government is able to revoke certain rights, as happened in 2002, when part of the FMA was reallocated to another company.

This raises the question of why the Meadow Lake First Nations chose to accept the specific rights and responsibilities set out in an FMA when their Aboriginal and treaty rights are arguably broader. One of our informants explained that this was a choice, a trade-off, made at the time – to take up an opportunity being offered by the provincial government so as to establish themselves in the business of timber production, thereby gaining access to a range of employment and economic benefits (Interview 14). The FMA provided access to industrial-scale forest operations and partnerships, beyond traditional rights access. Even so, the MLTC negotiators in 1988 insisted that the original offer of the old sawmill should be accompanied by a forest tenure that would give them access and management rights over their traditional forestlands (Interview 1). While the Dene and Cree people hold Aboriginal and treaty rights over forest resources on the traditional lands, a variety of barriers effectively excluded them from managing the land or of sharing in the economic benefits associated with the forest industry. Choosing to accept an

FMA can be seen as a pragmatic choice in a situation where insisting upon full recognition of rights would almost certainly have entailed lengthy legal and political procedures. The FMA allowed the deployment of significant efforts to develop capacity and systems to manage the land in ways that would provide economic and social benefits desired by the community. This decision also represents a strategic choice for a collaborative approach with non-Indigenous parties rather than a more confrontational approach to asserting rights through the courts or protest, as has been done by other First Nations (Wyatt et al., 2019).

Local benefits

Benefits of community forestry include economic, ecological, and social-cultural elements (Charnley & Poe, 2007). There have been other models of locally owned large-scale forest tenures and manufacturing facilities in Canada over the past three decades (where locally-owned involves, in the case of facilities, a combination of employees, managers, community members and outside investors) but Meadow Lake is the only integrated model still operating today (Varghese et al., 2006).

The Meadow Lake model has evolved over 30 years to provide a system of benefit distribution and equity for communities and other stakeholders within and surrounding the FMA to include the following key components: (1) benefits being captured locally (Birch et al., 2014), (2) effective governance, (3) rights, and (4) tenure system. Economic sustainability has been a priority for MLTC as they have expanded their forestry value chain beyond NorSask and Mistik Management Ltd. to include L & M Wood Products, purchased in the Fall of 2018 (Interview 14).

By assisting with financial and management support for local Indigenous businesses that are sub-contractors to Mistik, local economic development is being expanded. This has led to increased local employment and to the maintenance of a flow of revenue at the local level. Waterhen Forestry Products Inc. is an excellent example of a successful Indigenous-owned local contractor business in the Meadow Lake model. It has weathered downturns in the markets and has expanded to become the largest Indigenous contractor in the Mistik FMA (Interview 14). Over 30 people are employed by Waterhen Forestry Products, with 95 per cent of the workforce being Indigenous from local areas.

MLTC has made economic growth a priority since 1986 (Wyatt & Dumoe, in press), demonstrated through the purchase of the sawmill in 1988, the creation of Mistik in 1992, acquisition of stakes in other businesses (both forestry and non-forestry), support for Indigenous-owned businesses, the establishment of MLTC II, and the purchase of another timber mill, L & M Wood Products in 2018. The revenue supports social programmes, infrastructure development and improvements, the creation of new business opportunities for local communities, and increased local benefits.

Local benefits take many forms, from direct revenue sharing and capture to social, cultural, and environmental development, protection, and enhancement (Birch et al., 2014). For local communities (both Indigenous and non-Indigenous), ecological stewardship (discussed in the following section) is also a key benefit. Trap lines, traditional hunting areas, and berry-picking sites are recognised as important cultural and traditional values that are also prioritised for protection in planning and management activities on the FMA (Interviews 6 and 16). The co-management boards and other elements of participatory governance promote the flow of money back into communities where harvesting is occurring to be allocated at the discretion of the community. Some examples of local benefits include the purchase of an ambulance, scholarships and training for youth, equipment for the community, and training and employment opportunities. Overall, the linkages between collaborative efforts and sustained local benefits

have increased capacity and community resilience, while also enhancing the sense of ownership and connectedness to the land and resources being managed.

Phase 1 of this research (Wyatt & Dumoe, in press) undertook a deeper analysis of the economic benefits of the Meadow Lake community forestry model, including looking at employment and revenue from both forestry and other business activities. Of particular interest is the Community Well-Being Index (CWBI), which integrates census data for education, housing, employment, and income to enable comparison between communities and over time (AANDC, 2015). The CWBI shows improvement for all MLTC member nations from 1981 to 2011, except Canoe Lake and Mistikwan Lake. The progress as measured against the CWBI for the MLTC nations is consistent with the average of First Nations across Canada, but has been insufficient to close the gap between Aboriginal and non-Aboriginal communities.

Ecological stewardship

In the Meadow Lake model, ecological stewardship is a balance of all forest values, including the application of science with sustainable forest management (SFM) and traditional ways rooted in Dene and Cree values (Interview 4). NorSask, which represents the values and objectives of MLTC communities, holds 50 per cent ownership of Mistik and has four members on the Mistik Board of Directors that are all part of the decision-making process for any planning and management that occurs on the Mistik FMA. Mistik's approach is dedicated to sustainable use and stewardship of their 1.9 Mha FMA over the long term. They draw on expertise from scientists, naturalists, elders, trappers, fishers, loggers, MLMP, NorSask, communities, and other stakeholders to combine traditional knowledge and science in their forest management.

Mistik is required to follow the tenets of SFM in the required 20-year Forest Management Plan and all other regulatory requirements in provincial forestry standards. Mistik is also voluntarily certified in its forest management by the Canadian Standards Association (CSA) and the Forest Stewardship Council (FSC). SFM and forest certification requirements are achieved and strengthened by Mistik's approach to ecological stewardship, and as a result of Mistik's strong commitment to engagement with communities and stakeholders. Working and meeting with communities, the Public Advisory Group (which also includes representation from the co-management boards), and other stakeholders on an ongoing basis, has become an important part of the way Mistik balances the values and objectives across the FMA. More recently, Mistik has taken a lead by using its most recent Forest Management Plan renewal in 2019 to identify climate vulnerabilities and identify adaptation options, the first example of a large-scale forest management agreement holder doing so in Canada, that we are aware of.

Meadow Lake's current approach to ecological stewardship is one of the key outcomes of the Canoe Lake crisis of 1992–1993. In its early years, Mistik was still developing its management practices and logging on traditional territories of the Canoe Lake First Nation, which was met with opposition and road blockages (Beckley & Korber, 1996). The key concerns were the impact of clear-cut logging on the land, hunting, and trapping; insufficient consultation with community members; and highly mechanised harvesting that provided fewer jobs than motor-manual techniques (O'Meara, 1992). Although the government and the courts authorised eviction of the protesters, Mistik, MLTC, and NorSask preferred to negotiate, establishing a co-management board that enabled the Canoe Lake community to participate in decision-making and planning to reduce the negative impacts of harvesting. Harvesting techniques and employment opportunities were also modified, along with the provision of increased local benefits.

Relationships

Participants in our study referred to relationships so often and in so many contexts that we considered that it justified being recognised as a fifth principle in community forestry. All our interviewees stressed the importance of including human values in management and engagement processes. These relationships took a variety of forms and we use the Cree concept of *Cheemeenooweecheeteeyaung*, or 'good relationships', which englobes three types of relationships: kinship relationships (within the community), respectful relationships with other people, and reverence for all creation (Shearer et al., 2009).

As evidenced by the Canoe Lake conflict, *relationships within the community* are not always harmonious. As a Mistik staff member stated, 'consulting with the community and public … takes time and can be a struggle at different levels' (Interview 3). This is consistent with experiences in community forestry elsewhere. Hotte et al. (2018) recommended that Indigenous organisations engaged in resource and land management need to establish a variety of mechanisms to ensure effective communication and consultation with members of their own communities. Mistik does this through co-management boards, the PAG, and chiefs sitting on the MLTC board (who establish broad directions but are not engaged in daily operations), and through informal connections between Mistik representatives and community members. Nevertheless, perfect harmony is probably unattainable, and there continue to be tensions with the Big Island Lake Cree Nation over questions of logging practices and benefits.

Respectful relationships with other people are also a key feature of the Mistik approach, especially as NorSask (fully Indigenous-owned) and MLMP (with final ownership in Asia) each own 50 per cent of Mistik, and so must agree on all Board decisions. Mistik staff identified several key strengths in their model: relationships established over time have helped to build a level of trust; the partners can agree to disagree on certain issues; and that approaches and practices are consistent. These strengths correspond to factors that are mentioned in other research on relationships in collaborative processes, including respect (Shearer et al., 2009), trust (Hotte et al., 2019), mutual learning (Saint-Arnaud et al., 2009) and social capital (Leahy & Anderson, 2010). In a similar way, these same characteristics need to apply in relationships with other groups, including the Saskatchewan government, non-Indigenous communities and forest-users, and other businesses. Building these relationships through forestry activities can also provide a base for better relations in other fields. As a MLTC leader said,

> we have created a process that has also increased knowledge and better understanding of different approaches and values. … helping work through challenging situations where there may be a clash of values, such as between trappers and Mistik and respect of trap lines.
>
> *(Interview 14)*

The importance of a *relationship with the land* is a frequent theme in much research examining Indigenous land management and governance, but is also being used with non-Indigenous people in concepts such as 'sense of place' (Cheng et al., 2003) or managing people–ecological systems (Kennedy & Koch, 2004). A Mistik board member explained that 'there is an Indigenous perspective that includes multiple generations of living on the land that Mistik respects in the planning and management of the resources' (Interview 9). This respect for the land, for traditional values, and for non-timber uses is also a strong motivator for ecological stewardship as discussed here.

Good relationships allow for disagreements, which can benefit the parties and the forest. 'We have invested 20 + years to get to the place we are at now with the level of trust and respect and

being able to disagree and find ways to move forward, even when the situations are challenging' (Interview 4). The conflict at Canoe Lake in 1992 led to the establishment of co-management boards, while more recent differences with Big Island Lake Cree Nation have also led to changes in building trust and strengthening the relationship between Big Island Lake Cree Nation and Mistik (Interview 5). Through this process, Big Island Cree Nation has removed Mistik from a lawsuit on land rights, and its members are working with Mistik to expand forestry practices in the area, involving the people of Big Island. Wyatt et al. (2019) describe how First Nations in Quebec use conflict to bring about transformational changes around decision-making for and access to land and resources, while also co-operating on other issues to maintain benefits and to build capacity. We consider that efforts put into building all three types of relationships over 30 years, and especially the respect that underlies each of these, are among the principles that have contributed to the success of the Meadow Lake experience.

Future challenges, vulnerabilities, and resilience

MLTC, Mistik, MLMP, and NorSask recognised that challenges and vulnerabilities from future changes need to be identified. These may involve changes in markets with economic downturns, climate and the environment, government and policy, social issues, and other potential impacts.

Financial sustainability is a principal challenge. Changes in markets, increased operating costs, and other related factors could all affect the competitive position of the partners. Meadow Lake is also reliant on mixed wood utilisation, with provincial requirements and regulations for harvesting and forest management of both softwood and hardwood species on the FMA. MLMP utilises the hardwood species to produce pulp, while NorSask uses softwood at the lumber mill. If there is a change in the market, affecting one of the mills, this could lead to vulnerabilities across the Meadow Lake model. Both mills must remain financially sustainable for the economic success of the Meadow Lake model. Meadow Lake has built diversity and flexibility through their model and economic development in local communities and MLTC II, which add to their capacity and resilience to deal with downturns in the market. Wood utilisation is also another area that has added flexibility; they are not at full utilisation capacity on the FMA (Interview 10).

Climate change is also a vulnerability identified in the Meadow Lake model which will affect both the biophysical and financial elements. Impacts of climate change have already been experienced and include reduced access to wood in the FMA due to wet conditions and frequency of extreme weather events, leading to mills running out of wood or becoming low on fibre supply in the mill yards; increase in loss of operational days due to weather events; increased wind events, resulting in large-scale blowdowns; and increased risk of wildfire due to warming and drying conditions. Climate change impacts and increasing climatic uncertainty are expected to continue and increase over time. To become more aware of the vulnerabilities on the FMA, Mistik completed a climate change vulnerability assessment of the SFM system. They developed adaptation options for strategic and operational components of the SFM system, which have become part of their management practices (Andrews-Key, 2018).

Other potential future challenges that partners, communities, and other stakeholders have identified in the Meadow Lake model include

- Changes in government and policy may require greater financial outlays in planning, management, and other forestry related activities, e.g., increased regulatory requirements surrounding environmental protection, mitigation for carbon emissions, and climate adaptation planning.

- Social issues with health and employment in communities continue to pose challenges (Interview 12), as is the case in many northern communities. While companies such as Mistik can support training, employment, and economic development, these are broader systemic issues that require actions from outside Meadow Lake.
- Continuing traditional land uses is becoming more difficult. Trapping and hunting – important activities for maintaining lifestyles, obtaining food, and for income – are hampered by a decline in wildlife populations and lower prices for furs (Interview 16).

The rights and tenure, governance structure, ecological stewardship, local benefits, and relationships are cornerstones of the Meadow Lake model. These tenets of community forestry in the Meadow Lake model have added to the capacity and resilience in dealing with challenges, identifying, assessing, and adapting to vulnerabilities and surviving economic downturns to date.

Conclusion

While the Meadow Lake example is significantly more complex than many other case studies, it shares many characteristics with other successful community forests, as described by Teitelbaum (2017). Despite differences in scale, we believe that there are important lessons that less complex community forests can learn from Meadow Lake.

Participatory governance is a defining characteristic of community forestry, and Meadow Lake shows that governance arrangements can be scaled-up for industrial management and production and allow a role for partners from outside the community. While the separation between political and operational management may be challenging in small-scale forestry, research has demonstrated its importance (Cornell & Kalt, 1992; Trosper et al., 2008). Meadow Lake's governance structure illustrates that it is not easy to balance community interest in forest management and operational needs, as evidenced by the opposition of Canoe Lake to actions by a company of which they were part owners.

Clear *rights* are recognised as important in community forestry, but Meadow Lake also demonstrates that progress is possible, even when rights are not so clear. The MLTC nations have not given up their Aboriginal and treaty rights but are also complying with a tenure system that is based in provincial legislation. All community forestry projects seek *local benefits*, and Meadow Lake is not an exception. Although this model is focused on an industrial approach to economic development, there are also a range of other environmental and social benefits. Mistik as a forest management company has developed and implemented its own approach to *ecological stewardship*, building upon traditional values and knowledge, while also meeting recognised international and national standards. However, this has only been possible because the company has had flexibility in its management decisions and been able to draw upon the expertise and knowledge of community members, professional managers, and external researchers.

We have gone beyond Teitelbaum (2017) in stressing the importance of *relationships*. The Canoe Lake crisis could have destroyed the Meadow Lake model, but instead has contributed to a stronger framework for building relationships among the communities. Similarly, building a large-scale industrial forestry complex would not have been possible without strong relationships with non-Indigenous partners, even when they are from very different cultural and corporate backgrounds. Finally, the relationship with the land is widely recognised as a defining characteristic of most Indigenous communities, and we suspect that it also applies in non-Indigenous community forests.

It is also important to note that MLTC, Mistik, MLMP, and NorSask have all recruited and trained both Indigenous and non-Indigenous persons, now qualified and experienced employ-

ees. This has helped maintain the viability of the mills in a highly competitive forest sector, including an economic crisis (2008–2011) that saw similar mills closing across Canada. Forestry operations such as harvesting, road construction, and transport are undertaken by independent contractors, often companies owned by MLTC member nations, families, or individuals. This requires working with and learning from non-Indigenous companies. A number of non-Indigenous staff have remained with the Meadow Lake companies for more than a decade, providing stability and leadership. Training and career opportunities have also been provided for members of MLTC communities (Interview 10).

The Meadow Lake model has evolved over the last 30 years, and this success is attributed in large part to the structure and strength of its governance, which has allowed members to use the rights they have obtained to generate lasting local benefits while maintaining ecological stewardship. This governance structure benefits from and contributes to building strong relationships between Indigenous and non-Indigenous parties, a key factor in the success of the Meadow Lake model.

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18

LISTENING WATCHFULLY

Following the Lílwat pathway towards reciprocal and relational forest research in Lílwat Indigenous Territory, British Columbia, Canada

Emily Doyle-Yamaguchi and Tonya Smith

Introduction

Globally, 36 per cent of intact forest landscapes (IFL) are within Indigenous peoples' lands, where deforestation rates are considerably lower and the storage of carbon stocks is higher than on other forest lands (Fa et al., 2020). The overlap between Indigenous forest management and IFLs can be attributed to the fact that forests have long been sites of Indigenous cultural survival, providing the materials for day-to-day life as well as grounding collective cultural knowledge and identity in the biophysical environment. Western scientific researchers are increasingly looking to Indigenous communities and Indigenous knowledges for solutions to the growing ecological crisis (Petzold et al., 2020) and are only beginning to recognise the interconnectedness of all life, long known within diverse Indigenous epistemes (Cajete, 2018; Simpson, 2017). Within Indigenous worldviews, the land is not only material, but also a 'system of reciprocal relations and obligations [which] can teach us about living our lives in relation to one another and the natural world in non-dominating and non-exploitative terms' (Coulthard, 2014, p. 13).

While research grounded in Western scientific ways of knowing and learning differs from the Indigenous ways of developing and sharing knowledge, Indigenous scholars and community members teach that there are ways that knowledge systems can be bridged to do critical and solutions-oriented research. Often, this involves researchers working with Indigenous Elders and Knowledge Keepers to integrate reciprocity and relationality into the methodologies. Explicitly seeking to understand and practice reciprocity and relationality as legitimate forest research objectives involves honouring the responsibility held by humans to non-human beings, as well as to other humans (McGregor, 2014). Actively incorporating reciprocity and relationality into research confronts the colonial erasure of Indigenous knowledge systems, which is perpetuated by extractive and harmful research done *on* rather than *with* Indigenous communities (Chilisa, 2019; Smith, 1999). Researchers can activate relationality when working with Indigenous communities by prioritising knowledge revitalisation and engaging with Indigenous ways of producing and sharing knowledge as research objectives that are equally important to hypothesis testing (Simpson, 2017). These steps are greatly improved if the research is led by Indigenous peoples and community members themselves (Thompson et al., 2020). Prioritising relationality

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makes space to realise that community well-being objectives are at the heart of community-based forestry research (Lyall et al., 2019; Sniveley & Williams, 2016).

Here, we share our experiences as researchers moving through the worlds of the Lílwat people of British Columbia, Canada, learning reciprocal and relational ways of engaging with forests. We describe our pursuit of ethical forest research, according to the Lílwat S7ístken Research Protocol, and the lessons we learned from the *Ucwálmicw tmicw* – a phrase in the Lílwat language signifying that the people and the land are together as one.

Learning relationality within the S7ístken Lílwat Research Protocol

The stories we share here are an outcome of research with the Lílwat Nation to support community-defined goals in forestry, namely, to adapt forest management planning to protect cultural foods and medicinal plants. As part of a relational research process, and following the guidance and leadership of Lílwat Nation hosts, several steps were taken before the research began. Firstly, the research project topics were defined by the Lílwat Nation to fulfil their own needs. This is an important step, as research is a 'dirty word' (Smith, 1999, p. 1) for many Indigenous peoples, including members of the Lílwat Nation, who have experienced extractive research conducted by non-Indigenous researchers in the past. For the Lílwat Nation, research



Figure 18.1 The authors learning from Martin Nelson how to find pine mushrooms. © Emily Doyle-Yamaguchi.

is emerging as a means to be involved in defining a future for their own people. Assistance from non-Lílwat researchers is sometimes necessary to accomplish community goals, such as protecting and recording cultural knowledge and practices in forestry in a way that can be understood by forest managers and government decision makers (Jordon Gabriel, Lílwat Nation, Mount Currie, BC, personal communication, March 2021).

Secondly, approvals were sought and provided by the Lílwat Culture, Heritage and Language Authority (LCHLA) to pursue each research project. The LCHLA is 'the first point of contact for researchers interested in working with the Lílwat community for research in the areas of culture, heritage and language' (Leo et al., 2006, p. 7). In a process of co-creating each aspect of the research, both projects were considered from the many points of view held by each member of the LCHLA, who are Elders and Knowledge Keepers that are chosen speakers for the community.

Thirdly, clear agreements were made at the outset of the research, between Lílwat First Nation and the UBC Faculty of Forestry researchers, about ownership, access, control and possession of knowledge, and data used and produced during our research. These agreements follow the Ownership, Control, Access, and Possession (OCAP) Principles created by the First Nations Information Governance Center (2020), along with the TCPS 2: Course on Research Ethics (CORE) guidelines created by the Canadian Government's Tri-Agency funding councils (2020). The agreements go beyond these ethical guidelines in supporting the specific principles and wording requested by the LCHLA in defining what ethical data ownership, control, access, and possession entail for the Lílwat Nation. The Lílwat Nation ensures that all outside researchers who want to work with the community follow ownership and access guidelines that give the Lílwat Nation executive ownership to, and authority regarding use of, research results and data collected within the community.

In addition to these steps, the standard approvals from the University of British Columbia's Behavioural Ethics and Review Board were also obtained. This chapter has also received approval in concept from the LCHLA. No content herein has been included without the consent of those who shared knowledge and teachings with us. We are grateful for the ongoing role of the LCHLA, whose members must approve all the outputs and deliverables from each research project. Following engagement with the formal ethical steps to beginning the Lílwat-led relational research process, we were asked to read and learn the S7ístken Lílwat Research Protocol (Leo et al., 2006). This Protocol highlights core teachings of a Lílwat approach to doing relational and collaborative research. Based in principles of Participatory Action Research, the S7ístken Protocol prioritises Lílwat community interests and the protection of Lílwat intellectual property within any research endeavour (Leo et al., 2006). The S7ístken Protocol provides guidelines for moving towards respectful research relations and is a place-based research methodology rooted in Lílwat values (Leo et al., 2006). The structure of the Protocol is guided by the construction of a s7ístken – a Lílwat pit house – and is centred on six teaching and learning concepts, translated from Ucwalmícwts (the Lílwat language) by Dr Lorna Williams, Lílwat scholar and former Canada Research Chair in Indigenous Knowledge and Learning (Leo et al., 2006, p. 2). These teachings are reprinted here with consent of the LCHLA, and include

Célhcelh – Taking responsibility for personal learning and taking initiative within the learning community.
Cwelelép – The discomfort and value of being in a place of dissonance, uncertainty, and anticipation.
Á7xa7cal – Locating the infinite capacity we all have to answer our own questions as learners.
Kamucwkálha – The energy indicating group cohesion around a common goal.
Watchful Listening – Having an openness to listening beyond our own personal thoughts and assumptions.
Katíla – Finding stillness amidst our busyness and need to know.

These teachings have always existed within Lílwat ways of knowing and of being, known as Ntákmen (meaning 'our way'), and are reflected in the S7ístken Research Protocol. Experiences with 'helicopter' researchers, even quite literally flying in and out of the Lílwat community to conduct brief and extractive research encounters, as well as with research that was non-reciprocal, conducted without permission, inappropriately incentivised, and/or unrightfully claimed ownership to Lílwat intellectual property, form the backdrop against which the S7ístken Protocol was developed (Leo et al., 2006). The S7ístken Protocol, through its guidance, relocates power over research agendas and the rules of engagement from the academy to the community. We have been honoured to observe community protocols about when and how research can and may occur, particularly in observing times of community gatherings when all work is paused. Moreover, the process has enhanced each of our personal learnings about forests and about life in a way that has changed us and has been deeply rewarding.

Following Louise Fortmann's (2014) assertion that research is always collaborative, this chapter reflects on the interactive dynamics that characterise our research experiences in Lílwat. Writing from a first-person point of view, we use autoethnography and reflexivity to demonstrate how 'sentimentality both challenges and complements the emergent authority of objectivist science' (Pratt, 2008, p. 73). We attempt honesty in our reflections, recognising our personal affective experiences of research both as shortcomings and strengths, as well as to 'make visible the reasons for reciprocity' and share the 'profound experiences' that we were gifted as part of the research from collaborators and participants (Fortmann, 2014, p. 3) (Figure 18.1). Here, we emphasise to readers that as 'settler'[1] researchers, our first-person points of view are not a replacement for the points of view expressed by Lílwat voices. We listen to hear and to learn from Lílwat voices in our experiences as researchers. We listen in our ongoing relationships with those who led the research, and use every opportunity available to us to elevate those voices in our thesis/dissertation and in conferences where we are often co-presenters. We offer our points of view together here with the hope that other non-Indigenous researchers can learn what pursuing Indigenous community-led research in a good way might look like – and to encourage you/them to seek out and learn about the protocols specific to the Indigenous community with whom you/they hope to work.

Autoethnography: One tool of an Indigenous research methodology

Described by Hokkanen (2017) as the combination of 'introspection and cultural analysis' (p. 27), autoethnography is the primary method we have used in writing this chapter. Within the respective time spent in Lílwat Territory, we have each documented and navigated our experiences while engaging with the research topics and the people and surroundings with whom we work(ed). Analysing and reflecting on this documentation and our experiences form the crux of our autoethnographic method. We reflected on our visceral experiences of those moments to locate ourselves in the data, and to make plain our presence as 'highly visible social actor[s] within the written text' of our work (Anderson, 2006, p. 383), as well as to enable richer and more complex analysis. Here we offer a sample of our reflections on these encounters, and the lessons learned for working within a Lílwat-led relational research process on forest-related topics.

Location

Lílwat Territory spans nearly 800,000 hectares, extending south to Rubble Creek, north to Gates Lake, east to the Upper Stein Valley, and west to the Pacific Ocean, in the Province of British

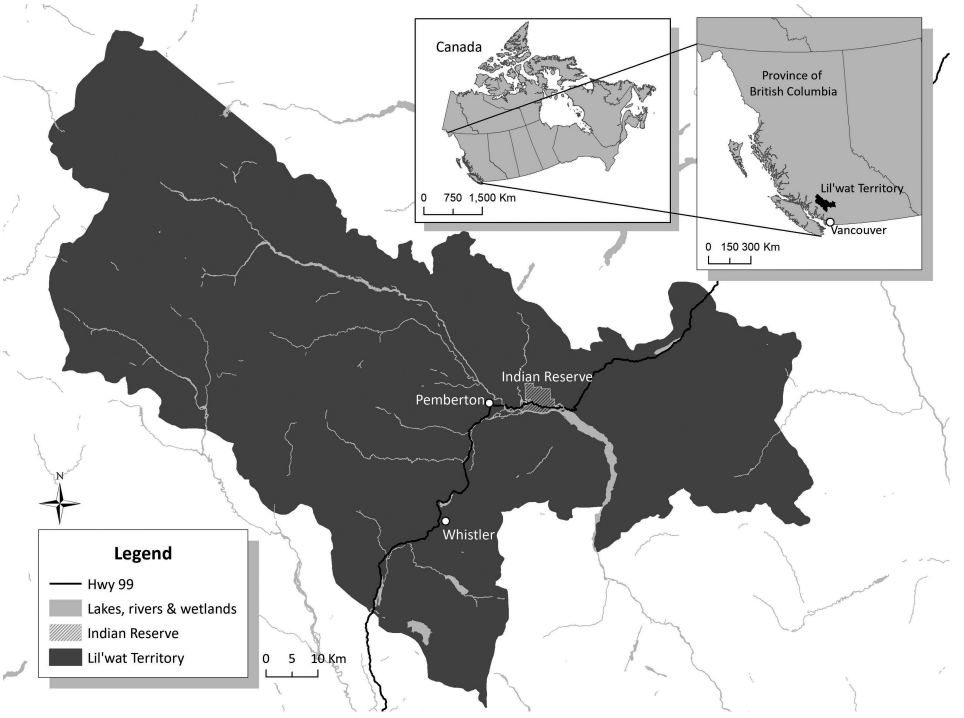


Figure 18.2 Location of Lílwat Territory. Source: Emily Doyle-Yamaguchi.

Columbia (BC), Canada (Lílwat Nation, 2008) (Figure 18.2). Lílwat is one of 12 Stáťyemc Nations, who are Interior Salish peoples speaking the Ucwalmícwts language and among whom there are many inter-marriages and family bonds. The Lílwat Nation has the third largest on-reserve First Nation population in BC (Lílwat Nation, 2008). The heart of Lílwat Territory is the convergence of three rivers, which descend from the surrounding Coast Mountains that stretch along the western side of BC, separating the wetter, mild coastal areas from the drier interior of the province (Figure 18.3). Lílwat people are historically traders, enabling the flow of goods between communities on the coast and the interior (Lílwat Nation, 2008). Lilwat7úl (Lílwat citizens) are fishers and hunters who have close ties with the land, as Ucwalmícw Tmicw ('the people and the land as one') (Lílwat Nation, 2017). Since colonial settlement in the 1850s, the Lílwat Nation has occupied ten tiny reserves that make up only 0.004 per cent of the territory (Lílwat Nation, 2008). However, the 1911 Stáťyemc Declaration states that the Stáťyemc Nations, including the Lílwat Nation, have never ceded any of their collective rights to the territory.

Reflections

Gifts from Jeanie

Emily Doyle-Yamaguchi

I met Jeanie Andrew through Tonya. Jeanie is 77 years old, a Lílwat mother and a grandmother, and a person highly regarded in her community for her expertise in plants and traditional harvesting and use. When first seeking people to interview regarding *q̓em̓s* (*Tricholoma murrillianum*,



Figure 18.3 Lillooet River and valley. © Emily Doyle-Yamaguchi.

pine mushrooms), Jeanie's name did not immediately come up. Jeanie is not a commercial mushroom picker. Her main goal is not to earn an income from harvesting mushrooms, but to gather food. After I had earned the privilege of interviewing Jeanie, she shared with me her knowledge about gathering food – including pine mushrooms – and her concerns for the future. But the prelude to that moment, to the 'data gathering', is just as important to explore, and is the focus of what I share here.

Interviewing Jeanie was, indeed, a *privilege to be earned*. Let me explain. I have no inherent right to ask her, or any other Lílwat person, about their lives and culture, and expect an answer. Without an invitation, my questions are an intrusion into the private lives of not just the people with whom I wish to speak, but also their friends, family, and ancestors. If this seems strange to you, ask yourself: how would it feel if a stranger asked to have an hour-long conversation about your deepest family secrets? And what if that person stared in disbelief when you said 'no, thank you'? Indigenous lives, knowledge, and culture are no more part of the public domain than your relationship with your loved ones. This is, perhaps, one of the most important lessons I have learned during my time as a student-researcher.

Introductions were needed before I could ask Jeanie if she would speak with me. An opportunity came in late October 2019, when Tonya would be helping Jeanie, and other co-researchers to gather wild medicine and food. My contribution would be to provide extra transportation, and to help harvest. The day before the trip, I had gone out with Jordon Gabriel, my primary Lílwat research collaborator and Field Supervisor for Lílwat Forestry Ventures, to collect ecological field data. We found pine mushrooms and picked them to share with others. I prepared a bag of mushrooms to give to Jeanie as a thank you gift for inviting me, as well as small bags of tobacco for Jeanie, Susie (Jeanie's sister), and Koskas (a Líl'wat researcher). During previous field trips with Tonya and Jordon, I learned that it is important to thank the land for keeping you safe, and providing food and medicine. One way that Lílwat people do so is by leaving tobacco when they arrive at their food gathering place. The tobacco was a gesture for me to convey my thanks and respect to Jeanie, her sister, and Koskas for their hospitality and teachings that day.

After a long drive, and short walk from the road, we spent the better part of the day picking *qwemtsáols* (*Vaccinium oxycoccus*, bog cranberry) (Figure 18.4). The picking place could not have

been more different from the kind of habitat where you would find pine mushrooms. However, spending time *not* thinking and talking about pine mushrooms was an important precursor to talking about pine mushrooms. I was a human, spending time with other humans; laughing, learning, and sharing food. Doing so was consistent with the S7ístken Research Protocol teaching and learning concept: *célhcelh*, which involves taking time to build relationships and spending time in the community beyond research activities (Leo et al., 2006, p. 2). I was participating in what Aluli-Meyer (2008) terms 'an epistemology of spirit', where we are 'of service, [not getting] drawn into the ego nurtured in academia' (p. 4) – a pathway towards knowledge that is built on relationships, not just fact-finding and/or career building.

A few days later, we spent the day with Martin Nelson – one of the most experienced mushroom pickers in Lílwat, and one of two people from whom I learned the most about pine mushrooms. We found more pine mushrooms that day than on any other I had spent doing field work so far. Martin gave me a full bag to keep and share. I put a large amount in a bag and left them on Jeanie's doorstep. Sometime later, she gave me a bottle of concentrated *sxúsum* (soapberry) juice, but asked for the bottle back because she uses them for canning and they can be hard to come by. On my next trip to Lílwat, I brought with me a dozen canning bottles for Jeanie. It was around that time – a month after the day we first met – that I finally felt I could ask Jeanie if she would allow me to interview her. I was elated when she said yes. We had lunch together first, and then spent over an hour talking. She shared with me stories, answered my questions, and showed



Figure 18.4 Qwemtsáo̓ls (*Vaccinium oxycoccus*, bog cranberry) © Emily Doyle-Yamaguchi.

me photos of plants and food preparation on her Pinterest feed. It was wonderful. While it was customary to provide an honorarium for this kind of exchange, my gift was nothing compared to what she gave me. When I picked her up at her house that morning, she gave me a beautiful red wool hat that she knitted, and a jar of bog cranberry jelly. I want to underscore the value of these gifts. Bog cranberries are very small, smaller than the eraser at the end of a pencil. Anyone who has ever made jam will know how much fruit boils down in the process, and the volume needed to turn fresh fruit into preserves. Hours of travel time, picking, cleaning jars, making the jam, and letting it set went into making that jar she gifted me. This does not include the time Jeanie spent learning from her ancestors where and how to pick and preserve.

Not only was I deeply touched, but Jeanie's generosity (with her gifts, her time, and the knowledge she shared) also brought me into the story of people and place, of Lil̓watúl and Lílwat. By inviting me to briefly participate in and witness the Lílwat world of Jeanie Andrew, I became invested in the future of that world, and accountable to all the people who share in it. Beyond an exchange of material and intellectual abundance, Jeanie offered gifts of personal abundance (Fortmann, 2014); she offered friendship and the chance for me to form ties with a new community. To borrow a phrase from Fortmann (2014, p. 4), 'I could never give my research team and other [community members] as much as they gave me'.

Effect begins with intention

Emily Doyle-Yamaguchi

Gélpcal Chief Ashley Joseph is the Cultural Chief of Lílwat Nation, a father, husband, teacher, artist, and Knowledge Keeper regarding wild foods and medicines, including pine mushrooms. The first time I met Chief Ashley, it was in late September 2019. Jordon and I asked to meet with him in preparation for an upcoming open house we organised to generate the interest of Lílwat mushroom pickers. Our conversation began with what to address during the open house, but soon shifted to a discussion about pine mushroom stewardship and being on the land. 'Your intention when you come into the forest affects how much you find … listen to your conscience', he advised.

Just a few days earlier, I had begun an intense seven-day period of field work to collect ecological data about the habitat in which pine mushrooms grow. My research is interdisciplinary and includes both a quantitative and qualitative component. The quantitative aspect of my research primarily consists of building a habitat suitability model and producing a map that Lílwat Nation can use to inform their decisions about pine mushroom management. The modelling is driven by a general hypothesis that pine mushrooms do not grow in random locations – that they grow because of certain environmental variables and their interactions. I wanted to know which variables mattered most, or would be the most useful, for predicting pine mushroom habitat.

But Lilwat7úl have always known that the pine mushroom's presence is not random. Once I put down my 'science sticks' (the nickname given to my sampling quadrat by Jordon and Tonya) and started listening, I learned from my Lílwat teachers that pine mushrooms emerge because of a complex web of relationships as old as time. The moon, the sun, the trees, the soil, the deer, the bears, the wind, the rain, the people … these are all a part of the pine mushroom's ontology. In Martin's words, 'the pine mushroom has a mind of its own' (Nelson, 2019, personal communication).

It would be a little while before I did start listening, however. When we began the field data collection in late September, I was completely preoccupied with avoiding collecting biased

data. Western scientific convention holds that a randomly selected, unbiased sample is the only reliable way to test a hypothesis and extrapolate results to represent the 'true population' – the unknown total of the species being studied. A 'biased' sampling method is deemed not rigorous, and the results are considered of limited use. I had devised a sampling plan that involved randomly selecting sample points across the territory. Over the course of three days and a few hundred kilometres, Tonya, Jordon and I visited 20 different locations. Only five ended up having any pine mushrooms. Given the time and resources we spent, this did not feel like success. I was worried and frustrated because the modelling software I would use requires presence data, and many more data points than we had gathered. I also had a strong feeling that I was not going about things the right way, but I did not know why.

Jordon, who is an experienced mushroom picker, traditional knowledge holder, and astute observer, already knew that we would not find many mushrooms at these random sites, but went along with my plan anyway. We arrived at a location that my mapping told us should be suitable habitat and should fall under a certain category of canopy cover. In reality, neither seemed to be true. Nothing made sense, and I felt ready to give up. Jordon noted, however, that he had seen some qems (chanterelle) mushrooms growing while he walked around in search of pine mushrooms, which almost immediately changed my mood. Chanterelle mushrooms are delicious! He brought us over to the small patch and we harvested them to take home and share with friends. Jordon also noted that he had seen a coveted medicinal plant, and that we should harvest some for a family member who is recovering from illness.

Taking time to shift my intentions from being a scientist to being a human, a human that is also connected to other humans, as well as non-humans like mushrooms, and plants, helped me to see that I was not listening, to the land or to Jordon. 'Plants are carriers of knowledge'



Figure 18.5 The authors and Jordon Gabriel, research collaborator and Field Supervisor for Líl̓wat Forestry Ventures © Emily Doyle-Yamaguchi.

(Kimmerer 2011, p. 69), and they, along with the terrain, were telling me that we were not in the right place to find pine mushrooms. Although Jordon supportively drove us all over the territory, he noted that many of the places I asked to go to were not mushroom areas known to Lílwat people. But I was not listening. Things changed, however, once I did start listening. I opened myself to another way of seeing and being in the forest, extending the scope of my Western scientific knowledge to include the relational, diachronic, and qualitative (Kimmerer & Lake, 2001) Lílwat knowledge of pine mushrooms held by Jordon and his community. Following Jordon's lead, we found many, many pine mushrooms – and we gathered them with the intent to share. We still travelled to different parts of the territory to collect our samples from a range of representative sites, but where we went was guided by the knowledge of Jordon and others, whose knowledge of pine mushrooms draws from generations of experience.

Fortmann (2014) states, '[t]he people we work with in the field literally give us our careers' (p. 2). Without Jordon, I would not have found pine mushrooms – a necessity for conducting my quantitative species distribution modelling. I also would not have learned about the place of pine mushrooms within Lílwat social fabric, where harvesting is not just a matter of meeting one's own individual needs but is done with a mind towards the needs of friends and family. This experience would later lead me to more insightful qualitative analysis of the importance of pine mushrooms to Lílwat people. Perhaps more importantly however, my willingness to let go of my ego and be vulnerable allowed for a bonding experience with Jordon and Tonya, and demonstrated that I valued Jordon's knowledge and experience, which, in turn, supported a continuing research collaboration built on mutual respect and trust (Figure 18.5). Repositioning my intentions towards the forest and towards the people who know it best enabled more successful and respectful research.

Kamucwkálha: Coming together for a goal

Tonya Smith

One day, we were at the Lílwat Community Garden, working away at weeding, and a visitor asks us what we have been up to; 'A whole lot of fun', responds Koskas laughing. Koskas is a Lílwat researcher who has been guiding the Lílwat Food Security Project. Each time we are asked about the research, we have done a verbal dance trying to explain the many activities that are a part of it: tending to plants and growing and harvesting food; providing educational opportunities for Lílwat youth; helping Elders; learning and documenting knowledge of traditional foods and medicines; speaking at conferences; writing reports; working with Lílwat Forestry Ventures on stewardship activities – there is no easy way to summarise the many activities that constitute this research.

> 'But at the core of it, in its essence', Koskas says, 'the research is about people coming together to have a good time with one another.'
>
> *(TS Field Notes, September 2018).*

What is so special about this? Considering how Western researchers often think about research, this research initiative deviates a great deal from conventional science. The goal identified by Koskas better reflects the relational approach of the S7ístken Research Protocol (Leo et al., 2006), wherein human relationships form the heart of research, and research questions, methods, and outcomes are subjective.

One of the foundational aspects of our work together was tending to the human relationships of the research. In some ways, the strong relationships we have taken time to foster among the research team have enabled us to do much better research. We are on a journey of building a foundation of trust and are constantly working towards accountability with one another. To ensure that monetary support is available for community researchers is only the very first step for academic research to begin to value the labour and lifetimes of knowledge and brilliance created and maintained within Indigenous community-led research (Sniveley & Williams, 2016). Our strong personal relationships involve caring for each other through the exchange of gifts and medicines, fun experiences and time spent together, emotional and physical support, and various other forms of non-tangible care. We present our research process and findings together at conferences, which provides a much richer and nuanced account of our research

Our close bonds and relationships can also create complexities in the research process. How much of what is taught is shareable? How much of our interactions have to do with the research versus the personal? The relationship we have with one another involves more responsibility than either a personal or research relationship alone would. It is vital that we continue to communicate and check in with each other on these topics. This requires the important step of reflecting on and refracting our own knowledge of what is respectful, responsible, and reciprocal (Chilisa, 2019). What makes this possible is that we value the relationships with one another more than the specific tasks that might be planned for a day. In other words, we 'go with the flow' of what any given day of research might hold, adapting to emergent information and situations as they present themselves. One of Koskas' teachings is about the importance of an adaptive research process – do not force things if they do not come easily. There is a reason that things are not working as anticipated, which will be made apparent when we move ahead in an easeful direction.

Another of the teachings Koskas brings is to always remember the healing power of having fun. Laughing and being in joy together is one of the ways that Lílwat and other Indigenous Peoples have survived within settler colonial systems (Maynard & Simpson, 2021). Koskas teaches that joy and fun are also important in research, by, for example, attracting interest from people who may bring important contributions to the work. When we are having a good time together, laughing and joking and storytelling, others become curious about what we are doing, and sometimes ask to join in. When we go out to gather foods or medicines, our laughter inspires people to want to join us, instead of us having to actively search for participants. Joy also promotes learning without realising you are learning, and builds long-term interest and commitment in the research. Joyful collaboration and quick-witted humour are a part of how Lílwat people live *n̓tákmen*, the Lílwat way, and is also apparent in how community members help one another out in times of need.

> 'When what we are doing seems like a good time to us all, it is much easier to commit to doing days of research together without it seeming like a burden. Each day is a gift.'
> *(TS Field Notes, August 2019).*

Bringing in joy does not mean that we are only attending to positivity. Yes, joy and fun enable hopefulness for the future. But hard topics can also come up when you are having fun, and deep learning can occur. Joy and fun provide an excellent cushion for life's harder bits of learning, which would otherwise be uncomfortable, agitating, or very sad. Koskas teaches that if you are not having fun, then perhaps you are following a way of doing things that was forced on Indigenous peoples as part of the legacy of Residential Schools:[2]

> 'Koskas lets us know he rejects anything that has the feel of Residential School and does not tolerate research or programming that he feels is guided by those rigid, assimilatory values'
>
> *(TS Field Notes, October 2018).*

One thing that comes easily when we are having fun is dreaming, which is an important aspect of research. Our bodies, filled with dopamine, serotonin, and the other mood-boosting and regulating chemicals, feel light and able to envision how the research we are doing can create desirable changes for the future:

> 'When we are doing research in the community, or out on the land, we are embodying the type of future that we are working towards. We are living by Lílwat protocols and laws, because we are listening to and being guided by Elders who are carrying on ancestral teachings'.
>
> *(TS Field Notes, 2018–2019).*

'We are living in relationality; we are tending to the land and waters with our actions and intentions'.

> 'In many ways, the research process is also the outcome'.
>
> *(TS Field Notes May 2018).*

We are living in the ways that Indigenous food sovereignty[3] can be embodied; we are finding the ways it can be made practicable, given the constraints of the real world. We are Lílwat/Indigenous peoples and settler peoples working together in a balanced and harmonious way, being respectful of one another's similarities and differences and honouring them as strengths. Through doing this and asking others to join us, the research is being implemented as part of its process. This is a relational research process, where following the guidance of an Elder can provide the ethical framework that university ethics boards cannot.

In this research, we did not always know where it was going, but it always got us to a good place where we were learning beyond what we had imagined was possible.

Conclusion

In this chapter we share auto-ethnographical accounts of working within the Lílwat S7ístken Research Protocol, framed within broader theories and approaches within Indigenous research methodologies. Our reflections on being guided by Elders demonstrate some consideration on how to do research that minimises harm and prioritises the interests and needs of Lílwat community members. We share first-hand accounts of learning how to follow Lílwat community protocols, including *kat'íla* ('how to move beyond the need-to-know into stillness'); experiencing *kamucwkálha* ('the energy indicating group cohesion around a common goal'), and *kalán* ('listening and being aware of what is being taught and shown') (Leo et al., 2006, p. 2). We point to reciprocal and relational conduct as precursors to successful research collaborations with Indigenous communities, both within our own experiences and as highlighted in the literature. Through sharing our experiences with other academic researchers who may be interested in working with Indigenous communities, we encourage a shift from top-down, outcome-driven approaches to those that are heart-centred, process-oriented, and built from the ground up.

Through being guided to think within a Lílwat cultural framework, to know the territory as Elders teach it, we have expanded our understanding of how to be in and learn about for-

est landscapes. Given the history of extractive colonialist research practices and paradigms, it is essential that researchers are open to learning to walk lightly and follow the guidance offered by Indigenous Researchers, Elders, and Knowledge Keepers. This may involve embracing objectives currently perceived to be outside of the status quo research scope, to include social responsibilities, reciprocity, and respecting the autonomy of each person who chooses to participate in the research. The S7ístken Research Protocol has shown us how research outcomes can be made richer and more effective at addressing holistic community well-being by actively seeking to cultivate reciprocity and relationality within forest-based research.

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Notes

1 A 'settler' is a person of non-Indigenous ancestry living on an Indigenous territory, and/or whose ancestor(s) travelled from their homeland to establish residence and/or business on Indigenous land, which may not have been ceded by the Indigenous peoples.
2 Indigenous children across Canada were forced to attend 'Residential Schools'. The first opened in 1831 (National Centre for Truth and Reconciliation, 2021) and the last closed in 1996 (CBC News, 2008). Not only were the children forced to attend against their will, and against the will of their families; the 'schools' were also located far from their homes, and the children suffered abhorrent abuse at the hands of their 'teachers'. Concerted efforts were made by the Canadian government to eradicate the children's knowledge of and connection to their ancestral languages and cultures. Many children died while attending, or attempting to escape from, the 'schools'. The traumatic effects of Residential Schools continue to be felt by Residential School survivors, their families, and their communities (National Centre for Truth and Reconciliation, 2021).
3 Indigenous food sovereignty ascribes the right of Indigenous peoples 'to freely decide their own food and agricultural policies' (Food and Agriculture Organisation of the United Nations, 2008, p. 3), including what to plant and with whom to trade, and is a concept that makes visible the power dynamics inherent to systems of food production and consumption.

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‘WE ALL HAVE THIS MOTHER’

Land tenure conflicts and Indigenous forest communities in Argentina

Mónica Gabay and Ricardo Julián Apaza

Introduction

Community forestry in Latin America has evolved in widely different ways, as the recognition of property rights involves situations ranging from strong land tenure and forest management rights (e.g. Bolivia, Guatemala) to rather weak actual recognition, as is the case in Argentina (Alanda & Victoria, 2016; Castelnuovo Biraben, 2018; Gabay & Rekola, 2019). This chapter shows that, despite the legal framework that recognises Indigenous land tenure rights, the failure to fully implement and enforce these regulations has resulted in the intensification of conflicts and, in some cases, the expulsion of Indigenous communities from their ancestral land. These situations occur within the context of what David Harvey would call dispossession by accumulation[1] linked to the expansion of the agricultural frontier (Gabay & Alam, 2017; Harvey 2003, 2004) and power asymmetries that invisibilise and render communities powerless (Gabay, 2013). The destruction of forest in Indigenous ancestral territories, as is the case in many provinces in northern Argentina, is equivalent to dispossession, as forests are a source not only of livelihood but also of identity and spirituality. Mioni, Godoy Garraza, and Alcoba (2013) point at factors aggravating the situation, such as weak local organisation; lack of legal advice; insufficient interest or knowledge about Indigenous rights on the part of the judiciary and the police; and lack of law enforcement and contempt for court rulings.

We use the term *tenure* to refer to any arrangement allocating rights to those who hold or assert rights to land, and sometimes setting conditions, regulating both access to and use of natural resources (FAO, 2011). Secure land tenure is essential for community forestry and for the very subsistence of Indigenous communities. Furthermore, secure tenure and access rights allow forest-dependent local communities and Indigenous peoples to invest in long-term management (Gabay & Rekola, 2019; Mutangadura, 2007).

Description and context of the case study

We discuss a case study located in the northern Argentine Province of Jujuy to showcase how Indigenous communities'[2] tenure rights are attacked, and the strategies the communities may adopt to defend them. Contrasting the publications celebrating the success of community forestry under the forest policies promoted by international organisations (FAO, 2016; Kusters & de

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Graaf, 2019), we maintain that the results of these policies are heterogeneous and cannot be generalised (Gabay et al., 2020; Hajjar et al., 2016; Harrison & Suh, 2004). Furthermore, we argue that macro-economic neo-liberal policies, including those that followed the 'Green Revolution', often create an enabling environment for the lack of enforcement of Indigenous communities' rights, leading to abuses, land-grabbing, and accumulation by dispossession (Amazon Watch, 2018; Pearce, 2012). The trajectory of norms regarding Indigenous rights in Argentina is one of systematic lack of enforcement and contempt by the authorities, paving the way for abuses by the privileged class since colonial times, and by private businesses in the present (e.g., FAO, 2021; Greenpeace, 2018). We show that beyond theoretical legal recognition, effective and secure land tenure is an essential requisite for community-based forestry.

Indigenous communities' rights in Argentina

> This is a historic demonstration, we dare to come to this world of buildings, asphalt, and we come with respect but also with strength, we want it to be clear to them that the big business of companies is devastating our lands and taking our lives.
>
> *(Qom Indigenous leader cited by Aranda, 2010)*

Indigenous communities in Argentina were largely invisibilised, and more frequently, combatted and assimilated during most of the country's history. Violent incidents between settlers and Indigenous peoples and between authorities and Indigenous peoples were constant throughout the centuries, as well as some examples of peaceful coexistence. In this context, over 70 peace treaties were signed between the authorities and Indigenous peoples between the 16th and the 19th centuries (Levaggi, 2000).

The first modern federal law focused on Indigenous Peoples is Law No. 23,302 of 1985. It declares of national interest the attention and support of the Indigenous communities, and their defence and development for their full participation in the socio-economic and cultural processes of the nation, respecting their own values and modalities. The law defines Indigenous communities as 'the groups of families that are recognized as such by the fact of descending from populations that inhabited the national territory at the time of the conquest or colonization'. The law provides for legal recognition of Indigenous communities, granting them legal personality. Furthermore, in 1992, Federal Law No. 24,071 ratified ILO Convention 169 on Indigenous and Tribal Peoples.

The National Constitution, reformed in 1994, recognises the ethnic and cultural pre-existence of Indigenous peoples. It mandates the Federal Congress to pass laws: i) guaranteeing respect for their identity and the right to a bilingual and intercultural education; ii) recognising the legal status of Indigenous communities, and the community possession and ownership of the lands they traditionally occupy and regulating the delivery of other lands suitable and sufficient for human development; iii) ensuring their participation in the management of their natural resources and other interests that affect them. It also declares that Indigenous communities' land will not be alienable, transferable, or susceptible to liens or taxation; and determines that the provinces can exercise these powers concurrently.

In line with these provisions, the Federal Civil and Commercial Code of 2014 addresses the rights of Indigenous communities and determines that recognised Indigenous communities have the right to community possession and ownership of the lands they traditionally occupy and of other lands suitable and sufficient for human development. It also establishes that a specific law will regulate these rights. At the time of writing (August 2021), the Federal Congress had not passed that law, although at least two Bills are pending treatment. In late 2006, Federal

Law No. 26,160 declared a four-year emergency regarding the possession and ownership of the lands traditionally occupied by Indigenous communities. During that period (2006–2010), the law suspended the execution of judicial sentences and procedural or administrative acts whose object was the eviction of Indigenous people from their land if 'the possession is current, traditional, public and reliably accredited'.

The National Institute of Indigenous Affairs (INAI, in Spanish) was given three years to carry out the technical-legal-cadastral survey of the tenure situation of the lands occupied by Indigenous communities and was mandated to promote the necessary legal actions. Failure to fully implement this law resulted in successive extensions of the deadline, the latest of which ends in November 2021. After almost 30 years of the constitutional reform in 1994, the legal title of Indigenous communities to their ancestral land has not yet been secured. Some of the reasons explaining this situation are a lack of sufficient funding; inadequate co-ordination between the INAI and provincial governments; low participation of Indigenous communities in the land surveys; and inefficient selection mechanisms for Indigenous representatives for the Indigenous Participation Council due to the disrespect shown by the federal government for the customary procedures (Alanda & Victoria, 2016).

Indigenous community forestry

As we focus on a case of Indigenous community forestry, it must be noted that there are distinctive features that set it apart. Indigenous communities use traditional forest-related knowledge to manage their ancestral territories. As Trosper et al. (2012) point out, these features can be summarised into five criteria:

i. *Sustainability*: it aims to achieve forest sustainability.
ii. *Relationships*: peoples' connections among themselves and to their ancestral land are not broken by new knowledge, ideas, or techniques.
iii. *Identity*: people self-identify as a distinct community from their neighbours.
iv. *Reciprocity*: the system of benefit sharing among themselves according to traditional tenure systems is preserved.
v. *Limits on exchange*: capitalist market logic of maximising profits does not guide the community, although they may engage in market exchange.

Traditional Indigenous community forest management thus cannot be analysed using neo-liberal ontologies pervading international forest policy and its instruments as it contrasts with the latter's core principles of marketisation, an enhanced role for the private sector, and deregulation and voluntarism (Humphreys, 2009).

Ineffective institutions and powerlessness: The case of the Qolla People's community of Las Animas

Description and context of the case study

The Province of Jujuy is located in the extreme northwest of Argentina, neighbouring Chile and Bolivia to the north and the Province of Salta to the east and south. It is home to nine Indigenous peoples: Atacama, Qolla, Guaraní, Qolla-Guaraní, Ocloya, Omaguaca, Tilián, Toara, and Toba (García Moritán & Cruz, 2011). According to the 2010 National Census of Population, Households and Housing, 7.9 per cent of the population of the province self-

identify as Indigenous (INDEC, 2020). That percentage is more than triple the national average of 2.4 per cent. In August 2021, there were 293 communities, including the pending applications for legal recognition (ENDEPA, 2020).

The Indigenous community of Las Animas Pueblo Kolla[3] is located in the El Durazno district, Department of Tilcara, within the jurisdiction of the Municipality of San Francisco de Tilcara, Province of Jujuy. Its traditional community land is about 8,920 ha (Figure 19.1). It is bounded by hills and has a pronounced altitudinal gradient within a length of 19 km. The highest point towards the west is 4,510 metres above sea level (m.a.s.l.) and the lowest point in the east is 1,430 m.a.s.l. (Figure 19.2). Its rugged relief comprises a series of folds, faults, canyons, and very steep mountain ranges. The precipitation of about 2,000 mm per year in the lower area feeds a lush rainforest called the Yungas or Tucuman-Bolivian Rainforest, which covers the mountain slopes, presenting altitudinal variations in its species.

The Yungas stretches from the eastern Andes in the south of Bolivia (Departments of Chuquisaca and Tarija) to the northwest of Argentina (Provinces of Salta, Jujuy, Tucumán, and north of Catamarca) (Brown & Kappelle, 2001). The foothills rainforest, ranging from 400 m.a.s.l. to 700 m.a.s.l., has the greatest forestry aptitude and plays a key ecological role in the regional context. The montane rainforest (from 700 m.a.s.l. to 1,600 m.a.s.l.) and the montane forest (from 1,600 m.a.s.l. to 2,100 m.a.s.l.[4]) have an important ecosystem value for the protection of watersheds.

Higher up, there are pastures that reach the peaks of the mountains. Montane rainforest occupies the eastern slopes, usually covered by clouds during the summer and early fall.

The forest area of this case study is located in the south-eastern extreme of the community territory. This wedge-shaped portion of the forest is flanked by Las Animas River to the south,

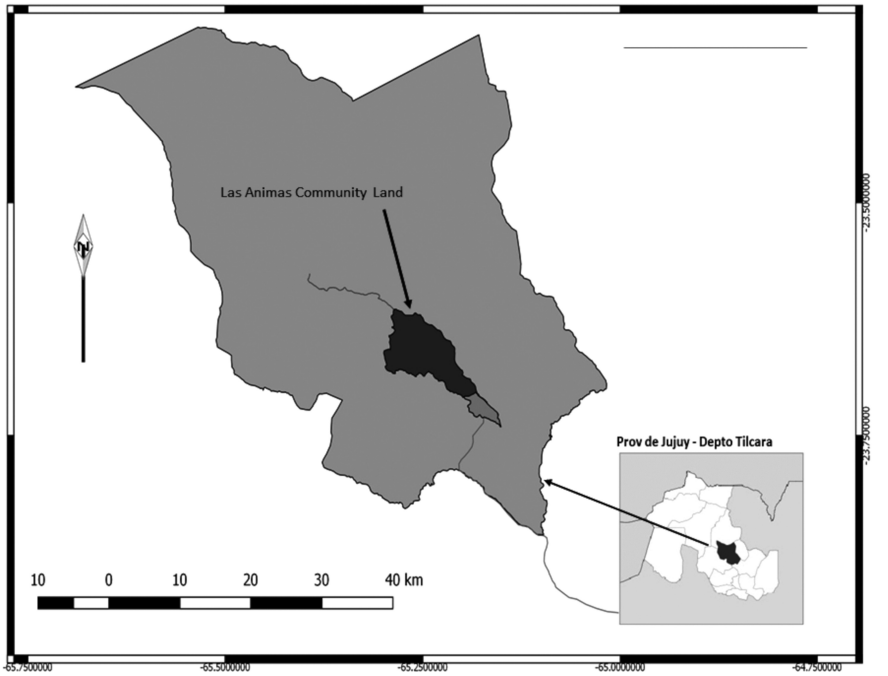


Figure 19.1 Las Animas community ancestral land. Source: Apaza (2021).

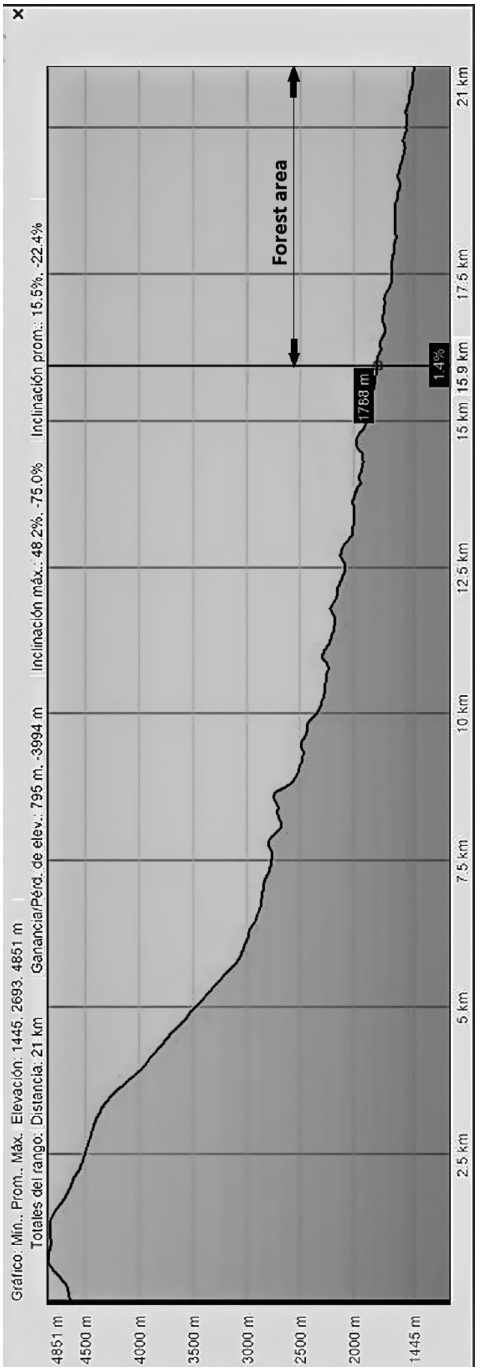


Figure 19.2 Altitudinal profile of the Las Animas Community, at its greatest length. Source: Google (2021) and Apaza (2021).

by the edge of the mountain range to the north-east, and by steep slopes in the west, where the rainforest gradually disappears as the Andes grow higher.

Land tenure arrangements

The traditional way of life and livelihood are still prevalent in the community of Las Animas. In recent years, community members frequently needed to combine their subsistence livelihoods with paid employment to secure additional income. Most families have at least one member who obtains extra income through seasonal migration to the closest urban centres, usually to the city of Tilcara. The permanence of the culture and traditions of the Qolla People[5] in the community of Las Animas might be explained by its remote and inaccessible location.[6] Their production strategy is based on their traditional land use, which in turn is based on the division of the territory into different agroecological zones, considering the climate, natural vegetation, and land use.

In general, Qolla communities develop economic strategies that allow them to combine various ways of life in a diverse ecological environment. There is a differentiation between community land and individual or family land. The 'puesto' comprises the home and surrounding agricultural plot. Each family has plots in different agroecological zones, differentiated in altitudinal gradient. Thus, all the families have some land in the higher area, some in the middle area, and some in the lower zone. Families usually have at least two 'puestos' located in different heights, which are used for extensive subsistence transhumant grazing of sheep, goat, llamas (*Lama glama*), and cows in the summer. In the middle areas, where most of the families live, they produce subsistence crops (potatoes, papa oca [*Oxalis tuberosa*], yacon [*Smallanthus sonchifolius*] and some vegetables). The lower area, or Monte, is used mainly as a grazing and shelter area for cattle in the cold and dry time of year. It is also used in the warm season for the production of crops requiring higher temperatures and humidity, such as pumpkins, some varieties of corn, cayote (*Cucurbita ficifolia*), and occasionally some citrus fruit trees. In spring, by mid-September–October, cattle are moved to the higher pasture area. Therefore, during the rainy and warm season from October to March, a time of high biological activity, the Monte regenerates, provided there is an adequate availability of seeds of both tree and herbaceous species.

The activities on community land are defined by consensus among the members of the community. Every year, before starting to work on the plots, an assembly allocates the plots that each family will work on that year (i.e., size and location). Some plots are more productive than others. Usually, a family will never be allocated the best plots two years in a row, nor will it receive the most difficult ones twice. This results in a 'double rotation': both the family and the crops that will be grown in a particular plot rotate every year.

The Zona de los Montes, where illegal logging took place in late 2005, is community land. The rainforest of tall, multi-stratified species is used as a shelter for cattle, and to collect medicinal plants, dyes and pigments. Logging in the area is unthinkable for the community of Las Animas. The community has been surveyed within the framework of Federal Law No. 26,160, but they had not received their property title at the time of writing this chapter (August 2021).

Governance arrangements

Qolla distinctive traditional decision-making process

The community of Las Animas makes collective decisions. Any work, action, or novelty is debated, consulted, and agreed upon by the family and then by the Community Assembly. First,

community members receive the information, which is then discussed within the family and in the Assembly. In a second meeting, they return to the Assembly to clarify doubts, and it is only in the third or fourth meeting that they express opinions, share a position, or make a decision, be the matter simple or complex.

Structure of the organisation

The community of Las Animas is an 'Ayllu'.[7] Its internal structure comprises several families, where the concepts of duality and complementarity are the fundamental criteria of community life. Duality, because the Qolla understand that there are two universal forces: the cosmos ('Pachakama' or 'Pachatata') and the Mother Earth ('Pachamama'). The energetic interaction of these forces is complementary and engenders all that there is and expressed through 'Ayni', i.e., complementarity and reciprocity (Zenteno Brun, 2009). Furthermore, 'Pachamama' nourishes and shelters, while 'pachakama' guides and protects. Hence, 'everything is structured on complementary opposites' (Zenteno Brun, 2009, p. 86).

The solid unity of the family and among the families of the same 'Ayllu' is the basis of the community organisation. The Assembly is the community government and is led by the President, also called 'Comunero'. As noted here, Argentina recognises the legal status of Indigenous communities. However, in practice and knowingly or not, the legal provisions implemented in order to recognise the legal status of the Indigenous communities are neo-colonialist. Indigenous communities must adopt a legal form that is not traditional (civil association), although it is accepted, incorporating alien organisational roles such as President, Secretary, etc., and it must be endorsed by the Council of Aboriginal Organisations of Jujuy (COAJ). The Province of Jujuy created the first provincial Registry of Aboriginal Communities in 1992 within the provincial State Prosecutor's Office (Provincial Decree N° 3,346/92).

The violation of community rights

In this section, we show how the lack of enforcement of the legal provisions safeguarding the rights of Indigenous Peoples together with the weakness of the institutional arrangements that should have enforced those rights paved the way for illegal logging and abuse affecting the community of Las Animas.

In the fall of 2005, Mrs. AA, who lives in the city of Tilcara and is a direct relative of an important local authority of that city,[8] had a purchase–sale document from her late husband that covered part of Las Animas community land. Mrs. AA does not belong to an Indigenous community. She used her influence and networks to get a logging permit although she had no property rights to the community land. Thus, the permit was legally invalid.

It must be noted that under Argentine law, Indigenous land is community property and cannot be sold or used as collateral. Furthermore, the purchase–sale document did not comply with any minimum legal requirement. Despite this, asserting 'property' rights with the irregular document, Mrs. AA signed a contract with a company specialised in logging. The company got the necessary permits and swiftly made arrangements to build a forest road for the felling and extraction of large cedros (*Cedrela angustifolia*), a vulnerable species also known as cedro coya, cedro Tucumán or cedro Rosado, in Las Animas community land. Poor road layout planning led the company to use explosives to blast the slope of the hill for about 3 km before reaching the area where the felled trees were.

The people of the community prevented the company from further blasting the area and reported the violation of their rights to the police. Although the logging company ceased its

activities, irreversible damage was already done. About 225 very large and old felled cedros lay on the forest floor, in addition to the destruction caused by the explosions. Together with five members of Las Animas community, one of the authors inspected the area to quantify the damage. Everyone felt and expressed deep pain when seeing the old trees on the ground and the damage caused to the rainforest. The diameters of the felled trees were no less than 1.30 meters, and the majority of them were over-80-year-old giants.

It must be noted that, particularly in the north-western provinces, the police and the judiciary are usually reluctant to uphold Indigenous community land tenure, and they turn a blind eye to violations including dispossession, illegal logging, and marginalisation, sometimes due to plain ignorance of the law, other times due to power asymmetries (González, Katz, Mendoza, & Romero Batallanos Wamani, 2019). The case of the Qolla community of Las Animas is an exception, as the conflict triggered the collaboration of lawyers and forestry practitioners to achieve social recognition of the community ownership of its ancestral land. In spite of the provisions of the National Constitution and ILO Convention 169, Las Animas did not have the formal recognition of this right. However, their right to their community land is recognised by the people of Tilcara (social recognition), as it is largely evident that their presence in their ancestral land and their traditional livelihood date from time immemorial. Sections of the road made of stone, carved in the Inca style and other items recorded by Nielsen as the site El Durazno, Inca Phase 1430–1535 AD (Nielsen A., 1996) within community land clearly testify to their longstanding presence. Furthermore, there are old tombs in the area dating back to the early 20th century that also belong to this community. Fortunately, this social recognition prevented further abuses.

This case is one among many violations of Indigenous Peoples' rights in Jujuy and other provinces of Argentina. Growing social awareness, aided by the rapid spread of information over social networks, an increasing number of members of Indigenous communities with university degrees readily defending their ancestral land in courts, and the involvement of grassroots and civil society organisations working in the field of Indigenous rights, are slowly improving the situation. There is still a long way to go, including the full implementation of Federal Law No. 26,160 and the pending congressional approval of the law regulating Indigenous community land property.

Community forest management options and decisions

After the incident, the gross volume of felled timber was quantified: 1,150 m^3, corresponding to the 225 felled cedros.[9] A year later, faced with the alternative of letting the timber decompose on the forest floor, in early 2006 the community analysed the possibility of extracting the felled logs and selling them. About 60 per cent of the timber could be extracted with low impact on the forest, if the organisation and execution of the tasks were carried out in the traditional way and applying low-impact actions such as on-site sawmilling, extraction using mules, and a correct planning of primary roads. There was much discussion in assemblies and meetings, and plans for the extraction of the felled timber and mitigation of the environmental impact were drafted.

Two alternatives were discussed:

1. To remove the felled timber before it got damaged.
2. Not to remove the felled timber, for opening forest roads would enable access for poachers and further illegal logging, as 60 per cent of the cedros in the Zona de los Montes were still standing.

At that time, the community of Las Animas did not have the formal title of ownership of the community land, nor does it have it to date (August 2021). Federal Law No. 26,331 on Minimum Environmental Requirements for the Protection of Native Forests was enacted in late 2007. By 2008, the Province of Jujuy approved the Adaptive Land Management Plan for the forests (Provincial Decree No. 2,187-PMA-08), and in 2009 it defined guidelines for environmental impact evaluations and for the approval of sustainable management plans and of plans for land use change (Resolution No. 81-DPPAyRN-09).[10] This resolution incorporates Wood Plot Management Plans (POP, in Spanish) – the technical instrument used to zone one or more plots. Back in 2005, without formalised land ownership, no permit could be obtained for forestry activities.

The community carefully considered the alternatives and decided to leave the felled timber to rot on the forest floor, as this was the better option to preserve the forest area. Qolla People do not have a forestry tradition; they do not think it is a good idea to harvest trees, open roads, etc. The Zona de los Montes provides shelter and is the storehouse for medicinal plants. The little timber they extract comes from dead trees, either standing or fallen over. The wood is used to carve pots and other kitchen utensils. To avoid future illegal activities, they decided to tour the area more frequently. The community also considered the possibility of a temporary enclosure of the affected area to allow for natural regeneration. The cedros that were saved were excellent seed trees. Unfortunately, without formal land ownership titles, it was impossible to obtain the necessary funding for the enclosure as neither the provincial government nor any NGO was willing to provide support. Commercial banks were also ruled out for the same reason.

Challenges and future prospects

Federal Law No. 25,675 on Environmental Policy includes environmental land management among its policy instruments, aimed at defining the activities that can be implemented in the different portions of a given territory and under what conditions, to promote its diversified, sustainable and balanced use. It has been characterised as 'a command-and-control mechanism' (FCD-FARN, 2010, p. 29), a continuous, dynamic, multi-sectoral, and inter-disciplinary process (Pastorino, 2009).

Qolla traditional land management is closely related to environmental land management. It could be regarded as a participatory community land management plan, dating back to the remote past. It addresses, but it is not limited to, 'natural resources', as the concept is rather poor and restricted to a utilitarian aspect. As such, the notion of 'natural resources' monetises nature and transforms it into a market good, alien to Qolla cosmovision. 'Pacha' is everything, time and space, where all that exists – e.g., water, air, earth, sun, vegetables, animals, minerals, lightning – are brothers in different states (MIJ, 2002). Qolla communities' planning involves space in all its dimensions, the integrity of the whole territory. It is a holistic perspective that completely differs from the merely timber-focused approach of Western forestry.

At the heart of this process is a broad conception of space and time, in synchrony with the seasons of the year and their respective festivities and productive activities. It implies thinking collectively, looking after the interests of the communities that are inextricably woven into the fabric of space and time. From a contemporary Western point of view, it is a kind of holistic participatory planning that goes well beyond the economistic mindset. The community land planning process is also in line with the right to free, prior, and informed consent (FPIC), as recognised by the National Constitution (article 75, §17); ILO Convention No. 169; the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP); and the American Declaration on the Rights of Indigenous Peoples. The long-standing demand of the Indigenous

communities for actual enforcement of the right to FPIC (and consultations) might be viewed as an extension of traditional community organisation, since internal decisions concerning everyday matters are made through a consultative process.

One of the most serious challenges facing community forestry is securing land tenure rights through the formalisation of ancestral community land property. The lack of recognition or titling of community land leads to deeper inequality and vulnerability. In our case study, a person alien to the community, using apocryphal, albeit old hand-written documents of purchase–sale, was able to hire a forestry contractor, to irregularly submit environmental impact studies to the local authority, and to request and obtain timber transport permits. Those actions were all to the detriment of the community of Las Animas, which had peacefully lived on its ancestral land from time immemorial. There is an inherent failure in the institutions that allow this kind of abuse to happen on a fairly regular basis. Moreover, in Argentina, there are over 200 recorded cases of conflicts involving Indigenous communities and human rights, including expulsion from their traditional territories (Amnesty International, 2020).

Las Animas is still powerless. They obtained formal legal status and in 2003 took action to achieve the legal recognition of their right to their ancestral land. By 2006, they also initiated the procedure for titling their community land under the Federal Law No. 26,160. Without formal title to their ancestral territory, they cannot submit a forest management or a forest conservation plan, nor can they access financial support or a loan to restore the damaged area or develop sustainable infrastructure to enhance conservation. Fifteen years after the approval of this law, the community of Las Animas is still waiting.

Up to the present (August 2021), there has been no clear explanation as to why no meaningful progress has been made. The lack of territorial regularisation and ownership of land are the main obstacles that imperil the development, social rooting, and well-being of Indigenous communities. It seriously impairs communities' livelihoods and the resilience of their productive activities (Cervera, 2010). The National Aboriginal Pastoral Team's (ENDEPA in Spanish) 2020 report showed that, according to data provided by the INAI to the National Senate, by mid-2017 only 39 per cent of the country's 1,687 Indigenous communities had been surveyed. Thus, the National Congress passed yet another extension of the deadline for the regularisation and titling of Indigenous community land. In brief, after over 30 years since the Argentine ratification of ILO Convention No. 169 in 1992, a constitutional amendment, and a specific law (Law No. 26,160 of 2006), with three deadline extensions, the historical debt to the Indigenous communities remains unfulfilled.

In the Province of Jujuy, there are 293 registered Indigenous communities; of these, 57 per cent have been surveyed, 38 per cent are in the process of being surveyed, and 7 per cent have not begun to be surveyed. It must be noted that surveys are just the first step towards obtaining formal titles to ancestral land.

Rights that only exist on paper and are not operationalised might be considered *de facto* as no rights at all. The recent landmark case of the Lhaka Honhat is a valuable precedent, as after over 20 years of litigation before the Interamerican Commission on Human Rights and the Interamerican Court of Human Rights, the Argentine government – provincial and national – was instructed in 2020 to take concrete steps to ensure secure land tenure rights for the involved wichí communities.[11] However, most communities have no means to access courts of justice. Furthermore, persistent violations of their rights, including dispossession, criminalisation, and physical violence, threaten their very survival.

The expansion of the agricultural frontier towards the centre-north of Argentina produced massive land use changes in forest areas and the expulsion of local communities and Indigenous peoples in a process that fits Harvey's 'accumulation by dispossession' theorisation (2003, p. 145).

Genetically modified crops, like *Roundup Ready* soybean, have made it feasible to convert what was regarded as cheap and unproductive land (i.e., forest areas) to agriculture, disregarding both the ancestral rights to land of Indigenous peoples and creole peasants' long history of occupation (Gómez Lende, 2015). Other factors driving this process are shifting rain patterns, technological innovation, neo-liberal policies, commodity prices, crony capitalism, poor law enforcement regarding Indigenous rights, and fragile institutions. Forest degradation and biodiversity loss in the Yungas were linked to negative direct and indirect effects from the unsustainable use of timber forest products, extensive unmanaged livestock farming, forest fires, inadequate infrastructure projects, and urban expansion (Malizia, Pacheco, Blundo, & Brown, 2012). Certainly, the effective regularisation and ownership of Indigenous land would contribute to avoiding these unsustainable excesses, as has been confirmed in other countries (Martínez Alier, 2011; Nepstad et al., 2006).

Some final thoughts

There is evidence of positive outcomes of community forestry, both in terms of enhanced livelihoods and better forest conservation (Hajjar et al., 2020). Achieving the full potential of community forestry requires, *inter alia*, secure tenure rights, an enabling regulatory framework, strong governance, viable technology, adequate market knowledge, and a supportive bureaucracy (FAO, 2016). These requisites are necessary but not sufficient. Power asymmetries and elite capture are among the factors that can negatively affect community forestry, and which have been largely disregarded in celebratory literature. Furthermore, unequal benefit sharing can deepen inequality and marginalisation, e.g., in Kenya, Ghana, India, Indonesia, Vietnam, Ecuador, Mexico, and Nepal (Gabay et al., 2020). Lack of formal property titles is usually an obstacle to accessing the benefits that might derive from community forestry.

Weak enforcement of Indigenous rights facilitates the dispossession and expulsion of Indigenous communities from their ancestral territory. On the other hand, increasing local community organisation, access to higher education, support from grassroots and civil society organisations, and judicial and constitutional activism might contribute to reverse decades of neglect and marginalisation. A recent demonstration by Indigenous communities in the neighbouring Province of Salta involved a large number of chiefs and members of the community walking for over 500 km from Santa Victoria Este and Pichanal to the provincial capital to be heard by the government:[12]

> The native peoples united we march so that the world can see the pain of our Mother Earth affected by forest clearings, drought, predation, and misery. We move to transform the consciousness of governments and societies, today indifferent.
>
> The native peoples united we march out of respect for our Mother Earth, source of spiritual support, use of medicinal plants and food sovereignty. We all have this Mother.
>
> *(UACOP, 2020)*

The mobilisation offers hope that Indigenous communities might be empowered to stand up for their rights and transition to a new era of good living in cosmic harmony (Movimiento Indígena, n/d). Rosendo C., former 'Comunero' of Las Animas and brother of the current 'Comunero', says that 'the forest has healed everything',[13] that there are no traces of that predatory logging event. He says that 'There are more trees than before'. Based upon their traditional knowledge, they shortened the period the cattle grazed in the damaged area, thus allowing for natural regeneration. Each family owns only a few animals for their own consumption, so the

pressure on the forest is rather low. The forest road opened through rock-blasting 15 years ago is barely visible, but people can tell a piece of hill is missing. Still, this hill is one of the last natural refuges of the cedro coya, under the wise custody of the community of Las Animas.

Indigenous communities have made substantial progress in the recognition of their identity and rights after centuries of struggle. This situation is partially explained by a failure in land tenure governance, weak institutions, and corruption. Against this background, we find that Indigenous Peoples in Argentina are increasingly mobilising for their rights, as some members of their communities access higher education, improve their institutions, and interact with grassroots and civil society organisations that support their land tenure claims in court. There is still a long way to go to achieve the full implementation of the laws securing community property, but the future looks promising for Indigenous communities like Las Animas in Argentina.

Notes

1 Harvey (2003; 2004) coined the concept of 'accumulation by dispossession' to refer to the way in which capitalism and neo-liberal policies allow for the concentration of wealth in the hands of a few actors at the expense of less powerful ones, depriving them of their livelihoods and land. The explosion of commodities and the concentration of land rights in big agribusinesses in the 1970s and extractive industries such as mining are examples of this process.

2 Indigenous communities currently abide by the terminology used by international agreements such as ILO Convention 169/89 and the United Nations Declaration on the Rights of Indigenous Peoples of 2007. In this text we use interchangeably the denominations *native*, *Indigenous*, and *aboriginal* peoples.

3 This is the name under which the community is registered in the Registry of Aboriginal Communities of the Province of Jujuy, in order to have official legal status.

4 The mountain forest in the Yungas can extend up to 3,000 m.a.s.l., depending on the latitudinal sector.

5 The word 'Qolla' is a Quechua language expression meaning 'south' and is related to the word 'Qollasuyo' which refers to the 'southern region'. It is sometimes spelled out as *Colla*, *Coya*, or *Kolla*. International congresses on Quechua language and culture are normalising Quechua writing.

6 It takes 6–7 hours on foot to reach Las Animas from the nearest town, Tilcara, through a bridle path. There are no roads for vehicles, and not even an all-terrain vehicle could enter the area.

7 The word 'Ayllu' expresses kinship and social and territorial grouping. It indicates certain forms of territorial property, with characteristic religious features. The religious physiognomy of the 'Ayllu' is demonstrated in the cult of the ancestors. There is an idea of transformation, rupture and unfolding of the notion of 'Ayllu' over time. The 'Ayllu', like *gens* (consanguineous community), is transformed into the 'Ayllu' clan and, finally, into the agricultural tribal organisation (Fernández, 2017). Despite its changes, the 'Ayllu' cannot be understood without its initial matrix, that is, its archaic architecture, corresponding to a pre-Columbian temporality (Prada Alcoreza, 2008).

8 The El Durazno district, Department of Tilcara, within the jurisdiction of the Municipality of San Francisco de Tilcara, Province of Jujuy.

9 Timber from *Cedrela angustifolia* is light, with a density of about 0.430 g/cm^3. It is the most valuable wood of the Yungas, recommended for decorative wood veneer, interior and exterior carpentry, cabinetmaking, musical instruments, and household utensils (Speranza, Badinier, & Cosimi, 2020).

10 Compendium of Environmental Laws of the Province of Jujuy. http://www.ambientejujuy.gob.ar/wp-content/uploads/2017/12/COMPENDIO-DE-LEYES-AMBIENTALES-JUJUY_2017.pdf

11 Wichí Indigenous communities in the area have demanded the recognition of their ancestral community land tenure in 1984. After years of provincial government inaction, in 1998 they resorted to the Interamerican Commission on Human Rights (ICHR) of the Organization of the American States, with support from two major NGOs. Failure of both the provincial and national government to implement the recommendations emanated for the ICHR resulted in a presentation to the Interamerican Court of Human Rights, which passed an historical sentence mandating the Argentine provincial and national governments to ensure the formal titling of the communities' ancestral land. For more information, see: https://www.corteidh.or.cr/docs/casos/articulos/seriec_400_esp.pdf.

12 See news coverage: https://argentina.indymedia.org/2020/11/17/historica-marcha-indigena-en-salta/#:~:text=Referentes%20de%20nueve%20pueblos%20originarios,salud%2C%20entre%20los

%20reclamos%20b%C3%A1sicos.&text=Puntualizaron%20una%20decena%20de%20leyes%20que%20protegen%20sus%20derechos. http://infopais.com.ar/pueblos-originarios-marcharon-en-salta-por-sus-derechos-indigenas/. https://latinta.com.ar/2020/11/marcha-pueblos-originarios-salta/

13 Personal communication of Ricardo Apaza, August 2020.

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PART VI

Community forestry associations, gender, landscapes



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COMMUNITY FORESTRY IN BRITISH COLUMBIA, CANADA

History, successes, and challenges

Jennifer Gunter

Context of community forestry in British Columbia

Forests and communities

British Columbia (BC) is Canada's westernmost province and comprises 944,735 square kilometres of diverse ecosystems, from temperate rainforests on the west coast to the Canadian Rocky Mountains in the east, from semi-arid deserts in the southern interior to vast boreal forests in the north. Forests cover about two-thirds of BC's total landmass. About 15.4 per cent of BC has been set aside to conserve nature and cultural values (Johnston, 2019).

Since the early 20th century, forestry has been the mainstay of most of BC's rural communities. As the timber industry was establishing itself in the 1890s (Rajala, 2006), the prevailing economic theory suggested that by developing natural resources and harvesting and exporting timber, communities would receive the benefits of employment, income, population growth, and a boost to the local tax base (Power, 1996). By adopting this approach, the BC economy grew, and many rural communities were established and flourished. Logging created high-paying jobs and stable employment, placing much of rural BC on similar income levels as urban British Columbia (BCCFA, 2019b).

But 'the benefits to communities from local forest resources in the form of jobs and industrial tax base has shrunken dramatically since the mid-1990s as the commodity lumber sector has consolidated and updated technology to eliminate costs, incluing labour costs' (BC Rural Centre, 2019, p. 3). In the last 15 years, the forest sector labour force has declined by 36 per cent – nearly 35,000 jobs. 'This has created noticeable hardship for many rural and Indigenous communities as they have seen their attachment to the forest sector decline, or in some instances disappear' (BCCFA, 2019b, p. 2).

While forest-dependent communities have always been vulnerable to the ups and downs of an industry reliant on international commodity markets, biophysical factors have also made the last 15–20 years especially difficult for many rural areas. In the early 2000s, an infestation of mountain pine beetle (*Dendroctonus ponderosae*) devasted BC's interior forests. By 2020, it is estimated the infestation had killed 55 per cent of BC's mature merchantable lodgepole pine (*Pinus contorta var. latifolia*) (British Columbia, 2020d). Compounding this crisis were the devasting, record-breaking wildfire seasons of 2017 and 2018, which impacted 2.6 million hectares (Mha). Harvest levels were temporarily elevated to salvage economic value. The inevitable decline in timber has

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resulted in milling capacity that exceeds the available supply. While the provincial government has worked to mitigate this declining timber supply by investing in reforestation efforts, mills have closed, leaving behind workers and communities that relied upon them for incomes and contributions to local taxes (BCCFA, 2019b). This change is occurring at the same time that society is increasingly recognising Indigenous peoples as the original stewards of the land and as key players in addressing the economic, social, and environmental challenges of managing forest lands and resources (First Nations Forestry Council, 2019; Truth and Reconciliation Commission, 2015).

This chapter describes how community forestry in BC has developed over the last 20 years in response to the aspirations of forest-dependent communities and as the direct benefits from the industrial forest sector are diminishing. Community forestry is also an important way to increase the involvement of Indigenous communities in the management of their traditional territories, and a means to bring Indigenous and non-Indigenous communities together in the spirit of collaboration and mutual benefit. First, it is important to understand the context of Canadian land ownership and the BC forest tenure system.

Land ownership, the tenure system, and regulatory regime governing BC's forests

In Canada, the Constitution grants provincial governments the responsibility for Crown lands and resources. In British Columbia, 95 per cent of the forested land is considered Crown land, owned by the provincial government (British Columbia, 2020b). The BC Government authorises rights to harvest Crown timber through forest concession licences, known as 'tenures' in Canada (see Figure 20.1).

Most Crown timber harvesting rights are held by large forest companies and the province's own Timber Sales Program. About 42 per cent of BC's provincial allowable annual cut (AAC) is held by five enterprises (BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development, 2020b).

The large-scale industrial forest sector is a vigorous, efficient, and world-competitive timber processing industry. The business model of these corporations acts in the financial interest of their shareholders, managing for profits or business growth to increase share value. Community values such as stable local employment and ecosystems resilient to climate change and wildfire are lesser priorities.

Indigenous rights and title

While the provincial government is deemed the 'owner' of public land in British Columbia under the terms of Confederacy of 1871, the legal understanding of public land ownership is rapidly evolving. This is because most of BC's 200 Indigenous Nations did not sign treaties ceding their lands to the colonial government of the British Crown nor to the successor Dominion of Canada. Most of the provincial Crown land in BC is unceded traditional lands and territories (BC Treaty Commission, 2020).

In Canada, Indigenous peoples hold specific constitutionally protected rights which are recognized and affirmed in section 35 of the Constitution Act, 1982. Through decades of arguments from lower to higher courts, these rights have been affirmed and further defined by a series of legal decisions of the Supreme Court of Canada (SCC). In 2014, a landmark SCC decision affirmed the ability of First Nations to prove and claim Aboriginal title to land. Called the Tsilhqot'in decision, it is part of the substantial body of settler or colonial law on Aboriginal rights in Canada. While this decision applied exclusively to 1,900 square kilometres of the Tsilhqot'in Nation's land (Supreme Court of Canada, 2014), over time the legal precedent will

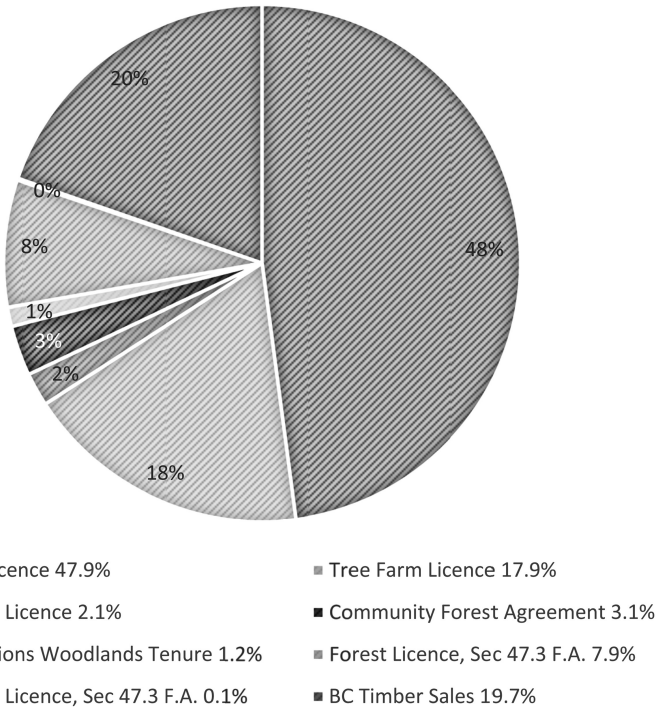


Figure 20.1 Tenure distribution as a percentage of AAC in British Columbia. Source: Abanilla, Chantelle. Manager, Business Applications, Forest Tenures Branch, Ministry of Forests Lands Natural Resource Operations and Rural Development. Personal communication, September 30, 2020.

lead to an increasing number of Indigenous Nations gaining control over their Aboriginal title lands. This means that areas of BC will no longer be solely Crown land; they will also carry the added encumbrances associated with Aboriginal title lands.[1]

This ruling built upon various earlier SCC decisions, including the Haida decision (Supreme Court of Canada, 2004), which collectively further articulated the Crown's duty to consult Aboriginal Nations and accommodate their interests while retaining ultimate decision-making power. This means that Aboriginal groups whose traditional territories will be impacted must be consulted and, if feasible, accommodated prior to the approval of all forestry activities, including the issuing of tenures and harvesting of timber.

The 2014 Tsilhqot'in decision augmented this responsibility and stated that if the Crown and proponents (e.g., natural resource industries) proceed without consent, they must understand that when Aboriginal title is recognised, Crown decisions can be cancelled, and damages may be owed to the Indigenous peoples for the harm done to their Aboriginal title land. This has created uncertainty for government and for the forest industry. According to Douglas White III, the only way to avoid that total risk is to shift to consent-based decision-making (White, 2016).

The BC provincial response to the United Nations Declaration on the Rights of Indigenous Peoples

In 2019, the BC government passed legislation that sets out a framework for reconciliation with Indigenous peoples. All the political parties in the Legislative Assembly voted unanimously to

pass a Declaration on the Rights of Indigenous Peoples Act (Declaration Act) which commits the provincial government to create a path forward that respects the human rights of Indigenous peoples and establishes a process to align BC laws with the United Nations Declaration on the Rights of Indigenous Peoples (British Columbia, 2019). The Declaration Act allows the Province flexibility to enter into agreements with a broader range of Indigenous governments, which could act as a tool for decision-making between Indigenous governments and the provincial government (British Columbia, 2021). BC's Declaration Act was co-developed by the Province and the First Nations Leadership Council.

In the context of forest management, additional legislative amendments will be required to enable joint decision-making and consent-based decision-making under statutes. Given the protracted time horizon for legislative change, the focus of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (Ministry of Forests) is to work with Indigenous Nations on a range of models that support collaborative management and consensus-seeking decision-making at the strategic level. These higher-level processes include land use planning, forest landscape planning, and the review of timber supply calculations. The premise is that, with an emphasis placed on collaboration at the strategic level, the focus on individual operational level matters will be reduced (British Columbia, 2019).

Community forests are positioned at the operational level in this hierarchy, whereby forest tenures operationalise the strategic direction set out in higher level plans, such as land use plans. Nevertheless, there are significant opportunities to advance reconciliation through on-the-ground initiatives like community forests. The involvement of Indigenous communities in community forest management in BC has been an integral aspect of the community forest program since its beginning in 1998 (Gunter & Mulkey, 2017).

Overview and history of community forestry in BC

The modern concept of community forestry in BC was first articulated in 1945, when the Royal Commission on Forest Resources of BC, led by Gordon Sloan, recommended that municipalities manage local forests (Sloan, 1945). He suggested that areas of Crown land situated in or near settled communities could be managed by municipal authorities for timber production. This would be 'a means of acquainting the public with the benefits to be secured from the practice of sustained-yield forestry, the necessity for fire-protection and related subjects' (Sloan, 1945, p. 147).

The town of Mission led the way, when in 1948 over 1,000 hectares owned by the municipality were incorporated into a Forest Reserve under the Municipal Act. Ten years later, the provincial government added more hectares of Crown land when granting the town a Tree Farm Licence – thereby creating what is known today as the Mission Municipal Forest (District of Mission, 2020). Despite more calls for community forestry in the subsequent Royal Commissions of 1956, 1976, and 1991, it took over 40 years for the provincial government to embrace these recommendations. The reluctance to do so earlier may have been due to the cost of compensating existing tenure holders, or that BC's tenure system 'has been shaped by the continuous adaptation to the interests of large corporate tenure holders' (Ambus, 2016, p. 158).

It was not until the 1990s that the idea of community forestry gained considerably more traction. Disagreement in the province over how forests were managed and who benefited reached a boiling point. As Ambus (2016) describes:

> This was a decade heightened by social conflict focused on the forests of British Columbia, dubbed in the media as 'the War in the Woods.' The forest industry, domi-

> nated by a handful of large corporations with close linkages to provincial government, was under fire from labour, environmentalists, communities and First Nations … In the midst of this conflict, a variety of actors began looking at community forestry as a source of common ground.
>
> *(Ambus, 2016, p. 155)*

Many forest-dependent communities were looking for an alternative path, one that would give them a greater say in ensuring the long-term ecological and economic sustainability of their communities. A handful of communities had secured forest tenures with a community forestry mandate. Most of those tenures were short-term (15-year), non-replaceable forest licences, designed with the sole purpose of timber harvesting, and were mismatched with the core values of community forestry. Calls for a tenure specific to community-based forest management grew.

Pilot program

The message was heard. In 1997, the provincial government introduced a legislative package called the Jobs and Timber Accord. This was a major initiative by the BC Ministry of Forests intended to create new employment and economic opportunities in the forest sector and was a key element of the government's response to the conflict. It included a commitment to create and pilot new community forest tenures (British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development, 1998).

The Forest Act was subsequently amended in 1998 to include a new form of tenure, the 'community forest agreement'. Communities were invited to submit applications in a competitive process for a community forest pilot program. Over 100 communities expressed interest, and 27 submitted full applications (Anderson, 2002). By 2001, ten community forest pilot sites had been selected. The pilot agreements were limited to a term of 5 years, during which the tenure was evaluated. If successful, the pilot agreement holders would be offered a long-term community forest agreement with terms of 25–99 years.

Operationalising the tenure and program expansion

Under the pilot program, a community could only apply for land and timber that were not already allocated to another licence holder. Most of British Columbia's forestland was already licenced to ten major industrial forest companies, and they were unwilling to surrender harvesting rights without compensation (Anderson, 2002).

In 2003, the nascent community forest program received a significant vote of confidence when a second major government initiative was introduced. The Forestry Revitalization Plan was intended to diversify the forest sector and increase the economic competitiveness of BC's forest industry. It increased timber harvest volume and area available for the community forest program through a 'take-back' that required all major licensees to surrender approximately 20 per cent of their harvesting rights in exchange for financial compensation. About half of this volume was used to set up a new system called BC Timber Sales, whereby timber would be sold by competitive auction. This system would provide a benchmark to determine stumpage rates applied to Crown timber. The other half was to be redistributed to First Nations and small tenure holders, including community forests and woodlots. The plan also brought changes that deregulated various aspects of the tenure system, most notably the appurtenancy rules that required licensees to process timber at specific mills. The rules around subdivision and transfer were simplified to 'allow licensees greater flexibility in business decisions' (British Columbia

Ministry of Forests, Lands and Natural Resource Operations, 2012, p. 7). The deregulation facilitated the consolidation of AAC in the hands of fewer and fewer companies. But the plan also freed up AAC so that an additional 33 communities were invited to apply to participate in the community forest program (Gunter & Mulkey, 2017).

During the early years, community forest tenure holders demonstrated some success, creating local jobs and managing forest health issues, but they faced many challenges (British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development, 2002). The provincial regulatory framework, designed primarily for large industrial-scale licences, created significant obstacles for the smaller, community-based enterprises. Through the advocacy efforts of the BC Community Forest Association, in the mid to late 2000s, important improvements were made. These included a special stumpage arrangement better suited to the tenure and a change in legislation removing the probationary status. Prior to 2009, a 5-year probationary period was required of new community forest agreement holders. This short-term licence created uncertainty and hampered their success; the new legislation removed the probationary requirement and enabled them to transition to long-term licences, thereby improving the incentive to invest in long-term planning and business relationships.

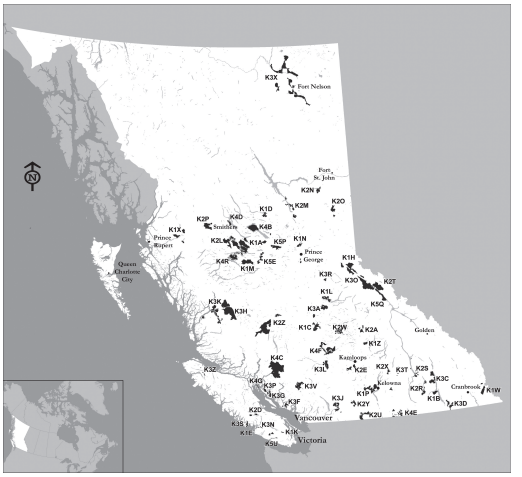
By 2020, there were 59 community forest agreements in BC, totalling 1,849,398 hectares with an Allowable Annual Cut (AAC)[2] of 2,241,804 cubic meters per year (see Figure 20.2).[3] As of 2021, five more communities had been formally invited to apply for a tenure. Targeted at rural areas, the average population of the communities involved in the Community Forest Program is less than 4,000 people. Many of these communities are, or have been, dependent on the forest industry for their livelihoods. Although the demographics are changing – with retirees and telecommuters seeking out the nature-based lifestyle these places afford – local forest-based employment remains central to these initiatives.

Tenure rights and responsibilities

The community forest agreement (CFA) is a legal concession licence between the provincial government and the agreement holder. The ownership of the tenure is exclusively local, and there are a range of community-based legal entities that can enter into an agreement. The CFA grants the licence holder specific rights to use public forest land and harvest timber in exchange for meeting certain obligations, including forest stewardship and the payment of stumpage and annual rent. The CFA is an 'area-based tenure',[4] which gives the tenure holder the exclusive right to harvest timber in a defined area. The tenure also offers the non-exclusive right to harvest, manage, and charge fees for botanical forest products and other products.[5]

Forest stewardship obligations include strategic and operational planning, forest inventory maintenance, and reforestation, along with requirements to engage with and report to the community. CFAs are governed by the *Forest Act* and the *Forest and Range Practices Act*, and all other applicable statutes and regulations. In BC, all licensees are legally required to reforest harvested areas. The tenures are issued for a 25-year term and are replaceable every 10 years. The existing tenures range in size from 361 hectares to 184,682 hectares, with an average size of 31,346 hectares.

To obtain a community forest agreement, representatives of communities, or groups of neighbouring communities, are formally invited to apply. A comprehensive application process includes the requirement to demonstrate local community engagement and support. Prior to this invitation, the government must consider a number of factors, including the availability of timber that can provide a suitable AAC; the availability of an unencumbered land base within



Legend

Licence Number	Community Forest Agreement Holder
K1A	Burns Lake Community Forest Ltd.
K1B	Harrop-Procter Community Cooperative
K1C	Alkali Resource Management Ltd.
K1D	Fort St. James Community Forest Cooperative
K1E	Bamfield-Huu-ay-aht Community Forest Society
K1H	McBride Community Forest Corporation
K1K	Khowutzun Forestry Services Ltd.
K1L	Likely-Xat'sull Community Forest Ltd.
K1M	Cheslatta-Carrier First Nation
K1N	Tano T'enneh Limited Partnership
K1P	Westbank First Nation
K1W	Nupqu Development Corporation
K1X	Terrace Community Forest Limited Partnership
K1Z	Lower North Thompson Community Forest Society
K2A	Wells Gray Community Forest Corp.
K2D	Alberni Valley Community Forest Corporation
K2E	Logan Lake Community Forest Corporation
K2L	Dungate Community Forest Limited Partnership
K2M	McLeod Lake Mackenzie Community Forest Corporation
K2N	Little Prairie Community Forest Inc.
K2O	Tumbler Ridge Community Forest Corp.
K2P	Wetzin'kwa Community Forest Corporation
K2R	Slocan Integral Forestry Cooperative
K2S	Nakusp and Area Community Forest Inc.
K2T	Valemount Community Forest Corporation
K2U	Lower Similkameen Community Forests Limited Partnership
K2W	100 Mile Development Corporation
K2X	Monashee Community Forest LLP
K2Y	Vermilion Forks Community Forest Corporation
K2Z	Eniyud Community Forest Ltd.
K3A	Williams Lake Community Forest LLP
K3C	Kaslo And District Community Forest Society
K3D	Creston Valley Forest Corporation
K3F	Sunshine Coast Community Forest
K3G	Powell River Community Forest Ltd.
K3H	Nuxalk Forestry Limited Partnership
K3J	Cascade Lower Canyon Community Forest Corp.
K3K	Bella Coola Resource Society
K3L	Xaxli'p Community Forest Corporation
K3N	Huu-ay-aht First Nation Forestry Limited Partnership
K3O	Dunster Community Forest Society
K3P	Tla'amin Timber Products Ltd.
K3R	Wells-Barkerville Community Forest Ltd.
K3S	Barkley Community Forest Corporation
K3T	Cherry Ridge Management Committee
K3V	Cheakamus Community Forest Limited Partnership
K3Z	North Island Community Forest Limited Partnership
K3X	Northern Rockies Regional Municipality Fort Nelson First Nation Partnership
K4B	Tanizul Timber Ltd.
K4C	Klahoose Forestry Limited Partnership
K4D	Babine Lake Community Forest Society
K4E	West Boundary Community Forest Inc.
K4F	Clinton & District Community Forest of BC Ltd.
K4G	Cortes Community Forest Cooperative
K4R	Chinook Comfor Ltd. Partnership
K5E	Fraser Lake Community Forest Corporation
K5P	District of Vanderhoof
K5Q	Valemount Community Forest Corporation
K5U	Qala:yit Forestry Ltd.

Figure 20.2 Map of community forest agreements in British Columbia.

the provincial Crown forest; the involvement of Indigenous Nations, and/or support from Indigenous Nations; local support; and the potential benefits the community forest agreement will bring, including the potential to address local land use issues (such as the ability to balance a community's desire for economic development with the need for safe drinking water from surface water sources) (British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development, 2020a).

A prerequisite of CFA issuance is the development of a Management Plan, which becomes part of the licence. It must contain the broad social, economic, and resource management goals proposed for the community forest; identify the linkage between the community forest goals and the provincial community forest program goals (see Table 20.1); and include a plan for annual reporting to the community (British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development, 2017).

Community forest agreements create strong incentives for long-term planning and investments in the health and productivity of the forest and to support the health and well-being of the communities that manage them. These incentives originate from the characteristics of the tenure, but in equal measure from the community-derived mandate. The forest tenure rights conferred, while limited in scope, are strong and secure (Leslie, 2016). The tenure is area-based,

Table 20.1 Comparison of the goals of the Community Forest Program and the timber industry

BC's explicit Community Forest Program Goals	*Generally understood timber-processing industry primary goals*
Provide long-term opportunities for achieving a range of community objectives, values, and priorities.	Provide profits to private owners and shareholders.
Provide social and economic benefits to BC.	Fulfil fiduciary obligations to private shareholders.
Diversify the use of and benefits derived from the community forest agreement area.	Comply with the uses and regulatory requirements government has set for the license area.
Undertake community forestry consistent with sound principles of environmental stewardship that reflect a broad spectrum of values.	Undertake the most efficient industrial forestry consistent with sound principles of environmental stewardship that reflect a broad spectrum of values.
Promote community involvement and participation.	Involve communities if required by the regulatory framework.
Promote communication and strengthen relationships between Aboriginal and non-Aboriginal communities and persons.	Promote communication and strengthen relationships between Aboriginal communities and persons and the private tenure holder.
Foster innovation.	Foster innovation in the pursuit of global competitiveness.
Advocate forest worker safety.	Advocate forest worker safety.

long-term, and not transferable. The significance of these characteristics is made clear through the lenses of property rights.

Research in natural resource management has shown that the more complete the property rights held by an individual or group, the more likely they are to develop rules that define how they exercise their rights of withdrawal (i.e., timber harvesting) (Schlager & Ostrom, 1992). When resource users are faced with the long-term consequences of their decisions, they have stronger incentives to develop management regimes for long-term sustainability. Generally, the more complete the rights, the better. However, the right to transfer or sell a licence, known as the right to 'alienate', has the potential to lead to the degradation of the resource through over-exploitation. This occurs if the licence owner's discount rate is high, meaning that they value short-term gains more than expected future gains (Schlager & Ostrom, 1992).

Most forest tenures in BC are transferable and can be bought and sold among forest companies, subject to certain criteria set by the government.[6] However, the community forest agreement and the newer First Nations woodlands licence are the only tenures in BC that are not transferable. In the case of the CFA, the licensee does not have the right to 'alienate' or sell its tenure. The only transfer that can occur is to another legal entity representing the same local community[7] and only with the approval of the Minister of Forests.

Since the CFA tenure gives communities the right to manage a fixed area for the long term, a right that cannot be sold to anyone outside the community, the communities themselves are directly faced with the consequences of their decisions, both in the short and long term. This contributes to their motivation to manage sustainably and to invest in intensive silviculture to enhance the future economic value of the forest beyond what is required by law.

The evidence of CFA holders responding to this economic incentive is strong. In the BCCFA's 2020 Community Forest Indicators Survey Report, 44 per cent of survey respondents

made investments in intensive silviculture for a total of US$836,963 (CAD1,086,775), averaging US$64,382 (CAD83,598). Activities included prompt regeneration with high genetic gain seed lots and tea bag fertilisation of all seedlings planted to enhance growth and establishment; pruning of deciduous trees to maintain a healthy, biodiverse stand; pre-commercial thinning and spacing; and rehabilitation treatments for low-volume and damaged stands (BCCFA, 2020).

Beyond recognising the business case for forward-thinking silvicultural practices, CFA holders are also managing for a range of objectives that improve ecosystem resilience and a community's ability to sustain itself, including wildfire management and community protection; climate change mitigation and adaption; enhanced forest stewardship; and the conservation of culturally significant areas and values. The Slocan Integral Forestry Cooperative, the Harrop-Procter Community Forest Cooperative, the Logan Lake Community Forest Corporation, and the Burns Lake Community Forest Ltd. are among the many excellent examples of CFA holders that have prioritised wildfire risk reduction activities in their tenures. CFAs are making their communities safer, while contributing to climate-change mitigation efforts and reducing the risk of high severity fires. For the Esk'etemc Community Forest, restoring natural grasslands which were being encroached upon by forests due to decades of forest fire suppression in the BC Interior, means that the landscape is becoming more resilient to wildfire and climate change. This effort is bringing back grassland habitats that 80 per cent of local bird species require, and that support important Indigenous cultural practices like hunting and gathering (G. Chipman, Manager of Esk'etemc Community Forest, personal communication, September 30, 2021).

However, the economic incentives to invest in non-timber values such as biodiversity and community protection from wildfire are scant. This is because, as Leslie (2016) describes, the actual scope of tenure rights is limited by an almost exclusive focus on timber. Yet, CFA holders are creating many benefits for their communities that go above and beyond legal requirements. Erik Leslie, Forest Manager of the Harrop-Procter Community Forest, contends that the non-timber benefits that CFA holders create are due to the informal, community-driven, social mandate of the community forest (E. Leslie, 2020, personal communication, 14 December 2020).

The expectation on the part of both the government and communities is that CFA holders will manage for a broad range of community benefits. Community forest agreements are in fact distinguished from other forms of tenure by government through a set of explicit goals for the Community Forest Program that contrast with the generally understood goals of the timber processing industry (Table 20.1, BCCFA, 2019b).

An ongoing area of effort for the BCCFA is to ensure that the added expectations placed on community forest tenure holders continue to be recognised in provincial forest policy. In the mid-2000s, in response to the advocacy efforts of the BCCFA, government simplified the stumpage rates to account for the increased costs of community forestry, freeing them from the onerous and restrictive requirements of the BC stumpage appraisal system. This change facilitated administrative streamlining of the tenure, giving community forests an incremental increase in autonomy. These changes do not constitute a devolution of strategic management control or a fundamental increase in management rights (Leslie, 2016). However, my observation is that these changes have significantly improved the ability of community forests to harvest in highly constrained areas while managing for multiple values, to generate economic benefits for their communities, and to make investments in the land base.

Another important factor for community forests is the setting of the Allowable Annual Cut (AAC). To determine the AAC, the CFA holder must undertake the technical analysis of timber supply while balancing land-management priorities that incorporate a range of social, cultural, and ecological factors. The rationale for the AAC is included in the CFA holder's Management Plan, which must be approved by the Ministry of Forest and becomes part of the licence. For

many community forests, the AAC 'represents a de facto expression of community values and priorities' (Leslie, 2016, p. 316). But there is a tension, as Leslie describes: '[since] community forests are offered an AAC apportionment from a timber supply area instead of a land base to manage, the CFA tenure is framed from the very beginning in terms of a predetermined harvest level' (2016, p. 315). A community that is offered this apportioned harvest volume must then work with the Ministry of Forests to identify a suitable area of Crown land. This can involve the consideration of (and negotiation with) many parties, including other pre-existing tenure holders, which can result in the new community forest having less than optimal boundaries from the point of view of community-based management.

Leslie (2016) argues that for BC's community forests to meet their full potential, the tenure rights must be expanded.

> Although community forests have a mandate to manage for a wide range of resource values, they have limited rights and no economic incentives to manage for these other values. As a community forest manager, I struggle with this incongruity every day. Rather than a narrow tenure system based on paying stumpage for timber as it is harvested, a more appropriate tenure system may be a land 'rent' model based on area, not timber. In discussion of community forest program development and expansion, it is inappropriate to frame community forests as simply another tenure group seeking access to timber. Rather, we need to be thinking about new ways to facilitate integrated management of forest resources.
>
> *(Leslie, 2016, p. 325)*

Community forest governance

CFAs are granted to legal entities that best represent a local community's interests. These community-based institutions are self-organising, and the advice of the BCCFA is that 'a community's choice of a legal structure should reflect its needs and values' (Mulkey, Stoklosa, & Furness, 2012, p. 11). In accordance with the Forest Act, the tenure can be held by a limited community-held corporation, a society, a co-operative, a First Nations Band, a local government, or a limited partnership involving one or more of these entities (British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development, 2020a). These organisations are led by a board of directors which develops the strategic direction and oversees its financial sustainability. The board hires a manager, often a professional forester, to implement the plan and carry out the day-to-day operations. Collectively, in 2021, over 100 Indigenous and non-Indigenous communities are involved in community forestry in BC.

The organisational structure of many forest organisations under CFAs is designed to foster understanding and co-operation between rural and Indigenous communities. Nearly half of the operating community forests in BC are held by Indigenous Nations or are partnerships between Indigenous and non-Indigenous communities. Of the 58 operating community forests, 13 (22 per cent) are held solely by an Indigenous Nation, and another 14 (24 per cent) are partnerships between Indigenous and non-Indigenous communities.

In addition, many community forest organisations include Indigenous representation on their boards. Indigenous Nations and their members are also engaged in co-operative planning, share profits, have memoranda of understanding and employment contracts, and work with community forest organisations in capacity-building activities like training and education. A good example is the Lower North Thompson Community Forest Society. This Society represents a group of communities in the Lower North Thompson river valley from Little Fort to

McLure, including Chu Chua – the main community of the Simpcw First Nation. In 2017, the Community Forest Society partnered with the Simcpw First Nation to conduct fuel treatments to reduce the risk of wildfire around the First Nation's reservation, and they also worked together to expand the mountain-bike trail network. In that same year, grants were disbursed totalling US$3,850 (CAD5,000) to the Simpcw Youth Program, US$7,700 (CAD10,000) to the Chu Chua Volunteer Fire Department, and US$3,463 (CAD4,500) to the Simpcw for Water Engineering Technology Certified Technician training (BCCFA, 2018).

Log sales and economic benefits

Most community forests do not own their own processing facilities and are primarily independent log sellers. They sell on the open market to a range of customers, depending on their location in the province. Where markets are diverse, they are price-makers and can sell to numerous, competing buyers. But in some parts of the province, the CFA holder may not be so fortunate and is a price-taker with only one or two buyers.

Consistently, the BCCFA's survey results show that 75–80 per cent of the volume sold by community forests province-wide go to large sawmills, while about 20–25 per cent go to small and medium-sized facilities, value added manufacturers, mills that use low-quality fibre, or low quality fibre and other uses (BCCFA, 2020). In increasingly consolidated log markets, CFA holders are challenged to capture the highest value possible for their logs. To maximise the value of the forest resources under their control, some are developing local manufacturing capacity and seeking partnerships.

A small number of community forests have invested in their own milling capacity. The Harrop-Procter, Lower North Thompson, Valemount, and Dunster Community Forests have all diversified their operations by operating small scale mills. In addition, many CFA holders prioritise the use of waste and residual fibre to generate more diverse revenue streams while mitigating the risk of wildfire and impacts of climate change. For example, the Cheakamus Community Forest (CCF) has implemented a project to use post-harvest biomass to create compost. The CCF is a partnership between the Lil'wat and Squamish First Nations and the Resort Municipality of Whistler. Through the CCF's wildfire risk reduction work, the biomass is ground and delivered to the municipality's composter, where it is turned into Class A soil amendment and sold locally (BCCFA, 2019a).

The economic benefits derived from community forests vary from place to place. Each one creates local jobs and direct revenue for the provincial government. Variability also comes in how the profits are defined and distributed. In some cases, profits in the form of dividends are paid to the local shareholders (e.g., local municipal government and First Nations Band Council such as the Barkley Community Forest Corporation, a partnership between the District of Ucluelet and the Toquaht Nation). Profits are also often disbursed to local service groups and charities through grants to support local social, economic, cultural, and environmental priorities. The BCCFA's 2019 Community Forest Indicators report documented a total of over US$12 million (CAD16 million) in community contributions by respondents in the reporting year, averaging US$392,381 (CAD509,497) per community forest. These contributions took the form of everything from grants to local youth sports teams to investments in community infrastructure like seniors' housing (BCCFA, 2019a). In other cases, profits are reinvested back into the land base through activities such as intensive silviculture or ecosystem restoration or are used to leverage new economic development opportunities such as the purchase of small milling facilities.

Threats and challenges

BC's community forests face the same threats as the major licensees: biophysical threats such as climate change, catastrophic wildfires, and pest infestations, as well as economic conditions imposed by international commodity markets. The provincial forest policy that governs forest management in BC can also be an obstacle to the success of community forests, if not crafted to support small, area-based tenures.

They also have challenges that are unique to community-based tenures. The tenure area itself can be difficult to manage, as community forests are often located in areas surrounding communities that are sensitive and hold important ecological, social, and cultural values. In a regulatory regime designed for timber production, these values are considered 'constraints'. According to a BCCFA survey, over 45 per cent of the community forest land base is comprised of sensitive areas, including but not limited to domestic and community watersheds; riparian areas; visually sensitive areas; unstable terrain; areas with archaeological or cultural heritage areas; critical wildlife habitat; and recreation trails and sites. For some tenure holders, 100 per cent of their area is deemed sensitive (BCCFA, 2020). A significant number of community forests are limited in their ability to achieve an economy of scale because of the small size of their tenure, coupled with the high operating costs associated with harvesting in sensitive areas and the need for a higher degree of public engagement. This is especially difficult at a time when corporate consolidation within the industry is accelerating.

Community forests can also struggle from the inside. As Gunter and Mulkey (2017) explain, there can be significant challenges internal to community forest organisations.

> Since the community forests are governed by volunteer boards, local capacity to establish effective organizational governance structures is vital. There is an ongoing need for education and training to understand and navigate the complexities of community processes and organizational governance issues related to the management of a community resource.
>
> *(Gunter & Mulkey, 2017, p. 155)*

Important questions for organisations to consider are the following: How are community members represented within the governance structure, and how do they gain access to decision-making positions in the organisation? What are the relationships between the elected officials of local governments and the leadership of the community forest? How are transparency and accountability to the community assured? How does the organisation manage conflicts of interest? How does the community forest distribute the profits and other benefits of community forest management? The BCCFA is tracking the evolution of community forest governance and produces educational materials for its members to help them navigate what, for many, are uncharted waters.

While a solid understanding of effective board governance is important, community forest managers play a pivotal role in fostering and maintaining successful community forest initiatives. They operationalise forest management and are tasked with creating viable business opportunities while also managing for diverse and sometimes conflicting social, environmental, and cultural community values. Siegner (2019) explains that these managers must blend hands-on forestry skills with the ability to develop trusting relationships with community members who want to take an active part in forest management, while also maintaining a viable business. Community forest managers are immersed in their communities and develop an understanding of local needs and values. Their positions enable them to devise forest management strategies and business opportunities that create long-term community benefits.

The BCCFA has benefited greatly from the participation of these forest professionals in its development. These managers, as well as community forest board members, have understood the importance of building a collective voice to represent their unique place in forest management and community economic development.

The BC Community Forest Association

Foundations of the BCCFA

The BC Community Forest Association (BCCFA) was formed in 2002 from an inaugural membership representing ten communities. The provincial government's community forest pilot program had been functioning for just over 2 years, and numerous issues quickly became evident. Provincial forest policy was designed for large industrial companies, not for the new small-scale community-held enterprises. The pilot CFAs needed an advocate that could work with the provincial government to improve their circumstances. There was a clear need to create a formal organisation where those involved in the pilots, as well as other community leaders interested in community forestry, could come together to share their experiences and build a province-wide network.

From its inception, the BCCFA was grassroots, inclusive, and member driven. The Association has grown in step with the expansion of the community forest program while preserving its original intent to be the voice of BC communities engaged in community forest management, as well as those seeking to establish community forests.

The BCCFA is a legally incorporated not-for-profit society. Membership in the BCCFA is voluntary and available to all community forest organisations in British Columbia that support the vision, mission, purposes, and guiding principles of the Association. This includes those that have forest tenure agreements, as well as community organisations that are seeking to obtain a CFA. Member groups include First Nations, local governments, and organisations representing communities throughout British Columbia. Members of the Association have the right to elect the board of directors and to vote on key decisions. Of the operating community forests in BC, 78 per cent are currently members. Separate non-voting membership categories of 'associate' and 'supplier' member are open to individuals, institutions, and companies that also support the vision, mission, purposes, and guiding principles. In 2021, there were 54 full members, 6 associate members, and 9 supplier members.

Full members pay membership dues based on their status. Operating community forests pay annual membership dues based on their AAC and their actual harvest. These are a fixed rate of US$0.042/$m^3$ (CAD0.055/m^3) based on AAC, plus US$0.092/$m^3$ (CAD0.12/m3) calculated on the previous calendar year's harvest. This allows the annual dues to reflect the economic activity of the members. Fees are capped at US$7,700/year (CAD10,000/year). Under this formula, the annual dues vary greatly, reflecting the range in sizes of the members. In 2020, the smallest community forest paid US$46 (CAD60), while the six largest hit the US$7,700 (CAD 10,000) cap. Communities seeking a CFA pay US$192/year (CAD250/year). Supplier members pay US$385/year (CAD500/year) and associate members US$38/year (CAD50/year). The formula for the membership fees was developed by and approved by the membership with the goal of making the BCCFA self-sufficient. To date, this goal has been achieved, with the core operations of the Association, while modest, funded solely through the membership fees. In addition, the Association has a fee-for-service program that offers consulting services regarding community forest governance; it hosts an annual general meeting and conference; and it manages special projects with outside funding.

The members elect a nine-member board of directors from within the membership. The role of this volunteer board is to set policy, establish strategic priorities, and approve budgets. Board members are elected for a 2-year term, and for a maximum of three consecutive terms. A small contract staff operationalises the strategic plan.

Purposes of the Association

Given the success of the program to date, the Association contends that community forests are a tangible way to promote rural development and can also be a tool to advance reconciliation with Indigenous Nations. By securing long-term forest and land-management rights, Indigenous and non-Indigenous communities are increasing their self-reliance and their capacity to be more resilient. The Association's work is rooted in the core belief that community forests are the best tenure option for public land around rural communities.

The mandate of the BCCFA is focused in three key areas: advocacy, networking, and education. The Association is the conduit between the interests and needs of its members and decision makers in the provincial government. The association works to improve the legislation, regulations, and policy that affect community forests. Examples of its success are removal of the community forest tenures' probationary period and the changes in stumpage and administrative streamlining described earlier.

By working with the expertise developed within its membership, as well as with academia, industry, government, and the non-profit sector, the BCCFA is building knowledge of the unique approaches required in community forestry. Supporting the development of a strong collaborative network, the Association develops practical resources and links community forest practitioners to one another. The extension services of the Association aim to increase the organisational capacity of its members, focusing on effective governance, community engagement, accountability, and transparency, as well as leading-edge information aspects on forest management that are of special interest to community forests, like wildfire mitigation.

A primary focus of the BCCFA's work is to advocate for an expansion to both the number and size of community forests. Many communities would like the opportunity to manage a community forest but do not have access to harvesting rights. In addition, several existing community forests struggle to meet their objectives and benefit their communities because they are too small. For these reasons, the BCCFA has consistently recommended an increase in the number of community forest tenures, making them broadly available to communities and Indigenous Nations, as well as an increase in the size of many existing tenures to make them large enough to be efficient, economically viable, and able to provide benefit to local economies.

Broad public education about community forestry is more of a challenge for this small non-profit organisation. With limited resources for advertising, it can be difficult to raise awareness about the benefit of community forestry among people who are not involved in the forest sector. This is particularly the case in BC, where most of the population lives in urban centres, away from the direct experience of forests and forest management. Even so, the BCCFA recognises the importance of building broad support for community forestry, especially as it offers solutions to some of the pressing problems British Columbians face, including mitigating and adapting to climate change, and taking meaningful action to advance reconciliation with Indigenous Nations.

Since 2014, the BCCFA has conducted an annual survey of its members to measure the economic, social, cultural, and environmental benefits that community forests generate. Working in collaboration with community forest practitioners, government, academia, and industry experts, the Association developed 18 common and easy-to-measure indicators that can be applied

regardless of governance structure or ecosystem to show the impact of CFAs. Making data collection relatively easy and inexpensive was the goal. An annual report shares the survey results along with many examples and first-hand stories, and provides tangible, quantitative information on the benefits of community forests.

Thirty-two community forests participated in the 2019–2020 survey, providing data from their last reporting year, specific to their operations. This sample represents 73 per cent of the operating community forests in the BC Community Forest Association. Most are small rural communities, Indigenous and non-Indigenous, with an average population of 3,965 (see Appendix 1 for links to the reports).

Notable results of the 2019—2020 survey include:

- Community forests are creating 85 per cent more jobs/m^3 than the industry average in their forestry, logging, and support services.
- They generated US$1.42 million (CAD$1.85 million) in economic activity in their rural communities, on average, and contributed an average of US$426,060 (CAD$553,518) cash and in-kind to local projects.
- Many community forests are leaders in the proactive mitigation of climate change and wildfire hazard. Community forests tripled their own investments from 2019 to US$2 million (CAD$2.7 million) in 2020.
- Community forests are facilitating meaningful partnerships with Indigenous communities. Nearly half of the operating community forests in BC are held by First Nations or are partnerships between Indigenous and non-Indigenous communities (BCCFA, 2020).

Challenges of the Association

The differences amongst the communities that are involved in community forestry include the size of the tenures and the communities, the bio-geoclimatic zones in which CFAs are located, and the culture of the people who live there. While this diversity is a strength of the program, it presents certain challenges for the Association. This has led the BCCFA leadership to be inclusive and in constant engagement with the membership to strike the right balance on important matters of provincial policy.

Future of community forestry in BC

In 2018, the BCCFA recommended that the province consider designating a 10 km zone around rural communities where community tenures and wildfire management are prioritised. A critical zone for community protection, this zone also encompasses areas around communities where other social values and ecosystem services intersect, including community water supplies, sites of cultural significance, and recreational areas. Further, this zone is of prime importance to Indigenous and rural communities as they invest in economic development to become more self-reliant. The Association asserted that community-based tenures – the community forest agreement, the First Nations woodlands licence, and small locally held woodlot licences – are the most appropriate mechanism to meet urgent priorities for rural development and community protection.

To implement this concept would require a significant excision of parts of existing concession licences and their redistribution to communities that develop a new vision for the lands that surround them. The Association's concept would see communities, Indigenous and non-Indigenous, taking on a stronger stewardship role. While there is widespread political support

for community forestry, the establishment of new community-based tenures such as CFAs and the expansion of existing ones is challenged by the fact that the province's AAC is already allocated to other forms of forest tenures. The lack of unallocated harvest rights is compounded by the reality of a decreasing wood supply resulting from the mountain pine beetle epidemic and forest fires.

Present-day legislation dictates that to re-allocate the timber harvesting rights from a forest company with an existing tenure would require compensation. In effect, the provincial government would have to buy back the harvesting rights. In today's economic climate and with the high value placed on harvesting rights, government argues that this price is prohibitively expensive. Another avenue is to make harvesting rights available to community forests through the apportionment process that follows timber supply reviews.[8] This has created modest gains in the community forest program in recent years, and some argue it could be a mechanism to create additional community forest opportunities. Further gains for community forests will require political will and collaboration on the part of communities, Indigenous Nations, and local, regional, and provincial governments, along with the support of the broader forest industry.

Conclusion

Two decades into British Columbia's experiment with community forestry, interest and support for the concept is high. People across the political spectrum see the value of this tenure model. Community forests present a unique opportunity for Indigenous and non-Indigenous communities to collaborate in the management of local forest resources. They can energise rural development in a manner consistent with the principles of community economic development, and they empower communities to take action to adapt to climate change and to protect themselves from catastrophic wildfires.

Maintaining and strengthening the tenure rights of community forests will be important work for the BCCFA and the provincial government, along with continuing to improve forest policy to ensure it supports this unique form of tenure. An even greater, yet worthwhile, challenge is to bring community forestry to more parts of BC so that more Indigenous and non-Indigenous communities can chart their own path and create healthy and vibrant rural communities and economies through long-range thinking and sound investments in the forest.

Appendix 1: Practical resources and links to BCCFA reports

1. BC Community Forest Association/Forrex. The Community Forestry Guidebook: Tools and Techniques for Communities in British Columbia (Gunter editor, 2004). http://bccfa.ca/wp-content/uploads/Guidebook_FORREX_.pdf
2. BC Community Forest Association/Forrex. The Community Forestry Guidebook II: Effective Governance and Forest Management (Mulkey & Day editors, 2012). http://bccfa.ca/wp-content/uploads/2013/03/FS30_web-proof.pdf
3. BC Community Forest Association. The Shareholder/Corporation Contact: A Tool for Strengthening Co-operation and Accountability in Community Forestry (Mulkey & Ruston, 2016). http://bccfa.ca/wp-content/uploads/2016/09/BCCFA-Contract-Guidebook-web.pdf
4. BC Community Forest Association. Building Relationship and Cultivating Social Licence: A Guide for Small Tenure Holders in BC (Mulkey et al., 2018). http://bccfa.ca/wp-content/uploads/2018/05/CFA-Social-License-and-Collaboration-signoff-May-15.pdf

Community Forest Indicators: Measuring the benefits of community forestry

1. BC Community Forest Association. Community Forest Indicators 2015: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2015/01/BCCFA-Report-2014-medium_file_A-1.pdf
2. BC Community Forest Association. Community Forest Indicators 2016: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2016/02/BCCFA-Report-2015-web2.pdf
3. BC Community Forest Association. Community Forest Indicators 2017: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2017/04/2017-4-13BCCFAprint.pdf
4. BC Community Forest Association. Community Forest Indicators 2018: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2018/08/BCCFA-Indicators-2018-Sept-12-web.pdf
5. BC Community Forest Association. Community Forest Indicators 2019: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2019/09/BCCFA-Indicators-2019-Sept-19-links.pdf
6. BC Community Forest Association. Community Forest Indicators 2020: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2020/10/BCCFA-Indicators-2020-final.pdf
7. BC Community Forest Association. Community Forest Indicators 2021: Measuring the Benefits of Community Forestry. https://bccfa.ca/wp-content/uploads/2021/09/2021-BCCFA-Community-Forest-Indicators-Report.pdf

Notes

1 Aboriginal rights (including aboriginal title) are rights of use and occupancy – not ownership. They are *sui generis* (unique). The crown continues to hold allodial title, and aboriginal rights are an encumbrance on that title. Aboriginal title is the highest form of aboriginal right which includes the right of exclusive use and occupancy (Garry Merkel, personal communication. August 31, 2020).

2 'The province carefully regulates the amount of timber that may be harvested each year. The maximum amount of timber that may be harvested per year from a specified area of land is called the Allowable Annual Cut (AAC). A separate AAC is assigned to every management unit: Tree Farm Licences, Timber Supply Areas, Community Forest Agreements and Woodlot Licences'. British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development (2012).

3 According to the BCCFA's 2020 Community Forest Indicators Survey, 75 per cent of community forests are on track to meet their harvest targets (known as 'cut control' requirements). This supply of logs to the open market supports the full spectrum of milling and manufacturing facilities in BC.

4 In BC, area-based tenures grant the licensee virtually exclusive rights to harvest timber within a specified area of forest land. In contrast, volume-based tenures grant licensees the right to harvest a certain amount of timber within a timber supply area, allowing several licensees to operate in the same management unit.

5 In the absence of provincial regulations governing non-timber resources, CFA holders have yet to exercise this right to manage and charge fees for botanical products.

6 All transfers undergo ministerial review to assess the impact on the public interest, Indigenous communities and the marketing of fibre in BC.

7 For example, a CFA originally established as a community-based Society can be transferred to a partnership between a First Nation and a municipality.

8 The allowable annual cut (AAC) of each timber supply area is determined by the chief forester at least once every 10 years. Once the chief forester has determined the allowable annual cut of a timber supply area, the Minister of Forests, Lands, Natural Resource Operations and Rural Development may then apportion it to various forms of agreements. British Columbia. Retrieved from: https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures/forest-tenure-administration/apportionment-commitment-reports-aac

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21

ACHIEVING POLITICAL RIGHTS, ENHANCING FOREST LIVELIHOODS

Latin American Indigenous and Afrodescendant women's views

Omaira Bolaños Cárdenas and Iliana Monterroso

Latin American women's land and resource rights

Increasing attention and awareness of the importance of women's rights, prompted by demands by women's movements and by research, have proven the instrumental value of recognising women's land and resource rights for a range of developmental outcomes, including poverty reduction and food security (Doss & Meinzen-Dick, 2020). Land and resource rights define social status and political power in the village and structure relationships both within and outside the household (Agarwal, 1994). Research and practice evidence that access to land and resources have been recognised as critical for women's empowerment, and for achieving sustainable development goals (Kabeer, 2005).

International agreements and conventions, including the Sustainable Development Goals (SDGs), United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), International Labour Organization Convention concerning Indigenous and Tribal Peoples in Independent Countries 169, and the Voluntary Guidelines on the Governance of Tenure of Lands, Fisheries and Forests in the Context of National Food Security (VGGTs), advocate for women's access to land and resources. These call for States to eliminate women's discrimination, particularly; and ensure gender-equal treatment, Indigenous land, and other assets, with particular attention to their rights. Sustainable Development Goal 5 specifically requires closing the gender gap by promoting equal and secure rights to economic resources, land ownership, and control (Bose et al., 2017).

Although progress across countries is uneven, Latin America leads the tenure reform process globally. As of 2020, Indigenous Peoples, local communities, and Afrodescendants customarily manage at least 31 per cent of land area (571 million hectares [Mha])[1]. While 76 per cent of these areas have been legally recognised as owned or designated for communities, at least 137 Mha remain unrecognised (RRI, 2020b). Still, this represents a major shift in tenure rights for the region's local communities (RRI, 2015a). Community forestry has been widely promoted as leading to sustainable outcomes and more equitable models of forest and resources man-

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agement. Defined broadly as 'forms of forest management involving forest-dependent people', community forestry is based on the premise that secure land and forest resources rights improve resource management, contribute to the achievement of development goals, and support the self-determination of Indigenous and customary groups (Coleman & Mwangi, 2013). Yet, little attention is paid to the question of how women and men can participate equally in emerging governance structures, and in the benefits-distribution mechanisms which foster development opportunities.

This chapter discusses how processes of tenure rights recognition of Latin American Indigenous Peoples and Afrodescendants[2] are linked to women's struggles for recognition and their ability to exercise rights within collective tenure regimes. Contestation processes aimed at occupying representation and decision-making spaces within community-based organisations are discussed. An analysis of how Indigenous and Afrodescendant women develop and strengthen strategies and position their ethnic, socio-cultural, political, and economic agendas will also be presented. It evidences that mobilisation of Indigenous and Afrodescendant women goes beyond the recognition and formalisation of collective tenure rights. It ensures their recognition as political subjects at different levels, and guarantees their ability to exercise collective rights, while enhancing individual and collective livelihoods. This political process is key to understanding the constraints women face in benefiting from community forestry initiatives.

The chapter is divided into three sections. The first provides background and context for understanding the evolution of Indigenous and Afrodescendant women's mobilisation processes around collective rights and their positioning within community-based organisations. The second draws from the authors' participation in women's movements discussions amongst Indigenous and Afrodescendant women's organisations from different Latin American countries. This was convened by the Rights and Resources Initiative (RRI)[3] Coalition. The final section reflects on the conditions that allow processes recognising collective rights to create avenues leading to better outcomes for women. It focuses on promoting community forestry initiatives and ensuring women's rights within Latin American collective systems.

Background and context

This section provides the background and context to understand Latin American Indigenous and Afrodescendant mobilisation for collective land and territories. It will discuss the cruciality of contextualisation in women's struggle for individual and collective rights within community forestry initiatives.

Mobilising for collective land and territories in Latin America

Efforts to formalise collective tenure rights across Latin America, mainly through collective titling, have been shaped by national and international social mobilisations around territorial-based approaches. Claims are also shaped by the reassertion of cultural, gender, and ethnic identities, and environmental protection. These new-style mobilisations have paved the way for crucial policy reforms of Indigenous and Afrodescendant rights (Paschel, 2016; Yashar, 2005). Since the 1970s, and some even earlier, most Latin America countries have democratised and ratified international frameworks. The subsequent constitutional reforms resulted in the introduction of provisions recognising Indigenous and Afrodescendant statutory collective rights, including those to land and resources in several countries.

For instance, Indigenous land rights recognition in Mexico dates to the 1917 agrarian reform (Bray, 2013). Panama established the first *comarca*[4] in 1938 and recognised four more following the Indigenous mobilisation of the 1950s (Velasquez-Runk et al., 2011). In Peru, the recognition of Amazonian Native communities began in the 1970s through constitutional reforms, and also after significant Indigenous mobilisation (Monterroso et al., 2017).

In Colombia, Indigenous Peoples attained the recognition of over 22 Mha previous to endorsing the ILO Convention 169 and enacting the new Constitution in 1991. The new overarching legal framework has propelled reforms protecting Indigenous collective rights, and, for the first time, recognising Afrodescendants as collective tenure rightsholders (Guerrero et al., 2017; Muñoz-Onofre, 2016). In Bolivia, the 2008 constitutional reforms recognised millions of hectares of indigenous land claims as TCOs (*Tierras Comunitarias de Origen*) and created mechanisms for recognising additional indigenous claims (Cronkleton et al., 2009). Brazil has recognised the largest area of community and Indigenous collective rights in the region (RRI & ISA, 2015). The 1988 Federal Constitutional reform included the recognition of *quilombola*[5] communities' territorial rights, triggering the re-creation of rural Black territories (Riscado et al., 2010).

The late 1980s and the early 21st century marked vital transformations in the international legal status of Afrodescendants in the region, raising the level of protection of their human and collective tenure rights. This Afrodescendant movement brought conceptualisations of Black identities catalysed into ethnic-racial policies, including ethno-territoriality (Paschel, 2016; Reiter & Simmons, 2012). Brazil, Colombia, and Ecuador undertook constitutional and legal reforms recognising Afrodescendant rights as distinctive ethnic groups, with their own collective land rights. Despite this progress in international and national legislation, however, Afrodescendants face greater resistance and bigger challenges in land recognition and titling than any other group (Hooker, 2005).

Reconciling women's rights in the collective community forestry initiatives context

Social mobilisation, shifts towards collaborative governance approaches in forest management, and changes in regulations promoted by decentralisation of the forest sector led to the recognition of forest-dependent peoples' rights. At the local level, however, these policy and practice shifts did not always result in equitable benefit-sharing and decision-making in terms of forest resources. Increasingly, disparities in access conditions emerged. Research on inequalities in access mechanisms shows that women's land and resource rights are determined by national policies, communal governance structures, and household dynamics (Monterroso et al., 2019). Therefore, their individual rights are defined both by how collective structures are recognised (or not) by national States and by the rules determining their rights within their collectives. In the forest context, these collectives are referred to as 'forest user groups', which can be a community, a co-operative, a forest committee, or something else.

Important progress has been made to understand the diversity of community forestry initiatives. However, research has focused on the factors leading to initiative sustainability, particularly community forest enterprise development, or the extent of value chain development (Baynes et al., 2015). There is additional attention to livelihood and conservation outcomes, i.e., whether an activity increases forest income generation, or whether management actions prevents forest degradation and deforestation. Nevertheless, the main focus has been on communal and collective structures, with a poor understanding of the power relations underlying individual members' ability to participate equally (Nightingale, 2011). This problem is highlighted in research show-

ing women as still disadvantaged by insecure rights and land and natural resource access; and by exclusion from decision making and governance, from local to national levels (Doss & Meinzen-Dick, 2020). More specifically, research on collective tenure systems shows that women remain marginalised and participate less than men in decisions on land and forest use, management, and benefit distribution (Monterroso et al., 2019).

Women's ability to benefit from community forestry initiatives in collective tenure regimes is closely tied to their recognition as rightsholders and as political subjects in their communal (or collective) governance structures. Since Latin America is one of the regions where community forestry initiatives have been extensively promoted, this provides an excellent context for further exploration of women's engagement in community forestry initiatives. In this paper, we argue that this can only be done through understanding their role, and their place, in the Indigenous and Afrodescendant territorial rights struggle.

Indigenous and Afrodescendant women in Latin American collective rights movements

In Latin America, gender disparity overall, between rights and actual rural land ownership, continues to be vast, and rural and Indigenous women still have limited access and property rights to forests and agricultural land (Bose et al., 2017). Gender, social status, and the nature of collective membership combined determine who can benefit from the rights acquired and influence perception around rules, tenure security, and livelihood outcomes (Larson et al., 2019). Furthermore, securing forest resources tenure rights for women can provide security in the case of the loss of privately owned assets (land and rights) due to the death of, or separation from, their spouse (Quisumbing & Maluccio, 2003); enhance their engagement in public negotiation processes, and thereby their self-determination (Larson et al., 2015), and improve their agency in collective rule-making processes. However, while active participation in decision-making is a crucial step for women in influencing institutional decisions and in forest and land tenure policy reform and implementation, in practice, participation does not mechanically, or equally, enable women to voice their perspectives (Agarwal, 2010). Often, cultural norms defining gender relations at the community level render invisible women's roles in political participation and representation (Mairena et al., 2012).

Indigenous and Afrodescendant women have been part of the broader ethnic territorial rights movement. They have engaged in political processes reshaping national forest tenure policies, including community forestry, but women's tenure rights and access to Indigenous and Afrodescendant territorial benefits are still debated. Indigenous and Afrodescendant women argue that patriarchal structures and a masculinisation of the governance systems limiting women's land and resources access and control prevail within the collective tenure regime legal frameworks and the structures of community-based tenure systems. These reproduce historical injustices alienating women from formalisation processes and from resource management (Llanque et al., 2012; Mairena & Lorio, 2013; MIPMRC, 2015; RRI, 2016a). In practice, these prevailing factors limit gender equity in collective tenure legal recognition and in resource use rights. By failing to clarify tenure and use rightsholders within communities, formalisation processes have not ensured women's tenure rights equity, their leadership roles, territory, and resources governance, or their access to information and equitable benefit distribution.

Although the Latin American Indigenous movement has challenged governmental socio-political systems and hierarchy in their collective rights struggle, gender exclusions and gender power relations are still unresolved. Palacios (2005) asserts that Latin American Indigenous women's leadership has evolved under exclusion systems that undermine their

participation, voice, and viewpoints within Indigenous movement claims. Yet, gaining greater and active participation, voice, and representation in decision-making has constituted a vital means by which Indigenous women have influenced not only policy reform and implementation, but also their ethnic political mobilisation. Mairena et al. (2012) assert that Nicaraguan Indigenous women began participating in territorial rights mobilisation in the 1980s, becoming increasingly empowered in the political and social arenas. However, at the community level, minimal incorporation of women in decision-making persists. Pequeño (2009) explains how Ecuadorian Indigenous women's organisational processes contributed to their positioning within the Indigenous movement, enabling them to bring issues absent from indigenous political demands into the public debate. Rousseau and Morales (2016) argue that the Peruvian Indigenous women's movement emerged from weaknesses in the broader Indigenous movement and gaps in the political interface, which provided greater space for Indigenous women to exercise a public role. Although recognised as a legitimate political subject and representative, the Peruvian Indigenous women's movement's capacity to influence state policy is still evolving.

Indigenous women have progressed in their political participation and approach to representation (Ulloa, 2020). Their gradual mobilisation reinforced women's confidence and empowered them to fight for their rights to resources and to ensure their family and communities' livelihoods while challenging their internal exclusion to transform collective identities (Rousseau & Morales, 2016; Schmink & Arteaga, 2015). They have moved towards strategically selecting the type of political arenas to influence, rethinking the purpose of participation and representation, and reshaping political approaches by departing from their ethnic-cultural practices – within and outside their communities (Ulloa, 2020).

Similarly, Afrodescendant women have been fundamental to social and political movements recognising communal territorial rights. They have played a crucial role in community organisation processes and territory and resource governance under conditions of exclusion that make their contributions invisible. Moreover, multiple forms of discrimination, linked to gender, racial, and ethnic-based processes, have reinforced social marginalisation and limited Afrodescendant women's political representation and land access (ECLAC, 2018). Brondo (2013) asserts that the 1990s 'gender-blind' neo-liberal land policy expanded Garifuna land displacement in Honduras and exacerbated racial and gender inequality there. Under these laws, Garifuna women lost their land rights through modernisation of legislation and economic globalisation focusing on land privatisation. This meant issuing individual titles, as opposed to the Garifuna customary system of communal use and matrilineal inheritance rights.

In their organisational process, Colombian Black women faced challenges to their autonomy, identity, and visibility in a highly violent system designed to enhance male leadership (Mina et al., 2015). Women have had to overcome dominant racial and patriarchal viewpoints in territorial defence and governance processes. In Brazil, *Quilombola* women's invisibility in public policy contradicts their essential role in the management and maintenance of sociocultural and economic life in quilombo territories, and as agents in the fundamental land rights struggle.

While legislative changes provide communities with a legal basis to access resources essential for livelihoods, these laws are often not enough to secure communities' ability to exercise their new rights (Monterroso et al., 2019). Also, women within those communities do not always hold the same decision rights on land and territorial governance. Thus, inequality and structural exclusion continue to be hallmarks of Indigenous and Afrodescendant women's membership within their groups, and within the broader society.

Indigenous and Afrodescendant women's views on collective tenure rights and forest livelihoods

The following is based on discussions in five regional multi-stakeholder workshops[6] on women's land and forest tenure rights (from 2012 to 2016), which brought together Indigenous, Afrodescendant, and community women as well as academics, NGOs, and Government representatives from different Latin American countries. These multi-stakeholder meetings provided a unique space for women to voice their perspectives on the factors and practices limiting or favouring equal opportunities for collective tenure rights and community forest management benefits. These discussions assumed that policy reform implementation generally does not address the complexities of collective land and forest tenure, customary governance systems, or the persistent gender inequality practices limiting land and resource access and the exercise of rights. The encounters focused on collective tenure systems and aimed at bringing a deeper understanding of how Indigenous and Afrodescendant territorial rights recognition has translated into the reduction of historical injustice in women's tenure rights.

Two inter-related moments are discussed here. The first two workshops focused on identifying and increasing knowledge of shared challenges and priority issues in the region and across ethnic groups. In the three following encounters, Indigenous, Afrodescendant, and community women used their understanding of common issues and challenges to target key political opportunities at the national and regional level, and mobilised as a regional platform to develop a common strategic and purposefully political advocacy strategy.

Advancing women's rights agenda within collective tenure

The first two regional workshops held in Bolivia (2012) and Nicaragua (2013) helped establish the analytical basis for the community, institutional, and legislative gaps to be addressed to foster stronger integration of gender and women's rights into collective land and forest tenure policy-making and implementation. Table 21.1 synthesises six topics and provides a 'conceptual roadmap' emerging from the first two regional encounters, including a) gender as a category of analysis in territorial governance; b) land and resource access, and the benefits of collective tenure rights; c) gender equity in participation and decision making; d) public policy, territorial norms, and multi-level governance; e) alliances among women's movements; and f) information and knowledge.

The 2012 regional encounter led to the development of this conceptual roadmap, which became the basis for articulating ideas emerging from horizontal learning and exchanges, as well as critical analysis of the gender-based injustices faced by women. It helped identify how all this affects the recognition and exercise of their tenure rights (Llanque et al., 2012). The women's conceptual roadmap discussions highlighted that having a clear definition of collective tenure rightsholders is a critical factor in the exercise of territorial and resource governance rights. While the legal recognition of collective land and forest resource tenure intends to benefit all community members, in practice it has not guaranteed women's rights to access and govern land and resources, nor equitable access to social, political, and economic benefits. The discussions stressed the need for breaking patterns of gender inequality from the communities to the national sphere, and to fully position women as a collective tenure rightsholders. They suggested this could be achieved by making women's land and forest resource management roles and contributions visible; questioning and dismantling male-dominated decision-making systems; legitimising women's organisations and leadership roles; and transforming community and statutory norms on participation and representation.

Table 21.1 Women multi-stakeholder conceptual road map synthesis

Discussion topics	*Bolivia (2012)*	*Nicaragua (2013)*
Gender as a category of analysis in territorial governance	Understanding relationships between women and men, productive and reproductive views allow for the addressing of structural violence against women at the individual, family, and community levels. Gender inequality gaps are exacerbated by the masculinisation of access and control norms to economic, social, cultural, and political assets of the community. Concept of complementary women's roles hides subordinated position in society.	Lack of clarity in internal mechanisms of access and participation, despite advances in collective land legislation in Latin America. Patriarchal, structurally racist, and gender-based biased conceptions persist in legal definitions of collective land rights, limiting women's enjoyment of these. Ethnic group history matters when defining land tenure rights; for Afrodescendants, it implies redefinition of relationship with land and resources.
Land and resource access for the benefit of collective tenure rights	Recognising collective land tenure rights does not guarantee women's (and other disadvantaged groups') rights recognition to land and resources, nor does it guarantee access to social, political, and economic benefits. For self-determination in territorial governance, communities need to recognise women as socio-political subjects with a distinctive identity, i.e., recognition of women as holders of collective and individual benefits and rights.	Advancing women's land and resource rights requires clarifying rights and resource access at the community level. The interplay between collective and individual rights, the identity of women as individuals and as collective members, varies according to historical processes of ethnic and women groups. Discussions of women's positioning in the collective tenure context strengthens mobilisation around the recognition of Indigenous and Afrodescendant collective territorial rights.
Gender equity in participation and decision-making	Women's participation in multi-level decision-making is critical to overcome inequality and invisibility conditions. Effective participation should rise from parity in representation and seeing women as a political peers. The concept of 'women' should be re-thought by moving away from socially assigned roles and responsibilities.	

Table 21.1 (Continued)

Discussion topics	*Bolivia (2012)*	*Nicaragua (2013)*
	Reflection on women's role in territorial and external political dynamics contributes to breaking inter-generational inequality cycles in participation and decision-making. Women's participation in mixed organisations is insufficient to guarantee inclusion of their perspectives in the laws and territorial by-laws. Women's own spaces of reflection and analysis contribute to their empowerment.	
Public policy, territorial norms, and multilevel governance	Compatibility between public and territorial policies to strengthen opportunities for women and men to manage and benefit from territories and resources. Redefine self-regulatory territorial systems legitimising unjust and vertical governance systems limiting women's and disadvantaged groups' rights. Qualitative transformation is required at different levels: • Political sphere: Question decision-making mechanisms limiting participation and reproducing oppressive relations. • Normative level: Make gender an integral component territorial policy. • Domestic sphere: Transform power and subordinate relationships.	
Women's movements' alliances	Strengthening women's movements and their alliances are an important entry point to achieve common goals and gain social recognition as rightsholders. Women's autonomous movements strengthen a common position on a) understanding oppressive systems in community coexistence affecting women, land, and territories; b) dignified economic autonomy for women; c) revitalisation of women's knowledge and wisdom relationship to the land. Women's right to physical and emotional non-violence must be part of the processes influencing changes in services and decision-making access within State power structures and systems of discrimination and disparities.	**Lessons learned from advocacy strategies** Advocacy efforts to change norms impairing women's rights should emerge from within communities. Physical and psychological violence against women is exercised at different levels, affecting women's participation and advocacy in decision-making mechanisms. The lack of mechanisms for facilitating women's participation is a form of social and political violence against women.

(*Continued*)

Table 21.1 (Continued)

Discussion topics	*Bolivia (2012)*	*Nicaragua (2013)*
		Enhancing women's leadership in organisations strengthen Indigenous mobilisation. Finding a common agenda between the broader indigenous movement and women's organisations contributes to consolidated alliances. Strategic alliances need spaces for negotiation to resolve disagreements, unify understandings, and develop common languages that address parties' aspirations around similar goals.
Information and knowledge	Remarkable absence of gender disaggregated data on collective land and resources tenure rights.	**Production and access to knowledge** Lack of research on Indigenous and Afrodescendant women's perspective on land rights. Research done in regions by local academics and/or Indigenous and community researchers remains unrecognised. Research produced in English is privileged, limiting access to published knowledge. Community leaders' knowledge is not recognised in foreign language research and publication. Spirituality and cosmogony of communities are not adequately recognised by academic research.

Source: Authors' own creation, based on discussions from the multi-stakeholder workshops in Bolivia and Nicaragua.

The 2013 regional workshop deepened the conceptual roadmap analysis and highlighted the internal and external dynamics preventing women's participation and decision-making rights (Mairena & Lorio, 2013). The debate signalled the importance of recognising women as a legitimate peer in the legal and social arenas related to land and resources governance, and in political participation and representation at all levels. It also unveiled socio-cultural and political systems

and structures of domestic, community, and state violence and racial discrimination against Indigenous and Afrodescendant women that persist within their communities, the wider society, and legal systems. These structures exacerbate gender, racial, and ethnic inequalities and women's marginalisation in terms of participation and decision-making.

The discussion underlined the contentious interplay between collective and individual rights within communal systems and women's place in them. Women's identity as individuals and as members of a collective varies across ethnic groups and contexts. Women claim their collective membership gives little chance to exercise their individual rights. They concluded that women's individual rights do not go against their collective rights or the political agendas of their groups. Furthermore, identifying a shared agenda between the broader Indigenous or Afrodescendant movements and the women's rights agenda strengthens alliances in securing land and forest tenure rights and collective resource management.

The discussion here underscores the importance of overcoming structural and systemic gender inequalities, discrimination practices, and abuse against women as essential for securing women's effective participation in Community Forest Management (CFM) initiatives. CFM design needs to go beyond entrepreneurial project goals to become a multi-level path for reaffirming women's rights and leadership.

Putting the conceptual road map into action

The next three regional engagements aimed at strategically influencing national and international spheres, and promoting policy recommendations based on Indigenous, Afrodescendant, and community women's perspectives related to their territorial and resource rights, roles, and contributions. The events convened women from different Latin American countries, and in some cases from other continents, to work together toward supporting a national or international women's political agendas and building a bridging dialogue with governments. The workshops followed a similar pattern, involving two days of debate to prepare policy recommendations, and a public event to present the recommendations in an effort to gain endorsement or commitment from governments and/or international agency delegates.

The third encounter took place in July 2014, previous to the UNFCCC-COP-20 global climate change discussion. The event intended to position Indigenous women as crucial rightsholders and to present their proposals as part of the climate change commitments of the Peruvian government. The recommendations stressed the relationship between climate change and Indigenous women's collective land and forest resource rights and included (ONAMIAP, 2014)

- Effective implementation of the international framework and national laws protecting Indigenous Peoples and Indigenous women's rights;
- Promotion of Indigenous women's participation in the design, implementation, and evaluation of policies, plans, and programs in Indigenous territories;
- Revision and update of the legal framework to guarantee effective and equal participation of Indigenous women at all decision-making levels;
- Recognition of Indigenous women's ancestral knowledge, and their role in safeguarding and transmitting cultural and social practices to new generations.

This encounter was critical in positioning ONAMIAP (National Indigenous Organization of Andean and Amazonian Women), using their own voice and proposals, in a highly competitive climate change multi-stakeholder platform – a scenario dominated by male representatives from Peruvian national Indigenous organisations. Moreover, ONAMIAP is now considered one

of the crucial national Indigenous constituencies that must be brought to the discussion table when addressing livelihoods, such as community forestry, particularly to secure women's tenure rights and their effective participation in climate-change initiatives.

The fourth encounter was held in Colombia (2015) to influence the National Development Plan (NDP, 2014–2018) regarding the promotion of women's tenure rights within national policy and institutions, and to advocate for comprehensive rural women's rights and policies (RRI, 2015b). The regional event contributed to larger rural women's tenure rights mobilisation led by Peasant, Afrodescendant, and Indigenous women. The rural women's platform – 'Table for Political Advocacy of Colombian Rural Women' (MIPMRC in Spanish) – pressured the government to include in the NDP specific provisions on rural women's land rights and the creation of mechanisms to advance and implement them. This included the creation of the Office of Rural Woman within the Minister of Agriculture and Rural Development. Box 21.1 summarises the process.

Box 21.1 Bringing Indigenous, Afrodescendants, and Peasant women's perspectives into Colombia's National Development Plan

The 2012–2016 peace negotiation process between the FARC-EP guerrillas and the Colombian government highlighted the national importance of land tenure rights in policy reform. The peace accord recognised the extreme inequality in land access, and land concentration as the primary source of the violent armed conflict. It also acknowledged the disproportionate impact on Peasant, Indigenous, and Afrodescendant communities, and on rural women.

During the peace negotiation, Colombia's 2014–2018 National Development Plan provided an opportunity to promote women's land tenure rights.

The rural women's movement advanced the definition of rural women's rights and mechanisms for implementation. The NDP approved by Law 1753–2015 included provisions for promoting gender equity in land titling, ensuring access to livelihood micro-financing and encouraging women's political representation.

Through this process, the Peasant women's movement, Mesa de Incidencia Politica de Mujeres Rurales Colombianas (MIPMRC) and the Colombian National Indigenous Organization (ONIC) produced the first draft of a women's land rights public policy guide to advance the creation of a comprehensive rural women's rights law (MIPMRC, 2015; ONIC, 2016). This guide integrates Indigenous and Afrodescendant women's views on collective tenure rights. This was a crucial step, given that land policy reforms have historically privileged individual tenure rights over collective perspectives. The guide presents the historical contexts and political viewpoints from which Peasant, Indigenous, and Afrodescendant women conceived their land and resources tenure rights. It proposes an ethnic-territorial stance and participatory process. The participatory principle implies both a dynamic reading of the context affecting the law's implementation and a review and enhancement of women's social-cultural and political participation conditions.

The viewpoints and conditions to land rights access of each women's group were delineated through critical analysis. Peasant women stressed land value and local economies as the driving force behind their political and economic empowerment. Afrodescendant women recognised their bodies as a territory and positioned themselves at the centre of territory. Through creative resistance, Afrodescendant women have created their ethnic identity and history and have guided the political

mobilisation for territorial rights. For Indigenous women, territory embraces celestial, terrestrial, and underground life. Water emerges from under the ground, sustaining Mother Earth and life. Women help regulate resources in the territory and are mediators between humans, nature, and society.

Therefore, changes in regulation should not homogenise women; reforms need to appropriately respond to women's specific characteristics, history, demands and perspectives, ethnic and social background. New regulation should address the multiple dimensions of historical inequality preventing women from fully exercising their land and resource tenure rights.

The fifth regional workshop in 2016 centred on influencing the International Decade for People of African descent 2015–2024 (the Decade).[7] The Decade includes three areas: recognition focusing on equality and non-discrimination rights; justice to ensure equality before the law, and the adoption of affirmative action; and development promoting education, employment, health, and housing rights (UN, 2015). None of these addresses Afrodescendant women's land rights. Considering this critical gap, the fifth multi-stakeholder workshop was conceived to promote recommendations on incorporating women's land rights (RRI, 2016b).

The regional encounter was convened in Colombia (2016), where the Afrodescendant movement was actively pursuing a regional discussion around the Decade's potentials and gaps. The regional workshop brought together Afrodescendant women from several Latin American and Caribbean countries to discuss and propose recommendations to secure their territorial rights. In the recommendations, Afrodescendant women urged the regional governments to safeguard the collective and territorial rights of women as crucial steps to ensure the presence and active inclusion of Afrodescendant women in the countries' political, economic, and social life. They also called for recognition of Afrodescendant women as subjects of tenure rights within the 169 ILO Convention and national laws; the reduction of violence against women; the elimination of representation disparities at different levels; the creation of mechanisms for participation in decision making; and the creation of a more inclusive, and less violent, development model (RRI, 2016a; 2016b). They also urged States and governments to 'rethink laws that hinder and destabilize the self-directed development of Afrodescendent communities, and override their exercise of their ancestral rights' (ECLAC, 2018, p. 50).

Participants provided testimonies of the state of Afrodescendant collective tenure rights recognition and the role of women in collective tenure systems. Box 21.2 presents a Garifuna woman's testimony on the pressures from development programs and the tourist industry on Garifuna communities on Honduras' north coast. It also describes Garifuna women's strategies for preserving their matrilineal and communal land and environmental management. Women played a crucial role in the Garifuna movement for securing ancestral lands. In the Garifuna's matrifocal and communal system, land had historically passed through matrilineal lines, allowing women to play a key role in community and land decision-making. As noted previously, however, the 1990s neo-liberal land reform and regularisation program in Honduras disrupted the Garifuna communal and matrilineal systems by privatising and selling community land (Brondo, 2013). While land privatisation increasingly affects women's land rights and their community decision-making role, Garifuna women have resisted by using cultural systems that help safeguard community kinship networks of solidarity and traditional knowledge.

Box 21.2 Garifuna people and women in Honduras

[We], the Garifuna people arrived in Honduras in 1797, after being expelled from the Island of Saint Vincent, by the British. To date, Garifuna people maintain a very solid cultural resistance allowing us to preserve the Arawak language and culture of the Antilles. Garifuna people rose from the 17th century cultural and racial syncretism between Africans and Caribbean indigenous peoples.

Currently, we are 47 Garifuna communities on the north coast of Honduras. Even though the State recognized our territorial property rights, Garifuna communities are affected by invasions and dispossession, many promoted by politicians and businessmen, and the support or inaction of military protection, from the municipalities, and the National Agrarian Institute (INA) – the entity in charge of issuing property titles in rural areas. The government ignored the functional habitat of the communities, leading to the dispossession of a large part of our ancestral territory.

Together with OFRANEH, Garifuna communities have filed claims before the Inter-American System for the restitution of the seized territories, which achieved its purpose. This achievement is mostly explained by the articulation between legal processes and the continuous mobilisations where women play a leading role.

This strength is rooted in the fact that the Garifuna are traditionally matrifocal; despite the pressures of the majority society to impose patriarchy, to date we have managed to preserve the extended family and women's networks in the communities associated with dance groups, which have managed to preserve traditional knowledge. From ethnobotany, gastronomy and religion, all traditional knowledge revolves around women.

Note. Testimony of Kerlin Teresa Colon from OFRANEH at the Latin America Encounter, Land Territories and Afrodescendant Women's Rights, Bogota, Colombia October 11–12, 2016. Kerlin is a territorial and human rights promoter.

In contrast with the Indigenous mobilisation, Latin American Afrodescendants' territorial rights struggles have not won the same attention in national and international discussions. Hence, Afrodescendant women's role within political claims for human, territorial, and resource-use rights is less debated. This has occurred despite international mobilisation processes starting in the 1960s, integrating the anti-racism movement, conceptualisations of Black identity and Black women's identity, and ethno-territorial rights claims, which attained crucial legislative reforms in several countries (Brondo, 2013; Paschel, 2016; Reiter & Simmons, 2012). Brazil and Colombia are examples of countries that undertook crucial constitutional reforms that recognised, for the first time, the legal rights of Afrodescendant populations, including tenure rights. However, Afrodescendant women's tenure rights and their contributions to local economies and livelihoods and the management of forest resources is less advanced in national law. More needs to be done from advocacy, research, and legal stances to ensure the effective participation of Afrodescendant women in decision-making and in the governance of land and forest resources.

Women's contributions to ethno-territorial forest livelihoods

As claimed by Indigenous and Afrodescendant communities, the economic development model promoted by neo-liberal policies generated severe social fractures, polarised society, and subordinated more equitable and sustainable autonomous development strategies (Mina et al.,

2014). However, communities' conceptions of development and their economic practices do not preclude interaction with the dominant economic development model. These often co-exist with inspiring examples of successful community-owned enterprises (Anderson et al., 2008). Community forestry initiatives provide an opportunity for reconciling self-determined economic models claims by involving local communities in management strategies that can contribute to strengthening autonomy, and promoting development models that include control over their lands.

For Indigenous and Afrodescendant peoples, 'the economy' is essential to address the challenges faced in their territories. From their perspective, economy is based on broader conceptions integrating community assets – that is, their people, their identity, their land, their environment, their network of social relationships, their traditional knowledge, and their spirituality. Based on conceptions such as the *Buen Vivir* and *Ubuntu*, Indigenous and Afrodescendant communities have engaged in economic initiatives that strengthen both their local economies and political positioning. *Buen Vivir* (Good living) brings a conception of living in harmony with the self, society, and nature; *Ubuntu* expresses the collective principle of life – 'I am because we are' (Mina et al., 2015).

Based on these economic conceptions, a new study is being undertaken to inform on how communities' economies operate, and their role in women's empowerment.[8] The preliminary results, based on mapping of 76 economic initiatives led by women, show a variety of areas in which Indigenous and Afrodescendant women engage beyond what is narrowly understood as community forestry activities – including natural and processed products, gastronomy, tourism, textiles, fibres, ceramics, cosmetics, cultural services, social services, and health (RRI, 2020a).

The economic initiatives display several common characteristics. They have a collective structure, with associations of several women or families within the community. They function based on solidarity and redistributive principles, with the purpose of improving the integral well-being of individuals, and having a positive impact on the community. These initiatives also promote respect for nature and the proper use of communal territory resources. Interestingly, the efforts are a powerful means through which ethnic identity is reasserted or claimed. They are also used to seek positioning and acceptance in the broader society. In general, the initiatives mapped emerged in a context of political change, and the economic activity became a vehicle to bypass, resist, or confront new challenging scenarios. They are a response to territorial rights violations, a way to overcome poverty – a creative economic alternative with which to confront racial and social discrimination, male domination, and gender violence (RRI, 2020a).

More analysis is needed regarding the active role of women in local economies, and the way in which women are reshaping economic, political, and cultural systems through by their engagement in entrepreneurial initiatives. These are rooted in a different conception of the relationship between women, their communities, and the economy. Moreover, new analysis is needed on gender-based differentiated effects of the pandemic lockdown processes affecting Latin America. It is important to know how pandemic measures have impacted women-led economic initiatives, and the opportunities available to Indigenous and Afrodescendant women for economic recovery.

The discussion and political action of the women discussed in this analysis recall the need to broaden perspectives on women's land and forest tenure rights within collective tenure systems. These experiences push us beyond the technically and statutorily defined perspectives of collective tenure rights and community forestry initiatives, bringing in other interpretations and conceptions from women. The discussion also highlights how women conceptualise land, ter-

ritory, forest resources, and development, and the role their ethnicity, race, and identity play in shaping conceptions and practices.

Still, it is important to consider the role racism continues to play in preventing rights recognition, and in delaying implementation of rights legislation. It is crucial to consider how aggravated racism and pervasive violence, including sexual violence against Indigenous and Afrodescendant women, reflects critical intersections of factors of exclusion that limit women's full social and legal positioning as political subjects. Also, it is essential to examine how violence against women is a means of deterritorialisation and dispossession by enforcing displacement, discontinuity of cultural knowledge and norms, and a barrier to exercising legal and customary use rights over their collective territories.

Across Latin America, Indigenous, Afrodescendant, and women's movements have struggled to include 'ethnic-territorial conceptions' (Mina et al., 2015) and 'intercultural conceptions' in public policy. Indigenous and Afrodescendant women are actively producing knowledge about their interactions, their land and resources, their communities, and their economies. The way they shape policies and political representations can inform official forest policy, forestry initiatives, and forest governance (Mina et al., 2014; Ulloa, 2020). The knowledge produced by Indigenous and Afrodescendant communities in non-English languages receives little attention in academic debates and policy making, in particular among practitioners working on forest policy and women's land and forest resources management rights. Discussions from the stakeholder forums analysed in this article are a wake-up call for better integration of Indigenous and Afrodescendant women's knowledge.

Notes

1 Results based on 12 countries https://rightsandresources.org/wp-content/uploads/2020/09/Area-Study-Final-1.pdf.
2 Refers to the person of African origin who lives in the Americas and in the African Diaspora as a result of slavery, and who has been denied the exercise of their fundamental rights (Declaration of Santiago on Afrodescendants).
3 See https://rightsandresources.org. Omaira Bolaños is Director of the Latin America and Gender Justice programs in RRI, and convened and participated in all five events analysed in the text. Iliana Monterroso was the RRI Central American Facilitator (2009–2014) and participated in three of the five events analysed here.
4 *Comarca* is an Indigenous region recognised by Panamanian laws as customary territories with self-government and autonomy. In total, the government has recognised five *comarcas.* https://www.iwgia.org/en/panama.html
5 *Quilombolas* are self-declared ethno-racial groups and descendants of escaped African slaves. *Quilombola* communities exist in all Brazilian states, and are recognised as having collective rights. https://www.wilsoncenter.org/article/quilombola-communities-brazil
6 Refers to platforms and processes that are 'purposefully organised interactive processes that bring together stakeholders to participate in dialogue, decision-making and/or implementation regarding actions seeking to address a problem they hold in common or to achieve a goal for their common benefit' (Barletti et al., 2020: 2).
7 The UN General Assembly proclaimed 2015–2024 as the International Decade for People of African Descent (Resolution 68/237).
8 The study was undertaken by RRI in nine Latin American countries.

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22

‘COMMUNITY’ AGROFORESTRY AND LANDSCAPE RESTORATION

Towards recognition of the trade-offs and externalities of tree planting

Laura A. German

Introduction

Political ecology and other critical theories of science and development have highlighted how the truths held about environment and development are often as much a reflection of the observer’s ideological and ontological predispositions as they are reflections of objective reality (Burman, 2017; Doyle & Gilbert, 2011; Leach & Mearns, 1996). Knowledge about environmental conditions, characteristics of local land users, and benefits likely to result from particular interventions (so-called ‘theories of change’) have each been shown to be in part social constructs (artifacts of the imagination) – yet constructs having very real effects in the world and in rural land users’ livelihoods (Bromley, 2008; Leach & Mearns, 1996). This chapter applies these ideas to the fields of agroforestry and landscape restoration, where received wisdoms and simplified understandings of ecology and environmental improvement often predominate.

As conventionally conceived, agroforestry is a farm-level activity involving decisions by individual farmers or households, with the aim of integrating productivity and profit with environmental stewardship (Mason et al., 2014) or harnessing the sustainability attributes and production benefits of integrating trees with crops and/or livestock on the same unit of land (Nair, 2005, 2014). The technical and analytical focus is thereby placed on the economic and biophysical aspects of getting trees to synergise with other on-farm activities, so as to deliver multiple products and benefits. Agroforestry in these accounts is conceived of as an arena involving exclusively farm-level decision-making, and trees as environmentally benign. Yet research has shown that trees can have both positive and negative social and environmental effects that extend far beyond the farm (Farley et al., 2005; Poore & Fries, 1985; Sun et al., 2006). Evidence suggests that trees – and the programs working to put more trees on landscapes – are characterised by trade-offs, whether between diverse environmental objectives (e.g., timber production and water conservation, carbon sequestration and biodiversity); between environmental and economic objectives; or between the interests and values of diverse actors and scales (Bremer & Farley, 2010; German et al., 2006b, 2009; Trabucco et al., 2008; Veldman et al., 2015).

Despite mounting evidence of the social and environmental trade-offs of tree planting, programs aiming to restore millions of hectares of land in the global South through afforestation

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and reforestation are often grounded in assumptions about the ecological benefits of having more trees on the landscape and the 'win–wins' for climate change, environment and livelihoods. As these initiatives gain steam, recognition and governance of the 'social' and 'systems' characteristics of trees and the 'politics of afforestation' become crucial.

With the origins of community forestry emphasising afforestation (Arnolds, 2001) and encompassing multiple spatial arrangements 'involving local people in forestry activity', from woodlots to trees planted on farm to 'the activities of forest-dwelling communities',[1] landscape restoration programs involving tree planting on farmers' and pastoralists' customary land clearly fit within the scope of this volume. Yet as the cases in this chapter will show, the concept of 'community' suggests a bounded, coherent entity with uniform interests and voice and fails to capture the micro-political dynamics surrounding trees (Rocheleau & Edmunds, 1997; Singh, 2012) that are present even within linguistically homogenous settlements with longstanding ties to place (Schroeder, 1993).

The chapter begins with a review of the literature on the social and ecological effects of agroforestry and afforestation/reforestation programs within agricultural landscapes. This is followed by case studies from Ethiopia and Tanzania to illustrate how the social and systems effects of these programs might be identified and equitably governed. The paper concludes with a discussion of implications for landscape restoration.

Literature review

The landscape restoration era

The crucial importance of forests and trees in global climate mitigation is firmly established. Increases in CO_2 emissions from fossil fuels and from land use change have been identified 'with very high confidence' as the dominant cause of the observed increase in atmospheric CO_2 concentration (Ciais et al., 2013, p. 493), with an estimated 32 per cent of anthropogenic emissions from 1750 to 2011 attributable to land use changes – particularly the loss of tree cover. Afforestation, reforestation, and avoided deforestation have therefore become key strategies in efforts to mitigate climate change.

The African Forest and Landscapes Restoration Initiative (AFR100), launched at the Global Landscape Forum at COP21, seeks to restore 100 Mha of degraded and deforested land in Africa by 2030. Ethiopia, the Republic of Sudan, Cameroon, and the Democratic Republic of the Congo (DRC) alone have committed to 49.6 million ha in total, while countries with high population densities such as Kenya, Malawi, and Rwanda have committed to restoring 5.1, 4.5, and 2 Mha, respectively.[2] Many of the 185 national climate plans (Nationally Determined Contributions, or NDCs) submitted to the UNFCCC also commit to the expansion of tree and forest cover nationally. India, for example, has committed to expand forest cover from 23 per cent to 33 per cent of the national territory (Government of India, 2008), and Uganda from 14 per cent to 21 per cent by 2030 (Ugandan Ministry of Water and Environment, 2015).

Narratives suggesting a unity of purpose between environmental and poverty alleviation agendas are common in these and other efforts to sequester carbon and safeguard environmental services, obscuring the trade-offs accompanying these programs (Fairhead et al., 2012; Igoe et al., 2009). This is evident in the official narrative surrounding AFR100:

> The initiative contributes to the achievement of domestic environment and development commitments, the Bonn Challenge, and Land Degradation Neutrality tar-

> get-setting process, among other targets … AFR100 accelerates progress towards achieving the Sustainable Development Goals (SDGs) and the Paris Agreement.[3]

Such optimism were echoed by the Minister of Natural Resources of Rwanda, one of the most densely settled African countries, where these afforestation commitments were said to deliver 'prosperity, security and opportunity' and 'improved well-being' for local communities.[4] This suggests there are no trade-offs in these restoration initiatives, and therefore no competing aims or externalities to be governed. This optimism is in direct contrast to the published evidence on the social and environmental effects of trees, and runs counter to the growing call in the academic literature to acknowledge aims that are incommensurable and the trade-offs involved in alternative decision pathways (Hirsch & Brosius, 2013). These programs could lead to trees competing rather than synergising with local livelihoods and food security (Doelman et al., 2019; Poore & Fries, 1985), or to the displacement of local land users and more exclusionary forest management in the public or private scramble for new rents generated through global commitments to climate mitigation (Fairhead et al., 2012; Overbeek, 2010). Furthermore, with 'virtually every inch' of the African continent 'owned under indigenous/customary norms; used in accordance with custom … and, where not settled or cultivated … normally the common property of identifiable communities' (Wily, 2010, p. 4), it raises the crucial question of exactly how these programs will interface with and affect the rights, access, and livelihoods of local land users.

The social and systems effects of trees

The rise of the modern environmental movement over the past 50 years has seen the conflation of tree planting with environmental protection, from tree planting campaigns on Earth Day to lay conceptions surrounding the linkage between forest cover and rainfall, or assumptions that more trees on landscapes is good for everything and everybody. While trees can be objectively credited with a number of environmental 'services' or benefits to humanity (Barrios, 2018), such favourable relationships cannot be assumed for all tree species and places (Saxena, 1994; Veldman et al., 2018). In fact, trees are implicated with a host of both positive and negative social and environmental impacts that depend on the species, ecological zones, and landscape locations where they are planted and the interests of particular stakeholders.

One of the earliest recognitions that trees may carry not just benefits, but also costs, came from the 'Great Eucalyptus Debate' surrounding India's social forestry programs in the 1980s. The World Bank initiated many of these programs in an attempt to alleviate fuel wood shortages, replace animal dung as a fuel source, augment timber supply, and generate rural economic opportunities (Ives & Messerli, 1989). Eucalypts were chosen for the majority of social forestry projects because of their tendency to out-perform indigenous species and most other exotics in height and girth increment and ability to adapt to difficult growing conditions (Casson, 1997; Ives & Messerli, 1989). Yet they failed to fulfil their promise as a fuel source due to high timber prices, while becoming the focus of social protest due to other trade-offs embodied in the tree and the design of government-sponsored social forestry programs (Ives & Messerli, 1989; Raintree, 1996) – from excessive water use to soil nutrient depletion, allelopathy, and "desertification" (Shiva & Bandyopadhyay, 1987). In response to such critiques, the Food and Agriculture Organization of the United Nations (FAO) commissioned a study on the ecological effects of Eucalyptus. This study found that young Eucalypt plantations require a large quantity of water, which can have an adverse effect on nearby crops and cause erosion (Poore & Fries, 1985). Eucalypts were also found to rapidly deplete soil nutrients if harvested in short rotation, to harm

wildlife, and to reduce plant diversity. Some evidence was also found to suggest that Eucalypts produce toxins that inhibit the growth of other plant species.

Others argue that such ecologically based critiques conceal other motives for social resistance, such as insufficient consideration of disadvantaged stakeholders' needs (Casson, 1997; Raintree, 1996; Shiva et al., 1981). According to Raintree (1996), the consultant FAO hired to explore the socio-economic effects of Eucalyptus, the fact that these programs helped the relatively better off population segments while failing to address the needs of the poorest sectors of society was the crux of the controversy. The project literature exhibited little or no awareness that there were different kinds of tree users, and that the purposes for which trees are planted vary not only with the type of tree but also with the type of user. Raintree concluded that 'an outstandingly important outcome of the Indian experience is that great care must be exercised in assessing local tree growing needs and potentials and to the differentiation of needs of all major client groups' (Raintree, 1996). In reviewing the social conflict surrounding social forestry programs in India and Thailand, Casson (1997) found an additional set of factors driving resistance. These included the loss of agricultural land for food production; reductions in rural employment; diversion of forest products from local markets to larger industrial users; transfer of public or common land to private corporations; and negative effects on livestock from the replacement of indigenous trees and competition with undergrowth on communal lands.

The ecological effects of tree planting

Research published in the past two decades has added considerable nuance to our understanding of the properties and 'vitality' of trees and de-bunked common assumptions that trees and woodlots are, by definition, environmentally beneficial. Trees have largely been found to be net consumers of water, especially in early phenological stages (Bruijnzeel, 2004; Farley et al., 2005). Research in South Africa found that both *Pinus patula* and *Eucalyptus grandis* produce significant decreases in stream flow within 3–4 years after planting and completely dry up streams within 9–12 years – with clear felling resulting in the return of full perennial streamflow (Scott & Lesch, 1997). Similar results have been found in studies of conifers, Eucalypts, and deciduous hardwoods from other regions (Fahey & Jackson, 1997; Sahin & Hall, 1996; von Stackelberg et al., 2007). An analysis of the likely effects of efforts to mitigate climate change under the Clean Development Mechanism – Afforestation/Reforestation provisions of the Kyoto Protocol on global, regional, and local water cycles (Trabucco et al., 2008) puts these studies in global perspective. The study found that large areas deemed suitable for afforestation/reforestation would exhibit either increases in evapotranspiration or decreases in runoff if converted to forest – showing a clear trade-off between carbon sequestration and water conservation/availability. These effects were found to be largest for drier areas, the semi-arid tropics, and in conversion from grasslands and subsistence agriculture. It should be noted that most of these studies emphasise exotics, with the hydrological effects of forest restoration with native species being less studied (Filoso et al., 2017).

The environmental costs of afforestation go beyond hydrology to biodiversity losses, reduced carbon stocks, and increased vulnerability to fire. In a review article, Veldman et al. (2015) find a clear relationship between the conversion of grassy biomes to tree plantations or forests (e.g., through fire suppression), and the loss of biodiversity, reductions in globally significant soil carbon stocks, and decreased groundwater recharge and stream flow. They also find that the World Resources Institute and the International Union for the Conservation of Nature had misidentified 9 million square kilometres of ancient grassy biomes as suitable for forest restoration – illustrating the dangers of assuming that trees are environmentally benign.

The evidence for caution extends well beyond grasslands. Bremer and Farley (2010) synthesise peer-reviewed articles providing quantitative data on plant species richness in plantations and paired (mostly pre-plantation) land uses, and find that the biodiversity effects of plantations depend on the original land cover and whether natives or exotics are planted. Positive effects on biodiversity are most likely for plantations established on degraded lands rather than replacing natural forests, grasslands, or shrublands, and when indigenous species are used – representing a rather narrow suite of beneficial practices. A paper on China's massive investment to increase forest cover was found to 'exacerbate environmental degradation in environmentally fragile areas because it has ignored climate, pedological, hydrological, and landscape factors that would make a site unsuitable for afforestation' (Cao et al., 2011). Such findings point to the crucial importance of matching species and management practices to current land cover and local environmental conditions.

The social effects and politics of tree planting

A second misconception about tree planting is that it is a predominantly technical (and thus asocial and apolitical) practice. One conceptual framework places agroforestry in the realm of technologies fully operationalised at the plot level and requiring low levels of collective action (Knox et al., 2002). This assumption contrasts with mounting evidence for how tree planting may carry negative social impacts, exacerbate inequality through the production of winners and losers, and be used as a tool in ongoing social conflict (Lyons & Westoby, 2014; Rocheleau & Edmunds, 1997; Schroeder, 1993).

Other literature highlights how state management agencies emphasise the technical dimensions of programs and species selection to the exclusion of social concerns (Hohenthal et al., 2018). Species selection in these programs has often emphasised unitary technical logics, such as maximising a specific product or service (e.g., wood for industrial processing, carbon sequestration), while marginalising other economic, social, and ecological values (Casson, 1997; Hohenthal et al., 2018; Ives & Messerli, 1989). This may lead to the pursuit of plans that marginalise local values or exacerbate trade-offs between neighbouring households or the environmental values of stakeholders at diverse scales (German et al., 2006b; German et al., 2009).

Trees have also been utilised strategically to consolidate authority and control over land at farm, landscape, and national scales. In his book *The Politics of Planting*, Shaul Cohen (1994) profiles how Israel has utilised afforestation in Jerusalem to consolidate Israeli control over contested land – generating considerable conflict. A case study from Colombia highlights how afforestation campaigns interfaced with ongoing inter-ethnic conflict, being utilised as a tool to wrest control over land from Indigenous inhabitants (Munk Ravnborg & Ashby, 1996). These dynamics resonate with a larger dynamic of 'green grabbing' – in which land and natural resources are appropriated in the name of climate mitigation and other environmental ends (Fairhead et al., 2012). As shown in these case studies, the 'green' label may be utilised to obscure underlying ethnic or national politics while legitimating efforts to consolidate control over land for some actors or interests at the expense of others.

The politics of knowledge surrounding the environmental effects of trees has also been the subject of scholarly interest. This is perhaps most clearly shown in the lively debate surrounding the water footprint of Eucalypts. Local concerns about Eucalyptus drying springs and waterways and contributing to the loss of indigenous forests and associated cultural values in the Kenyan highlands, for example, have been met with official responses emphasising the lack of 'valid' evidence for these negative impacts as well as claims surrounding Eucalypts' water

use *efficiency* (Hohenthal et al., 2018). The technical guidelines produced by the Kenyan Forest Service and Kenya Forestry Research

> numerically demonstrate that eucalyptus uses less water than, for example, *Acacia auriculiformis*, *Albizia lebbeck* and *Pongamia pinnata* for producing the same unit of biomass in relative terms, thus making it a 'water efficient species'. What is not highlighted here is that the total consumption of water per year by eucalyptus is greater in absolute terms than that of the other tree species that grow slower.
>
> *(Hohenthal et al., 2018, p. 11)*

Such simplified discourses also fail to acknowledge how growing conditions and landscape location shape a tree's localised effects (Whitehead & Beadle, 2004). This debate plays out in similar ways elsewhere in the eastern African highlands, where forestry officers emphasise Eucalypts' water use efficiency and local residents emphasise net drawdown of water from springs and waterways (personal observation). With research showing the water use efficiency of Eucalypts to *increase* with total water usage (Stape et al., 2004; see also Li, 2000), the crucial importance of the specific variables chosen to evaluate the water footprint of Eucalyptus – and the suitability of a particular species or practice in general – becomes clear.

It may come as no surprise, then, that tree-planting campaigns have been shown to exacerbate inequality at household, community, watershed, and even global scales (see, e.g., Bachram, 2006; Lyons & Westoby, 2014). At the household level, tree planting has exacerbated gender inequality in labour, income streams, and resource access and control. 'Environmental stabilisation' campaigns encouraging tree planting in The Gambia, for example, enabled male landholders to take advantage of female labour by planting orchards on women's garden plots, while undermining gardeners' use rights as plots reverted to male control (Schroeder, 1993). At community level, tree planting has been shown to exacerbate inequality in resource access and income generation – with management practices tending to maximise social trade-offs (German et al., 2006a, 2006b). This is seen in the tendency to establish private woodlots adjacent to communal springs (where growth rates are higher, but water drawdown is greater) and on farm boundaries (where competition with one's own crops is minimised but competition with adjacent cropland is exacerbated). At regional and global scales, trees are implicated in changing patterns of water availability; in shifts in land access and control due to land alienation or the restructuring of rules and authority under 'green' agendas; and in offloading the burden of climate mitigation to developing countries (Bachram, 2006; Fairhead et al., 2012; Lyons & Westoby, 2014).

Case studies: Towards niche-compatible agroforestry in Ethiopia and Tanzania

The case studies discussed here took place under the African Highlands Initiative (AHI), an eco-regional research and development program under the Consultative Group for International Agricultural Research (CGIAR) and the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA) operating from 1995 to 2007. The program sought to enhance livelihoods in densely settled highland areas through improved agricultural productivity and natural resource management. AHI operated through benchmark sites in Ethiopia, Kenya, Tanzania, and Uganda, where teams composed of professionals from national agricultural research and extension systems used action research to develop and pilot new approaches for assisting rural farmers and to document lessons learnt for a wider audience (German et al., 2012). Methods were developed through an iterative process of planning, field testing, reflecting, and re-planning at community, site, and regional levels.

In 2002, the project moved from farm to watershed or landscape scale. This case study reports lessons learnt from approaches developed in agroforestry in two benchmark sites: Lushoto, in the East Usambara Mountains of Tanzania; and Galessa, in Western Shewa Zone, Ethiopia. These sites were selected in the 1990s as AHI benchmark sites because they were deemed representative of more extensive highland areas in their respective countries in population density and land use. Galessa has a high-altitude mixed crop-livestock system consisting of several land use zones: homestead plots, where multi-purpose trees and shrubs are grown and livestock parked at night; infields, where high-value crops are grown in highly fertile patches of soil; outfields, where staple crops on individual property are seasonally rotated with open access grazing; and year-round communal grazing areas. In Lushoto, farmers grow a diverse mix of staple and cash crops on hillsides and high-value vegetable crops in moist and fertile valley bottoms. While population pressure has all but eliminated communal grazing areas, some families hold livestock in semi-intensive management systems.

Trees in each system are integrated with other farm enterprises and selected for the multiple benefits they provide, including fuel, income, timber, food, and fodder. In Lushoto, however, trees are far more abundant than in Galessa. Cultivated in woodlots, along property boundaries, in communal forests, and along the boundary of government forest reserves, both indigenous and exotic trees feature prominently in the East Usambara landscape, dating from ambitious afforestation programs initiated as early as the 1930s (Terje Iversen, 1991). Afforestation programs are more recent in Galessa, dating from the early 1990s, and their effects are much less visible. It is believed that the heavy-handed presence of the state in land ownership and forced resettlement, and shifting political regimes that have repeatedly changed the rules of the game, have contributed to depletion of the country's native forest cover and undermined incentives for long-term investments in land (Melaku, 2003; Omiti et al., 2000). Scattered woodlots may nevertheless be found with fast-growing exotics (primarily Eucalyptus), and multi-purpose trees and shrubs along homestead and infield boundaries.

Approach

AHI sought to identify and address the environmental concerns of local residents, rather than implement an afforestation program. Yet many of the concerns voice by local residents related to trees planted under earlier afforestation programs, and lessons from efforts to address local concerns are of direct relevance to programs aiming to place more trees on landscapes for carbon sequestration or any other purpose. The methodology involved two key phases: a participatory problem diagnosis, through which local residents' landscape-level concerns were identified; and a negotiation support processes to address identified trade-offs in local land-use practices. The participatory problem diagnosis included a general watershed diagnostic exercise to identify problems of concern to local residents that cut across farm boundaries, and follow-up work to gain a deeper understanding of the dynamics surrounding each issue. Here, we focus on issues related to agroforestry; for a discussion of the wider suite of issues, see German (2018). The negotiation support process sought to field-test approaches for addressing identified niche incompatibilities or trade-offs in species selection through participatory action research. It followed a process of stakeholder identification, externally facilitated negotiations among land users to reconcile diverse interests, and planning to increase niche-compatible species and reduce the niche-incompatible species in each of the two benchmark sites.

Results

Social and environmental trade-offs in agroforestry

The watershed diagnosis identified several problems related to the incompatibility of specific tree species with particular landscape niches. These included the depletion of springs by fast-

Table 22.1 Tree features causing niche incompatibility in Lushoto and Galessa

Niche	*Problematic tree features*	*Sites where found*	*Affected parties*
Farm Boundaries	Competes with crops	Galessa, Lushoto	Landowners and neighbouring farms
	Has negative effects on soil	Galessa, Lushoto	
	Creates a large shady area	Lushoto	
	Arrests undergrowth	Lushoto	
	Depletes soil moisture	Lushoto	
	Out-competes other tree species	Lushoto	
Forest Boundaries	Arrests undergrowth	Lushoto	Farms bordering protected areas
	Depletes soil moisture	Lushoto	
	Competes with other tree species	Lushoto	
Roadsides	Roots break the road	Lushoto	Farms bordering roadsides; all road users
	Competes with crops	Lushoto	
	Branches break in the wind	Lushoto	
Springs and waterways	Is a heavy feeder on groundwater	Galessa, Lushoto	All local residents, irrigating farmers
	Has an aggressive root system	Lushoto	
Farmland	Leaves hinder infiltration, increase runoff	Lushoto	Farmers cultivating these species
Valley bottoms	Dries valley bottoms	Lushoto	Downstream residents

growing tree species, boundary tree competition with neighbouring crops, negative impacts of trees on soil, and enhanced run-off from an impermeable layer of leaf litter. Following further exploration through a niche compatibility study in two sites, a number of specific problems were found (Table 22.1). For a list of species deemed most and least compatible with each niche in each site, see German et al. (2006b). Together, these data demonstrate that trees are not always environmentally benign, and that explicit consideration of social and environmental impacts and trade-offs should accompany tree-planting programs.

In addition to these negative impacts, those trees found to have the greatest economic benefits in Lushoto also had a strong inverse correlation with the (largely indigenous) species exhibiting a number of important environmental benefits (German et al., 2006b). Similarly, in Galessa, those species seen as best for income generation were more closely associated with trees having negative environmental attributes, and least associated with (mostly indigenous) species having many beneficial cultural and environmental attributes.

Managing trade-offs: Multi-stakeholder negotiations

In designing strategies to foster more optimal integration of trees into agricultural landscapes, it is useful to know the primary barriers farmers face in resolving identified trade-offs on their own and why farmers continue to grow species that are widely recognised as harmful. In AHI benchmark sites, there were at least three reasons for this. The first concerns the properties of trees, with the species most implicated in producing trade-offs exhibiting highly favourable characteristics according to some parameters (e.g. income generation) *in addition to* other unde-

sirable properties. Second, and closely related to the first, is the tendency to treat tree planting as an individual activity both by farmers and outside actors, for which benefits to the individual landowner drive species choice irrespective of their social effects. A third factor concerns the difficulty of establishing species deemed to be good substitutes – whether due to a lack of technical knowledge on how to access or propagate such species, slower growth rates, or institutional biases in forestry extension emphasizing the dissemination of species deemed to be good for timber rather than those valued locally. Case studies were chosen to illustrate efforts to address the first two factors in an integrated fashion.

Trade-offs embodied in species selection often require that land management practices be negotiated between individual landowners and the actors negatively affected by their management decisions. This is often complicated by the fact that property regimes tend to favour exclusive rights of the landholder to make decisions on how to use their land. Short of legal reforms, the only viable solution seems to lie in contract-like agreements between diverse interest groups or the good will of the landholders involved to accommodate other interests in their management choices. Towards this end, the project facilitated multi-stakeholder negotiations for each of the concerns identified. A common misappropriation of the term *stakeholder* depoliticises it, yet here we focus on actors experiencing direct effects from the outcome – be it the status quo or alternatives to it – as implied by the term ('holders' of 'stakes'). For problems stemming from niche-incompatible agroforestry practices, it has been useful to define stakeholders by niche. This is due to the unique features of the niche, the niche-specific compatibility criteria of stakeholders, and the need to identify and engage those individuals most directly impacted by any resolutions by calling together those parties with a direct stake in outcomes. Here, we discuss two specific cases involving springs and farm boundaries.

(a) Niche incompatibilities surrounding springs

Conflict over spring management was common across all AHI benchmark sites, suggesting the problem is widespread throughout the eastern African highlands. In each site, the problem assumes a similar character: an individual landowner with a woodlot of 'thirsty' trees on their land, near a spring (thereby maximising tree growth, but depleting the water supply), with water users experiencing a growing water shortage. Addressing the problem of trees depleting spring water required that a compromise be reached between the two interest groups – the landowner and spring users. A case study from the Ethiopian highlands helps to illustrate the potential for negotiating more socially optimal outcomes with minimal harm to both parties.

Farmers from Ameya village were found to source water for domestic consumption from a single spring located adjacent to a privately owned Eucalyptus woodlot. Ameya residents had watched as their sole water supply dwindled following the woodlot establishment. They had tried to convince the landowner to remove the Eucalyptus from the area, but he consistently refused, and at the time of research, the conflict was at an impasse. With local residents indicating that cases resolved through the courts often result in long-term (often inter-generational) enmities between families, AHI sought to assist in resolving the conflict locally. Early project attempts to bring the landowner to a change of heart or to bring him to a village meeting to discuss the situation failed. After some debate with local leaders about the best approach, it was decided to attempt to resolve the case informally by involving village elders. The elders first visited the landowner on an individual basis, encouraging him to consider the legitimacy of the villagers' complaints. This attempt at rapprochement prior to open negotiations turned out to be a decisive factor in the landowner agreeing to attend a village meeting.

Following brief introductions to the problem by the Watershed Committee and AHI team members, each party was asked to present their views. When the Eucalyptus owner expressed his views on what he would lose in labour and cash if he were to cut down the woodlot, others began to attack him openly. The facilitator intervened to legitimise the landowner's position and right to speak. Subsequent debate over the ultimate consequences of a dried-up spring on current and future generations brought the landowner to offer a concession: to remove the Eucalyptus in exchange for each household planting one tree in a woodlot established elsewhere on his property. The proposal was initially rejected by Ameya residents, but after one resident spoke up and agreed to the conditions, stressing the importance of a secure water supply, others followed. The negotiation was resolved in such a way that all parties would benefit – villagers through restored spring discharge, and the landowner through restored social relations and reduced conflict—while no party suffered much harm: the landowner's losses were minimised through the agreement among affected water users to invest their labour in establishing the woodlot elsewhere on his farm. All parties, the landowner included, left the meeting in high spirits.

Early stages of implementation were nonetheless hindered by the failure to develop a detailed action plan specifying who would supply materials and labour to fence the new woodlot, when seedlings should be provided, and at what point and how the current woodlot would be removed (given they coppice after harvest). The delays further created a window for the landowner to engage local government in his defence, resulting in the addition of financial compensation as a precondition for woodlot relocation. The level of compensation was deemed to be far out of reach of the villagers, and the impasse went unresolved.

This example provides lessons that can be employed in other cases where negotiation is required to address natural resource management problems among local stakeholders. First, a third party both known and respected by each party (in this case, village elders) played a crucial role in bringing the parties together for face-to-face dialogue. Secondly, while the AHI facilitator mediating negotiations did not maintain a neutral stance toward the desired outcome (Eucalyptus relocation), he openly legitimised the concerns of all parties. This helped lend legitimacy to the mediator, and to keep both parties engaged in seeking middle ground. A third lesson is the importance of compromise and cost minimisation. In this case, the dispute was only resolved when each party agreed to make a concession for the benefit of an agreement – the spring owner to relocate the woodlot, and Ameya residents to bear the labour burden of relocation. Fourth, informal negotiations can have a more lasting effect in putting conflicts to rest than use of the courts, as they allow each party to set the conditions under which they will concede (see also Raj Upreti, 1999). This in effect minimises legal and inter-personal harm to both parties, enabling a deeper sense of resolution to take root. It also helps to legitimate and bolster endogenous structures and processes for natural resource governance. Yet the Ameya spring case also highlights the need for local government to be kept informed of deliberations and give their tacit consent, in order to avoid last-minute disruptions. Finally, it illustrates the fundamental importance of developing a concrete action plan with activities, roles, responsibilities, and a timeframe during the first negotiation.

(b) Niche incompatibilities on farm boundaries

The second case involved the cultivation of trees on farm boundaries and latent conflict between actors with very different levels of power and influence. One of the key stakeholders identified by farmers was the Sakharani Mission. After Eucalypts were planted in 1970 to secure the farm

boundary from encroachment, neighbouring farmers had noticed the negative effects of these trees on their cropland. Smallholder farmers with small landholdings adjacent to the mission had experienced significant financial losses from the competition of the boundary trees with their crops, rendering up to a third of their farmland unusable. When this issue emerged through the diagnosis, AHI facilitated a multi-stakeholder negotiation between Sakharani and affected farmers and leaders from three neighbouring villages.

The AHI site team formulated a preliminary plan for multi-stakeholder engagement, with two steps: meetings with individual stakeholder groups to communicate the problem, elicit their views, and explore their willingness to engage in negotiations, followed by multi-stakeholder negotiations. In the first step, the team was able to elicit criteria for a good boundary tree from each party. Based on this understanding, the team developed a five-step plan for multi-stakeholder engagement. The meeting would start with introductions and the establishment of ground rules. AHI would then share findings from the watershed diagnosis (watershed problems related to agroforestry, niches identified as needing improved management, and species identified as most and least compatible with these niches) and elicit reactions from participants. The next two steps would involve the negotiation of 'binding' criteria for species selection based on the most important criteria for each party, and the identification of species meeting these criteria. Finally, a work plan would be developed jointly, specifying activities, responsibilities, and a timeline.

In practice, the plan had to be modified several times to cater for stakeholder input. During our preliminary meeting with the Sakharani farm manager, one of the AHI team members introduced the problem voiced by farmers – the negative impact of boundary trees on neighbouring cropland and springs. Use of language suggestive of a polarisation of interests ('stakeholder') and presupposing compromise on behalf of the landowner ('negotiation') was our first mistake, as it provoked an understandably defensive reaction from the farm manager. Furthermore, having diagnosed watershed problems from the perspectives of smallholder farmers alone in effect marginalised a host of issues faced by Sakharani in its dealings with its neighbours. These issues – including declining water supply to the mission thought to be due to loss of forest cover in the upper catchment, and damage caused to tree seedlings from free grazing – were promptly brought to our attention in this first meeting.

Other nuances were handled by the site team in ways that helped to advance the desired rapprochement. The first was to accept the farm manager's invitation to visit the areas implicated in the water supply problems he was having. In addition to showing empathy to the Mission's problems, it provided an opportunity for the team to explore opportunities for more optimal boundary management. This walk helped reveal that the main use of Eucalyptus, for example, was not for income but for securing the boundary. The few trees harvested for timber were mainly used to manufacture bridges for the local community, and could easily be substituted with timber from another source. This exchange also cemented an understanding of the issues facing the Mission in its interaction with surrounding land users, opening a space for dialogue by balancing the attention given to each party's concerns. Secondly, it provided an opportunity for the farm manager to weigh in on plans for the subsequent multi-stakeholder engagement, including a proposed date and venue for the meeting, and input on the draft agenda. Contributions to the meeting's agenda included the inclusion of village leaders in addition to affected land users, and modifications to our plans for presenting the problems facing each party. Rather than present separate lists of the niche compatibility criteria of each party, the farm manager suggested an emphasis on shared problems – thereby emphasising commonalities rather than divergent interests (Table 22.2). By accommodating the interests of the farm manager, the proposed meeting

Table 22.2 Format for feedback emphasising commonalities among stakeholders

Problem	*Problem faced by:*	
	Farmers	Sakharani
Competition of boundary trees with neighbouring crops	√	
Eucalyptus degrading water sources	√	√
Decline of rainfall	√	√
Degradation of water sources	√	√
Damage caused to crops and trees from free grazing	√	√

for multi-stakeholder engagement was now seen as an opportunity to enter into dialogue with his neighbours for the benefit of both parties.

Additional nuances emerged during planning, such as the need to adapt the wording of niche compatibility criteria to reflect farmers' positionality not as landowners making decisions about their own farms, but as neighbouring land users. The criterion 'adds nutrients to the soil', for example, was changed to 'no harmful effects on soil fertility'. This helped to align criteria with the legal principle of 'no appreciable harm'. Additional adjustments to the plan were introduced during the first negotiation. The first was the facilitator's inclination to defer first to the farm manager when identifying possible species to replace Eucalyptus. While all participants eventually weighed in, asking the farm manager first whether he could accommodate the interests of neighbouring farmers in his management choices was a way of acknowledging the Mission's property rights and encouraging his continued participation in the process. A final adjustment involved changing the focus of discussion from niche compatibility criteria (viewed as somewhat vague) to the pros and cons of different tree species. As different species were proposed, first by the farm manager and next by neighbouring farmers, and evaluated by the other party, we took care to ask the reason for each proposal and reaction to reach a better understanding of these evaluations. The criterion 'no edible fruits', for example, was added to the list of Sakharani criteria after farmers proposed a species whose fruits would have attracted many people to the boundary area, which the Sakharani manager found undesirable. The final list of criteria agreed upon by both parties (Table 22.3) led to the identification of a single suitable species, called locally Mtalawanda (*Markhamia obtusifolia*).

As with the first case study, a number of general lessons emerge to illustrate how such negotiations might be conducted. First, it is important to acknowledge how property rights shape positions of authority in final decisions on boundary management and views on the legitimacy of the process (without which people may simply refuse to engage). This was evident when negotiating niche-compatible species ('Can the criteria of neighbouring farmers be accommodated in your species selection?') and setting an agenda for multi-stakeholder dialogue. A second lesson was the need to present the issues of concern to each party in a way that minimised polarisation so as to secure ongoing engagement. As shown here, this can be done through choice of terminology (e.g., use of 'party' and 'dialogue' rather than 'stakeholder' and 'negotiation') or how problems are represented (e.g., as common rather than polarised

Table 22.3 Boundary compatibility criteria by stakeholder

Stakeholder	*Niche compatibility criteria*
Sakharani Mission	• Long lifespan • High canopy (tall) • Has limited branching and shade • No edible fruits
Neighbouring farmers	• No harmful effects on soil fertility • Does not interfere with crop growth • Has limited branching and shade • Does not dry water from the soil and springs

concerns). Third, it is important to capture equally the interests of each stakeholder prior to initiating multi-stakeholder negotiations, to establish trust in the process and the credibility of the facilitator through the empathy shown towards concerns expressed by each party. Fourth is the critical importance of prior meetings with individual stakeholder groups to encourage prior rapprochement and identify important opportunities for mutual benefit, in particular where communication between parties is strained. The importance of prior visits to affected areas cannot be overestimated as a means of furthering dialogue and rapport with each party. It was also a means of gaining a deeper understanding of the concerns of each party and opportunities for mutually beneficial solutions – two critical ingredients to effective facilitation of multi-stakeholder engagement.

Conclusions

The literature reviewed and problems diagnosed by land users in these two highland communities illustrate clearly that trees are not always politically neutral or socially and environmentally benign, but can carry harmful effects and exacerbate conflict. While the case studies focused on competition with adjacent cropland and depletion of water resources (interactions between private property, or between private property and a resource of collective concern), these were but two of a wider set of concerns identified by local land users – many of which are relevant to the management of forests as common pool resources or landscapes as complex assemblages of resources and tenure regimes (German, 2018). With forest and landscape restoration and 'community' agroforestry programs gaining steam across the global South, there is an urgent need to build on lessons from past experience and view trees and forests as part of a wider set of landscape-scale social and ecological dynamics characterized by both social and ecological complexity.

The primary lesson from these case studies is that tree planting can be expected to always carry trade-offs. Current uses of trees – and decisions about the species, landscape locations, and the planting and land tenure arrangements[5] of afforestation/reforestation programs – will advance certain biophysical, economic, and cultural values, and benefit some (local and/or external) interest groups, at the expense of others. Programs without an explicit intentionality related to ensuring equity and multi-functionality (balancing diverse goals rather than maximising singular aims) will tend to exacerbate inequality and produce trade-offs rather than synergies between competing policy goals – such as climate mitigation, biodiversity conservation, and rural livelihoods. To avoid doing more harm than good, sophisticated processes of engage-

ment with local land users – in particular, ones that surface competing interests and draw on this understanding to foster negotiation of socially optimal outcomes in ways that are deemed legitimate by all parties – are urgently needed.

Secondly, the goals of such programs must be rooted in *local* concerns and priorities on the environment–livelihood nexus, not exclusively in global environmental values such as carbon sequestration or conservation of globally significant biodiversity, or exogenous ideas of what community forestry ought to look like. This is because efforts to advance global environmental values may undermine local social and environmental values and rural livelihoods (German et al., 2009). Participatory landscape diagnostic tools are useful in this regard. Yet to minimise bias towards particular interests, an effort to explicitly consult and engage across difference – whether gender and ethnic identities, livelihood systems (e.g., pastoralism and agriculture), land uses (protected areas, farmland), the unique set of interests surrounding diverse livelihood strategies, or other site-specific factors – is paramount. Once issues of local environmental concern or localised goals that might be served through the integration of trees into local farms and landscapes are identified, there is a need to explicitly identify the diverse interest groups surrounding each goal. This is about identifying those *directly impacted* by any given land use decision and being intentional about these actors surfacing their interests and concerns and helping forge socially balanced solutions.

Finally, any land use intervention can be expected to produce winners and losers, as changes in land use tend to involve changes in land or resource access and control, as well as changes in the environmental goods, services, and disservices experienced by different land users. Identifying the suite of impacts, both positive and negative, that may be involved with any given intervention (species choice, landscape location, planting arrangement) is crucial, as it enables the identification of actors directly affected both positively and negatively by those choices. This, in turn, will create the opportunity for deliberative dialogue to plan interventions in which costs are minimised and benefits more equitably distributed – thereby building sustainability into such programs by aligning the incentives and values of diverse land users with land use practices. This is no easy task, but the combination of skilled facilitators knowledgeable about local conditions, and the depth of local environmental knowledge about different species and their impacts within different niches, are crucial ingredients to 'getting it right'. This is not to say that intervention will always be the right choice.

Notes

1 FAO website; available at: http://www.fao.org/3/u5610e/u5610e04.htm#TopOfPage (accessed 14 January 2021).
2 'African Forest Landscape Restoration Initiative (AFR100)', available at: https://www.wri.org/our-work/project/AFR100/restoration-commitments#project-tabs (accessed 28 September 2020).
3 See: https://www.wri.org/initiatives/african-forest-landscape-restoration-initiative-afr100 (accessed 14 March 2022).
4 See: https://www.wri.org/news/2015/12/release-african-countries-launch-afr100-restore-100-million-hectares-land (accessed 7 October 2020).
5 This includes whether trees are integrated into other agricultural activities as agroforestry, planted as part of regreening efforts, or cultivated in monoculture plantations and woodlots, as well as whether these efforts involve any changes in land tenure, control, and access.

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23

‘IF THERE IS *JANGAL* (FOREST), THERE IS EVERYTHING’

Exercising stewardship rights and responsibilities in *van panchayat* community forests, Johar Valley, Uttarakhand, India

Madison Stevens and Ramesh Krishnamurthy

Introduction

On a clear, November afternoon in the Western Himalayas, several dozen women take time out of their busy days to gather on a rooftop. Bundled up against the cold in colourful layers of wool — toddlers in tow — the women find places to sit beside their neighbours, chatting as they wait for the *van panchayat* (forest council) meeting to begin. On the agenda is one primary concern: it is time to open the season on leaf litter, so that families can gather this rich, insulating material to serve as fodder and bedding for their livestock, before the ground is blanketed in snow. For how many days should the season be open? Who will inform the village? What should the community charge non-rights-holding households for a ‘pass’ to gather leaf litter in their forest? Should households who do not own livestock still be required to pay fees associated with fodder provision? The discussion becomes lively, often contentious. The *sarpanch*, a member of the community elected to lead the forest council, sits quietly – listening carefully, asking the occasional question, and taking meticulous notes. These minutes reflect the day-to-day realities of governing a *van panchayat* – the oldest state-recognised institution for forest co-management in India.

The *van panchayat* (hereafter VP) is a community forest institution, recognised by the Indian government and managed by a council of elected rights-holders, from which local resource users derive both direct and indirect benefits. The land is owned by the State government, and is categorised as forest land under the authority of the Forest Department; the land records and oversight of council election procedures are the purview of the Uttarakhand Revenue Department. Under this co-management model, elected forest councils act as intermediaries between the tenure-holding government and a community of forest rights holders. These councils manage forest patches ranging in size from a few hectares to several square kilometres. The scene described here reflects elements of longstanding practice and norms – such as seasonal restrictions on gathering non-timber forest products (NTFPs), and the prickly local politics of common-pool resource management – alongside emerging trends – such as the increasingly prominent role of women in VP leadership in some villages, and the waning prevalence of

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livestock-based livelihoods. These considerations reflect local needs, embedded in the broader context of regional and global change.

This chapter introduces the critical role of Indigenous Peoples and Local Communities (IPLCs) in stewarding biodiversity, globally and in India. We discuss the VP as an institution, describing its prominent role in the environmental history of the Kumaon Himalayan region in Uttarakhand. We detail the function and structure of VPs. Following a review of establishment procedures, tenure arrangements, and relevant stakeholders and rights-holders, the chapter focuses on the relationship between communities and VPs in Johar. How do the stewardship activities undertaken by forest councils address the challenges facing VPs today? Grounding the narrative in the perspectives of forest managers across ten VPs in Johar Valley, this chapter aims to illustrate the complexity and interdependence of the connection between people and forests, fostered by longstanding relationships of rights and reciprocity. We conclude by considering the following: in light of emerging challenges, how well are communities poised to govern these forests going forward? How might the VP as a forest governing institution be re-imagined to better meet the needs and aspirations of mountain people as they adapt to new realities?

Community forest stewardship in India

Lands and waters stewarded by Indigenous Peoples and Local Communities (IPLCs) are increasingly recognised as havens for the world's beleaguered biodiversity (Corrigan et al., 2018; Schuster et al., 2019; Tauli-Corpuz et al., 2020). This places many stewarding communities on the front lines of preventing deforestation and forest conversion, frequently at loggerheads with industry and governments (Gadgil & Guha, 2012; Sikor & Stahl, 2011). For many forest-dwelling peoples, community forests are more than the monetary value of their resources, the sum of their species, or their legal designations. They are places laden with value and critical to identity and livelihoods alike. Mountain communities in particular have been highlighted as both acutely vulnerable to environmental change *and* uniquely positioned to protect places of global ecological significance (Chettri & Sharma, 2016; Ingty, 2017; McDowell et al., 2014). The capacity of these communities to effectively exercise stewardship – according to Indigenous and local value systems, priorities, and livelihood needs – depends on the capacity of local governance structures to adapt to changing conditions (Agrawal & Chhatre, 2007; Kashwan, 2013; Shahabuddin & Rao, 2010).

In India, forest-dependent communities have long struggled to safeguard and exercise their relationships with traditional territory. Colonial authorities established a protected area estate based on the fortress conservation model, later expanded by post-Independence governments (Lele et al., 2010). This has resulted in the displacement and exclusion of IPLCs from access to critical resources and participation in land and wildlife management, ensuring that conservation is broadly perceived as the privilege and purview of the urban environmental elite (Gadgil & Guha, 2012; Rangarajan, 2017). Meanwhile, the colonial forestry industry in India was initially founded on the premise of 'scientific forestry', which entailed a widespread restructuring of forests in order to maximise economic profit from commercially valued species, compromising biodiversity and ecological function (Agrawal, 2005). In response, local communities across the country have for more than a century mobilised to combat state-sanctioned development pressures – including large hydroelectric projects and industrial-scale timber production – risking their bodies to protect trees and watersheds (Gadgil & Guha, 2012; Rangarajan, 2017). In some cases, forest peoples have formed strategic alliances with conservation organisations in order to rally against development projects which threaten vulnerable ecosystems (Chhatre et al., 2017).

Yet despite significant alignment of their goals, conservation interests and forest dwellers have found themselves frequently at odds.

Through widespread grassroots mobilisation, India's IPLCs have clawed back recognition of forest rights in law, at regional and national levels. The 1988 National Forest Policy nominally recognised the subsistence rights of tribal and poor communities, acknowledging stewardship relationships, though it did not establish mechanisms for realising these rights (Das, 2019; Kumar et al., 2015). Framed as participatory forest management, Joint Forest Management (JFM) was a broad effort in the 1990s to formalise pre-existing local forest institutions in many states and to develop new co-governing models where these did not exist; however, JFM has been widely critiqued for its restrictive scope of rights realisation and poor implementation (Lele & Menon, 2014; Nayak & Berkes, 2008). Enacted in response to JFM, and as a legal rebuke to Forest Department orders for mass evictions, the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (2006) (FRA) represented a landmark legal victory for India's forest dwellers (Das, 2019; Kashwan, 2013; Kumar et al., 2015). Yet in practice, implementation of rights-based forest legislation has fallen far short of expectations (Kashwan, 2013; Kumar et al., 2015). Today, rates of forest conversion for the purposes of development and infrastructure are rising (Lele & Menon, 2014), threatening community-managed forests across India. Forest peoples' capacity to respond to these pressures is hindered by legal loopholes and entrenched tensions between communities, conservationists, and development interests at multiple scales.

Uttarakhand's *van panchayats*: A brief history

The further from the *terai* (plains) one travels, the more commanding the presence of the *pahad* (mountains) becomes. The glaciated peaks of the Greater Himalaya rise dizzyingly above. To cross the valley, less than a kilometre as the crow flies, involves a day's arduous trek on perilous footpaths. Residents proudly identify with *pahadi* culture and traditions, and the region is commonly referred to as *dev bhoomi* (Land of the Gods). Small *mandir* (temples) dedicated to local deities and draped in colourful cloths adorn the hillsides, and feature prominently in daily life (see Figure 23.1).

The Kumaon region of modern-day Uttarakhand commands a central role in India's environmental story (Gadgil & Guha, 2012; Guha, 2000). Under the British Raj, its forests were considered a natural treasury – perceived as an inexhaustible source of timber for the empire. Meanwhile, resident *pahadi* (mountain) communities have long engaged in contestation and resistance against environmental degradation and the imposition of external political authority. From these mountains, the *van panchayat* (VP) emerged as an early example of explicitly rights-based forest policy, established in direct response to widespread civil disobedience by local communities against state control of forests. In 1889, the British Raj claimed ownership of all forests in the United Provinces (present-day Uttarakhand and Uttar Pradesh) not under freehold (private) title. The state subsequently reclassified nearly 80 per cent of the forested land in the Kumaon region as Reserve Forest administered by the nascent Forest Department, and in doing so deprived forest-dependent communities of rights to access critical resources and sacred places (Agrawal, 2005). Rural forest dwellers responded with protests, arson, and widespread civil disobedience, as the *Kumaun Parishad* agitation movement for forest rights (active in the 1910s–1920s) mobilised against the centralisation of control over forests (Agrawal, 2005; Negi et al., 2012).

In 1921, the colonial Forest Department established the Kumaon Forest Grievances Committee to investigate the sources of rural discontent. Historically, village-level institutions



Figure 23.1 A view of Kumaon from Khaliya top, above Munsiari. Source: © Madison Stevens, 2019.

called *lattha panchayats* had governed forest use and access in Kumaon (Guha, 2000). However, these were too few and too informal, and their rules too contextual to accommodate the apparatus of the state (Agrawal, 2005; Mukherjee, 2014). Upon the recommendation of the committee, in 1931 the Forest Panchayat Act (section 28(2) under the 1927 Indian Forest Act) devolved environmental management authority to similar, but formally recognised bodies, naming these *van panchayats* (forest councils) (Agrawal, 2005). This Act allowed for the formation of VPs upon petition by at least a third of the village residents, without constraints as to the type of land cover or the size of parcel (IFA, 1927). Initially, the VP seemed a useful complement to the mandate of the Forest Department, as overt forms of local opposition to state forest management waned temporarily. Further, the colonial State benefitted by minimising the costs of a sprawling forest administration, while bringing the rural frontier into the Forest Department's purview (Agrawal, 1999; Baland et al., 2010).

Yet this Act did not quell rights-based agitation in Uttarakhand; on the contrary, the remainder of the 20th century was marked by recurring rural protest movements, many focused on political representation and environmental stewardship (Brar & Mukherjee, 2012; Guha, 2000). In the 1930s and 1940s, rural Kumaoni resistance was integral to the *Quit India* movement, promoting India's independence from British colonial authority; in the immediate post-Independence period (1948 through the 1960s), the Kumaon Bhotiya Indigenous People's Federation mobilised for the tribe's trading and herding rights (Bergmann et al., 2011; Guha, 2000). Most prominently, in the 1970s–1980s, a group of (primarily women) activists made headlines by wrapping themselves around the trees, symbolically and physically linking their lives to the fate of the forests in what became known as the Chipko Movement (Guha, 2000). These efforts led in 1980 to a 15-year moratorium on tree felling in hill districts[1] and millions of trees planted in reforestation efforts across the state. In 2000, following sustained political pressure from rural mountain dwellers in both the Garhwal and Kumaon regions, Uttarakhand gained recognition as an independent State (Mukherjee, 2014). In the 1990s, pastoralists protested the exclusion of local people from the Nanda Devi Biosphere Reserve. Local herders' access and grazing rights were eventually negotiated with the government in the mid-2000s, after recognition that some

endemic species were dependent on historical grazing practices (Silori, 2001). In many of these movements, VP forest councils have acted as powerful fora for local organising.

This chapter enters a rich intellectual conversation on the VP as a forest governance institution. Scholars have explored the VP as a catalyst for environmental 'subjectivities' (Agrawal, 2005) and an organising body for social resistance (Guha, 2000) – at once an exemplar of commons management (Anthwal et al., 2010; Rawat et al., 2011; Tompsett, 2014) *and* an example of the tragedy of the commons (Germain et al., 2018). Has the VP proven a failed experiment in democratic decentralisation of forest resources, or does it offer a model for effective community-based conservation? Recent scholarship depicts an institution in crisis, characterised by a decline in community participation (Negi et al., 2012; Mukherjee, 2014) and environmental degradation (Baland et al., 2010; Shahabuddin & Thadani, 2018). Mukherjee (2014) posits that the statutory 'reorganisation of VPs has in fact destroyed the traditional culture of resource sharing', and has created inequities that cause conflict and forest degradation. Negi et al. (2012) identify a series of administrative bottlenecks which deny local resource users the authority needed to effectively manage forests through onerous approval processes. A 2018 study found that VPs are largely perceived as inadequate to meet the needs of local resource users (Germain et al., 2018). Tompsett (2014) decries the commercialisation of community forest institutions, suggesting that the sustainable, subsistence-based model no longer prevails. Balland et al. (2010) found that VP management is positively correlated with reductions in the lopping of tree branches for fodder and fuelwood, but does not consistently demonstrate signs of forest regeneration, improvements in canopy cover, or increases in forest biomass. This case study will illustrate that in spite of their shortcomings, many local forest stewards in Johar Valley see VP forest commons as both the driving force behind environmental protection in the valley and key to their survival and subsistence needs, which complicates this academic narrative of failure.

Methods

This chapter is informed by qualitative fieldwork conducted from November 2019 to January 2020 in Johar Valley, Uttarakhand, using ethnographic methods to explore the changing nature of VP governance and stewardship. We used open-ended interviews with local forest managers (n=41 participants) in ten villages to understand local perceptions of and priorities for VPs. We aimed to sample for a diversity of views rather than stratifying representatively (Small, 2009). Participants included former or current VP forest council members and individuals familiar with VP processes and institutions. Of the participants, 23 were men (ages 30–77) and 18 were women (ages 26–55). Interviews were conducted in Hindi, with some participants supplementing their responses with English phrases and/or Kumaoni dialect, then translated into English. Thematic coding of the qualitative data revealed patterns of forest dependence, stewardship, governance, and change.

Study site: Johar Valley, Kumaon region, Uttarakhand

Nestled in the crook of India's international borders with Nepal and the Tibetan Autonomous Region (China), Johar Valley (Figure 23.2) is home to approximately 50,000 residents, settled in villages ranging from only a few families to several hundred. Approximately 20 per cent of the population of the valley identify as Bhotiya, a Scheduled Tribe[2] whose members historically practised livelihoods based on pastoralism and trade with inhabitants of the Tibetan Plateau. The international border across this trade route was closed in 1962 during the Sino-Indian War, and many Bhotiya people subsequently sought livelihoods elsewhere (Bergmann et al., 2011). Today,

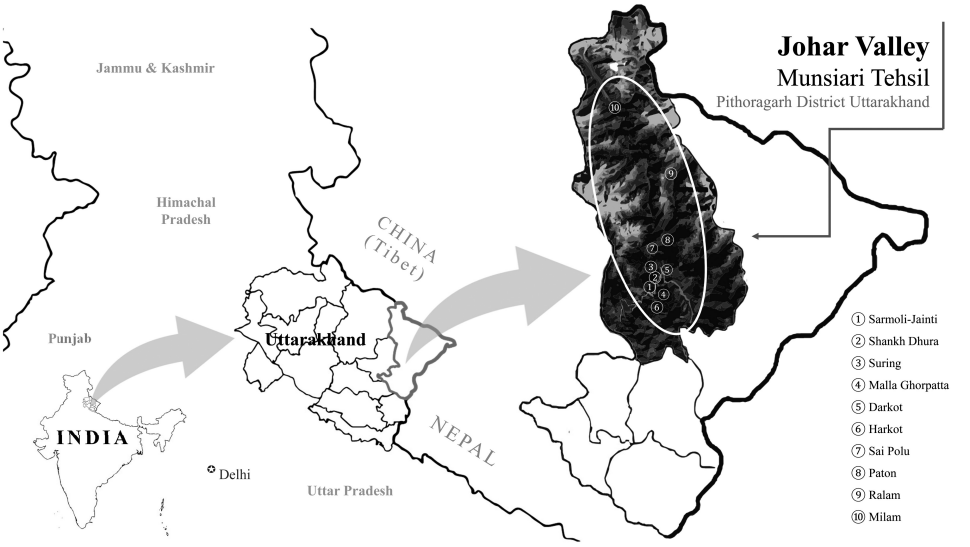


Figure 23.2 Map of study sites, Johar Valley.

most residents earn a livelihood through a combination of smallholder agriculture (both crops and livestock) and wage labour (Negi, 2007).

Considered a biodiversity hotspot, Johar Valley hosts approximately 325 of Uttarakhand's 636 recorded bird species, including several of international concern (such as the resplendent and iconic Himalayan monal). Its forests are rich in endemic orchids, particularly on the eastern slope of the valley in the Askot Musk Deer Wildlife Sanctuary (Samant et al., 1998). At higher elevations, alpine meadows host several medicinal plants with high value on international markets, including caterpillar fungus (Hopping et al., 2018; Laha et al., 2018). Also found here are several species of high conservation interest, including the Asiatic black bear, snow leopard, Bengal tiger, Himalayan tahr, and white-bellied musk deer (Shahabuddin & Thadani, 2018) (See Table 23.2).

Among the approximately 12,065 VPs today in Uttarakhand, about half were already constituted by the time the separate state of Uttarakhand was carved out of Uttar Pradesh in 2000. Between 2000 and 2007, another 5,674 VPs were constituted, many of which exist only on paper. Of the 1,621 VPs registered in Pithoragarh District, most were established between 1960 and 1980. Munsiari *tehsil*'s 209 VPs provide a wide range of benefits to rights-holders depending on the size, elevation, forest type, slope aspect, and management priorities. These range in elevation from 798 m to 4,110 m and in size from 0.139 to 1,163 hectares. Ecosystem types include pine-dominated canopies with low understory density and minimal biodiversity; mixed deciduous forests with oak, alder, and abundant understories; and *bugyal* (alpine pastures), predominant above ~3,500m. Approximately 51 per cent of the forested land in the district is held in VPs (UFD, 2018). In Johar Valley, forest council members in Sarmoli-Jainti estimate that VPs account for 60–70 per cent of the overall land base. Case study sites (Figure 23.2) were largely clustered near Munsiari, comprising primarily mixed deciduous forests. Several VPs in *malla* (upper) Johar Valley, including the two that lie at the head of the Milam and Ralam glaciers, are alpine *bugyal*, situated above the treeline.

Governance, rights, and tenure in Johar Valley *van panchayats*

Establishment processes and tenure

Uttarakhand's forested land base comprises three legal designations: 1) Reserve Forests and Protected Areas, State-owned and managed by the Forest Department for both conservation and commercial purposes, in which local residents have limited rights subject to Forest Department regulations (45 per cent of Uttarakand's forests) (UFD, 2018); 2) VPs, which are State-owned but managed by the Forest Department and Revenue Department and elected village forest councils, primarily to supply rights-holding community members with basic resources for subsistence (13 per cent of forested land); 3) and civil *soyam* forests (9 per cent), which are undesignated, open-access tracts owned by the State Revenue Department but not subject to formal resource management by either the State or the local community (Baland et al., 2010).[3]

According to the Uttarakhand Panchayati Forest Rules of 2005, new VPs can be established from Reserve or civil *soyam* forests. This begins when a petition, signed by at least one-fifth of a revenue village (*gram sabha*[4]), is submitted to the sub-divisional magistrate (SDM) at the *tehsil* level. A review and consultation process follows; the proposed forest area is demarcated, and a body of right-holders elects the VP management committee (forest council), comprising an elected group of between five and nine *panch* (council members). Four of these seats are reserved for women, and two for members of Scheduled Castes and Scheduled Tribes. One *panch* each cycle is elected from among elected members as *sarpanch* (council head) for a 5-year term (individuals are limited to three terms). Once elected, forest councils are mandated to create and submit micro-plans to the Forest Department for approval, after which they can begin functioning and establishing community bylaws. The responsibilities associated with council roles vary by VP, from councils in which *panch* are reluctant participants, active in name only, to councils which make decisions by consensus through extensive meetings, with active participation from the council members and rights-holders.

Although VPs are described as a decentralised model for resource governance, the state retains control over key decisions by acting as a management gatekeeper, whose oversight role persists through the establishment process and beyond. In this co-management model, forest councils effectively act as an agent of the state, without substantive legal authority to make decisions without government approval.

Government stakeholders

Two arms of the State government of Uttarakhand hold statutory roles in VPs: the Uttarakhand State Revenue Department and the Uttarakhand State Forest Department (Figure 23.3). The Revenue Department is responsible for overseeing elections and establishment procedures and maintaining land records. This role is fulfilled primarily by the SDM, whose office approves petitions for new VPs, conducts audits, and oversees elections. As Figure 23.3 illustrates, the activities of the Revenue Department are focused on overseeing the relationship between forest rights-holders (the user group) and the forest council. The Uttarakhand State Forest Department, in contrast, has responsibility for overseeing VP planning and implementing management, that is, operating at the interface between the forest council and the VP itself. The Forest Department approves management plans and is responsible for the collection and distribution of funds. Legally it can also carry out direct management activities in VPs without the approval of forest councils, although this is uncommon. Several levels of officers from the Forest Department are involved in VP administration, from the Divisional Forest Officer (DFO) to Forest Guards at the *tehsil* (sub-divisional) level.

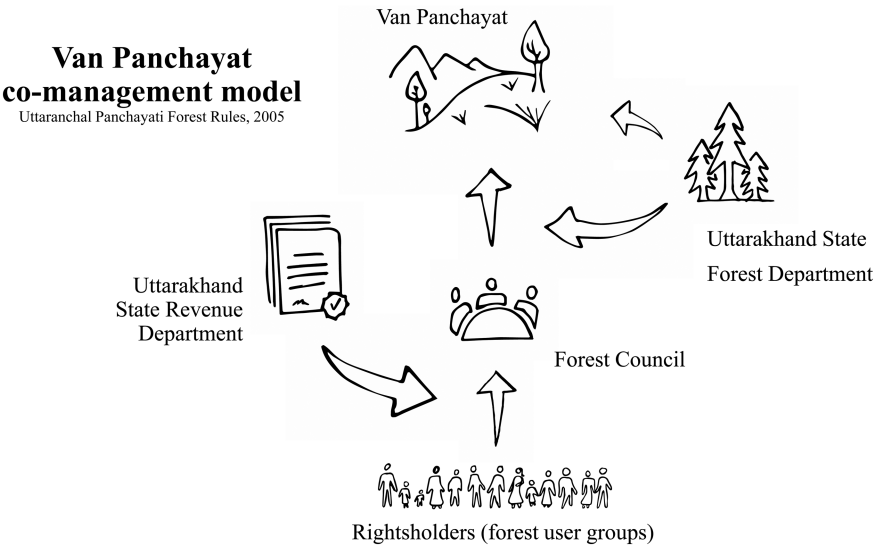


Figure 23.3 Stakeholder management roles in the *van panchayat* co-management model. Source: Uttaranchal Panchayati Forest Rules, 2005.

Affected stakeholders: *Van panchayat* rights-holders

In the context of community forests, 'affected' or 'primary' stakeholders are those whose lives and livelihoods are dependent on forests and are directly impacted by forest management decisions; these are also entities who engage in relationships of care with traditional or customarily claimed places. The affected stakeholders in VPs include both rights-holding community members in a village, *and* community members who either *de jure* or *de facto* are not effective rights-holders. According to the 2005 Uttaranchal Panchayati Forest Rules, rights-holders in this context are households – landowning or otherwise – who have resided in the relevant revenue village(s) for over 10 years (permanent residents of the village). This 'forest users group' is defined as 'the members of the general body, who are jointly interested in the management and development of forests and are dependent on the forest produce of the Panchayati Forest [VP] for their livelihood'. Rights-holders participate in the election of the forest councils, and are entitled to the benefits of the VP, subject to the rules and regulations established by the forest councils. In exchange, rights-holding members of VPs are legally obligated to participate in 1) fire control, 2) reporting VP rule infractions to the Forest Council, and 3) tree-planting efforts. Further stewardship responsibilities are decided on a village-by-village basis by the forest councils.

Because the land on which VPs are demarcated is not legally owned by communities, VPs confer on forest user groups only a limited set of strands in the bundle of rights (Table 23.1). Within this co-management model, rights-holders have use and withdrawal rights for subsistence resources, subject to some restrictions by the Forest Department (e.g. prohibitions on tree felling). Households' rights to harvest resources for commercial sale are typically limited by additional licensing requirements (see Box 23.1). Central to the VP model, communally held management rights empower forest councils to exercise authority over the day-to-day affairs in their VPs by passing bylaws, subject to oversight by government actors. Such management rights are not legally time-limited, and there are no formal provisions for dissolving the institution once estab-

Table 23.1 Forest tenure rights held by VP stakeholders in Johar Valley

Strands in the bundle of rights	*Stakeholder groups*		
	Government (Uttarakhand State Forest & Revenue Departments)	*Rights-holding residents (members of forest user group)*	*Non-rights-holding residents*
 **Access**	Yes	Yes	Yes
Rights to enter a defined area			
 **Withdrawal/ use for subsistence**	N/a	Yes	Conditional (pass required)
Rights to gather resource for household subsistence use			
 **Commercial withdrawal/ use**	Yes	Sometimes	Conditional (pass required)
Rights to gather resources for commercial sale			
 **Management**	Yes (oversight role)	Yes	No
Rights to make rules regulating internal use patterns			
 **Exclusion**	Yes	No	No
Rights to determine who will have access to a defined area			
 **Alienation**	Yes	No	No
Rights to sell or lease management or exclusion rights to other parties			
 **Duration**	Unlimited	Unlimited	N/a
Rights held are applicable within a certain time frame			
 **Bequeathment**	N/a	Yes (males only)	No
Rights to inherit tenure, and to operate without a term limiting rights of inheritance			
 **Extinguishability**	Yes	No	No
Rights to adequate compensation and due process in the event of seizure through eminent domain			

lished; however, many perceive these rights as insecure and the land potentially subject to seizure by government agencies. The distribution of rights described in Table 23.1 highlights the level of authority consolidated in the hands of government entities, and the limited rights devolved to the rights-holders ostensibly responsible for these forests. These formal rules reflect the priorities of Forest Department – in reality, however, rights are often exercised according to evolving customary laws enacted and revised at the village level (described further later in the chapter).

Non rights-holding affected stakeholders

In practice, some community members who meet the criteria set out in the Uttarakhand Community Forest Rules (2005) are not effective rights-holders, including migrants (e.g. transhumant herders) who reside in the revenue village, and, in most VPs, women. VP rights are held by households, not individuals; in most VPs, the sons of rights-holding households inherit rights in the village, while daughters – who customarily leave their natal village upon marriage – do not. Only in one of the case study VPs were women allowed to inherit rights: in Sarmoli Jainti VP, daughters who are permanent residents of either of the two villages, regardless of their marital status, can become rights-holders. Despite mandatory reservation of forest council positions for women (four seats out of nine), women are marginalised from decision-making in many VPs, and reserved seats are frequently treated as a paper formality. A 2012 amendment to the Uttarakhand Forest Panchayat Rules further stipulated that a woman sarpanch must be selected in each alternate 5-year term, although the implementation of this rule remains limited. According to the Uttarakhand Forest Department registry of VPs (2016), less than 5 per cent of sarpanch in Pithoragarh District are women. Further, many forest managers in Johar Valley observed that women could *not* become sarpanch due to the burdens associated with household work, physical limitations, or cultural taboos. For instance, water sources and certain sacred sites are considered off-limits to menstruating women. Several interviewees attributed landslides and other natural disasters to women who did not observe these restrictions.

However, women carry out the majority of harvesting of subsistence forest products (e.g. fodder, leaf litter, and fuelwood), often disproportionately bearing the burden of this labour. Civil society organisations (CSOs) and local collectives focused on women's empowerment have played a role in improving equity and access to livelihood options, and fostered significantly greater involvement of women in VP management in certain VPs. Several interview participants noted that roles have begun to shift. One described,

> Before in the VPs, women had more work … but what rights did they have? … Women were the ones going to fetch wood in the forest, doing this work, but it was only men making the decisions. … but now, men go for wood and women are making more of the decisions … Now women are coming forward.
>
> *(Women's co-operative member, Darkot)*

While this is not yet widespread, a trend of more active women's leadership in VPs is beginning to emerge. Access to management rights is further determined by dimensions of social marginalisation, including caste, social capital, and levels of education. The distribution of tenure rights in Table 23.1 underscores the acute vulnerability of resource-dependent people who are not recognised as VP rights-holders.

In theory, VPs are discrete parcels managed and relied upon by their rights-holders alone. In practice, however, most members of one community are dependent on a broader network of

other nearby villages' VPs to provide sufficient resources. Due to the steep elevation gradient of the valley, the aspect of the slope significantly affects resource availability, with south-facing slopes providing primarily grass, and the more heavily wooded north-facing slopes crucial for fuelwood and some non-timber forest products. Thus, members of nearby villages may be affected stakeholders for a VP in which they do not hold management rights. Non-rights-holding households have neither management authority nor unqualified use and withdrawal rights, though they may depend heavily on forest resources. Local resource users also depend on the ecological integrity of neighbouring Reserve Forests (managed by Forest Department) for their livelihoods. Two other categories of affected stakeholders (and, some argue, rights-holders in VPs) are non-human beings (such as trees and wildlife) and future generations.[5] Several forest council members suggested that they acted in a representative capacity to safeguard the interests of these forest dwellers. Further, *all* residents of the valley derive important indirect benefits and services from effectively managed VPs, including water, air filtration, and disaster mitigation (e.g. preventing soil erosion, which can lead to landslides and exacerbate flooding, discussed later in this chapter), as well as cultural values such as places of worship where their deities reside.

Benefits, services, and values: What do forests do for people?

Forests are the lifeblood of rural livelihoods in Johar Valley. Despite increasingly common use of liquid-petroleum gas, many households depend on fuelwood for cooking and heating homes; downed trees in VPs are frequently used as fuelwood for communal celebrations, such as weddings and festivals. Pastoralists – whether they have one milking cow or 100 goats, are sedentary or seasonally transhumant – rely on forestland for grazing, fodder (in the form of dry harvested grass or tree branches, usually 'lopped' by hand), and leaf litter used for bedding. Livestock manure is used as fertiliser, while leaf litter is applied directly to enrich soils and insulate crops. VPs are an important source of building materials, including timber and grass for roof thatching. Residents also rely on water sources in community forests; effective catchment-area management ensures that water quality remains potable in most villages, even without treatment.

Box 23.1 Caterpillar fungus—a NTFP 'goldrudh'?



Locally known as *yaarsa gumba* or *keeda jadi*, the caterpillar fungus (*Ophiocordyceps sinensis*) is one of the most valuable biological commodities in the world (Hopping et al., 2018). This parasitic fungus attacks the larvae of ghost moths beneath the surface, essentially mummifying its hosts. The harvested product is used in traditional Chinese medicine, and has gained popularity in recent years. Its use is banned in India, and the trans-border trade is heavily regulated. Harvesters pay a fee in order to legally sell their products to middle-men who then broker them on international markets; the collectors receive a small fraction of the revenue earned. As a result of overharvest across the Himalayas, caterpillar fungus are thought to be declining precipitously (Hopping et al., 2018).

In Johar Valley, participants describe harvesting caterpillar fungus as potentially lucrative, but also risky and speculative. Nonetheless, this is one of the few forest-based livelihoods which has grown in importance in recent years; the increase in harvesting in the valley has been described as a 'gold rush (Laha et al., 2018).' Some VPs have benefited enormously from the harvest in recent years through sales of passes, the revenue from which has been used to carry out much-needed improvements in VP infrastructure. A few participants suggested that there was a distinct revival of interest in VP governance as a result. However, in light of rampant illegal harvesting, forest council members in *bugyal* VPs suggest that management efforts are significantly focused on regulating caterpillar fungus extraction to prevent overexploitation. Interview participants involved in the harvest reported recent declines in harvest; further, many expressed concerns about impacts associated with increased human presence on sensitive *bugyal* ecosystems (e.g. pollution).

Medicinal plants found in VPs have historically supported household health and well-being (as well as served spiritual purposes) among Johari communities. Although household use appears to be declining, the area has seen a recent boom in medicinal plant harvesting in alpine *bugyal* for sale in international markets (Laha et al., 2018; Negi et al., 2019). The potential for lucrative returns from collecting caterpillar fungus in high alpine meadows has created renewed interest in VPs as a source of cash income for rural communities (see Box 23.1) (Laha et al., 2018).

Even for those whose livelihoods are not directly dependent on forest resources, reliance on forests is inescapable. A young *panch* in the village of Sai Polu explained:

> If we want to save our VP, and to save our environment, we [*panch*] have to take care of everything. We have to explain to people why it is important … If somebody cuts the trees, it will be difficult to breathe. … Pollution causes so many diseases. If we destroy our environment, and … we cut the trees, then the wild animals will move through the villages because they … won't have a healthy environment [to live in] … We won't get clean oxygen and clean water … So that's why our efforts [are focused on] balancing the environment. We get everything from the environment.
>
> *(panch, Sai Polu)*

Her statement enumerates how forests indirectly contribute to the well-being of all residents by supplying water, improving air quality, buffering the impacts of pollution on human health, and mitigating human–wildlife conflict. By minimising soil erosion, intact forests also mitigate the risk of landslides and flooding in this hazard-prone region. These benefits ripple well beyond the confines of the valley, safeguarding biodiversity, storing carbon, and enhancing water security for people downstream.

Indeed, the value of forests transcends their material contributions to human wellbeing. VPs often contain sites of spiritual significance, home to *devi* (gods) and spirits. Trees are described as bodily organs, mothers, brothers, and children. Commenting on past practices in the region, one forest manager noted,

> For one year of agriculture, people cleared the whole forest. They sowed, grew crops, and then left. Then they did the same thing somewhere else … it shouldn't be done, such ruthless destruction … Don't cut the live trees. Because hurt comes from cutting a tree. And that hurt is as if that [tree] is our child.
>
> *(panch, Sai Polu)*

When people hold the forest as kin, environmental degradation takes on a character of moral harm, more wounding than simply inflicting damage to property or reducing the capacity of a resource. These ideas complicate the anthropocentrism inherent to an 'ecosystem services' framing of forest values, by also highlighting the dependence of other-than-human beings on these places. 'Those wild animals, their only home is in the forest. They live in the forest, their house is nature' (panch, Sarmoli-Jainti). This perspective recognises that humans are not the only forest beings with the right to dwell here, that the forest offers shared value.

> The trees have a right to be healthy. The healthier they are, the better it will be for us. If rivers are more full, we will have more water. The forest will be more green, which will increase the rivers. We'll get more water.
>
> *(panch, Sai Polu)*

In turn, then, the flourishing of other forest life supports the well-being of people who depend on forests.

Stewardship practices: How do people care for forests?

Nominally, VPs are subject to Forest Department rules and regulations, including restrictions on felling live trees and selling timber. However, most rules governing access and withdrawal rights for forest resources are customary, decided by VP councils and enacted at the village level. Commonly, meetings open to rights-holders are held between three and five times per year, called at the start of the different seasons for harvesting important resources. VP councils, with input from the general body, pass specific resolutions during these meetings. VPs must maintain a register of meetings and resolutions passed, pertaining to day-to-day functioning; specific 'bylaws' are framed and documented as a part of VP Microplans (approved by the Forest Department). Unwritten traditional and customary practices guide behaviour and decision-making; rules enacted to steward community forests are also influenced by the nature and changing condition of the forest itself. As one participant from Suring VP noted, 'all laws originate from the forest. It has so many acts, so many articles'. In a well-functioning VP, decisions are informed by the communities' understanding of the forest condition, balanced against the needs of rights-holders.

In return for the benefits and services derived from VPs, most forest stewards see it as their reciprocal responsibility to care for the forest. Exercising these stewardship responsibilities (Figure 23.4) not only safeguards rights-holders' ability to depend on the forest in future, but also helps secure their tenure rights:

> This is government land, and the government gave this piece of land to us so that we would take care of it. In this land there are resources, and the government is saying 'use them, protect your forest', that is why they have handed over to us the VP. The day we stop taking care of the forest, the government will take this land from us.
>
> *(panch, Shankh Dhura)*

Thus, many understand use rights in VP to be contingent upon effective forest management, as state actors define it. However, people's commitment to caring for forests is motivated by more than the threat of tenure insecurity, guided by deeper linkages between the right to benefit from forest products and people's obligations to take care of the forest as kin and provider.

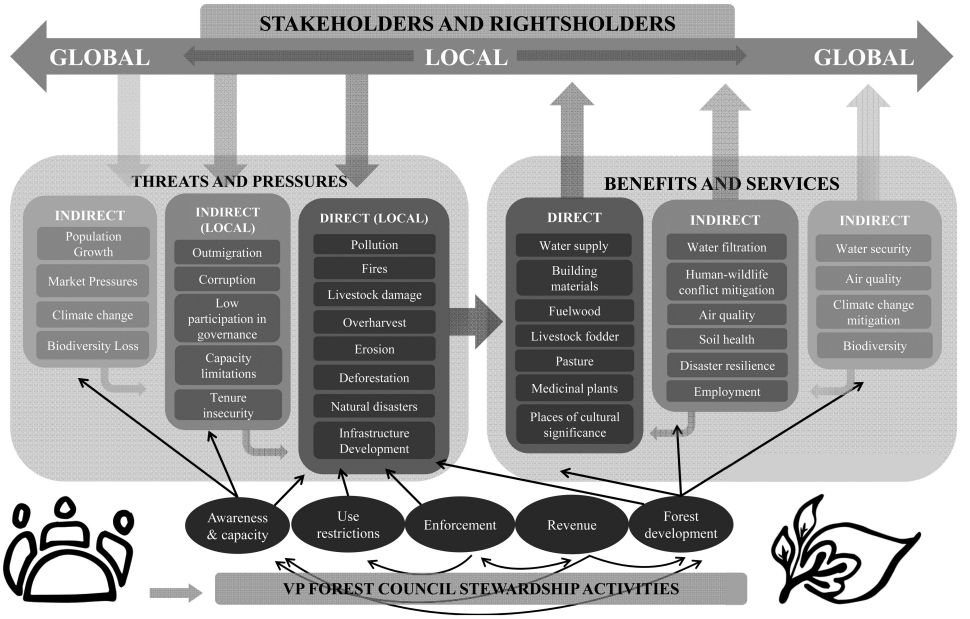


Figure 23.4 Stewardship activities, benefits, and threats in *van panchayats*.

As illustrated in Figure 23.4 and described here, Forest Councils undertake many activities to mitigate threats and pressures and foster the benefits, services, and values they prioritise.

Preventing degradation

Use restrictions: Community bylaws and resolutions limit the permitted collection and use of forest products. Restrictions may be seasonal, with individual councils deciding when to 'open' and 'close' access to products like fuelwood, leaf litter, grazing land, and medicinal plants to promote forest regeneration. Further limitations restrict the quantity of a resource which can be collected, or the harvesting method (for example, by allowing only one family member from a household to collect fuelwood, or requiring bundles of wood to be hand-carried). A few VPs have demarcated patches of protected areas – often sacred sites and water sources – in which resource harvesting is highly restricted or prohibited entirely. In some VPs, specific plots of VP land are allocated privately to each family and passed on from generation to generation.

Enforcement of community rules: In most VPs, rule enforcement is a primary focus of councils' efforts and expenditures. Enforcement strategies commonly include constructing and maintaining boundary walls, conducting forest patrols, and financially penalising rule-breakers. Boundary walls mitigate livestock damage and discourage encroachment. Patrols may be carried out by hired *chowkidar* (guards) if funds are available, by rights-holders on a rotational basis, or by members of the forest council alone. When rules are broken, forest councils often levy fines, enforceable by civil courts if rule breakers refuse to pay. Forest councils are also empowered to impound offenders' tools until they pay fines or compensate for damages incurred. In practice, rules are enforced at the discretion of forest council members, with non-rights-holders often subject to a higher degree of censure. Personal circumstances may be taken into account; for example, during this study, a member of the community known to be experiencing hardship at home was

given a verbal warning for harvesting without a pass, but was allowed to continue harvesting. In other cases, forest council members described chasing down 'outsiders' to seize their scythes and other harvesting instruments.

Increasingly, forest councils resort to a less direct – but reportedly very effective – form of enforcement: dedicating the forest (or a portion of it) to a locally respected deity for divine protection, and a promise to rule-breakers of divine retribution. Most commonly, the goddess invoked is Baghwati Mata (also known as Kodgadi Devi), a Hindu goddess of justice known and feared throughout this part of the mountains. A few VPs dedicate their forest to more local deities. This is often considered a last resort for VPs which do not have the capacity to effectively apply other means of enforcement (e.g. to hire a *chowkidar*). As one participant explained:

> Our VP forest has nearly been cut down. But we have now dedicated it to a goddess called Kodgadi Devi … so if somebody is doing something wrong, the goddess will punish them … now people are afraid even to cut a single tree … that is why the forest is somewhat safe. Otherwise it would have all been cut down.
>
> *(sarpanch, Malla Ghorpatta)*

Dedication is also common in villages where subsistence need for forest products has declined over time. While this strategy can be effective, the formal dedication process is costly. Alternatively, some VPs which have not formally dedicated their forests to the *devi* nonetheless tie red cloths around the boundaries to discourage would-be encroachers.

Aiding regeneration

They 'develop' the forests: 'Forest development' describes activities intended to improve forest condition and the provision of and/or access to valued resources. Many VPs – particularly small parcels and those subject to significant use pressure – plant trees and other important forest species. Some councils choose to systematically remove undesired or invasive species, or clear underbrush to allow for easier access and foster the regeneration of fodder grass. Other forms of 'development' include restoring stream banks to help protect water sources from erosion and contamination, and maintaining trail networks. Some of the larger, more remote VPs which are not subject to high levels of use pressure rarely carry out such active management, instead relying on natural regeneration to maintain canopy cover and abundance of valued forest products.

Building capacity

They collect revenue: Primary sources of revenue for VPs in Johar Valley include contributions from rights-holders, proceeds from the sale of forest products, and grants or contributions from the Forest Department or other stakeholders. In many VPs, rights-holders pay a nominal fee which supports VP maintenance and affirms the household's status and withdrawal rights. Some VPs allow families to contribute volunteer labour or *shraam daan* (such as patrol or plantation duty) in lieu of monetary contributions. Most VPs derive their income from a combination of these annual dues and sale of products or 'passes', which non-rights-holders may purchase to access resources such as fuelwood, fodder, and leaf litter. For high value products (such as the timber from a fallen tree), some councils hold auctions within their revenue villages, where rights-holding members may purchase the rights to specific resources.

Typically, resources are not offered for sale to members of other villages until rights-holders' needs are met, except where neighbouring villages have long-standing reciprocal

arrangements. Some funding for VP activities is available through the Forest Department or other government 'schemes'. Those VP councils which are aware of these opportunities submit project proposals to access available funds. Less commonly, some VPs engage in eco-tourism or other business enterprises to earn revenue. Tourism can present challenges for VP councils, in particular the recent rise in privately run tourism companies who use the VPs as sightseeing attractions. Forest councils are not permitted to exclude others from access rights to the forest on the basis of their rights-holding status. Yet VPs are burdened with mitigating tourism-related damages, without additional revenue to compensate, or rights to pass bylaws regulating entrance.

They foster awareness of VP activities. Forest councils are tasked with keeping rights-holders apprised of their activities. At a minimum, forest councils call regular meetings to make decisions about forest use and discuss proposals for new rules or projects. Some VP councils aim to foster wider engagement in governance by intentionally involving youth, and collaborating with other VP leaders and/or CSOs. Such grassroots organising has long been a strength of the VP as an institution; led by a motivated *sarpanch* it remains a powerful tool for collective action. From approximately 2005 to 2010, an association of sarpanch from around the valley (the *sarpanch sangathan*) worked to spread awareness of legal changes, building capacity, and sharing conservation strategies. A new *sangathan* (association) of Johar Valley VPs was formed in 2020, representing about 30 VPs in the valley. In April, 2021 Johar forest councils also elected a district-level advisory committee to communicate the needs and priorities of VPs with government stakeholders. This additional channel of communication can play a pivotal role in ensuring that local priorities are heard and addressed.

Threats and pressures: What challenges do *van panchayats* face?

Much of the literature on environmental condition in the Himalayas points to an ecosystem both precious – a bastion of biodiversity, a water tower for billions downstream – and precarious. The Western Himalayas are considered highly vulnerable to patterns of global environmental change (Chettri & Sharma, 2016; Shahabuddin & Thadani, 2018; Wester et al., 2018; Theophilus, 2002). The loss of forest canopy cover, faunal populations and the impacts of climate change – particularly declines in the historical extent of glaciers – are widely documented (Wester et al., 2018).

Many forest stewards interviewed in Johar Valley expressed acute concern about their vulnerability to processes and trends of global environmental change and identified their pivotal role, as conservation actors, in addressing these challenges (Figure 23.4). Despite broader perceptions of ecosystem degradation, many also described the perception that *local* forest condition – particularly within VPs – has improved through concerted management and restoration efforts by VPs in the last few decades. One participant from Sarmoli-Jainti described,

> We have more hope now … when we used to go into the forest there was nothing. … We [restored] that *jungal* in our village – we took time for boundaries, planting, and development. When we stopped, we saw that the forest had been restored. We felt that we had new life.

Many in Johar Valley hold this same pride in their generation's reforestation and conservation efforts, describing positive trends in forest cover, biodiversity, and the provision of forest products. However, for many the improvements of recent decades also feel tenuous, subject to both local pressures and broader social, economic, and environmental changes beyond communities' control.

Erosion of governing capacity and tenure insecurity

Policy developments over the last several decades, at both central and state levels, are perceived as consolidating governmental control over VPs by expanding the Forest Department's management role. Several regulatory changes have contributed to the legal erosion of community authority over VPs, including amendments to rules that govern VPs in 1976, 1997, 2001, 2005, and 2012 (Ballabh et al., 2002; Mukherjee, 2014; Negi et al., 2012). The passage of the UP Village Joint Forest Management Act in 1997, framed as a turn towards more participatory forest governance, reportedly led to elite capture of forest benefits and negative consequences on gender equity in VPs (Nagahama et al., 2019). Unlike in other states, where JFM was implemented in Reserve Forests by involving those in dependent neighbouring villages, in Uttarakhand the JFM programme was undertaken in VP forests, co-opting an existing institution.

The Uttarakhand State 2005 Community Forest Rules instituted three key changes to the administrative structure of VPs, which granted the Forest Department significant oversight authority. Firstly, by appointing a Forest Department officer as 'Secretary' of the forest council, the new rules established joint revenue management, requiring a signature from both sarpanch and 'Secretary' for all withdrawals. Secondly, the 2005 Rules established a revenue sharing model, entitling the Forest Department to 10 per cent of the proceeds from the sale of all forest products. Thirdly, they granted the Forest Department authority to sign off on management plans, and to develop district-level composite management plans without input from VP councils (Ballabh et al., 2002). These changes have shifted the nature of the co-management relationship considerably, threatening the perceived security of communities' rights in their VPs.

The types and degree of *de facto* stewardship rights exercised in VPs depends on the level of awareness among forest councils and rightsholders, their cultural and social capital, the financial capacity they hold, and the geography of the forest parcel. Council members' educational backgrounds and awareness of legal provisions appear to play a particularly key role; in VPs with a history of sensitisation efforts by CSOs, forest councils often feel empowered to push back against laws perceived to be unjust or inapplicable, to pursue their chosen management strategies. In contrast, many VPs suffer from distinct capacity limitations, where elected forest council members have little awareness of applicable laws and processes.

Demographic and livelihood changes

Many forest managers point to demographic change as a key driver of reduced governing capacity in communities. Outmigration is a widely documented trend in the Himalayas, and in mountain regions more broadly (Prateek, 2017). Across the mountainous districts of Uttarakhand, recent decades have seen widespread outmigration as youth (mostly male) seek employment or education in the plains, young families move to urban centres to secure better opportunities for their children, and smallholder agricultural producers and pastoralists abandon fields for the promise of more secure livelihoods (Prateek, 2017). Since 2001, approximately 300,000 rural *pahadi* Uttarkakhandi have migrated semi-permanently out of the mountains, and a further 100,000+ have migrated permanently (Sajwan, 2020). Residence in seasonal alpine villages declined precipitously following the closure of the trade route with Tibet in 1962, and has continued steadily since (Bergmann et al., 2011). Now, many of these villages are occupied only by a handful of families. As one participant noted,

> Who wants to stay here? Who will protect the forest? Those who can generate employment here are the ones who can save it, because they create livelihoods [so people can

> stay]. Only then can this land be saved. This soil can be saved. This mountain can be saved. … Otherwise, life is over.
>
> *(former sarpanch, Harkot)*

The viability of resource-based livelihoods in Johar Valley is quickly waning. Once the cornerstone of economic stability in this region, agriculture and nomadic pastoralism are now seen as livelihoods which offer fewer opportunities for social mobility or economic security and are highly vulnerable to the effects of ecological change – particularly the increased prevalence of natural disasters and human–wildlife conflict. Transhumant livelihoods are particularly vulnerable to this trend. Nomadic sheep and goat herders face significant tenure insecurity, increasingly crowded out of access to the lower altitude pastures essential for enduring the lean winter months (Pandey et al., 2017). For many families, the prospect of spending one's days herding livestock does not match parents' aspirations for their children. Even among those most closely connected with forest management, staying to practice forest-based livelihoods is increasingly seen as a last resort, rather than a secure and fulfilling livelihood. This presents a conundrum: while declining dependence and outmigration are perceived by many as existential threats to VPs, many forest council members *also* expressed a desire for their own children to receive a quality education and find employment outside of the valley. Many local forest managers are concerned about declining participation in forest governance among the youth who stay behind, and they also wonder whether those who have gone will maintain a connection with their community forests.

Against the broader trend of outmigration, Johar VPs are also affected by localised population growth in Munsiari and nearby villages, as people migrate from outlying areas seeking better educational and employment opportunities in the relative bustle of the township. People are also migrating here from lower lying areas, as low property prices and new markets afford opportunities for entrepreneurship in tourism and the service sector (Negi, 2007). Some argue that local population growth results in unsustainable pressure on forest resources, and accordingly propose increased enforcement to prevent against encroachment and degradation. People express particular hostility towards 'outsiders' such as recent migrants, suggesting that while rights-holders' dependence on forests may be sustainable and even promote good governance, 'outsiders' who lack a sense of attachment to place cause degradation and fail to respect customary rules. 'Outsiders' may also include transhumant herders, increasingly less welcome in their seasonal pastures in other villages' VPs. These groups are often blamed for increased deforestation and overharvest, pollution, livestock damage, and fires. In reaction, in some VPs, harvest limits are sufficiently restrictive that even rights-holders must go elsewhere to secure subsistence resources (typically to Reserve Forests). In these cases, those with stronger claims to forest rights capture benefits, while non-rights-holding community members are particularly vulnerable to resource shortages.

Continuing reliance on VPs

Whether forest managers interviewed in this study attributed their concerns to State efforts to re-centralise control over VPs or blamed factors endogenous to the functioning of local institutions, most agreed that the capacity of VPs was declining. Forest councils frequently operate with limited capacity and face a mounting threat of tenure insecurity. Many forest council members in Johar Valley are fiercely committed to forest stewardship, and buoyed by the progress made by the latest generation of forest caretakers. Thus, a sweeping narrative of failing VPs is incomplete without recognition of this continued commitment to caring for forests, rooted

in communities' awareness of their dependence on the environment and a deeply held sense of cultural, spiritual, and communal responsibility towards these places.

Moreover, many participants shared the conviction that healthy VPs will only become *more* important to local communities' well-being in coming years. The upheaval associated with COVID-19 in 2020–2021 has redoubled this belief, though it will take years to understand the reverberating impacts of the pandemic on people and forests. With inadequate virus testing and treatment and the existing rural health infrastructure strained, the human cost of COVID-19 in the region is difficult to ascertain, and may be underestimated (IHME, 2021). Beyond the direct health impacts, the pandemic has also affected the burgeoning tourism industry, which supports a vibrant service sector and allows households to diversify their livelihoods. However, remoteness may be a meagre advantage; certainly, the privileges of clean air, clean water, and ample space are keenly felt in such times. Facing scarcity, people can turn to the forest to meet their needs – a crucial social safety net. In 2020, tens of thousands of Uttarakhandi began migrating back home; the Uttarakhand Rural Development and Migration Commission estimated that between March and July 2020, over 10,400 people migrated back to Pithoragarh district, thought to be seeking safety and livelihood security amid the pandemic. The Uttarakhand administration sees this as an opportunity to gainfully employ youth and reverse the longstanding outmigration trend – and has focused on VPs as a possible site for employment by proposing to hire *van prahari*, or forest guardians, to manage wildfire risk and patrol VPs. This controversial approach, which would repurpose funds earmarked for compensatory afforestation, nonetheless underscores the continued relevance of VPs in conservations about rural development and human well-being in Uttarakhand's mountains.

Conclusions

A common historical reading of Uttarakhand's VPs suggests that they were created as a compromise, a way for India's forest bureaucracy to maintain control over its Himalayan frontier while quelling rural resistance (Agrawal, 2005). Yet in responding to mountain communities' demands for increased authority in forest governance, the state took an unprecedented step by devolving a measure of legal control over forest stewardship to democratic local institutions. VPs subsequently emerged as a crucial site for further political organising, central to communities' struggles for self-determination and environmental protection. Furthermore, for many who live in Johar Valley, community forests have become a point of pride, core to one's identity as a *pahadi*, a mountain person. This venerable institution has been extolled as a model for governing forest commons, both in India and abroad. Here, we have described in one mountain valley the integral role of community forests for human well-being, and the ways in which local communities exercise care and responsibility for these important places.

However, as this chapter has also demonstrated, the future of VPs appears precarious. Several scholars have documented a decline in institutional capacity, lamenting the VP as a failed experiment in democratic resource governance (Agrawal & Chhatre, 2007; Baland et al., 2010; Ballabh et al., 2002; Prateek, 2017; Shahabuddin & Thadani, 2018). Rather than framing this chapter as a question of success or failure, we instead point to an emergent mismatch between the institutional framework and the needs and aspirations of forest users as an opportunity to re-imagine local resource governance. Managing the commons requires accommodating multiple and sometimes competing needs, values, and visions. Meanwhile, the VP must adapt to meet new challenges: increasing environmental uncertainties; changes in rural livelihoods affecting communities' dependence on forest resources and their development goals; and diminishing

capacity to govern. Accordingly, we propose that it is time to rethink *how* the VP is shared – among neighbouring communities, between communities and the State, and for the benefit of both humans and other species. We call for renewed exploration of what this shared vision for the future of VPs might look like, in order to foster a more resilient and equitable model for community-led forest stewardship.

Several key questions can guide this process: Firstly, how are VP leaders currently understanding and responding to intersecting dimensions of environmental, socio-economic, and legal change? As in all communities, the residents of Johar Valley are diverse individuals with diverse viewpoints, ideas, priorities, interests, levels of power, and livelihood needs, which presents formidable challenges for effective co-operation. The current model for VP governance is largely discretised into individual VP parcels, with limited opportunities for collective planning among villages. Accordingly, forest stewardship in the valley comprises a patchwork of isolated strategies and approaches, and forest councils are often preoccupied with efforts to prevent encroachment by their own neighbours. Articulating a shared vision requires 1) reaching a common understanding of where things currently stand, and 2) a workable framework for co-operation which attends to power inequities and enables VP councils to meet the needs of their own villages, while also contributing to the well-being of the valley at large. This does not demand that differences be entirely reconciled, rather that diverse perspectives are articulated in order to find common ground from which to embark.

Secondly, what factors can contribute to an enabling legal and political environment for effective stewardship, amid these changes? To answer this question, we need to understand what is driving the erosion of governing capacity. On the one hand, some VP stewards argue for greater autonomy for forest councils, suggesting that their role has been diminished from a position of 'ownership' to being mere 'managers' in their forests. Others suggest that government entities – in particular the Forest Department – have reneged on their responsibilities as co-management actors, and that their lack of presence is crippling communities' stewardship capacity. Co-management efforts are impeded by dissonance between State actors' emphasis on VPs as a mechanism for conservation and economic gain, and local communities' focus on the subsistence and cultural values of VPs, indicating a need to revisit and rebalance the legal parameters of this relationship. Separate concerns about capacity involve non-governmental factors: Many forest council members – particularly *sarpanch* and former *sarpanch* – saw their work as a lonely, uphill battle to protect forests from encroachment and engage their fellow community members in governance. Most interviewees agreed that the long-term persistence of VPs depends on the willingness of young people to care for their forests, and in turn whether they can support themselves and envision fulfilling futures in Johar Valley. An enabling legal environment for forest stewardship would thus 1) empower individuals and councils who are committed to forest stewardship but lack the capacity (whether technical, financial, or otherwise) to implement their vision (both government actors and conservation organisations are well-placed to play this practical, supporting role); 2) provide a more co-operative governing framework for VP councils to address collective challenges and build institutional capacity; and 3) afford opportunities for meaningful livelihoods in the mountains.

Thirdly, across the broader landscape, are VPs delivering on their conservation promises? This chapter has not attempted to characterise the ecological outcomes of VP management in Johar Valley, a pressing question for further inquiry. In particular, does the VP model effectively protect the diversity of wildlife species which range across the Johar Valley slopes? In spite of a strong commitment to forest stewardship among VP managers interviewed for this study, we found that most saw wildlife – *janglee janvar* – as the responsibility of the state. This perception may result from the Forest Department's longstanding assertion of its authority over wildlife, as

Table 23.2 Selected species of interest found in VPs (mentioned by participants)

Common name	*Scientific name and authority*	*Local name*	*Details: Use(s), locations, observations*
Alder	*Alnus nepalensis* D. Don	Utis	Subsistence harvest: fuelwood, building material, livestock fodder
Asiatic black bear	*Ursus thibetanus* G. Cuiver, 1823	Bhaloo	Occasional conflict with humans
Bamboo	Multiple species (not determined)	Ringal	Smaller varieties used to support crops, other misc. household uses (e.g. fire starting). Larger varieties used to make household items, including vessels
Banj oak (Brown oak)	*Quercus leucotrichophora* A. Camus or *Quercus semecarpifolia* Sm.	Baanj Karsu Tinsu	Subsistence harvest: fuelwood, leaf litter (*patel*), building material, livestock fodder
Bengal tiger	*Panthera tigris tigris* Linnaeus, 1758	Sher	Seen rarely, occasional conflict due to livestock predation, prominent spiritual role in Hinduism and animistic traditions
Black cumin	*Elwendia persica* Boiss.	Kala jeera	Commercial cultivation in alpine regions, a common cash crop for migratory residents
Caterpillar fungus	*Ophiocordyceps sinensis* (Berk.) G.H.Sung, J.M.Sung, Hywel-Jones & Spatafora (2007)	Keeda jadi, keeda ghass, yaarsa gumba (yartsa gunba, यार्सागुम्बा)	Commercial harvest: medicinal uses (for export to Chinese markets)
Chir pine	*Pinus roxburghii* Sarg.	Surayi	Commercial and subsistence harvest: fuelwood, building material, resin
Deodar Cedar	*Cedrus deodara*	Deodar, devdar	Sacred tree, gathering place
Grasses	Mixed varieties, one common species is *Danthonia cachemyriana* Jaub. & Spach	Ghaas	Subsistence: grass for livestock fodder, grazing; found primarily on S/SE aspect
Himalayan birch	*Betula utilis*	Bojh Patra	Fuelwood, fodder, building material, medicinal uses, livestock fodder
Himalayan Fir	*Abies spectabilis*	Not known	Commercial and subsistence harvest: fuelwood, building material
Himalayan tahr	*Hemitragus jemlahicus* Smith, 1826	Tahr	Listed as Near Threatened, historically a hunted species
Himalayan Yew	*Taxus wallichiana* Zucc.	Thuner	Harvest of bark for tea, medicinal uses
Juniper	*Juniperus communis, Juniperus indica*	Bil	Medicinal use, fuelwood
Lichens	Mixed varieties, including *Buellia subsororioides* S.Singh & Awasthi	Not known	Medicinal uses, some commercial sale of lichens for making mehendi

Table 23.2 (Continued)

Common name	*Scientific name and authority*	*Local name*	*Details: Use(s), locations, observations*
Rhododendron	*Rhododendron* spp. (including *Rhododendron arboretus,* Smith; *Rhododendron campanulatum*)	Burans	National symbol, used for a local beverage enjoyed during the summer
Snow leopard	*Panthera uncia* Schreber, 1775	Tendua (him tendua)	Listed as Vulnerable. Comes into conflict with herding communities in alpine grazing lands
White-bellied musk deer	*Moschus leucogaster* Hodgson, 1839	Not known	Listed as Endangered, historically a hunted species with cultural importance for its tusks and musk glands. Also the Uttarakhand State animal

well as the pragmatic limitations of communities' abilities to manage wide-ranging species across large landscapes. Yet wild animals are also seen as neighbours and co-habitants, members of the forest community in their own right. So, in addition to meeting human needs and strengthening communities' bargaining power, could a governance model that treats the larger, connected landscape as a collective commons also offer better ecological outcomes? Further research into the wildlife–human relationships in the valley could shed light on how a shared vision for VPs might also accommodate the well-being of other-than-human beings.

For nearly a century, VPs have played a central role in mediating people's relationships with their neighbours, the forests and their non-human co-habitants, and the State, but the continued role of this institution is uncertain. Will changing livelihoods render forests less important on a day-to-day level, and lead to declining interest in stewardship? Whether or not households continue to collect firewood and gather leaf litter, will they continue to be aware of their reliance on VPs for indirectly sustaining their welfare? Are these contributions – or the stewardship efforts required to maintain them – still valued? Could so many people coming home during the pandemic afford an opportunity to concentrate on local needs and priorities, including food and water security, and restore a sense of attachment to place, if it has been absent? Or is the sudden population increase placing additional pressure on already strained forest resources in population centres? Will people choose to stay?

Human and non-human lives in Johar Valley are inevitably entangled with forests. Furthermore, the impacts of forest condition here reach far beyond the valley's slopes. As Johari communities adapt to changing landscapes, much will thus depend on forest councils' decisions about stewardship in VPs: the ability of families to weather the health and economic toll of a pandemic; next year's caterpillar fungus market; communities' identities as mountain peoples; the fortunes of a Bhotiya herder's children and a snow leopard's cubs; the ecosystem health of rivers that supply drinking water to a billion people downstream. As one elder explained, seated beneath a *deodar* tree at the heart of Sarmoli Village, 'If there is *jangal* (forest), there is everything. If there is *jangal*, there is water. *Jangal* is mother, *jangal* is father … it is everything. What more is there to say?'

Notes

1 The ban on felling green Chir pine trees above 1,000m was extended on multiple occasions, and remains in effect (including in VPs) except with permission granted by the Divisional Forest Officer, or in areas earmarked by the Uttarakhand Forest Development Corporation.
2 In India, Scheduled Tribes and Scheduled Castes are constitutionally recognised groups afforded Reservation status for political representation and protection from discrimination. Scheduled Tribes are tribal peoples which experience marginalisation from the community at large and maintain distinctive cultures connected to specific places.
3 Though formally administered by the Forest Department or local communities, civil *soyam* forests in Uttarakhand nonetheless comprise an important resource base, and some are actively (though informally) managed at the village level (Baland et al., 2010). New VPs have been commonly demarcated from civil *soyam* tracts.
4 The *gram sabha* is a village-level body established under the *Panchayati Raj* decentralised governance system, which elects representatives for community decision-making; under the *Panchayati Raj* system, decisions by the *panchayat* (council) require the consent of the *gram sabha*. Although it is common for each *gram sabha* to correspond with one VP, in some cases more than one *gram sabha* comprise the forest user group for a VP. In other cases a *gram sabha* may be split between two or more VPs, with corresponding forest user groups.
5 The rights of animals, species, and ecosystems are increasingly acknowledged in court rulings granting these entities legal personhood, including a ruling by the Uttarakhand High Court granting rights to the Ganga and Yamuna rivers and catchment areas (Kinkaid, 2019). The rights of future generations, specifically to enjoy the benefits of healthy and functioning ecosystems, are also identified as emerging rights on the international stage.

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PART VII

Politics and power in community forestry



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DISEMPOWERING DEMOCRACY

Local representation in community and carbon forestry in Africa

Melis Ece, James Murombedzi, and Jesse Ribot

Introduction

Public management of natural resources around the world is guided by discourses of local participation. Yet, the modes of participation that are based on substantive and empowered forms of engagement, and support and strengthen local democracy, remain elusive in forestry interventions. Recent climate-change mitigation interventions based on carbon forestry are no exception. They proudly feature 'broad stakeholder participation', 'social safeguards', and 'Free, Prior and Informed Consent' (FPIC) procedures that require intervening agents to engage local people in decision-making (UN-REDD No Date; UN-REDD, 2013; FCPF and UNREDD, 2012). Yet, concepts of participation in the UN documents are so capacious that they could encompass any practice – from democracy to forced labour. Further, the World Bank's Forest Carbon Partnership Facility (FCPF) has demoted the 'C' from *consent* to *consultation*, implying that consent is no longer required, thus enabling intervening agencies to choose to override local people's preferences (FCPF, 2009).[1] It looks like a green light for project implementers to consult local people and then do as they please.

For the for-profit corporations, the World Bank, and other bi-lateral and multi-lateral donor organisations, FPIC draws from the concept of Informed Consent and Participation (ICP) (Baker, 2012), which is generally required for what these institutions classify as high-risk projects. ICP involves an in-depth and good faith exchange of views between project proponents and the populations that projects choose to define as 'affected communities' in a way that should influence how a project is carried out. Clearly, however, consent should be understood as the right of *democratically represented* communities to approve or reject proposed actions or projects that affect them (Tamang, 2005; Lewis, Freeman, & Borreill, 2008; Ribot, 2004, 2013) – not 'stakeholders' or any other 'affected' group chosen to fit the interest of intervening projects and programs. The issue of consent is one of the most critical challenges facing the development process. Government and project practitioners certainly have the urge to secure consent in order to avoid the risk of project refusal or resistance. Yet, they merely engage in activities that appear to provide local inputs and consent. Both FPIC and participation are problematic means for providing substantive social protection (Dunlap, 2018). There is no 'freedom' of choice when people lack the right to refuse pre-determined options they are offered (Ece, 2017). There is no freedom of choice when 'prior' provides insufficient time to reflect and organise. There are no

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real choices when in lieu of 'informing' people of their rights and project implications, intervening programs 'educate' them on why they should agree to interventions (Mbeche, 2017). There is also no 'consent', certainly not with the toothless form 'consultation', when the community is not engaged as a whole citizenry through local institutions or processes that democratically represent them (Lewis et al., 2008; McGee, 2009; Colchester, 2010; Baker, 2012; Nuesiri, 2017; Baruah, 2017).

This chapter is based on the findings of the Responsive Forest Governance Initiative (RFGI) research program.[2] The program carried out 27 in-depth case studies in 13 countries (Burkina Faso, Cameroon, Democratic Republic of the Congo, Ghana, Kenya, Mozambique, Nigeria, Senegal, South Sudan, Tanzania, Uganda, Nepal, and Peru) from 2011 to 2015. Looking at responsiveness and accountability, the case studies found that the democratic ideals behind representation, consent, participation, or social safeguards are rarely, if ever, evident in international forestry projects. The findings show a systematic disjuncture between the donor and government claims of participation, representation, and inclusiveness in policy making and in project development and implementation. In practice, neither 'community participation' in community-based forestry, nor consent or consultation in carbon forestry, is based on substantive exchange of views (Colchester, 2010; Ribot, 2016; Marfo, 2015; Mbeche, 2017; Nuesiri, 2017, Ece, 2017). They remain mere theatrics. In international, national, and local fora, where key decisions regarding access, use, and ownership of public forests are taken, consent, consultation, and participation are reduced to a mere presence of certain categories of 'relevant' people – defined to be relevant by those managing the process and usually called 'stakeholders'. Whether these 'relevant' people democratically[3] represent local people's interests is, at best, of secondary concern. Project implementers often choose to work with non-democratic local actors, such as experts, customary chiefs, local committees, or NGOs. In this respect, intervening agents or agencies, including national governments, forestry administrations, donors, international development agencies, or environmental groups – that is, any supra-local institutions[4] that impose laws, programs, or projects – fail to understand or to care that *who* is authorised to speak for or represent local people matters deeply if participation in decision making is to be substantively representative and legitimate. Our position is that representation is not about talking with interested parties that projects identify as 'stakeholders'; it is not about having customary authorities and other influential elites at the table, nor should it be about consulting some vaguely defined 'population' on pre-determined goals and choices. Democratic representation required for substantive democratic engagement or democratic 'participation' is about broad-based citizen-driven decision-making. It requires democratically representative local institutions.

Political representation is responsiveness of government and leaders to people's needs and aspirations. Representation is democratic when that responsiveness is driven by the accountability of decision makers to the people (Manin, Przeworski, & Stokes, 1999). Democratic representation requires political processes by which program and project decision makers can (i.e., are empowered to) respond and are also accountable to (meaning can be sanctioned by) citizens (Manin et al., 1999; Agrawal & Ribot, 1999, 2012). In RFGI country case studies, governments and donors hold up representation of local people in forestry decisions as an ideal. Policies and project documents for all cases proclaim the importance of representation, but do not define it in enough detail to guide any reader on what representation would entail in practice. Likewise, when asked, most development and forestry practitioners cannot define democracy in sufficient detail to be able to systematically establish or support it – they cannot provide a substantive definition. They do not seem to know that it involves significant decisions in which the deciders are systematically accountable to the people of the jurisdiction. This is not to say that they do not believe in democracy. Indeed, they feel committed to promoting it. But, as important as it

appears in discourse, in policy documents, and in laws, accountable representation remains secondary to project forest management goals. The result is a slippage between stated commitments and practice. The idea of representation is draped over or performed next to forest management goals – the processes set up to engage local populations do not make the projects respond to local needs and aspirations. These processes are a theatrical enactment by intervening agencies of their participation requirements. The acts are used to facilitate local acceptance – through convening and consulting with select sub-groups or elites rather than broad-based public representation. Democratic representation is lost in the translation from discourse to documents or laws and then to practice. In our analysis, we use basic principles of local democracy – concerning the degree to which leaders represent and are accountable to local citizens – to evaluate how people are included in decision-making (Manin et al., 1999; Ribot, 2013, 2004). Our definition is substantive rather than procedural (Pitkin, 1967). Hence, we acknowledge that electoral systems are not democratic when the leaders lack power to respond to local needs or when the elections and other accountability means do not establish accountability – as is often the case. We acknowledge that systems without elections can be democratic, and a few are. Nevertheless, we take the position that electoral systems are preferable and represent the most durable and generalisable form of democratic representation (Manin et al., 1999).

This chapter characterises how and explores why forestry projects and programs systematically circumvent elected local governments by creating their own alternative arrangements for local 'representation' or 'participation'. The studies and broader literature suggest that the preference of the international agencies and donors to work with institutions other than elected local government has practical and ideological roots (Ribot, 2004; Manor, 2005; Ribot, Chhatre & Lankina, 2008). The first practical justification is the need to achieve the forestry objectives of a program (in most of our cases, carbon forestry). Democracy is slow, and intervening agents choose to work with local actors who are most likely to 'efficiently' implement their programs and projects. The second, in service of the first, is control – where local forestry brigades, customary chiefs, or user committees are easier targets of manipulation by central agencies or donors than are elected local governments. Third are ideological positions that are anti- 'big government' (in a Reagan-Thatcher sense), pro-private sector (part of the Reagan-Thatcher neo-liberal economistic stance), or pro-customary authority (emerging from indigenous people's movements and from a romantic ideology that everything indigenous is good – even if the leaders are colonially re-engineered, hereditary, and/or despotic). These beliefs often steer projects toward NGOs, project committees, private user groups, companies or individuals, or customary authorities. These ideological overlays may merely serve as a support for implementing the instrumental objectives of the project, i.e., implementation of project goals – that is, they may be an excuse to work with the quickest and most 'efficient' institutions, rather than with messy and slow democratic processes. In many cases, the existence of customary authorities parallel to and often in competition with other local authority structures provides intervening agents with a convenient motive to circumvent democratic processes and implement projects through these authorities. Or these beliefs may be drivers of local institutional choices in and of themselves. Whatever the motive, intervening agents systematically avoid local democracy while favouring NGOs, user committees, chiefs, and other private bodies.

Choice and recognition – Framing the research

The RFGI case studies, on which this chapter is based, used what we call the 'institutional choice and recognition' research framework (Ribot, 2006; Ribot et al., 2008). Each study examined the dynamics of decision-making processes involved in forest use, ownership, and access;

and the governance relations inscribed by community-based forest use and carbon forestry projects. We use the term *institutional choice* to refer to the process by which development agencies, large international organisations, domestic organisations, and national governments choose the local institutions or actors to partner with in their forestry interventions. We use the term *choice* in distinction from its use in neo-classical economics, institutional choice, and public choice economics. In our definition, it is about the will of authorities (intervening agents and their institutions) who make decisions, rather than assuming that governing decisions are an aggregate of individual choices articulated through governing actors (Ribot, 2013). In this sense, the term *choice* attributes agency to these actors so that we can trace outcomes and thus responsibility back to their decisions. This is not to say that people's consciousness and agency are not themselves somewhat structured (*à la* Bourdieu, 1977; Foucault, 2010).[5]

The idea that individuals (or institutions composed of people who set policies and rules) make decisions is relevant for understanding political–economic relations – in this case the choices by higher-level institutions, such as development agencies choosing the local institutions they work with. Through these choices, they are shaping local governance, and in particular, they are shaping rights, recourse, representation, and recognition. Through the discursive justifications of their choices, they bypass local institutions (Rutt & Lund, 2014).[6] We emphasise decisions in order to attribute agency to higher-level intervening agents. These intervening agents do decide, and thus should be responsible for, which institutions are being empowered and which are not; they recognise some, fail to recognise others, and de-recognise – remove powers from – yet other local institutions (Faye, 2017). Institutions do not just emerge organically out of Ostrom's (2009) polycentric bodies floating harmoniously in the luminiferous ether of Pareto optimality. They emerge from strategic decisions within structural relations. They emerge in the context of strategic power struggles in a material world.

Institutions are generated by social processes in which some individuals and organisations become recognised as relevant actors. People in need of services – whether it is the support for property claims or a demand for social protections – seek the institutions (or forums) in which their demands have standing and are likely to find favourable response (von Benda Beckman, 1981). They shop for, and thus reinforce, effective institutions and authorities. While there is forum shopping from below – that is, shopping by the people in need of services and adjudication – that shapes institutions (Lund, 2002; Sikor & Lund, 2009), we observe important forum shopping from above (Ribot, 2006; Ribot et al., 2008). In top-down forum shopping, higher-level forums, such as international development agencies or governments, are shopping for local forums, such as local institutions and authorities to work with. The local institutions they choose have consequences for local rights, recourse, and representation – the local institutional landscape. Thus, the word *choice* (e.g. the choice of local-level by higher-level forums) helps us to explore the logic of how, that is through which institutions, intervening agents engage with local people – based on interests and ideologies within a set of structural and discursive relations and constraints. These choices are consummated when intervening agencies empower or work with, that is, when they recognise, local institutions (see Taylor, 1994; Fraser, 2000; Povinelli, 2002; Ribot, 2006, 2007; Ribot et al., 2008).

The recognised, and thus authorised, institutions often stand in as representatives of certain groups (e.g., forest users, or indigenous peoples). Yet, they may or may not be considered as representatives in the eyes of these people. Although they are empowered and authorised by donors, they may not be considered legitimate, particularly when their roles and actions contradict or run against the needs and aspirations of those they claim to represent.[7] Many theorists (Manor, 1999; Agrawal & Ribot, 1999; Manin et al., 1999; Ribot, 2004) underline that democratic representation and the legitimacy of democratically elected authorities and institutions are measured

by their responsiveness to the needs and aspirations of their constituents and their accountability towards them. Pitkin (1967) and Manin et al. (1999) call this 'substantive representation': where representatives 'stand for' and act in the best interests of the represented, and are responsive to, because they are accountable to, the latter – to the degree to which that is possible (on elite capture and the vicissitudes of local democracy, see Bardhan, 1997; Manor, 1999; Persha & Andersson, 2014; Lund & Saito-Jensen, 2013).

The case studies in the journal *Conservation Society* (Vol. 15, No. 4) explored the degree to which the institutions being chosen by intervening agents are substantively representative of, that is empowered to respond to and held accountable by, the full range of local citizens. They also sought to understand the reasons that intervening agents choose to support the kinds of local authorities they engage with – the degree to which this engagement is about creating substantive democracy or the degree to which it is driven by other concerns – expedience, control, privileging the efficiency of project goals over democracy objectives or ideological concerns. These case studies illustrated the effects of choices being made by intervening agencies on the local institutional landscape and the ability of institutions to democratically represent the citizens of their jurisdictions.

Key findings and representation outcomes of case studies

The key findings of the case studies, described here, ranged from higher-scale to more-local interventions. Walters and Ece (2017) examined the dynamics of decision-making and representation in carbon forestry at international and sub-regional scales, by focusing on REDD+ project negotiations in the Congo Basin region; Mbeche (2017) and Nuesiri (2017) explored national REDD+ Preparedness Programs in Uganda and Nigeria. Ece (2017) examined mid-level elected sub-national government's role in in community forestry projects in Senegal. Faye (2017), Chomba (2017) and Baruah (2017) focused on village-level forestry cases in Senegal, Kenya and Ghana.

Walters and Ece (2017) studied power struggles within a World Bank-led REDD+ project that brings together Congo Basin countries under the Central African Forests Commission (COMIFAC). Over four years of project development and changing REDD+ engagement, they show how the power of the World Bank to allocate resources comes into tension with the sovereignty of each nation, as they sit at the project negotiation table. What appears as an arena of equals for regional cooperation on REDD+ is an ambiguous space in which agendas are fought out. Cameroon continued to engage under these circumstances while Gabon withdrew from REDD+ as a whole and only partially engaged with the project. The authors observe that countries are expected to adapt their existing forestry policies to REDD+ process needs, often according to guidelines handed down from international climate change negotiations. These impositions occurred despite that REDD+ social protections require compliance with national laws (UN-REDD no date). Under these conditions, those countries with the ability to withdraw and forego REDD+ opportunities were able to set their own agendas. In this case, the donors, as in all multi- and bi-lateral forestry programs, are mandated to work with authorities that represent their nation states on REDD+ – usually officials from forestry ministries. In the RFGI studies described here, however, we found that while these ministries represent 'nations' in the international arena, their domestic practices (in REDD+ and in community forestry) fall grossly short of even supporting democratic principles in local decision making. While Walters and Ece (2017) do not directly address choice and recognition of local institutions, their study provides background on the international context in which multi-lateral forestry programs and their national components unfold.

Mbeche (2017) and Nuesiri (2017) researched representation in REDD+ Preparedness Programs (R-PP) that support REDD+ policy design in Uganda and Nigeria (also see Marfo 2015). They argue that despite the participatory claims of the national R-PPs, national-scale 'stakeholder' consultations are limited to a biased set of non-representative actors. The R-PP policy consultations invited few representatives of indigenous forest-dependent peoples or elected local governments. NGOs and government officials constitute the majority of invitees. Mbeche (2017) and Nuesiri (2017) found that REDD+ implementers reasoned that local actors lacked the ability to understand the technical details involved in REDD+ and therefore they needed experts to mediate their interests (see also Faye, 2015). In practice, they only incorporated local actors who validated decisions that had been made by experts. Further, they circumvented elected local governments whom they felt would 'slow down' or 'politicise' the R-PP (also see Ribot et al., 2008). These two studies show that there is little democratic or deliberative debate in the 'consultations' leading to the preparation of REDD+ strategy documents.

To receive REDD+ finance, developing countries must prepare an R-PP document through a process with input from indigenous and forest-dependent peoples – a claim towards their substantive representation. Both UN-REDD and the World Bank's FCPF require interested countries and project developers to follow FPIC principles in the development of national REDD+ legal and policy frameworks (FCPF and UN-REDD, 2012; also see Anderson, 2011:15). FPIC is also required from affected populations before the implementation of REDD+ projects (World Bank, 2012; FCPF and UN-REDD, 2012). The World Bank's social and environmental safeguards also apply to the R-PP, requiring FPIC before REDD+ financing is provided (World Bank, 2012). In addition, the R-PP preparation guidelines call for each country to give forest dependent populations, in particular, indigenous communities a right to negotiate the terms of REDD design and implementation and requires inclusion of indigenous and forest dependent communities through their own appointed representatives (Mbeche, 2017; also see FCPF and UN-REDD, 2012).

Mbeche (2017) describes how stakeholder consultation processes for R-PP were carried out by the World Bank and the Norwegian Embassy in Uganda. Here, the World Bank recognised the National Forest Authority (NFA), a government agency, as the REDD+ focal point. The NFA created a secretariat composed of private international consultants, a steering committee of ministers, and working groups populated mostly by NGOs and consultants. The R-PP working groups had no representation from local groups. Sixty-one per cent of its members were from NGOs, twenty-three percent from central government ministries, nine percent from private companies, and six percent from research institutes. Despite there being 2,372 elected rural councillors and five levels of democratically elected local government in Uganda, the Uganda R-PP was centralised and had no direct input from the elected local authorities. In addition, a parallel 'highly participatory' World Bank consultation process with 154 participants included only seven elected rural councillors in Uganda. Mbeche (2017) also points out that in consultations carried out by the World Bank the government officials were preferred as 'representatives'. In subsequent consultations by the Norwegian Embassy, more importance was given to forms of representation based on ethnic and autochthonous identity claims.

All of these processes in Uganda managed to avoid a complex and time-consuming democratic process, to perform a consultation in order to meet the requirements of REDD+, UN and World Bank participation and FPIC requirements, and to facilitate the quick implementation of the program by 'educating' local people in the technical details of REDD+ implementation. In short, Mbeche (2017) found that the REDD+ consultations serve the instrumental outcomes of REDD+ by: i) 'educating' the participants in REDD+, particularly on its 'technical' aspects;

ii) legitimising the REDD+ strategy in the eyes of the donors by performing 'representation' of local people; and iii) promoting the quick achievement of the REDD+ objectives.

Nuesiri (2017), working in Cross River State, Nigeria, found that elected local governments were replaced in the National REDD+ consultative process by NGOs and chiefs who were called on to speak on behalf of their members and their subordinate populations. Citizens of local jurisdictions were not represented through a democratically accountable process. The REDD+ preparation process developed a discourse of representation and even of democracy, yet they did not include substantive representation as part of the REDD+ FPIC process. In the Nigeria consultation process, the REDD+ implementing agents had their own idea of democracy – rather than leaders being accountable to the people, it is a cacophony of voices handpicked by the Nigeria-REDD secretariat to legitimise the UN-REDD process. This arrangement allows the UN-REDD secretariat and organisation (international and national) to choose the actions they see fit while claiming that they have the consent and backing of local people. The farce of representation and pretence of democracy are necessary steps they must go through – what Nuesiri calls 'symbolic' representation (see Pitkin, 1967; Törnquist, 2009) – in implementing their programs. These are programs that will be implemented whether or not local people need, want or benefit from them.

As in Uganda, UN-REDD in Nigeria produces a highly skewed notion of representation. At the national scale, the NGOs are included in REDD+ policy consultations as 'stakeholders' and as the representatives of 'local people.' Representation in the drafting of Nigeria's REDD+-readiness document (supported by the UN-REDD) is also skewed. The majority of the 'representatives' are from the Forestry Commission, followed by the NGOs, the chiefs and 'community forestry groups'. The elected local authorities are not included in the consultations. None of the chosen 'representatives' are accountable and responsive to forest-dependent or indigenous peoples. The choice of NGOs and chiefs reflects the donors' understanding of participation in FPIC while producing mere 'symbolic' forms of representation – it is simply not intended to be substantive. Nuesiri (2017) found that the donor's 'stakeholder' approach that included 'all affected' brought in a variety of interested parties, facilitating elite capture rather than citizen-driven decision-making.

Both Nuesiri (2017) and Mbeche (2017) found that 'efficiency in achieving the program goals' was an important criterion reflecting the instrumental rationality in donors' institutional choices at national R-PP consultations. Mbeche (2017) notes 'efficiency' was constructed not only in relation to forestry and carbon-related technical expertise, but also in relation to the program's budgetary and time constraints. Nuesiri (2017), however, adds that the ability to wield political power and control over resources and people to achieve the program goals can be equally important in shaping donors' rationality of choice, reinforcing the accumulation of power in the hands of government officials, NGOs and local elites, who are neither elected nor downwardly accountable.

Ece (2017) shows how democratic spaces are closed down through the conversion of elected regional councils into instruments for privatisation of commercial and use rights to public forests in Senegal. The choice to work with regional councils in forestry projects is partly conditioned by neo-liberal decentralisation reforms. When the 1996 reforms re-instituted the regional councils as 'local authorities', they also gave them the role of intermediaries of development. Ece (2017) argues that this role helped transform the regional council into a locus for business like contractual agreements involving elected local governments and donor-funded 'community-based' forestry projects. This shift helped to displace the decision-making on public forests from rural councils to regional councils. However, this arrangement did not prevent the Forest Department's overriding of both rural and regional councils' decisions. It also enabled

donor-funded forestry projects to push further forest-based commodity production and privatisation of access over public forests via the regional council.

Ece (2017) also discusses the consequences of undemocratic practices and institutional choices of 'community-based' forestry and conservation projects at the rural community-scale. In the region of Tambacounda, the community forests are created for the commercial production of forest products, such as charcoal for urban use. She notes that the donor-funded forestry projects, which initiate the creation of reserves, bypass base-level rural councils in key decisions about land allocation and in the drafting of management plans. Further, despite their competing territorial claims, different projects share a similar neoliberal market rationality, oriented towards increasing commodification and privatisation of rights over public forests. Ece (2017) argues that this market-oriented rationality is also important in shaping the projects' local institutional choices. They put in place and recognise forest management committees as local institutional partners. The project-based local committees are treated as commercial organisations, with exclusive private access to trade of forest commodities and responsibility for forest management.

This article shows that through the chosen arrangements, the legitimacy of the elected local governments (rural councils) is undermined in two ways. First, the rural councils have the legal rights to manage forests and commercial forest activity, yet they are not included in forestry decisions by the Forestry Department and international donors, who prefer to work through 'committees.' Second, the elected rural councils have been subordinated to intermediate-level elected regional councils, positioned as a hub for donor-funded community forestry projects. The decision-making forum of the regional council is hijacked to subordinate the rural councils, to promote commodification and privatisation of rights over public forests and turned into an arena for performance of participatory democracy.

Also, in Senegal, Faye (2017) details how forestry decisions, legally under the jurisdiction of elected rural councils, are taken from these representative bodies and given to non-representative forest management committees created by a World Bank sustainable development project in Tambacounda. He describes how foresters and projects corralled village-based charcoal producers into the invented category of 'local producers', and then delimited their rights as distinct from and less than those of urban-based merchants. After setting these committees up in the name of participation and representation, Faye shows how forestry laws, practices and discourses systematically limited their rights by loading them with the burdens of forest management and depriving committee members of direct access to forestry markets – they had to sell most of their charcoal to urban-based forestry merchants. In parallel to the committees, foresters allowed urban merchants to buy from committees and to also hire migrant labourers to cut wood and make charcoal. Merchants, unlike local producers, were not saddled with the odium of management. This forestry system hemmed forest villagers into subsistence labour while allocating lucrative trade opportunities to the urban elite. Forest villagers wind up poor, living at subsistence level and on the brink of disaster. This 'sustainable development' project has recently claimed it would support climate adaptation by alleviating rural poverty through revenue generation from the charcoal business. Instead, the project was enriching forest merchants and impoverishing forest villagers while teaching them to cut and carbonise their forests for low wages. This does not seem to be an effective way of reducing climate-related (or any other) risks. It is also not strengthening the long-term democratic representation of forest villages in forestry or in any other decisions as it is side-lining and delegitimising the elected rural councils.

Faye's (2017) research illustrates also how the project's institutional choices and the supporting technical justifications are subject to contestation by elected local governments. During the first phase of the World Bank project, the forest service rationalised their choice of committees with specious technical claims, arguing that the committees had the capacity to implement

technically required management. Their actions showed they valued implementation over the procedural concerns of democracy (Ribot, 2008). The forest service and projects used a logic of technical necessity to override local concerns and to circumvent the elected local governments (community councils). Faye (2017:422) also shows, during the course of these management impositions, that:

> The stakes involved in the control of access rights and the institutions that enforce them had become very clear to ELGs [Elected Local Governments]. Indeed, PCRs [presidents of the elected rural council] understood that in order to respond effectively to local needs and to secure political visibility for themselves, they needed access to resources and the ability to exercise authority. Therefore, they began resisting the technical claims as much as they could, mobilising political arguments that are deeply rooted in decentralisation laws, and working to control the revenues flowing from forest-related activities.

After the first phase of the project, the elected councils challenged the domination by taking decision-making back from forest service and the project created committees – a demand from elected local governments for observance of national law. Here elected councils chose themselves. In the project's next phase, however, the project returned to re-establish its non-democratic committee-based implementation units. They then made these units into 'associations', which are private organisations that elected local governments will not be able to dissolve at the end of the next project phase. The elected local governments believe that the government's logic for creating associations was to override elected local governments (Faye, 2015a, 2015b).

Baruah's (2017) research focuses on a Community Resource Management Area (CREMA) that encourages farmers to plant timber trees on cocoa farms in South-Western Ghana. The CREMA approach has been promoted as a collaborative form of natural resource management that would help generate conservation and financial benefits for communities living around the protected areas. However, CREMAs like the one analysed by Baruah (2017), are also implemented in off-reserve degraded forested areas to increase timber production and introduce tree tenure privatisation. In Ghana, the elected District Assemblies' powers had been further limited after the reversal of decentralisations in 1996. Together with the chiefs, who grant access rights to land, forests and trees in their traditional '*wassa*' areas, the state forestry administration retains the key decision-making power over the commercial exploitation of off-reserve forests and trees. In this context, the ownership of the trees, access to tools, seedlings and benefits (including carbon benefits) need to be negotiated, a task undertaken by a local NGO positioned as the CREMA project implementer.

Baruah (2017) shows that despite claiming to strengthen democratic resource management through CREMAs, donors reinforced the existing centralised power relations by circumventing the elected district assemblies, recognising traditional elites and chiefs as *de facto* representatives in CREMA management, and choosing private entrepreneurs as the project implementing 'local NGOs.' Similar to other RFGI cases, the project established natural resource management committees to manage the CREMA. Here, however, chiefs occupied a prominent role both at regional and village-scales. Members of the committees were selected and nominated by the chiefs, often in the presence of the district forestry officers.

In the process of establishment of the CREMA by the Forestry Commission and in the drafting of its bylaws by international donors, the District Assemblies were not even 'consulted'. In this sense, foresters further weakened and delegitimised elected local authorities by diminishing their role in public decision-making. While the choice to work with chiefs and NGOs

is justified on grounds that these bodies somehow represent the 'public', the fact that they are not elected or accountable to the people makes them effectively private bodies. Simultaneously, to the degree that they are accountable to donors and the forest service who empower them to implement forestry activities, they are effectively administrative branches of these two extra-local agencies. So, through both this effective privatisation (the degree to which these non-state bodies have new discretion) of public resources and through external administrative control, the space of local public decision-making discretion is reduced; substantively weakening local democratic representation.

Of course, if in Ghana participation means allowing private groups such as local elite-led NGOs and 'community-based initiatives' to engage in and implement resource use decisions on behalf of the local people, then this non-public form of inclusion opposes democracy, which is about public resources and decision making. Indeed, more democracy here would mean less privatisation since democracy needs public resources and public decisions (a sphere of public decision making) in order to play a democratic role. Forests in Ghana could, if managed by local representative authorities, provide a collective local public domain. The contradictory talk of participation, representation and accountability while promoting private decision-making and benefit, needs to be evaluated. Perhaps private forestry decisions and use can increase efficiency or even make forests more lucrative, but at what cost to fledgling rural democracies? Democracy is not being chosen by these intervening agencies – even if it is one of their stated values. The CREMAs are the proposed basis of REDD+ Readiness in Ghana, yet they are not supporting community representation. If participation means implanting the administrative orders of external agencies it is also not democracy. In this sense we have two enclosures of the discretion of public democratic authorities; even the limited powers devolved to elected authorities are taken away and given to private bodies and others are retained by central agencies as required activities of the intervening agencies.

Membership in CREMAs is exclusive despite that CREMA and donor guidelines insist on elections and inclusiveness. The implementing agents excluded anyone whose interests or activities were not aligned with the objectives of the CREMA. They were also excluded from benefits derived from its activities and from receiving material from the NGO. Although implementing NGOs, like IUCN along with the Ghanaian forestry and wildlife line offices were aware that the process by which the committee members are selected was undemocratic, they chose not to interfere. "Their position is justified by the necessity to adhere to project 'timelines and objectives'" (Baruah, 2017, p. 377). The rationale given by implementing agencies for choosing to work through local NGOs and Chiefs included the merits of community-based initiatives, civil society engagement, donor mandated 'participatory' processes, regard for customary systems and perceived lack of capacity of the local governments. However, the private interests behind these institutional choices were often economic and political. The donors and foresters rationalise their lack of engagement with representation and accountability via institutional mandates, technical and managerial goals.

Chomba (2017) observes a key dilemma of representation faced by a prominent private-sector REDD+ project in Kenya. Do forestry programs work with unaccountable and ineffective local governments or should they circumvent them by creating their own more-effective committees? Kenya is transitioning from a centrally managed form of local administration towards empowered elected local governments. Prior to the 2013 general election, local administration was made of weak elected local councils without financial powers, running in parallel to strong local chiefs appointed by the provincial administration. The 2010 Constitution, however, mandated the transformation of the councils into democratically elected 'decentralised' county governments with political and fiscal powers and responsibilities. The 2010 Kenyan Constitution

also provided for the centralised system to be phased out. Given the representative roles that elected leaders are designed to fulfil under the Constitution, they would have likely been the first choice had the project been aiming to support and work through democratically elected local governments. But, the local elected leaders, elected before 2013, were circumvented. Project staff argued that this was to avoid political interference or because they viewed them as corrupt. After the new constitution, the project would not work with the newly elected local leaders because the necessary resources and infrastructure were not yet in place. On the other hand, the centrally appointed local officials made of chiefs were directly engaged in the project in the beginning, but later only as *ex-officio* members because they were similarly perceived as unaccountable, corrupt and inefficient. So, the REDD+ implementing agents largely skirted newly elected institutions. Instead they created their own single-purpose 'elected' Location Carbon Committees (LCCs), that worked with Community Based Organisations (CBOs) to implement REDD+ at the local level.

Chomba (2017) shows that the project, being part of REDD+, had a fraught choice in meeting the universal principles of participation, representation and democracy under the United Nations conventions and declarations, as well as those mandated for REDD+. Their choice to circumvent the 'representative' local government institutions appeared to contradict the REDD+ safeguard principle of ensuring full and effective participation of all relevant stakeholders. Indeed, while the project could claim that their carbon committees appeared representative on account of their being elected, the committee elections were hardly democratic. In a community meeting, voters had to bow their heads so they could not see others (wink wink) and raise their hands to be counted by the administrative chief. In this case, voters had to trust the chiefs to count correctly and feared that others would tilt their heads to see who they voted for. Of course, voters might also not feel free to express their positions in front of powerful chiefs. In short, this system was nothing like a secret ballot that would constitute a fair election. In this sense, the REDD+ decisions and processes reflected performed participation and representation while elected local government was left on the side-line.

These and other RFGI case studies provide democracy lessons for REDD+, carbon forestry, and any participatory forms of natural resource management. Where they exist, and despite their shortcomings (Manin et al., 1999; Ribot, 2013; Chomba, 2017), elected local authorities with the legal mandate to politically represent the citizens in their jurisdiction could serve as the institutional and legitimate basis for democratic participatory decision-making processes. Yet elected local governments in all of the case studies are circumvented. The side-lining, and thus delegitimating of these elected local actors weakened these existing structures (Baruah, 2017, Chomba, 2017, Faye, 2017, Mbeche, 2017, Nuesiri (2017).[8] Representatives (democratic or not), however, need to be recognised in order to have authority (Ribot, 2006, 2013; Ribot et al., 2008; Sikor & Lund, 2009; Thomassen, 2011).[9] Bypassing them undermines their authority – not empowering (or disempowering) them and thereby robbing them of relevance, and therefore legitimacy, *vis-à-vis* citizens. Forestry projects tend to choose to create, empower, and legitimise, alternative local institutions – local line ministry offices (Faye, 2017), committees (Baruah, 2017, Chomba, 2017, Faye, 2017, Nuesiri, 2017; also see Manor, 2005), and customary chiefs (Baruah, 2017, Nuesiri, 2017; also see Ribot, 1999; Ntsebeza, 2005). These institutions are rarely democratically representative. Further, many of them, especially project-initiated committees are ephemeral – non-sustainable – and disappear with the comings and goings of project interventions (Murombedzi, 2001; Manor 2005). The outcome is a set of institutional arrangements that are neither democratically representative nor sustainable and that disempower and delegitimise duly elected representative local government – in a process that Faye (2017 and 2015) has called 'derecognition'.

Each case illustrates conundrums that projects face when required to represent, negotiate, and protect local interests. In community-based forestry in Senegal, as well as in REDD+ carbon forestry in Nigeria, Kenya, and Ghana, the intervening agents require representation of local people in decision-making in order to protect local people's interests. The Ghanaian and Kenyan cases show how representation safeguards are compromised by an inappropriate circumvention of local government in favour of chiefs, NGOs, CBOs, and local committees. Yet, despite their failures, these modes of participation are held up as the model for how representation will be conducted when REDD+ is implemented nationally. The cases all show that representation is given second tier to implementing of other forestry project goals. Representation is required, but merely performed as a theatrical 'symbolic' enactment (Nuesiri, 2017). Substantive representation, even when there are democratically elected local authorities, is nowhere to be seen. While it is important to have more in-depth analysis of the rationality of institutional choice – the politics of choice and recognition – these studies just begin that part of the analysis.

Conclusion

Elected local governments would seem to be good institutions to represent local people in local decisions. But they are not given the opportunity to do so. They are ignored and avoided. This is not because they are weak or even culturally inappropriate. It is because international development agencies – certainly those working on natural-resource management – choose not to work with or through them. Local democratic institutions exist in most places. Yet, environmental projects and programs choose to work with institutions that operate in parallel to elected local governments. This choice, unfortunately, perpetuates the view that existing local democratic institutions are incapable of responding to local needs – it makes them appear irrelevant or incapable, without giving them a chance to prove otherwise. Local governments sit powerless on the side-line. Interventions create and work with alternative institutions at a moment when governments across the developing world have legislated into existence new elected local democratic institutions (Crook & Manor, 1998; World Bank, 2000; Ndegwa, 2002). Indeed, these choices support local institutions that masquerade as representative but remain accountable to donors, private organisations, or line ministries or to an identity- or interest-based subsection of the population. They foster committees, NGOs, chiefs, and other private bodies while generating a specious image of representation. Our case studies document how projects and government agencies chose to create and work through parallel institutions in forestry in Ghana, Kenya, Nigeria, Senegal, and Uganda.

The 16th United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP16) in Cancun in 2010 established safeguards for implementing the largest global forestry project, REDD+. The Cancun Agreements called for actions that 'complement or are consistent with the objectives of national forest programs and relevant international conventions and agreements' (UN-REDD, no date), but they did not address the fact that most national forestry programs fail to adequately uphold local representation or human rights. They called for 'transparent and effective national forest governance structures, taking into account national legislation and sovereignty' (UN-REDD, no date), but failed to recognise that transparency is only effective where there is sanction[10] (Fox, 2007) and that national legislation often fails to provide for local representation or rights. They called for 'respect for the knowledge and rights of indigenous peoples and members of local communities' (UN-REDD, no date), yet failed to acknowledge that many people who have lived in forests for generations are not indigenous and require equal representation and protection; safeguards should not be creating second-class citizens. They demanded 'full and effective participation of relevant stakeholders,

including, in particular, indigenous peoples and local communities' (UN-REDD, no date), without defining stakeholders as citizens, rather than merely interested parties. Indeed, why should a non-resident merchant hold a 'stake' in someone else's forest just because they stand to profit from it? They may have an interest, but the claim of rights or a 'stake' in the public resource belongs, by definition, to citizens. Stakeholders are indeed citizens if and when they live in the jurisdiction that presides over the public resource in question. So, let them vote if they want a 'stake' in the public resource; they should not have binding decision-making power at the negotiating table. They can and should inform (or misinform) decision-making processes, but they do not deserve a disproportional say in decisions. The decision should be made by accountable representatives. Decisions over public forests and other natural resources should be made in a democratic manner, rather than in proportion to the interests of 'stakeholders' recognised by actors within line ministries or projects.

The RFGI case studies show that while all forest carbon and conservation programs studied aimed or claimed to represent local people's needs and aspirations in their decisions, these programs generated very little representation that might be called democratic. Why is this so? Why do project and program managers choose to circumvent elected local government? Given that the safeguards outlined in the Cancun Agreements do not call for representation, it is not a shock that representation does not result from their application. They call for conformity with the *status quo* and the favouring of the influential, defining them as 'stakeholders' and giving them stakes in decision-making proportional to their interests. Several other motives for choosing to avoid elected local governments also emerge from the studies. First, elected local governments are avoided due to ideological favouring of markets and privatisation (Ece, 2017). These lead to enclosures that remove public decisions from democratic institutions and shift them to the private domain (ranging from individuals and corporations to NGOs). Second, elected local governments are avoided due to collusion between forestry service or project authorities and wealthy actors involved in lucrative activities where democracy or elected local authorities might undermine wealthy elites (Ece, 2017; Faye, 2017). As we well know, democratic representation can result in redistribution – and the rich and powerful do not seem to want to give up their wealth and power. Third, elected local governments are avoided because many intervening environment and development agents believe that civil society and stakeholder approaches or customary authorities constitute democracy (Baruah, 2017; Faye, 2017; Mbeche, 2017; Nuesiri, 2017). While some of these processes or actors may represent people, they lack systematic accountability to the people as a whole (whom we consider to be the residents of the jurisdiction where the public resource resides) and therefore they are not democratic (Manin et al., 1999). Fourth, local government is avoided because democracy is a slow and laborious process that requires time and resources, making it an unlikely choice by the agents under pressure to implement forestry management or carbon programs. Fifth, given that many local people might object to the very programs being implemented, their inclusion and consultation may be inconvenient and threatening to the project personnel trying to make interventions – being that they are under great pressure to demonstrate success (Baviskar, 2004). A sixth reason is that many technical agencies and project experts feel that the decisions are technical and belong in their expert hands. So, technical necessity is often used as an excuse for centralising decisions with line ministries and project staff (Faye, 2017, Mbeche, 2017; Mitchell, 2002; Easterly, 2013).

Many intervening agents also believe that local governments are corrupt or inefficient, so they circumvent them (Chomba, 2017). This may be true, but if the same intervening agents tried to circumvent a corrupt local government in the United States or Europe, even to implement a park management project or build a playground, these agents would find themselves quickly incarcerated. It is not acceptable to circumvent government agencies just because (or

even if) they are corrupt. Many are corrupt (Bardhan, 1997). So are many corporations, NGOs, and chieftaincies (Ntsebeza, 2005; Temudo, 2015). Rather than circumventing corrupt local governments, it is incumbent on anyone wishing to intervene to work to make those governments more accountable and effective. Along these lines, Chomba (2017), working in Kenya where agencies judged local government to be corrupt, recommends that in the short run, REDD+ projects can work with local committees and community-based organisations, but should place them under the authority of elected governments (see Ribot, 2004). Integrating these institutions and decision making into elected local government – but establishing project-imposed checks and balances in the form of committee deliberations, public meetings, audits, and other public accountability mechanisms – would get communities involved and help them to learn critical lessons on how to articulate their needs to elected leaders and how to hold their leaders accountable. In the process, it would make these leaders relevant and worth holding to account.

Instituting democratic governance in the long run will require the implementers of REDD+ – and any other laws, programs, or projects – to entrust democratically elected local government with resources and discretionary powers. People will then learn to trust them when local governments have been made accountable through the normal politics and multiple accountability relations that ensure democratic practice. The RFGI[11] research presented in this chapter also produced guidelines for supporting local democratic processes while implementing natural resource interventions (Ribot, 2016; Barrow et al., 2015; Ribot, 2017). Despite the fact that there are many structural and political–economic obstacles to supporting elected local government, those guidelines can be boiled down to two words: choose democracy.

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For more information on RFGI and for the full set of RFGI case studies, see https://www.jesseribot.com/Projects/RFGI----Responsive-Forest-Governance-Initiative-(REDD%2B-and-Adaptation). This chapter first appeared as the introduction to a special issue of *Conservation and Society* (Ece, Murombedzi, & Ribot, 2017) and has been slightly modified to fit this current volume. It is reprinted here with permission of *Conservation and Society*.

Notes

1 The meaning of consent in FPIC has been debated since FPIC's origins in the drafting of the United Nations Declaration on the Rights of Indigenous Peoples. Uncertainties remain regarding the relationship between consultation and consent. In practice, the interpretation of 'consent' is decidedly

narrow. In 2000, the World Bank commissioned an independent report on extractive Industries to determine whether resource extraction aligns with the Bank's mission of poverty alleviation and sustainable resource use. The evaluation report argued for FPIC to empower communities with self-determination. However, the World Bank was concerned that 'consent' in FPIC would promote veto by individuals and groups, and opted instead for 'consultation' geared towards gaining the broad support of affected communities. FPIC differs from mere consultation in several important ways, but most significantly in the way decision-making authority is exercised and legitimated. Consultation requires only an exchange of information between project implementers and communities, but does not involve any transfers of powers. It does not require that information be exchanged or that final project decisions be based on the views and needs of the affected communities. Thus 'C' has effectively been re-interpreted to mean a duty to consult without the obligation to obtain consent. We contend that the objective of consultation must be to obtain FPIC Consent.

2 RFGI, directed by James Murombedzi, Jesse Ribot, Ebrima Sall, and Gretchen Walters, was a collaborative research and policy initiative of the Council for the Development of Social Science Research in Africa (CODESRIA), the International Union for the Conservation of Nature (IUCN), and the Social Dimensions of Environmental Policy (SDEP) program of the University of Illinois. For RFGI publications see https://www.jesseribot.com/Projects/RFGI----Responsive-Forest-Governance-Initiative-(REDD%2B-and-Adaptation). Accessed 22 February 2020.

3 Representation is the responsiveness of leaders to the people. Representation becomes democratic when that responsiveness is driven by accountability of those leaders to the people (Manin et al., 1999). Achieving responsiveness with accountability requires leaders who have powers to respond – that is, executive, legislative, and judicial powers backed by resources such as knowledge, finance, and bulldozers. It also requires citizens who have means to reward or punish, that is, to sanction or hold accountable, their empowered leaders. Sanctions can include elections or many other means – such as embeddedness of leaders in community, third-party monitoring, courts, information diffusion, threats of violence, shaming, etc. (see Ribot, 2004: Annex A; Agrawal & Ribot, 2012). Elections are important despite being systematically inadequate on their own (see Chomba, 2017). So, accountability can also be achieved without elections, although we see elections and the standard procedures of democratic government as an important way of legislating and institutionalising – making sustainable and geographically complete – democratic practices. Non-election-based systems can certainly be democratic – as long as there are means of accountability. But representation is not always democratic even when it is effective, appreciated, and viewed as legitimate. There are many systems in which people are well represented without accountability of leaders. These are systems in which the leaders are ideologically committed to being responsive to local needs and aspirations. We call this benign dictatorship. But, benign dictatorships of this nature are still not democracy and are always at risk of deviating from popular desire. Electoral systems are also at great risk of being undemocratic when they are poorly structured, lack powers to respond, and lack multiple accountability relations beyond elections.

4 Here, we focus mainly on the institutional aspects of organisations.

5 As in legal theory, we stop process tracing analysis of cause at the first recursive node of human will to identify what we would call an agent (Holmes, 2009). Further, in our framing objects do not have agency, thus we trace causality to human will; objects do not think and therefore cannot be responsible, while humans do think (Arendt, 2003). In this way, we avoid an infinitely looping analysis of the relation between agency and structure.

6 Rutt and Lund 2014 describe how projects choose civil society organisations based on their prior partners. They chose partners they know they can work with.

7 One complication to this scenario is that donor-recognised representatives can use the powers and means transferred to them to strengthen their client networks, or to use these means in a way to meet their constituents' needs and aspirations, in order to become locally legitimate.

8 This delegitimisation can, of course, weaken the entire democratic institution, or just its functioning in the domain of forestry.

9 Thomassen (2011) analyses the relationship between representation and recognition from the perspective of identity politics.

10 Transparency does not cure the widespread 'transparent corruption', corruption that is already visible to all.

11 http://www.codesria.org/spip.php?article1247; https://www.iucn.org/theme/forests/our-work/locally-controlled-forests/responsive-forest-governance-initiative; or https://www.jesseribot.com/Projects/RFGI----Responsive-Forest-Governance-Initiative-(REDD%2B-and-Adaptation).

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25

COMMUNITY FORESTRY IN MYANMAR

Centralised decentralisation under conflictual authoritarianism – not yet rights-based resource federalism

Oliver Springate-Baginski

The struggle for local resource rights

In February 2019, I visited a poor village in southern Chin state, on the edge of a protected area. On arriving, my colleague and I asked to meet the village head. 'He is in prison, halfway through a 12-month sentence'. Concerned, we asked for what possible reason. 'He cut a tree, to build the village hall'.

The case exemplifies the inconsistency between customary and statutory resource rights. Rural communities, who depend on forests for a range of uses and products, have traditionally managed them under *de facto* customary mechanisms. But their rights became severely restricted as the colonial and then post-colonial Union government extended its jurisdiction and established a centralised resource control and extraction for revenue. After independence from Britain in 1948, the colonial-era state extraction system was consolidated, whilst community rights were never properly recognised. Since the Burmese army's 1962 *coup d'état*, the Union government has been a dictatorship with a brief interlude from 2015 to 2020. The army's logging contractor partners have stripped much of the country's forests, with little oversight. Citizens have lacked access to justice, and communities and civil society leaders have been murdered, tortured, and terrorised by the state, their liberties curtailed. In the world's longest civil war, ethnic organisations have aspired to a just peace based on federal decentralisation but have had to fight to defend themselves against a pathological Burmese army perpetrating crimes against humanity with apparent impunity (Smith, 2011). Extensive areas of the country remain today under 'mixed control' between ethnic armed organisations and the Burmese Army.

Under these extreme conditions, a Community Forestry (CF) policy emerged from the Union Government Forest Department (FD) in 1995, in the form of an administrative Instruction. The CF Instruction (CFI) provided a framework, transplanted from Nepal, to engage communities' participation in forest management. The initiative has sat somewhat awkwardly between state aspirations for community participation in commercial tree plantation and community aspirations for state recognition of village forest tenure and rights to traditional livelihood use. In terms of technical forestry, agroforestry approaches developed by CSOs and projects have

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tended to offer ways to try to reconcile these divergent motivations. Implementation was slow from the start, as despite grand targets (stated in the 'Master plan for the Forest Sector'), communities, the bureaucracy and donor agencies were all cautious, albeit each for different reasons.

- For communities, CF might offer at least some tenure protection against the prevalent land and resource grabbing, as well as a pretext for social mobilisation at a time when community gathering was circumscribed. As an FD administrative notification, only limited resource rights were offered, and CF risked compounding the projection of the centralised state's jurisdiction over village forest resources, undermining citizens' *de facto* autonomy, or 'recentralising while decentralising' (Ribot et al., 2006).
- The forest bureaucracy's pre-existing relationships with communities was typically strained, and frequently punitive. Forestry field officers had limited incentives, training, or skills to support CF implementation, and were already preoccupied with the contradictory pressures of their formal duties to oversee legal but hardly compliant commercial logging, primarily by companies close to the military (whose labour gangs may be armed and may also be paying FD field staff a parallel salary to stay away from harvesting sites). FD field staff had the additional responsibility to stop illegal logging – which in practice encompassed both official loggers allegedly exceeding their mandate in tacit agreement with government staff and well-organised armed gangs likely to be paying substantial bribes, as well as petty informal logging by villagers. So, forestry field staff, it is widely acknowledged, lacked rapport at village level.
- Lastly, most donors hesitated for ethical reasons to support the strengthening of the union government's hand, especially in conflict areas.

Democratisation began gradually from around 2008, with a new military-drafted constitution and tightly controlled elections in 2010. As the democratisation process gathered momentum, civil society aspirations grew for meaningful resource rights based on principles of self-determination via constitutional and legal reform. In this way CF, as a centralising administrative framework, became less relevant to many communities and CSOs. During the tumultuous decade from 2010, significant constitutional level policy progress was made towards the recognition of resource federalism, and the complementary recognition of CTS. Firstly, an administrative initiative to reconcile divergent land polices and laws between the Land Revenue and Forest Departments led to the National Land Use Policy (NLUP) 2016, which had, as one stated objective:

> To recognize and protect customary land tenure rights and procedures of the ethnic nationalities.
>
> *(GoM 2016)*

This would supersede CF for ethnic areas, as it would place CTS beyond the jurisdiction of the FD. Second, under the National League for Democracy (NLD) administration (2016–2020) the (slightly misleadingly titled) Nationwide Ceasefire Agreement led to the national Pyidaungsu Accord (2017), which acknowledged the principle of federal decentralisation:

> A policy that reduces central control includes human rights, international, democracy and federal system norms in drawing up land policy.

Combined, the two policies mandated federal decentralisation, and recognition of customary systems. The implied legal reforms have yet to emerge, and to date Union CF remains the only

statutorily recognised local forest resource governance mechanism and tenure framework. As such CF provided a framework useable for several different agents: FD staff, some civil society groups, and some international donors and international conservation organisations. The Regional Centre for Community Forestry Training (RECOFTC) led a long-term programme with the FD for their reorientation towards stronger community extension. As the Union FD expanded its Permanent Forest Estate (PFE) in ethnic areas over the last decade, CF became a means to grant statutory rights for communities in and around these newly gazetted forests. A revised Forest Law was promulgated in 2018, with minor revisions to the pre-existing colonial-era framework, including putting Union CF on a statutory legal basis.

At the time of writing (December 2021), around 4,000 CF User Groups (CFUG) have been approved by the FD and given certificates to manage their local forest. They have responsibility for around 211,325 ha (FD, 2018) or 0.7 per cent of the roughly 28,543,890 ha of Myanmar under forest cover (FAO, 2020). Figure 25.3 shows the number of CFUGs registered and extent of the area under their management according to data maintained by the Forest Department CF Unit (2018). How many were actually active prior to the coup is uncertain, as is how many more groups were active but without certificates. Although a few different studies have been conducted over the last decade (Tint et al., 2011, World Bank, 2020), there are no comprehensive, up-to-date studies, especially considering CF in comparative context with *de facto* customary forest management practices. In the absence of such an independent national level study it remains difficult to gain an overall qualitative picture of their specific circumstances. Impressions of the field realities gathered through the author's work across much of the country over the last decade are diverse, complex, and somewhat contradictory.

Kachin state has seen arguably the most vibrant development of CF in Myanmar, with 58 CFUGs registered, the country's first regional federation, the proliferation of community forest enterprises, and readiness to harvest and process timber (constrained by lack of approval forthcoming from FD staff). In Sagaing region over 900 groups are registered, and in Shan state and Magwe region around 600 each[1]. Some communities in Shan state have complained that they were pressured by FD staff into 'allowing' CF in their village lands and seem to feel they had to 'put up with it' to please bureaucrats and/or get land titles, rather than being motivated themselves.

I conclude CF has provided some consolations, proving particularly valuable where there are serious 'land grab' threats. But CF is itself a threat to tenure of sorts – in the sense of eroding the self-determination of CTS. It can consolidate Union government jurisdiction over ethnic areas which are generally seeking autonomy from it. In this way it is a contradiction of the Panglong Agreement of 1947 for federal autonomy, and the Pyidaungsu Accord 2017. It erodes existing customary systems by fragmenting governance of their elements and superseding their authority, putting a part of the village forest under an external administrative mechanism, thereby contradicting the NLUP 2016.

CF may have in some ways filled an important forest governance gap, and may have served as a 'stepping stone' towards the much-anticipated recognition of customary resource rights based on federal decentralisation principles. However, now the 2021 coup has derailed the democratic process and introduced a grave impediment to further rights recognition, and indeed citizens' safety, centralised decentralisation of the CF variety seems increasingly untenable for the future. With civil war now raging the 'critical mass' of CF in many areas offers some at least some form of decentralised resource right security. And whoever is now supporting the restoration of democracy may be able to capitalise on this existing platform for the protection of critical environments, rural communities and civil society.

Myanmar's context

To put Myanmar's CF process in context we must first review the specific environmental, social, and historical context.

Extensive forested landscapes

Covering around 67,000 km^2, Myanmar (or Burma)'s geography can be divided into three distinct areas: the largest is the 'horseshoe' of hilly forested borderlands that run from Rakhine Yoma (hills) in the West around Chin, Nagaland, Kachin, Shan, Bago, Karen, and Tanintharyi to the southeast. The second is the central Ayeyarwady Basin lowlands, including the arid 'dry zone', which contains the historic Bamar cities of Bagan, Ava, Shwebo, and Mandalay. Lastly, the long mangrove coastline contains extensive delta areas. Myanmar was, as recently as 1990, estimated to contain over 50 per cent forest cover, the majority categorised as 'dense' (FAO, 1990). Forest types include mixed deciduous, semi-evergreen, and deciduous dipterocarp as well as mangroves. Despite rapid deforestation since, Myanmar still contains some of the most extensive remaining forests in mainland Southeast Asia, and is considered one of Southeast Asia's most significant terrestrial biodiversity hotspots (CEPF, 2020).

Livelihoods and customary tenure systems

Myanmar's population is estimated to be 55.2 million (GOM, 2019), although census processes are unreliable due to political sensitivities. About two-thirds of the population are estimated to be of the Bamar ethnic group, and one third other ethnic groups, who reside mainly across the uplands and coastal areas. Livelihoods adapted to the upland forested landscapes have traditionally involved long fallow forest cultivation practices. Rural communities have historically controlled, managed, and used their forested landscapes through complex and frequently highly sophisticated customary arrangements (ECDF, 2016; Springate-Baginski, 2019; Springate-Baginski & Kamoon, 2021). These can be most evident in relation to shifting cultivation – in which much of the village can be involved, for instance in decision-making where and when to cultivate. They can however also apply to other village resource management issues, for instance grazing, water, or hunting norms. In many areas, however, increasing market incorporation and consequent patterns of livelihood transformation are eroding traditional CTS to varying extents.

Customary Tenure Systems are *de facto* systems: they are recognised within and between communities but not in statutory law since colonial subjugation. Unlike many other Asian countries, due to the political complexities of Myanmar's colonial and post-colonial eras, many upland communities have generally not come under complete statutory jurisdiction and so these customary tenure systems still persist in many areas, where they remain valued and legitimate (ECDF, 2016). In a recent long-term study across Shan state, Myanmar's largest and most ethnically diverse state, we confirmed CTS to be widespread and valued (Springate-Baginski & Kamoon, 2021).

CTS integrate a range of functions that might be understood as exemplifying 'village republics' (Wade, 1989), providing governance, management, and use functions; they enable multifunctional natural resource governance for livelihoods, e.g., shifting cultivation, hunting, water, grazing, medicinal plants, spiritual/sacred groves, and burial areas. They are an expression of the material culture and identities of the communities. They can combine and reconcile a mix of different tenure systems and rights within the village: encompassing both common and private property and also access and use rights. They enable the flexible allocation and reallocation of rights and duties, thereby enabling the regulation of use. They enable reciprocal labour obliga-

tions and collective action for social welfare (for instance, collective farming on the fields of those who are not able to cultivate for whatever reason). Traditional local authority structures are central to CTS, enabling culturally embedded, socially legitimate collective decision-making, arbitration, and conflict management. CTS give rise to diverse cultural landscapes based on technical knowledge applied through diverse uses (Springate-Baginski, 2019).

The historical context: Colonial-era and rent-seeking administration

The political and territorial history of Myanmar has for a millennium seen fluctuating cycles of political ascendancy and unification, reformation, and the tension between the lowland principalities, major upland centres – especially in what is now Shan state – and upland borderland areas.

Over the 19th century, Burma came gradually under the ambit of the expansionist British East India Company, territory being annexed in successive stages (1824–1826, 1852, and 1885) and incorporated under the Calcutta colonial administration, governed in effect as an additional province of India. Under colonisation, much of the country came under the direct jurisdiction of a rent-seeking administration in which agricultural surpluses and commercial timber from forests were priority policy imperatives (Furnivall, 1958). Lands considered unproductive were dismissively categorised as 'wasteland'. Livelihoods in forested landscapes and customary tenure systems were thus of limited concern, and no proper administrative arrangements for them were established (Guha, 1983; Bryant, 1997).

From 1855, a systematic 'scientific' timber extraction system began to be established to assure sustained extraction, marking the initiation of the British colonial forestry tradition (Bryant, 1997). Many foresters acculturated into the durable and conservative organisational structures of post-colonial forest departments still tend to treat this tradition with reverence. However, the system was primarily focused on extraction, rather than the nation's or citizens' welfare, and there are numerous drawbacks, most obviously its centralisation, and the lack of a proper community and livelihood forest rights, let alone local assurance of conservation and ecosystem services. Further, the centralised resource extraction system was created under non-democratic control, and magnanimous principles of sustained yield (that is, voluntarily capping extraction) could and have been overridden systematically.

As it expanded, the British colonial enterprise typically only extending its jurisdiction where potential revenues justified the expense of pacification and tax assessment ('land settlements' in which rights for landowners had their claims documented and their tax liabilities detailed, generating a cadastral survey. For more remote upland areas the combination of resistance from local communities and doubtful revenue benefits from incorporation meant they were often not brought under direct colonial jurisdiction. It is primarily for this reason that sophisticated traditions of customary resource management continued and are still widespread across many ethnic areas.

Independence and dictatorship

The Burmese theatre was one of the most bitterly fought and destructive campaigns of the Second World War, its consequences still overshadowing Myanmar's politics today. Ethnic Bamar independence movement leaders affiliated with the Japanese military, whilst most ethnic minority groups (having benefited from relatively preferential colonial treatment) supported the British campaign. An enduring schism was thus created. However, after the war and just prior to Independence, in 1947, leaders of most of the major ethnic groups signed the Panglong Agreement. This envisaged a federal constitutional settlement that would enable upland com-

munities to continue to manage their own affairs (accepting 'Full autonomy in internal administration for the Frontier Areas') and explicitly not therefore a unitary centralised government. But with growing tension over perceived ethnic Bamar domination of the new administration, the country spiralled into conflict. Burma's first *coup d'état*, in 1962, set a persistent pattern that neither the Panglong Agreement, the Constitution, nor even basic laws were to be honoured by the Burmese military. Panglong has since remained a political touchstone for ethnic groups through successive dictatorships, when the term 'Union' government implied an imposed union, an occupying administration lacking full legitimacy in ethnic areas. The Burmese military have precipitated conflicts across much of the ethnic upland areas. The colonial-era rent-seeking administrative framework was repurposed in service of the military government, with the military controlled 'General Administration Department' co-ordinating civil administration as well as domestic pacification. Forestry retained its focus on timber extraction for revenue, although extraction levels became gradually detached from any pretence to 'sustainable offtake'. Under the Ne Win dictatorship, the state and economy stagnated, leading in 1988 to the so-called 8888 popular uprising, violently suppressed by military dictator Than Shwe. Elections were then held in 1990, but the results were cancelled, and the dictatorship embarked on a new economic development policy, including building 'national entrepreneurs' (widely known as 'cronies') through preferential commercial opportunities (Smith, 2011).

The forest administration lost regulatory control over logging levels, as the dictator personally mandated annual revenue targets and awarded logging contracts and even free timber allocations as patronage to favoured business partners. During the colonial era, a timber exploitation system was developed in which the FD 'produced' the timber and the Timber Board exploited that timber. The board became the Myanmar Timber Enterprise (MTE). Over-harvesting of the extremely valuable timbers offered easy revenues to prop up the failing economy of state enterprises and a bloated Union military committed to subjugating the borderlands by force. Logging far exceeded estimated sustainable levels (MOECAF, 2011; Springate-Baginski, Treue, & Htun, 2016) as the FD became disempowered bystanders to the MTE/crony contractor plunder. Dutiful government foresters have sometimes recited that the colonial-era forest system bequeathed to Independent Myanmar is generally faultless, but its proper implementation has been constrained. Aside from the issues of 'historical injustice' around the initial appropriation of the forest estate and the lack of rights recognition or equitable benefit sharing, the system depends on political commitment to sustainability. As the revenue imperative became more compelling, production under the centralised system was easily increased. Figure 25.1 indicates

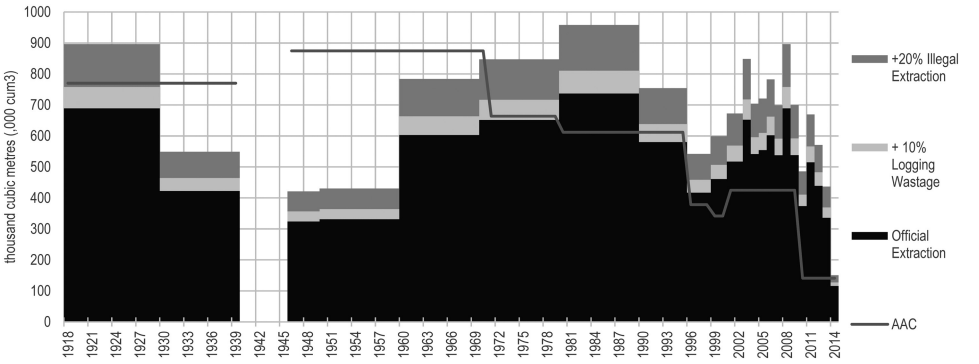


Figure 25.1 Long-term trend in teak 'Annual Allowable Cut' and production in Burma/Myanmar 1918–2014. Source: from Springate-Baginski et al. (2017), based on MOECAF, 2011.

estimated long-term teak volumes and annual allowable cut (AAC) the approximate threshold for sustainability. Ministry data (albeit guesstimates) shows the long-term pattern of over-extraction beyond the AAC from the 1960s, collapse in the AAC in the 1990s, and ultimately collapse in timber productivity in the 2000s.

Since Independence, internal military conflicts have fluctuated, with the Burmese army attacking different ethnic borderlands almost by rotation, and ethnic armed organisations coalescing to defend their territories, most notably the Kachin Independence Organisation and the Karen National Union. After the 1992 coup, economic recovery, and growth, resource appropriation became a military priority, involving territorial domination, land grabbing, plunder of forest, and the spread of infrastructure projects, including the highly controversial Myitsone dam in war-torn Kachin (Smith, 2011). Land grabbing for commodity production also accelerated across forested landscapes under the post-1990 economic development strategy. This became a grave threat to communities' customary tenure systems in many areas, as they lacked statutory recognition.

The Union Forest Department's administrative Community Forestry Instruction

The rural community–forest relationships vary across coastal, lowland, and upland areas. In upland areas, the largest area and where most of Burma's remaining forests are, villages tend to be surrounded by forest mosaics often in varying states of secondary regeneration from long fallow cultivation as well as logging. In the lowlands, on the other hand, with farmland more predominant, woodlots and forests tend to be more limited in extent. This distinction creates different contexts for village resource governance. Furthermore, whereas state supervision in the lowlands was more extensive even prior to the colonial period, many upland communities had not come under supervision, and have been able to maintain their *de facto* customary management traditions. However, these systems have become increasingly threatened in recent years through both land grabbing, as well as having their authority eroded by growing statutory powers.

Community Forestry emerged in Myanmar in 1995 from the Union Forest Department, through the Community Forestry Instruction (CFI), in the dark days of the Than Shwe dictatorship.

> Community Forestry means: Afforestation of areas where there is not sufficient fuelwood or other forest products for community use; Planting of trees and exploiting of forest products to obtain food supplies, consumer products and incomes.
>
> *(Union Government of Myanmar Forest Department 1995 Community Forestry Instruction p. 1)*

This administrative initiative provided for the first time a mechanism for the FD to engage with communities for village forest management. The initiative was authored by Hsaya Kyaw Tint, the FD Director General at the time, who was vehemently opposed to the military's compromising of the Department's integrity. The CFI adopted the Nepal style CF model (partly it seems as a Nepalese UNDP staff member guided its development): a self-identified community or group of interested individuals could form an *ad hoc* user group, prepare a forest management plan with technical support, and apply to the local Forest Department office for a certificate which conferred authority to manage the forest area in question for 30 years (in the first instance). The Forest Department must approve the management plan (which has typically involved relatively 'degraded' forests or secondary regrowth shifting cultivation areas, to be managed through clearing and then planting fast-growing species to be harvested at the end of the term). A local *ad hoc* CFUG institution would be created by, and under, the Forest Department auspices, which could assume responsibilities transferred from FD to manage 'their' forests.

The model was far from ideal for village communities for several reasons: first, it introduced the FD as the 'granting' authority, replacing (one might say usurping) the village authority. Second, these rights are partial and conditional, on a limited term (30 years), with conditions attached (typically: stop shifting cultivation, clear the area of natural trees and replant with agreed species as a tree farm, only harvest these with FD approval, and so on). Third, the Union 'street level bureaucracy' has been experienced by citizens as pervasively corrupt (field staff have been expected to augment meagre salaries through bribes and fines), such that any encounter with them risks bribe seeking or other jeopardy. The right to harvest timber requires FD approval, which has rarely been forthcoming in most cases. So, whereas CTS are complex, fluid, self-determined, and culturally embedded, CF replicated the top-down bureaucratic logic. The Burma Environmental Working Group summarise the problems of the CFI as follows:

> the CFI … is severely limited and predicated on a 'scientific' forestry approach. [Community groups] must have a forest management plan and follow silvicultural practices. Failure to do so may result in the lease being revoked. Such rigid parameters do not reflect the way that local people use forests (for example ethnic shifting cultivators who practice upland rotational agriculture). Furthermore, … in practice the FD is very reluctant to allow communities to manage good quality natural forest. Rather, the CFI has been widely criticised as simply a tool to use local people as a 'cost effective' method to regenerate heavily degraded forests.
>
> *(BEWG, 2017. p.17)*

Village communities were thus confronted with a difficult choice – the policy provided a government-backed mechanism which might offer some tenure recognition and management framework for their village lands, which were under increasing threat. It seemed to offer some defence against land and timber grabbing. But after decades of enduring dictatorship, communities are risk averse to government staff (considering arbitrary policing/bribe seeking and the shadow timber trade) and to possible conflicts, including with neighbouring villagers.

Implementation of the CFI began slowly, initially mainly through the well-funded UNDP Human Development Initiative cycle of projects, which included engagements on participatory resource management. Some communities took up the opportunity; many did not. Some areas saw a rapid early proliferation, especially where the tenure threats without CF seemed extreme (e.g., Union occupied areas of southern Kachin). Perhaps the most decisive factor for CF uptake has been where NGOs trusted by communities (like Shalom Foundation in Kachin) supported the piloting of the process. For these NGOs, it also appeared to offer the potential to redeem difficult relations between field-level state officers and communities, enabling local 'space for democracy' and participatory forest restoration. In 2001, the 'Master Plan for the Forest Sector' (2001–2030) declared an ambitious target of 2.27 million acres to be put under CF by 2030.

However, the awkwardness of the fit between the CFI proposition and community aspirations for meaningful rights became increasingly evident as political conditions began to gradually improve. Few Bamar areas had significant remaining forest areas, as much had been logged out by the military controlled government timber harvesting agency the MTE and its crony business partners (Springate-Baginski et al., 2016). But in the central dry zone area and its periphery (e.g., Magwe, Sagaing), CF has provided a basis for the development of community woodlots. Figure 25.2, showing locations of the registered CF by 2010, indicates that there were only a handful of township areas which have more than five CF registered. Most are on the edges of the central basin. There are otherwise a handful in upland areas and coastal areas.

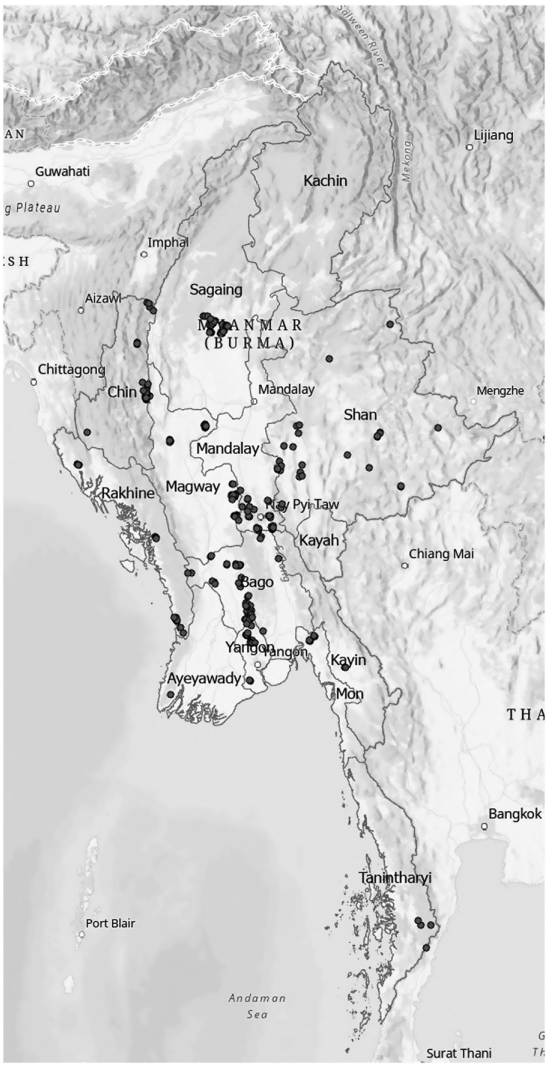


Figure 25.2 Number of registered CF by township, 2010. Source: author, based on Govt of Myanmar Forest Department unpublished data.

The fortunes of the CF experiment were in 2010 assessed to have been encouraging in many ways, but varying by area and quite ambiguous. An early multi-criteria evaluation, involving the author, found from field study of a range of cases that CF had proved popular for many villages which adopted it, in as much as it gave permission for communities to plant and restore their village forest areas and regulate their use, leading to a gradual improvement in forest conditions (Tint et al., 2011). However, most villages struggled to be as effective as they aspired to be, as they experienced little support from the Forest Department or the projects that had supported their initiation. The exception was in Kachin, where communities were highly cohesive and proactive, and their NGO support relationships were very strong. Success also appeared to correlate with higher rainfall areas, where forests regenerated more quickly.

Quasi-democratisation, conflict, and community resources from 2010 to 2020

Myanmar began to change very rapidly after promulgation of the new military drafted Constitution in 2008. Tightly controlled, ritualistic 'elections' were held in 2010, the first time in 20 years. A majority of military candidates (from the military Union Solidarity and Development Party or USDP) were returned.

2010–2015: Union Solidarity and Development Party (USDP) administration period

During the USDP administration from 2010 to 2015, significant legal changes were introduced. In 2012, the first Acts approved by the new national parliament were the Farmland and the Vacant Fallow and Virgin (VFV) Land Acts. Widely labelled a 'land grabber's charter', these intensely controversial laws enabled transfer of tradeable titles or long-term leases with little or no due procedure for recognition of prior rights or claims. These generated a wave of fear across ethnic communities and advocacy groups, as they failed to acknowledge pre-existing rights both in private and CTS, thereby rendering community lands available for state allocation unencumbered by the claims of their actual owner-users. Furthermore, since the gazetting of the 'Permanent Forest Estate' (PFE) remained an incomplete process, much upland forested areas became available for private lease. This led to a hasty gazettement process from the FD in areas under *de facto* Burmese army control and not under conflict. In these areas, CF provided a convenient administrative framework to 'settle' the land claims of shifting cultivators, albeit without recognising CTS.

CF earned some renewed, albeit qualified, appeal as a potential mechanism for defending against new forms of land grabbing. It continued to spread slowly, partly due to slow official approval of applications and hand-over. This was due to several reasons – first this was undoubtedly a low priority issue for administrators. Second, there could be land administration inconsistencies that needed resolving first (e.g., communities applying for CF in Revenue lands required the land to be transferred to FD jurisdiction first). Third, it has been speculated that delays in approval might be caused if administrators may lose opportunities to allocate the unencumbered land to developers (and potentially receive kick-back payments to do so).

During this period, donors still barely supported CF, even when support could really have helped promote a more constructive multi-stakeholder reform process. And without donor support, the FD had very limited capacity or institutional incentive to promote it. Nevertheless, a multi-stakeholder CF National Working Group was established in 2013, and a Unit within the FD to support it. But as the USDP term drew to a close, logging levels reached a crescendo of destruction, as crony contractors in partnership with the MTE plundered whatever forests they could before the window of opportunity closed with the next more democratic administration (Springate-Baginski et al., 2016).

Colonial-era land administration contained a fundamental inconsistency: there were two main territorial agencies in rural areas – forestry and agriculture/'revenue' – but their frameworks were not well reconciled, neither legally nor on the ground. Considering growing difficulties, the Director General of the FD initiated a review process, leading, after much deliberation, to the 'National Land Use Policy' attempting to reconcile them. This explicitly acknowledged the need for CTS recognition and was received as a significant step by land rights campaigners:

> In January 2016 the government adopted a National Land Use Policy, which included the recognition of customary land management practices. While this is a welcome first

> step in the necessary integration of Burma's customary land management systems with the national-level system, there is an urgent need for constitutional reform and devolution of land management powers prior to any such integration.
>
> *(Ethnic Community Development Forum, 2016: p. 2)*

The NLD Administration 2016–2020

In late 2015, the National League for Democracy (NLD) won a landslide victory in both national and regional elections, and its subsequent administration in 2015–2020 changed the Nation's political chemistry dramatically. Although Myanmar remained a 'hybrid democracy' with 25 per cent of seats reserved for military, the civil society and civilian politicians could begin to look beyond desperately clutching for concessions and aspire to structural reforms and constitutional change. The new NLD President, *Hsaya* Htin Kyaw (Myanmar's first non-military head of state in 54 years), immediately announced federal decentralisation as a top priority, and the *de facto* NLD leader Aung San Suu Kyi led national reconciliation negotiations, reaching in 2017 the Pyidaungsu Accord, in which the promise of CTS recognition appeared to draw closer.

However, during the NLD administration, the contradictions of pursuing democratic reform under incumbent military power became increasingly fraught. The Rakhine ethnic cleansing and genocide of 2017 was the gravest example of a military beyond constitutional control, but there were numerous other atrocities across the country, including terrorising communities across ethnic areas, and the execution-style murder of the NLD's senior constitutional adviser Ko Ni in broad daylight at Yangon airport in 2017. The growth of military and 'crony' dominance of the booming economy also portended problems, as land has remained a central issue of contention. The drafting of a unitary Land Law based on the aforementioned NLUP 2015 became an intensely contested arena. Land grabbing was reaching epidemic proportions, with the militarised Union General Administration Department (GAD) and Survey and Land Records Department (SLRD) administrations facilitating it. The FD, only gradually restoring its independent authority with respect to the MTE and military, sought to avoid forests being cleared under VFV laws and so in competition accelerated forest gazettement, mainly in ethnic areas. As such, customary lands were squeezed in a frontier administrative 'turf war' of the central state. In these forested landscapes, Union jurisdictional formalisation of informal settlements could be to human settlement; farmland; forests, including Community Forest; or the residual category of VFV land (the traditional colonial-era 'wasteland' categorisation), available for long-term lease to private individuals. Hence the property claims of communities historically relying on *de facto* customary tenure systems were not protected, and communities became increasingly anxious to find mechanisms to protect tenure. Indeed, both the FD and the Ministry of Agriculture Livestock and Irrigation (MOALI) are explicitly hostile to shifting cultivation, and have mandates to transform shifting cultivation areas into either sedentary farmland or CF.

CF began by 2015 to feel to many in civil society a rather dated proposition. The already 20-year-old CFI (1995) had established the legal basis for Forest Departments to implement community forestry. Yet customary rights were still not being separately recognised. Although CF remained a durable policy to the government, it was becoming superseded in much of civil society by pursuit of CTS recognition and federal constitutional reform. If customary tenures were to be recognised, and land policy development devolved to state levels, Community Forestry would probably become redundant in many areas. However, at the same time, donor interest began to increase as the political situation appeared increasingly optimistic (notably Korean, French, and the World Bank), and international NGOs (INGOs) also began to engage

more strongly. Some agencies have persisted with CF, including partly with the intention to improve the 'user friendliness' of the Union FD field officers, and some INGOs sought to promote CF for local resource conservation and sustainable use, albeit under Union military protection. Yet in ethnic areas, the agencies of Union government were frequently perceived as an occupying government, and so CF promotion would serve to extend their jurisdiction and fragment CTS. During the period, autonomous ethnic administrations introduced alternative CF-like policies to formalise CTS under their own Forest Departments.

Community forestry practices

It remains difficult to synthesise a general picture of the CF field situation across the country, in the absence of a comprehensive national study. Nevertheless, to make sense of the diversity of CF experience, we must recognise that the field contexts are so diverse, and the constellation of factors acting in each area very specific. These factors include

- The pre-existing environmental context, which is very different from coastal areas to agricultural basin areas, to uplands) and forest type and condition.
- The integrity and cohesion of the village community and their customary system, and capacity to deliberate.
- The level of militarisation, conflict, 'grabbing' threats (pushing communities to consider CF), and the conflict-related administrative reach of union government forest department.
- The implementation context, donor support, and NGO facilitation.

The author's impression from a decade of field engagement across the country, is of villagers' ambivalence towards the Union government field staff and official initiatives, but a tendency prevails to use whatever is available in the moment of need (Cleaver, 2012).

Kachin state contains arguably the most positive example of CF in Myanmar, and it is remarkable as it has developed under a highly militarised and conflictual landscape. Many communities in the Waingmaw valley around Myitkyina had moved down from the hills due to

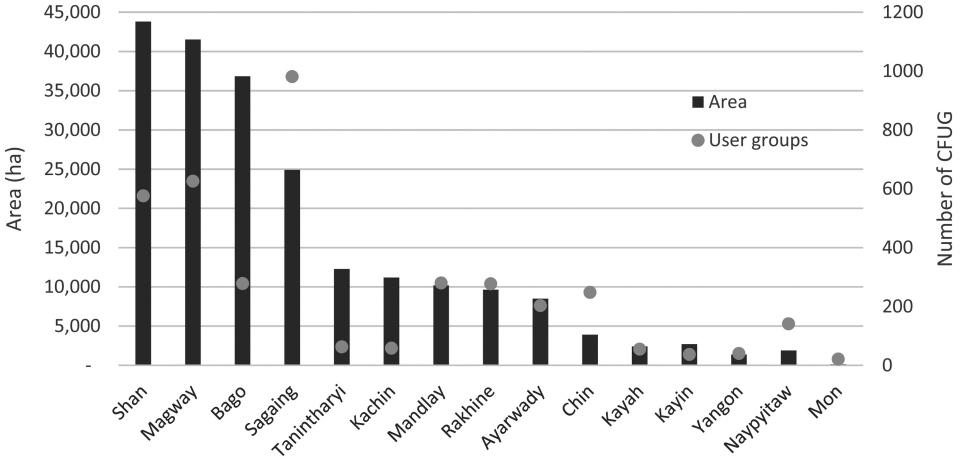


Figure 25.3 Number of CFUG groups registered and extent of area under their management. Data: Forest Department CF Unit 2018.

previous fighting and had been settled by the military without tenure, many in and around 'Reserve Forest' areas. Furthermore, the areas had been subject to destructive Chinese logging under Burmese army protection, so most accessible forests were relatively degraded by the early 1990s and subject to pressures for fuelwood supply from refugee camps. Many communities practised long fallow forest cultivation, and frequently followed the tradition of replanting areas after cultivation with preferred tree species (e.g., teak or fast-growing fuelwood varieties), and so the CF model offered a reasonably approximate fit with existing practice. CF here was initially adopted as one of the only possible ways to achieve some level of tenure security for forested landscapes, especially as land grabbing in the area was accelerating. The typical management plan approach has been to clear prior forest and plant tree farms, including fast growing fuelwoods, in 30-year rotations to fit the implicit harvesting cycle of the 30-year CF lease period.

Support for plantation development in Kachin occurred with the support from EcoDev, a Yangon-based NGO; and Shalom Foundation, a Kachin NGO accustomed to supporting the welfare of communities displaced due to conflict. Around 50 villages were assisted to apply for CF certificates. Nine certificates were initially granted. The rest became delayed due to the complexities of land administration under conflict – variously explained by different stakeholders as caused by the lengthy bureaucracy around surveying and categorising 'frontier' land, the lack of rapport between the Union government offices involved, and, lastly, the informal incentives on bureaucrats to retain the land in order to allocate it to 'grabbers' in return for bribes later. Land grabbing is an intense problem in southern Kachin: some groups who received certificates lost their land to 'grabbers' – particularly Chinese banana agri-businesses, operating illegally under Burmese military protection. Other villages were able to contest attempted grabs successfully. For example, in 2014, the (Burmese military) Kachin chief minister proposed a 'Special Economic Zone' in an area already handed over as CF. The CFUG group, with support from civil society (and the implicit backing of the Kachin Independence Organisation), was able to petition the central government, and in a remarkable development, the land reallocation attempt was blocked (for the time being). Gradually the vast majority of the remaining applicants received their certificates.

Since the 1990s, many community forests in Kachin have regenerated, remarkable considering the forests are under pressure for traditional shifting cultivation (which has often been pushed out to continue beyond the CF area) and timber and fuelwood collection, including for Internally Displaced Peoples camps. The CFs formed the Kachin Community Forest Association and applied for harvesting permission. However, FD permission has not yet been forthcoming, despite detailed management plans and silvicultural inventories.

The main incentive for community participation has been to secure tenure over village forests, protect against outside logging, and mobilise community members for environmental restoration (e.g., over important rice-paddy water catchments). Kachin Forest User Groups were found to be amongst the best performing in the country in 2010 (Tint et al., 2011). To improve the livelihood benefits from community forestry to poorer households, in 2014 Shalom initiated a collaboration with the Myanmar Bamboo and Rattan Entrepreneurs' Association Chairperson, U Kyaw Thu, to begin training in rattan processing. A rattan enterprise, established in Lamyang village in Waing Maw Township, has benefited from an investment of US$40,000 (from the PyoePin project). This was spent in building, training, processing machinery, etc., as well as technical support from U Kyaw Thu.

The Waing Maw Community Forest Association rattan enterprise, launched in 2016, is jointly owned by the CF Association – of 11 FUGs. The current enterprise facilitates two activities: pre-processing (splitting) of rattan and out-weaving of the split rattan into small easily transported items like boxes and trays. This initiative has already trained over 120 individu-

als from communities in and around Waingmaw, as well as from other townships, and FUG members from Kachin Conservation Working Group (KCWG). Based on the Waing Maw CF Association's successful initial experience with the rattan enterprise, in 2016, a new timber processing enterprise was established. The CF management committee members are the same as the rattan enterprise. In this case, EcoDev and Kachin Conservation Working Group (KCWG), of which Shalom is a founder member, have collaborated. The processing unit now comprises a sawmill, cutters, other machinery, and a large building. EcoDev provided a grant, through KCWG, of about US$100,000. The land, building and machinery are now installed, and the unit has been awaiting a Forest Department sawmill license. The business model is consolidating processing and marketing of produce from Community Forest plantations.

On the other hand, a field visit in spring 2017 offered insight into the paradoxical 'village reality' of the informal shadow economy in which some CFUGs exist. The author was visiting a village on the edge of the valley, discussing village affairs with the village head and CF committee members. At the end of the discussions, we walked around his compound, and encountered a hidden medium sized sawmill, surrounded by plenty of fresh sawdust.

> It's my son's. We asked the foresters if we could harvest the community forest to sell timbers to town. They told us no, but we could cut the big trees in the Reserve Forest as long as we paid a share to everyone in uniform.

The story serves to illustrate that relying on aggregate data alone can obscure complex and sometimes surprising field realities.

Community resource rights after the 2021 Coup

On 1 February 2021, Burmese military public servants seized control of the country illegally, again. Their USDP party had barely secured any votes in the 2020 general election, even in military compounds. They sought to avert their political marginalisation by force, obstructing the newly elected parliament from sitting and creating a 'State Administration Council'. The coup ended a decade of gradual democratisation and has precipitated a desperate and deadly struggle by citizens across the country to restore their political freedoms and rule of law. At the time of writing, the country has been at a standstill for almost nine months, and there is a pervasive civil disobedience movement and a declaration of war against the coup leaders. Almost 1,000 civilians are known to have been murdered, including youths, children, and pregnant women, many shot in the head at long range by military snipers, others tortured to death (including elected parliamentarians and some civilian public servants). Citizens continue to risk, and lose, their lives to protest:

> On Friday, 9 April, at least 82 civilians were killed by Myanmar's security forces in the city of Bago, about 90 kilometres (56 miles) northeast of Yangon. During their assault on anti-coup protesters in the city, the security forces used assault rifles, heavy machine guns, rocket-propelled grenades, hand grenades and mortar fire.
>
> *(Global Centre for the Responsibility to Protect - Atrocity Alert 14 April 2021)*

The coup has united those across the political spectrum to the primacy of federal decentralisation and the underlying problem of an imposed but 'reluctant' Union. The limitations of both Community Forestry and the lack of statutory recognition for CTS are brought into stark relief.

CF seems an increasingly anachronistic and untenable 'compromise' solution for communities, perpetuating foresters' colonial-era centralised powers to control villagers' resource use.

Many communities I have spoken to over the last ten years expressed ambivalence to CF, with some villagers politely scornful at the idea of the FD 'helping' them when they are accustomed to being intimidated, extorted for bribes, and by-standing while natural forests are stripped by Union government cronies. Some grow angry, tearful at the mention of the Union government, when their friends and family members have died. Others have for instance been terrorised into acting as human shields by the Burmese army in encounters with defensive local armed organisations, or in some cases having seen elder family members never fully recover from protracted torture. Even those people who are more ambivalent, typically in Bamar areas away from conflict areas, have often seen family cultivation lands converted into 'community' tree farms and to them 'pointless' species like eucalyptus imposed by the FD. Or those living in protected areas endured international conservation organisation staff, present under Burmese military warrant, lecturing them about how bad their normal livelihood resource uses are, such as traditional bushmeat hunting or shifting cultivation.

CF has nevertheless been adopted by some communities in Myanmar, and for many has been something to value. The strongest example in Myanmar has emerged in the most unlikely circumstances: in the Waingmaw valley in war torn Kachin, CF has 'taken off', with an association emerging to campaign for their interests. But rather than a final destination of reform, CF may represent a 'stepping stone' towards full community resource rights, under democratic federal decentralisation.

Looking ahead to democratic decentralised resource self-governance

This chapter has explored the fraught relationship between the state and communities over local forests and sought to show how the Community Forestry policies have remained a product of their time – emerging as a 'stepping stone' for gradual change in this relationship during the repressive period from 1995 to 2015. It is a stepping stone which gradually lost its relevance as the political process grappled with wider transformations – federal constitutional reform and recognition of customary resource rights. Ironically, as the transformative relevance declined, it appeared to become more popular with government and international donors. CF has frequently served a conservative agenda to 'depoliticise' contestation over resource rights and entrench the unitary Union government as the tenure authority in conflict areas where ethnic groups seek self-determination and self-government.

We conclude this discussion at a time when the country remains in the grip of a desperate civil war. Burma/Myanmar society has suffered more than most countries from political strife over its recent history, but the current moment appears as bleak as at any time. It does however also contain radical promise – Myanmar's society is almost completely united towards the goal of finally removing the parasitic grip of the Burmese Army and its pathological leadership once and for all, perhaps through a combination of economic collapse, the defection of military staff, and effective resistance.

What should happen now to community-based forest management in Myanmar? When the society ultimately prevails over its war criminals, the CF experience may provide a few valuable lessons.

Firstly, Myanmar contains a pool of remarkable talent and energy; there is a strong sense of earnest seriousness under strained conditions, both across many government staff and community members, including especially the youth. Many mid-level forestry field officers I have encountered exude a traditional professionalism it would be hard to match elsewhere in the

world. Similarly, many community members show earnest sincerity, despite the practical difficulties and hardships of their daily lives. If the compromising difficulties which the dictatorship has created were lifted, rapid progress could be anticipated in co-operation, and institutional innovations more fitting to local circumstances and priorities.

Secondly, the case for federal decentralisation and subnational legislation over resource governance and benefit sharing is now ineluctable. The existing diversity of traditional institutions and mechanisms for community-level resource self-management should secure legal recognition and be revitalised, as appeared to be mandated under the National Land Use Policy 2016.

Thirdly, donors must be much more conflict-sensitive and politically astute in their engagement, as they have not always acted in the political interests of all of Myanmar's citizens. At times, some have sided with the Union government for activities in conflict areas. It has not escaped Myanmar civil society attention, for instance, that the World Bank made some loans in recent years to the Union government to fund their capacity building, including in conflict areas, thereby appearing to ethnic citizens to be taking sides in a conflict against them.

Summing up, after over a century of destructive logging, decades of expansion of agricultural commodity production, and now the civil war, when the time eventually comes there is a huge task ahead for Myanmar's recovery. Enabling various locally appropriate forms of rights-based community resource management will be essential. These forms must not be imposed or monocropped, whether by the state or international experts or agencies, but must be self-determined by communities. In the meantime CFUGs may provide resource rights security to at least some extent. The 'critical mass' of existing CF groups may be capitalised on by those seeking to defend communities, critical environments and civil society, at least until more substantial reform is possible to envisage again.

Note

1 Myanmar's subnational administration is divided into states and regions – states are in predominantly ethnic areas, regions in predominantly Bamar areas.

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26

VILLAGE FORESTRY UNDER DONOR-DRIVEN FORESTRY INTERVENTIONS IN LAOS

Sabaheta Ramcilovic-Suominen and Irmeli Mustalahti

Introducing village forestry and REDD+ in Laos

The politics of language and terminology surrounding the concept of 'community forestry' vis-à-vis 'village forestry' in Laos requires some clarification. Community forestry is a politically problematic concept in Laos because governmental agencies associate it with an overly progressive socio-economic and political agenda in terms of villagers' rights and ownership (Hodgdon, 2010), which the government perceives as politically disruptive (Creak and Barney, 2018; Gindroz, 2017). In the 1990s when the Department of Forestry (DOF), under the Ministry of Agriculture and Forestry, and the international donor countries, predominantly Sweden and Finland, were negotiating the Laotian village forestry policy, the DOF made it clear that the term 'community forestry' was inappropriate in the context of the forestry sector in Laos. For this very reason, the term 'community forestry' was and still is avoided, and two alternative terms were adopted. First, the term 'participatory sustainable forest management' (PSFM) was formally accepted by the state and its development partners, and it refers to villagers' involvement in the production forest areas (PFAs) managed by the State authorities from district level upwards. A second term, 'village forest management' (or 'village forestry') is also formally recognised and used by actors across policy scales, and it is a term we adopt in this paper.

The empirical focus of this paper is village forest management in the village use forests, where we are particularly interested in the implications of donor driven village forestry projects, including REDD+ piloting, for villagers' rights to manage and use village forests. Village forestry has a rich and dynamic history in Laos (Hodgdon, 2010; Mustalahti, 2009), where steps to strengthen or to weaken it have alternately taken place. Villagers' involvement in formal or state forest management is especially evident since the 1990s, when so-called 'participatory forest management' was piloted in production forest areas in Laos (Makarabhirom & Raintree, 1999; Mustalahti & Lund, 2009). This was made legally possible under the 1996 Forest Law, which prescribed roles for and involvement of villagers in forest management (Art. 5, LPDR, 1996a, 48–54).

As for the REDD+ initiative, Laos became involved with the instrument in 2008 when it became a partner country in the World Bank's Forest Carbon Partnership Facility (FCPF). Laos' Readiness Preparation Proposal (R-PP) was accepted in late 2010. In June 2018, the FCPF Carbon Fund accepted the Laos Emission Reduction Program Document (LPDR, 2018).

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Implementation of the technical properties of REDD+, such as measurement, reporting, and verification (MRV) but also land titling, required substantial policy and institutional changes. As a result, the key REDD+ actors, consisting of the government and development partners working on REDD+, have focused on the development of REDD+ policy and institutional structures at the central level, to the detriment of provincial and district level capacity building and involvement and consultations of concerned actors at the local village level (Ramcilovic-Suominen et al., 2021).

In Houaphan province, the REDD+ pilot project, called Climate Protection through Avoided Deforestation (CliPAD), started operating in 2013. Since CliPAD facilitated the development of the Provincial REDD+ Action Plans (PRAP) for Houaphan, there are many connections between the PRAP for Houaphan and the CliPAD project. The PRAP for Houaphan (LPDR, 2017) identifies the following as the key drivers of deforestation: agricultural expansion for export commodities such as rubber, maize and banana; upland shifting cultivation for subsistence and commercial purposes; illegal logging; and unsustainable harvest of wood, mostly for development projects and export (EIA, 2017; To & Mahanty, 2019). The PRAP includes policies and measures for addressing these drivers, which consist of measures for development/improvement of agricultural intensification, diversification and alternatives to upland rice cultivation, better management of cash crops, stricter law enforcement, land use planning, and livestock production. These measures, however, focused on limiting the small-scale drivers (Ramcilovic-Suominen, 2019) and addressed the symptoms rather than the root causes of deforestation. CliPAD adopted a similar position on the key drivers and policy measures, but focused in particular on land use planning processes and promotion of alternative livelihoods (both aimed at regulating and limiting upland shifting cultivation) and on strengthening state and policy frameworks at the village level to reduce 'illegal' forest-based livelihood activities. It is worth mentioning that these REDD+ driven policy measures have an unmistakable resemblance to state-backed, long-term policies and practices, including stabilisation of shifting cultivation, land-use planning and allocation processes and building a statutory rule of law (Baird & Shoemaker, 2005; Singh, 2012), which further implies that this REDD+ pilot project has aided the geographic expansion of central government control over rural areas (Ramcilovic-Suominen, 2019).

Case study and research methods

The REDD+ process in Laos, in terms of institutional settings and implementation, is extensively covered elsewhere (Cole et al., 2017; Mustalahti et al., 2017; Ramcilovic-Suominen & Nathan, 2020;Vongvisouk et al., 2016). For this reason, we only cover the Provincial REDD+ Action Plans (PRAPs), which are central to REDD+ translation from national down to provincial and village levels. The PRAP for the province of Houaphan was developed by the German GIZ (German Technical Cooperation Agency), the governmental agencies operating under the Department of Forestry (from national to district level), the German consultancy agency UNIQUE, and village clusters' (*kumban)* authorities. Civil society organisations were only marginally involved in the REDD+ process due to lack of political will to include them in the first place (Mustalahti et al., 2017) and also due to complications which development partners faced when they did try to work with civil society in REDD+ villages (see Ramcilovic-Suominen, 2019 for details). The REDD+ donors' demands for civil society participation in REDD+ were satisfied with 'staged participation', i.e. occasional REDD+ consultations at the central level, which caused fatigue and frustration among civil society actors (Ramcilovic-Suominen et al., 2021). As a result, REDD+ piloting at the village level involved central, provincial, and district governmental

agencies, village level organisations and REDD+ pilot project staff, and mass organisations. Mass organisations are state-formed institutions with a hierarchical network stretching from central level down to village level (Stuart-Fox, 2006). Particularly active among these organisations are the Lao Front for National Construction, the Women's Union, and the Youth Union. Village heads, Village Land Use and Forest Management Committees and village forest units were trained in REDD+ issues so that they could understand the logic and aims of the programme, and one of their roles was to ensure that villagers participated in project meetings.

PRAPs define specific agriculture and forestry interventions, with significant implications for forest use and management, to be introduced at the village level. The PRAP targets three areas for intervening: (i) policy interventions for incorporating REDD+ into existing policies and legal framework at sub-national levels, including those related to illegal logging and land use planning; (ii) agriculture sector interventions, focusing on development of intensified agriculture, which among others imply limiting the traditional shifting cultivation; and (iii) forestry sector interventions, focusing on sustainable forest management and village forestry. All these interventions, as we will demonstrate later, directly affect the villagers' livelihood practices (e.g., farming, fishing, and hunting) and their rights and uses of forest, as well as the power structures and self-governing capacities.

REDD+ piloting project in two study villages in Houaphan

Houaphan is the first province for which PRAP was developed, under the auspices of the CliPAD REDD+ pilot project. Houaphan is located in the northern part of the country. The province covers 1.7 million hectares (Mha) of highly mountainous terrain. Houaphan has ten districts, with Sam Neua as its provincial capital. The province is highly ethnically diverse, with Ethnic Minority groups such as Tai-Kadai (Tai Lao, Tai Dam, and Tai Deng), Mon-Khmer (including Khm'u and Lao Khaa), and Hmong-Mien (including Hmong, Hmu, and Lu Mien). As is common in this part of the country, the ethnic minorities usually rely on upland shifting cultivation for rice and other crops (Baird & Shoemaker, 2005; Cramb et al., 2009). In Houaphan, upland rice shifting cultivation is predominant, while lowland or paddy rice cultivation is less extensive for topographic and cultural reasons as the ethnic minorities traditionally rely on the former. Upland production systems also saw significant changes due to the proliferation of investments in maize production for new markets, infrastructure development (hydropower and mining), and government efforts to eradicate shifting cultivation (Baird & Shoemaker, 2005; Cramb et al., 2009; Kenney-Lazar, 2013). Ethnic diversity could have been accommodated better, given that Hmong villagers complained they did not understand the village meetings, some of which were, as villagers said, held in the Lao language (see Ramcilovic-Suominen et al., 2021 for more nuances on this aspect).

At the village level, we followed REDD+ activities in two villages which here are named Ban Lao-Khmu and Ban Hmong, indicating the dominant ethnicities in the two villages. Ban Lao-Khmu is populated by the dominant ethnic *Lao* and the more-integrated ethnic minority *Khmu*. The second village, Ban Hmong, is populated only by *Hmong*. Hmong people remain politically disengaged and socially stigmatised (Baird & Shoemaker, 2007; Lestrelin, 2010; Singh, 2012), partly due to the GoL's (Government of Laos) attempts to consolidate national Lao identity, flattening the cultural and linguistic diversity. The description and selection of these villages are covered in the first author's work (Ramcilovic-Suominen & Nathan, 2020; Ramcilovic-Suominen et al., 2021)

Research methodology

This chapter is based on long-term studies related to the historical context of village forestry in Laos and on a qualitative study that explores the REDD+ policy process across different policy

levels in Laos. The research methodology is thoroughly described in the authors' previous work (Mustalahti & Lund, 2009; Mustalahti et al., 2017; Ramcilovic-Suominen & Nathan, 2020; Ramcilovic-Suominen et al., 2021). To avoid repetition, we will state the essentials, including that 33 structured qualitative interviews were conducted at the central level, in the capital Vientiane, in 2017. At provincial and district levels, 14 structured qualitative interviews were carried out with staff from various organisational backgrounds involved in REDD+. At the village level, structured qualitative interviews in Lao and Hmong languages were carried out in Ban Lao-Khmu and Ban Hmong, respectively. Interviews included representatives of village authorities, including heads, deputy heads, elders, members of Village Land Use and Forest Management Committees (VLUFMC) and Village Development Funds (VDFs), and ordinary villagers. In addition, discussions and encounters with villagers, which in many instances were insightful, were recorded in the form of fieldwork notes in Ban Hmong. All interviews were transcribed and, when needed, translated into English for analysis.

We conducted qualitative content analysis where we adopted an inductive approach to themes emerging from the data (Mayring, 2004). First, we coded interview quotes that dealt with village and community forestry, using codes such as shifting cultivation, upland rice cultivation, social safeguards, participation, local people, equity, livelihoods, village, and local/village administration. These codes were then organised in broad categories of themes such as village forestry, forest communities, forest and land tenure, titling, rights, and access. Finally, these themes were analysed to reveal patterns related to key research questions: (1) How does REDD+ relate to village forestry? and (2) How does REDD+ affect villagers' rights and access to forest and land in the village forest where it is piloted?

Village forestry over the last three decades: More tasks and less rights for villagers

The idea of village forestry (VF) entered policy debate and discourse in Laos in the early 1990s, when policy and project interventions experimented with different forms of participatory and village forestry models in the country. The first participatory village forestry intervention was the Joint Forest Management (JFM) approach introduced by the Lao Swedish Forestry Programme in 1992 (Makarabhirom & Raintree, 1999; Norén, 2015). In 1995, the Forest Management and Conservation Programme (FOMACOP), supported by the World Bank and Finnish development cooperation, piloted the so-called 'village forestry in production forests areas', which became known as the FOMACOP village forestry model. FOMACOP paid special attention to building village-level forest organisations in terms of entrepreneurial and technical capacities for sustainable forest management (Katila, 2000; Samountry et al., 2001). FOMACOP emphasised the importance of relying on and using local knowledge concerning sustainable forest management, including, for instance, letting village level organisations estimate annual sustainable harvesting levels. Furthermore, forest inventories were done jointly with villagers (Mustalahti & Lund, 2009). In the FOMACOP model within the allocated village forest land areas, villages were granted full forest management and forest benefit sharing rights and responsibilities but did not hold permanent land titles. FOMACOP, however, introduced long-term contracts and allocated customary land areas, which somewhat inadequately were titled 'National Sustainable Forest Production' areas.

In addition, under FOMACOP's village forestry model, authorised village forestry associations (VFAs) were entitled to manage national production forests in accordance with government-approved forest management plans. The long-term allocation of land for village forestry and under management of VFAs was authorised under Prime Ministerial Order No.93/

PM 1996 (LPDR, 1996b). The Order states that provinces and districts can develop a system of forestland allocation in their own locality and that the state can also sub-contract village organisations and other juridical entities such as state enterprises, joint ventures, collectives, and individual citizens to carry out forest management activities (Mustalahti & Lund, 2009). In exchange for these management services, villagers were entitled to direct benefit from these forest management activities (e.g., individuals were entitled to allowances from timber royalties and for participating in forest inventory and other management activities). At the village level, FOMACOP piloted benefit-sharing regulations, where villages received a fair share from legal logging in production forest areas (Williams & Heinonen, 1998). The VFAs were authorised to retain net profits from timber sales after paying government royalties, taxes, other fees, and labour costs during management activities. The VFAs reported the profits and, with the village leaderships, collectively decided how the profit could be used for the benefit of all village residents (Samountry et al., 2001). Under this system, the villages managed to finance village development activities, such as constructing schools, electricity lines, and roads, in co-operation with district authorities.

Despite, or *because of* these developments and the progressive village forestry agenda, towards the end of the first four-year pilot phase of FOMACOP (1995–1999), the concept of village forestry in production forests through village organisations lost political support, and the project's second term was not approved (Hodgdon, 2010). FOMACOP was replaced by the Village Forestry Sustaining Phase (1999–2001) until new project funding was agreed upon with the support of the same donors. The World Bank provided financial support, while technical assistance was provided from the Government of Finland's development assistance, which jointly supported the Sustainable Forestry for Rural Development Project (SUFORD) and its various extensions.[1] With the start of SUFORD in 2003, the concept of 'village forestry' was replaced by 'participatory sustainable forest management', where villagers' rights to manage and make decisions about village forest land participation were reduced to participating in forest management activities as labour. From 2004, the Lao Government started to implement new regulations for benefit sharing with respect to central government production forests, which significantly limited the villagers' benefits, compared to the ones enjoyed under the FOMACOP model. A year later, the Forest Sector Strategy (LPDR, 2005) adopted an objective of timber production from production forest areas under sustainable management 'in cooperation' with villages. Yet it did not support the allocation of production forest under village forest management, thus reducing the role of villagers from managers and decision-makers to that of participants performing prescribed tasks and duties (Mustalahti & Lund, 2009). The village forest production areas allocated under FOMACOP remained, but the diminished roles, responsibilities, and benefits for the villagers were not in their favour.

The start of the SUFORD project coincided with a larger phase of re-centralisation of state power and control, which among other things reversed the allocated rights of villages initiated under FOMACOP. SUFORD was set to be closer to the dominant political culture in the country and therefore secured domestic political support. Laos was and still is a one-party state under the leadership of the communist party. It is a country where army leaders and ruling party members have an influence on the implementation of national forest policy and are directly involved in the sawmill industry (Mustalahti & Lund, 2009; Ramcilovic-Suominen et al., 2019; Stuart-Fox, 2006). Mustalahti (2009) argues that SUFORD adopted a model which was a compromise between the progressive FOMACOP agenda and the central state domination and control over forests. Under SUFORD, management of production forest areas was no longer the responsibility of the local village organisations of each village. Instead, such management had to be implemented jointly by village clusters composed of several groups of villages (Kumban),

their village forest organisations (VFOs), and district forest management units (FMUs). These differences were expressed by an international consultant:

> When we developed village forestry under FOMACOP, we developed the villages as businessmen. The local village authorities and all villagers run a business, they manage the forest and pay the GoL royalty. The village authorities pay for the cost and this still leaves them with profits. They made a lot of money that way. But during the PSFM (participatory sustainable forest management) under SUFORD is different. The benefits are shared differently. The villagers become participants, the GoL receives the gross timber revenues, and then the GoL shares part of it for the village as an incentive for their participation.

One of the reasons that the FOMACOP village forestry model was not extended was that under the model the villagers were allowed to manage and benefit commercially from trees, and according to the GoL, village forests were gaining economic value, which the government saw as a reason for conflicts. Another international consultant who closely followed these changes in village forestry approaches expressed this view as follows:

> The GoL's concern was that some areas under FOMACOP managed by the villagers were rich in forest, where you can harvest a lot of timber and villagers would get lots of money. So, the GoL started saying, this is a problem for equality and that it will cause conflicts. Conflicts never happened though. But they hired an assessment team led by a researcher from the US to assess the two models, who argued in favour of participatory model, which was to GoL liking. Some people in the assessment team did not bother to go to the field, they already know what they want to write. But we would not participate in this assessment unless we go to field and assess fairly, and we did. But still it was GoL that decided, and it did not matter what we found in the field.

The GoL's reasoning on a positive correlation between poverty and equality was challenged by a number of respondents familiar with FOMACOP and SUFORD projects, as they argued that the equality narrative was only an excuse for the government to stop FOMACOP, which the government saw as a potential threat to their control over forest managerial rights and ownership.

Over the years and parallel with these international and donor interventions, the involvement and roles of villagers in production forests were to an extent embedded in national laws and regulations as well as in the National Growth and Poverty Eradication Strategy (LPDR, 2004). Other relevant laws include the Forest Law (LPDR, 1996a), Prime Minister's (PM) Decree No. 59 (LPDR, 2002), Regulation No. 0204 of the Ministry of Agriculture and Forestry (LPDR, 2003), and Forestry Strategy (LPDR, 2005). According to this body of regulations, the district forest authorities are the forest management units responsible for carrying out forest management in production forest areas on behalf of the central government. For example, regulation no. 0204 (LPDR, 2003) states that the forest management units are the state organisation under the district's forestry office and are responsible for sustainable management of village production forest areas of the district with the participation of villagers. In the early stages of SUFORD, this participation was limited to wages for villagers' labour. With time and donor support, engagement, and co-operation with villagers through consultations, village development projects and village forest livelihood grants were integrated into the project activities (see Ramcilovic-Suominen & Kotilainen, 2020). However, the legal foundation for involving vil-

lagers in planning and decision-making remained a challenge until the end of the SUFORD project and its various extensions (Ministry of Foreign Affairs of Finland, 2019).

In the participatory sustainable forest management model adopted by SUFORD, the Provincial Agriculture and Forest Office co-ordinated the forest management activities with the District Agriculture and Forestry Extension Office and village level organisations whose participation was limited to carrying out predefined tasks and duties. Within the same SUFORD village forestry model, timber auctions were introduced for exporting timber harvested in the production forest areas. In accordance with the decree on revenue sharing, districts and villages that participated in forest management were not entitled to royalties from timber sales originating from the production forest areas. The log royalty from the competitive sale of timber from production forest areas goes to the National Treasury. Upscaling of the SUFORD model for benefit sharing based on timber auctions was expected to increase competition among log buyers and in turn lead to increased log prices. However, the export of timber was often done directly from the province and provincial governmental agencies to Vietnam, by-passing any auctions or regulations, and this was a means to pay for past and ongoing military assistance (Stuart-Fox, 2006). For the villagers this meant the loss of their pre-existing customary rights, recognised under FOMACOP, to resources in production forest areas. Their rights were reduced to collecting materials to construct and repair family houses and to wages set by Government for their labour. Finally, in 2016, the government issued a new Prime Minister Order No.15 (LPDR, 2016), aiming at tackling illegal harvest and export, which led to a drastic decline in annual timber logging quotas and harvest in the state forest production areas (To et al., 2017).

At the time of the fieldwork in the REDD+ villages in 2017, there was enthusiasm for legal backing of village forestry in light of the revision of two important laws – the Forestry Law and the Land Law. At that time, the latest SUFORD extension project was already coming to an end, with Finnish support ending shortly, and only some activities were to be continued through World Bank support. Some respondents hoped that the Land Law and Forestry Law, which were in revision at the time of this research, would include articles and provisions to facilitate villagers' greater forest land ownership and use rights, as well as their rights to commercial benefits from timber in village use forests that were allocated outside of the production forest areas. Despite these hopes, however, the recently revised Forestry and Land Laws (LPDR, 2019a,b) have further weakened the ownership and use rights, customary rights, and villagers' decision-making power in relation to village land (MRLG, 2021). The Land Law 2019 introduces a new concept of 'public land for collective utility', which includes land used by villagers (Art. 81, LPDR, 2019b), so there is no category of common village land in the new Land Law. The same Law, under Articles 126 and 132, effectively legalises land grabbing under state-sponsored development projects and investments, as such projects have been added as additional reasons that can lead to loss of use rights. Similarly, in accordance with Art. 147.2, the state has the right to withdraw the existing use rights for state investment purposes. On the other hand, Art. 130 of the Land Law recognises customary rights, which can be secured by issuing 'land use certificates'. The requirements are, however, rigorous, including the need for 'continuous' or 'regular' use of the land for more than 20 years, the meaning of which, however, remains unclear. These changes imply that families or villages resettled for any reason (e.g. due to a development project or climate change) will not be able to secure such rights under the new Land Law.

Under the revised Forestry Law, recognition of customary rights is vaguely defined, without any concrete provisions and actions, backing up the uncertainty and conditionality of customary rights. The villagers' rights to the timber harvest in the revised Forestry Law remain limited to 'construction of village offices, meeting halls, schools, health centres, temples and bridges … which should be in accordance with the annual logging plan of provinces or the Vientiane

Capital, as approved by government' *(*Art. 62, LPDR, 2019a, p. 27*)*. Logging rights at sub-national level can be awarded only for

> constructing and repairing houses, particularly for families in need, such as poor families who as yet have no house, families with very old houses, with houses which have collapsed or have been damaged or destroyed by natural disasters. Such use must be approved by the District Agriculture and Forestry Office, following proposal from the village authority, in accordance with regulations.
>
> *(Art. 63, LPDR, 2019a, p. 28)*

The revised Forestry Law has strengthened law enforcement, increasing the activities restricted under the Law. It also has reinstalled the long-term governmental policy of limiting shifting cultivation (Art. 53, LPDR, 2019a).

In summary, land ownership, rights to commercial benefits, and decision-making rights continue to be restricted to the central, and in some cases provincial and district, governments and the land investing parties, while village authorities are recognised solely as participants, with limited powers, rights, and responsibilities, all tightly regulated by the state. While the right and responsibility for forest tenure and logging are retained by the national and sub-national governmental agencies, according to Art. 39 of the revised Forestry Law, the tasks of developing and implementing village forestry management plans are delegated to village authorities. They are given the responsibilities for

> management and protection of forest, planting and the rehabilitation of degraded forests, the prevention and control of forest fires and encroachment into forest and forestland, with an aim of making village forests rich and supporting the village to become a forest development village.
>
> *(Art. 39, LPDR, 2019a, p. 18)*

Village forestry as a platform for REDD+ initiatives on the ground

As a donor and 'REDD readiness' project, without performance-based payments in place, in the villages the CliPAD project to a large degree operated as any other forestry project. It focused on promoting sustainable forest management and agricultural diversification and intensification by stabilising and minimising shifting cultivation, regulating village forest illegal activities, and introducing alternative livelihoods, such as cash crops and animal raising. As a respondent from the Provincial Forestry and Agricultural Office (PAFO) stated, referring to the objectives and scope of the project activities: 'The most important thing is that we need to acquire funding to support villagers to do cash crops and animal raising activities, so that they will stop doing shifting cultivations'. For this purpose, the key tools used were the existing state policy instruments and practices, such as the land use planning and allocation process and development of village forest management plans. The land use planning and allocation under the project were carried out jointly by provincial and district offices, project staff, village committees, and villagers. In this exercise, the incomplete and inconsistent state land registries were compared with the actual land uses on the ground. The outcome was more accurate land use plans but, in some cases, as in the case of Ban Hmong, led to villages losing land for farming and/or livelihood activities because the state land use plans prevailed in importance.

Strategies used to incentivise the villagers to participate and comply with project aims and objectives included provisions of village development grants for permitted and desired 'sustain-

able livelihood activities'. The discourse about the relationship between forest management, their livelihood, and farming practices on the one hand and climate change on the other was an important strategy for inducing self-discipline among villagers because their way of life was linked to dangerous climate events, many of which they already experience. The term *climate change* was not used as such, but references were made to extreme weather events such as drought, flooding, and frosts. Commenting on village forestry and REDD+, a respondent from an international development partner organisation said that

> Village forestry is the platform for REDD+. Take CliPAD as an example. If you look at it, you see it is about village forestry at its core. So, at this moment they are preparing village forest management plans. But at the end of the day we really should prioritise what the villagers want. But being exposed to so many interventions and projects, villagers just try to follow what is going on. At the end of the day, all suggestions unfortunately come from external stakeholders and experts, not from villagers themselves.

Concerning land rights, community land titling has been promoted by the same international agencies as those leading REDD+ in the country, but this work is done outside of the REDD+ agenda. Those working on village land titling said that the government uses the narratives of lack of villagers' capacity, and in some cases openly tells them that this is not open for negotiation, as suggested in this interview response by an international development partner: 'We have been trying to promote this community titling forever here. But the GoL is just like – forget about it, don't talk about it, don't mention it. It won't happen'. With thin prospects for success and motivations to proceed with REDD+ piloting activities in the villages, critical issues such as land tenure and ownership are by-passed (see also Ramcilovic-Suominen, 2019).

In accordance with the draft Forest Law of 2015, which was applied at the time of the CliPAD project, and which required that village forests had to be used and managed in accordance with Village Forest Management Plans (VFMP), the CliPAD project's central activity in the villages came to focus on setting up such plans. CliPAD proceeded with a plethora of highly technical interventions based on scientific forestry, forest legality, and participation (GIZ, 2016), which included (i) participatory land use planning, demarcation of forest areas, and preparation of a map showing different forest categories; (ii) preparation of two Village Forest Management Plans (five-year and annual management plan); (iii) development of Village Development Funds; (iv) preparation of Village Regulations; (v) Village Forest Management Agreements (VilFoMa); (vi) a Free, Prior and Informed Consent (FPIC) process. These activities are described in a previous work by the first author (Ramcilovic-Suominen et al., 2021), as well as project reports (GIZ, 2016; Koch et al., 2015).

Linking local livelihoods to climate change, and limiting rights and access to forest in the 'REDD+ villages'

In both studied villages, the villagers claimed that REDD+ pilot project interventions have limited their rights concerning all forest-based livelihood activities, including shifting cultivation, tree felling, hunting, fishing, and NTFP collection. These claims of limitation on prior rights are confirmed in the VFM Planning Guideline (GIZ, 2016), which stipulates forest conservation activities and limits, including limits on hunting and fishing according to season and forest land-use category (e.g., conservation, protection, and village production area); and the size, number, and quantity of harvested/collected/hunted goods, products, and animals. These limits were drawn from state decisions and laws and the existing village regulations. In this process, the existing village rules were

cross-checked and updated in accordance with the State Forest Regulations, formalised, and put into writing. For instance, prior to the REDD+ pilot project, permits for subsistence and household activities in both villages – including permits for tree felling for house construction, hunting, fishing, or farming – were regulated using an oral permit system, where villagers orally requested the permit from the village head who was authorised to grant such permits. The village regulations, in accordance with draft Forestry Law of 2015, introduced a need for written permits to be obtained by an application submitted to the village head, who then requested approval from the district forest office. These revised village regulations therefore not only changed the form of the permit system but also shifted the permit granting authority upwards and outside of the village.

Considering the different contexts in the two villages, there would clearly be differences in responses and attitudes to the CliPAD project in the two villages. In Ban Lao-Khmu, villagers appeared to understand the project interventions and even justified them on the basis of environmental reasoning and climate change mitigation. In this village, shifting cultivation had already been largely reduced, and at the time of our fieldwork, many of the men had access to alternative income-generating activities, such as brick making. Moreover, village authorities and members of the forest and land use committees, but also some of the villagers, reproduced the narratives that forest destruction and climate change were caused by their forest livelihood activities, and that those in turn affected their livelihoods for the worse. A villager from the Ban Lao-Khmu explained the project logic as follows:

> It is in order for us to protect against climate change, which causes natural disasters, flooding and kills our harvests. … In the past, we slashed and burned all and every lake dried out, we hardly had water to drink. But now for the past few years we protect forest, and I could say that we have fresh air, forest has become thicker, and we can see water in the lake and river.

In contrast, in Ban Hmong, many villagers were far from satisfied. Many respondents refused to say much when the voice recorder was on. Those who expressed their views did so mainly off the record. Their responses suggested fear of and mistrust in both the REDD+ pilot project and the intentions of the government officials (see also Ramcilovic-Suominen & Nathan, 2020). These fears appeared to be rooted in their pre-existing mistrust in government and donor-led projects, based on their understanding of what had happened to other villages in their province and beyond, when they were involved in different forestry projects. This led to a deliberate lack of attendance at project meetings. In Ban Hmong, it was mainly the village authorities, even if not all of them, who had somewhat positive views of the project. For instance, one traditional village elder in Ban Hmong shared her concerns about the project's intentions and impacts but nonetheless reproduced the narrative that local activities cause climate change: 'Climate is changing; before we did not have a forest protection plan, the weather was hot. But today the weather is getting cooler because we have more forest and more wildlife'. These statements reveal that during the project, the local forest-based livelihoods were framed as one of the drivers of the changing climate, which implies that the local population is one of the culprits. In this way, the project relocates not only the climate change mitigation action (i.e., forest protection) but also the causes and blame for climate change from the collective global down to the local village level, and from the profitable development and industrial-scale agricultural ventures to small-scale subsistence farmers.

Conclusions

Our conclusions draw from long-term research on how village forestry and participatory sustainable forest management in Laos have developed under different donor-supported forestry

interventions and projects, with a particular focus on an empirical case from REDD+ piloting in two villages in the north of Laos. We also outline some key changes concerning village forests and land, brought about by the recently revised Forestry and Land Laws. Our study shows that in the course of the past 30 years, under different state policies and donor interventions, villagers' roles, rights, and decision-making power with regard to village forests have weakened. We trace how the state retracted the short-lived devolution of decision-making power, forest management use, and ownership rights to the villagers. While the revised Forest and Land Laws were awaited with anticipation and hopes for a strengthened village forestry agenda and villagers' rights, these did not materialise in the way expected. The two laws privilege state development projects and investment schemes over local uses and user rights. The laws recognise, but heavily constrain, customary rights, making their implementation questionable, and the villagers remain with thin powers in relation to decision-making and benefit sharing. The criminalisation of various activities and land uses has increased, and practicing shifting cultivation remains heavily restricted.

Concerning participatory sustainable forest management, as a village forestry model in production forest areas, there are three major bottlenecks: 1) a lack of implementation of sustainable forest management and timber auctions; 2) a lack of use and decision-making rights, including communities' customary rights; and 3) a lack of provisions for villagers to benefit from timber extracted from village forest production areas. The timber auctions which aimed to promote fair competition based on supply and demand were operational only in some forest production areas, which disrupted the demand–supply principle required for such auctions to operate. In addition, due to a decrease in harvest quota after PMO No.15 was issued in 2016 (To et al., 2017), as well as the availability of 'conversion timber', which originates from investment and development project sites, and due to availability of cheaper illegally extracted wood (EIA, 2017; Smirnov, 2015; To & Mahanty, 2019), buyers accessed timber outside of these timber auctions.

The issues and questions concerning the allocation of rights to land and benefit sharing of timber royalties, while prominent in the FOMACOP and SUFORD projects, were suppressed in the REDD+ village level implementation. Instead, the discursive space focused on the locally induced climate change causes (especially shifting cultivation) and on proposing solutions (e.g., alternative 'sustainable' forest livelihoods) that separate people from forests. Longer-term rights and responsibilities were suppressed by the focus on short-term transfer of roles and responsibilities, such as financially supported forest management and protection activities, as well as alternative livelihood schemes. While in this chapter we do not enter the debate on the Laotian one-party political system, it is an inevitable conclusion that the authoritarian and highly secretive political atmosphere (Creak & Barney, 2018; Croissant & Lorenz, 2018) diminishes any window of opportunity for an open and meaningful engagement between villagers and governmental agencies.

The external actors seeking to promote certain policies or project interventions in villages, such as REDD+, use village authorities and the established forest and land use management committees as the local contact. This creates a situation where village authorities are increasingly influenced by and accountable to district and provincial authorities and to the donor or development partner, rather than to the villagers they are meant to represent. Villagers, on the other hand, are engaged as grunt labour, being delegated tasks and duties for forest management, indicating the 'short termism' of the interventions.

The space for deliberation between villagers and project staff was limited in the REDD+ village interventions, with problem definition and options to resolve them coming exclusively from actors external to the village. This approach hinders true recognition of villagers, and also recognition and representation of village members of diverse ethnic groups and genders. This

by default implies that their right to self-determination and to social, political, and economic aspirations in relation to their forests are downplayed or ignored. While this is not surprising, considering that Laos does not recognise the different ethnic groups as Indigenous Peoples and therefore has no obligations under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the donor inputs and FPIC under REDD+ have provided little additional support for local peoples' rights to self-determination.

Beyond village forestry as a project and as an idea, we need to remember the socio-ecological and cultural importance that forests have for human and non-human beings alike. These include material and basic needs, safety net and subsistence, food, wood for constructing houses, and firewood and charcoal for cooking and heating, especially for the vulnerable, marginalised, and impoverished members of the community. But the importance of forest also extends beyond the material to spiritual needs and the self-expression of humans and more-than-humans (Celermajer et al., 2021). Forests support the unique and complex web of interactions between plants, animals, humans, and water bodies, and hence to treat them simply as a resource, as is currently done in international and domestic policies and laws and the consequent village forestry approaches, goes against a holistic approach to, and understanding of, forests.

The liability and actions of Western donors in Laotian forestry, including the current REDD+ donors and development partners, have become an important study subject (Broegaard et al., 2017; Cole et al., 2017). Over the years, donors have attempted to promote participation and recognition of customary rights (Broegaard et al., 2017; Cole et al., 2017; Fujita & Phanvilay, 2008). Yet, these initiatives have often resulted in the exclusion of villagers, increased poverty, land loss, and customary rights' insecurity (Creak & Barney, 2018; Ducourtieux et al., 2005; Fujita & Phanvilay, 2008). Our study contributes to this body of literature by highlighting that while REDD+ social safeguards and the FPIC process could be used as tools for strengthening local people's participation in Laos, the REDD+ pilot projects do little to challenge the status quo and the dominant power structure that sustain the lack of deliberative and participatory politics. The reasons include the authoritarian regime but also the donors' own rushed, self-serving, and efficiency-oriented practices (Ramcilovic-Suominen et al., 2021). Donor countries are also criticised for double standards and for demanding more egalitarian, democratic, and participatory processes in the countries where they operate compared to their domestic policies and practices (Arora-Jonsson, 2017). Finland and Sweden, for instance, as long-term development partners promoting participatory forest management and tenure security in Laos (Mustalahti & Lund, 2009; Noren, 2015), face challenges domestically in failing to respect the rights of the Indigenous Sàpmi people (Lassila, 2020; Raitio et al., 2020). Germany, the donor of the REDD+ intervention investigated here, similarly faces a lack of genuine participation in national forest programmes (Winkel & Sotirov, 2011). This is an important, even if not the key, point because it indicates not only a gap between the donor countries' demands and their own policies and practices but also a double standard in global forest governance, where demands and prescriptions are exclusively oriented towards countries targeted by development interventions.

Note

1 The initial SUFORD project funding (2003–2008) was extended in different stages and under different names, including SUFORD Additional Finance (SUFORD-AF, 2009–2013) and SUFORD Scaling Up (SUFORD-SU, 2013–2019). The funding from Finland, however, ceased in June 2017 and the project continued with World Bank funding until March 2020.

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27

DECOUPLING AGENDAS

Forestry reform, decentralisation, and Cambodia's model of community forestry, 1992–2020

Jeffrey D. Williamson, Tol Sokchea, and Julian Phromphen Atkinson

Introduction

By 1993, after the forming of a coalition government and the supposed end to decades of conflict, Cambodia was becoming the petri-dish for the new, post-Cold War liberal order predicated on democracy and market economies. In the words of Yasushi Akashi, the Chief of Mission for the United Nations Transitional Authority in Cambodia (UNTAC), Cambodia was a 'striking demonstration to the world that an intractable conflict can be resolved', and 'a shining example for other UN Member States' (Shawcross, 2000, p. 118). In response, Western governments quickly increased their aid to the small Southeast Asian country. From 1993 to 2003, foreign aid averaged approximately 13 per cent of Cambodia's GDP (Ear, 2007). This was especially apparent in how the international community, through development agencies, the World Bank, and the International Monetary Fund (IMF), engaged with the country's forestry sector. By 2001, almost all major players in the global conservation movement had a 'Cambodia program' (Milne & Mahanty, 2015).

In Cambodia, where 80 per cent of the country lives in rural areas, natural resources are important for individual livelihoods and national development. Consequently, the country's abundant natural resources, including forests, have been heavily contested and highly political throughout the country's history. In the early 1980s, forests were an important part of Cambodia's regional and international position, despite its reputation as a 'pariah state' (a product of its association with Vietnam at the time). Not only did logging contribute to the perpetuation of the country's conflict, but it also formed patronage networks that laid the foundation for the coalition government formed in 1993 (Le Billon, 2002; Milne, Kimchoeun, & Sullivan, 2015). From 1993 to 1995, according to Le Billon (2002, p. 568), a political accommodation emerged between the competing National United Front for Independent, Neutral, Peaceful and Cooperative Cambodia (FUNCINPEC) and the Cambodian People's Party (CPP) that was 'necessary to reassure international donors, who provided half of the national budget, and to bring a minimum of the stability needed to attract private investors'. Meanwhile, both parties were issuing ad hoc permits for forest concessions in a bid to secure revenue, build their own political patron–client system, and centralise their control over forests (Cock, 2016; Milne et al., 2015).

This political–logging nexus has shaped how the country's political elite engage with international donors on forestry reform. In particular, the Cambodian government has acquiesced to

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certain policy reforms that benefit their own positions while implementing other policy reforms in a manner that evades the core political problems (Cock, 2016; Biddulph, 2010). But was this donor–government relationship only present for forestry reform? How did the connection between forests and political power influence other reform processes, such as decentralisation? And how did these separate reform processes – forestry and decentralisation –interact with one another in Cambodia? This chapter explores these questions by examining the parallel development of community forestry and decentralisation in Cambodia.[1] Community forestry, defined broadly as policies and practices that increase the role of local people in governing and managing forest resources (see RECOFTC, 2020), represents an idealised model of decentralisation in the forestry sector. Therefore, community forestry should, in theory, be mutually compatible with larger decentralisation reforms. This chapter, however, argues that the donor–government relationship that developed in Cambodia during the 1990s and early 2000s allowed the Cambodian elites to decouple decentralisation and forestry reform, resulting in a legal framework that has further centralised control over forest resources.

By exploring the connection between decentralisation and forestry reform in Cambodia, this chapter provides further insight into how the Cambodian elite engaged with and adapted externally driven policies to increase control over the country's resources (Biddulph, 2010; Cock, 2016; Un & So, 2011). It also shows how the symbiotic relationship between the government and natural resources has influenced the outcomes of development interventions (Hughes, 2013; Milne et al., 2015). Cambodia's paradox of decentralisation has larger, more global, ramifications as well, showing how political elites can manipulate separate donor agendas to strengthen their own power over forest resources. This strengthens the argument put forward by Ribot, Agrawal, and Larson (2006) that decentralisation in the forestry sector is often implemented in a particular manner that preserves elite interests. Therefore, practitioners must be aware that in the context of neo-patrimonial states, decentralisation in the forestry sector must also be accompanied by stronger institutional reforms.

The politics of aid

Forestry reform

In 1985, Hun Sen, the newly appointed leader, declared a five-year plan to experiment with economic liberalisation and loosen control over aspects of the economy (Cock, 2016; Slocomb, 2003, 2010). At the time, large parts of Cambodia's forests remained intact, with official government sources placing forest cover at over 60 per cent (see Figure 27.1). But the tacit political acceptance of market forces and integration into global markets placed Cambodia's forests in a peculiar situation. As the Philippines and Indonesia experienced rapid deforestation, companies, especially in Thailand and Vietnam, began turning their attention towards Cambodia. By the time funding from the Cold War began to dwindle in 1989, the Cambodian economy underwent, according to Cock (2016, p. 88) a 'rapid involution as existing sources of economic assistance shrivelled', propelling forests into a position of material and diplomatic import.

Cambodia's natural resources soon became an important link in a web of connections between regional militaries, resistance factions, political parties, and Cambodia's own military in the 1990s, each using the political instability to control forest resources, often through concessions (Le Billon, 2002). Yet the 'uncontrolled, avaricious, free-for-all' nature of the forest concessions, as described by the Independent Forest Sector Review in 2004, worried international donors who were watching Cambodia closely (Miller, 2004, p. 3). In 1997, forest concessions covered

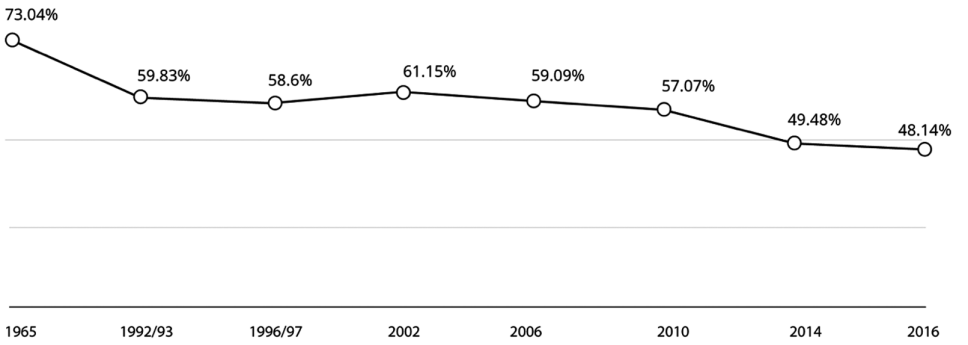


Figure 27.1 Forest cover in Cambodia, 1965–2016 (including oil palm, rubber, and tree plantations). Source: RECOFTC (2020, p. 45).

all available production forests in Cambodia, totalling 6.5 million hectares (Mha) (Poffenberger, 2013). This meant that over half of Cambodia's forests, which spanned across approximately 10.5 Mha in 1996–1997, were dedicated to exploitation (Forestry Administration, 2010). Donors, including the World Bank, which helped design the concession system, were starting to realise the unintended consequences of this approach. The World Bank noted that in 1998 almost 94 per cent of the timber production in the country was illegal, with timber rents taking place off-the-books or logging occurring outside the boundaries of 'legal' or 'formal' concessions (Poffenberger, 2013) (Figure 27.1).

By 1997, rent seeking in the forestry sector moved to the forefront of donors' minds. The IMF, concerned over elite capture in the logging sector, developed a series of funding tranches that followed the principle of aid-conditionality (Cock, 2016). For the World Bank and IMF, conditions for aid were focused on reforming the concession system due to its connection to how the state captured rents. This instigated a series of projects including the World Bank's Forest Policy Reform Project (1997–1998), the Asian Development Bank's Sustainable Forest Management Project (1999–2000), and the World Bank's Forest Concession Management and Control Project (2001–2003). Underlying these projects was a widely held notion that the concession system remained the best way to formally capture logging rents at the central level and invest these rents in other sectors (Poffenberger, 2013). For Hun Sen, who had gained full control over the government in 1998, the parallel budgets from misused concessions remained important but less so (Le Billon & Springer, 2007; Milne et al., 2015). The new political reality provided the CPP with an opportunity to entice donors back. Hun Sen declared a 'personal interest' in illegal logging at the February 1999 Consultative Group meeting held in Tokyo (Cock, 2016, p. 154). The group responded by committing more aid than had been requested. A year later, concessionaires continued to operate with effective impunity (Le Billon & Springer, 2007).

For Cock (2016), the government's willingness to acquiesce to the newly established agenda of concession reform was a result of the CPP's concentration of power and the dissolution of the Khmer Rouge in 1998. The 'accommodation period', as Cock aptly names the period from 1999 to 2001, more accurately reflected the ruling elite's ability to manipulate the reform agenda to their advantage rather than create meaningful change (Cock, 2016). This was especially true given how important forests were during Cambodia's early years of post-war development and, consequently, for its extensive patronage networks (Le Billon, 2000; Le Billon & Springer, 2007; Milne et al., 2015). Despite the international community's role in

bringing about greater transparency and accountability in the concession system, the political realities at the time allowed for Cambodia's elites to use the very terminology of sustainable logging to legitimise previous illegal practices (Le Billon, 2000; Le Billon & Springer, 2007). These early interactions would influence how the government merged and decoupled different reform agendas, including decentralisation, with the forestry sector.

Decentralisation

As the donor community pressured Cambodian elites to formalise the concession system, another set of projects were focused on developing capacities of local officials to manage the influx of aid money. In 1994, the United Nations Development Programme (UNDP) launched the Cambodia Reintegration and Rehabilitation (CARERE) project with a mandate to pilot activities focused on governance and develop new ways to finance local initiatives (Andersen, 2004). Although these projects provided Cambodian development practitioners with on-the-ground experience in navigating the country's patronage networks, they were more externally driven and lacked local ownership, which rendered many of them unsustainable in the long run (Hughes, 2007). By 1996, CARERE had entered its second phase, which was a US$78 million project aimed at delivering rural services from 1996 to 2001.

CARERE II, otherwise known as the Seila Program, was the first large scale effort to develop mechanisms within the government focused on deconcentration over the budget. Two years after Seila began, in 1998, the government passed the Law on Financial Regime and Property of Municipalities and Provinces.[2] The law suggested that Seila was transforming how the provincial government was viewed (Hughes, 2013; Niazi, 2011). Yet the government's move to decentralise fiscal responsibility, like its decision to centralise forest control, was a product of political circumstance. During the mid-1990s, both parties used decentralisation to consolidate local power bases and extend the central state's control (Craig & Porter, 2011; Eng & Ear, 2016). According to Netra Eng and Sophal Ear (Eng & Ear 2016, p. 217), Cambodia's move towards decentralisation continued to grow as conditions began to favour the incumbent government.

The first stage of Cambodia's decentralisation initiatives culminated in the Law on the Administration and Management of the Commune/Sangkat.[3] The law, passed in 2001 around the closing of the first Seila Program, recognised communes as legal entities with specific legislative and executive powers.[4] The law also paved the way for commune chiefs, who headed the council, to be electorally selected. This indicated that the government was moving from deconcentration to democratic decentralisation and expanding the role of local governments (Hughes, Eng, Thon, Ou & Ly, 2011; Niazi, 2011). But when viewed through the lens of the 'accommodation period', the movement from deconcentration to democratic decentralisation reflected another strategy by the government to extend its political base and ensure access to rural populations; decentralisation, similar to forestry reform, was centralising in nature (Eng & Ear, 2016; Hughes, 2013). The ability of the government to mobilise resources for rural development, and in particular, infrastructure, was key to this strategy (Craig & Pak, 2011). Decentralisation was thus, according to Milne et al., (2015, p. 35), a way for the CPP to legitimise their own rule, maintain control over valuable resources, and enhance their own legitimacy in the eyes of the international community (Hughes, 2013; Öjendal & Kim, 2011). The 'accommodation period' thus extended beyond the forestry sector as political elites acquiesced to certain decentralisation reforms that were beneficial to their own power.

Connecting forestry reform and decentralisation? The development of community forestry

By 2002, the Cambodian government seemed determined to curb the anarchical logging practices described by the World Bank and other donor agencies. In July of that year, the government released a policy statement that declared its intent to use conservation and sustainable forest management for the 'sustainable socio-economic development of Cambodia', while incorporating the 'full participation of the private sector and community in conservation and sustainable forest management' (RGC, 2002a).[5] Meanwhile, the Prime Minister issued a moratorium on all forest concessions. A series of laws passed from 2001 to 2003, following the closing of the 'accommodation period', reflected the government's commitment. In 2001, the government passed the Land Law, which defined public, private, and collective ownership, including articles on the immovable property of Indigenous communities who were managing their land under traditional practices.[6] Forests, defined as a 'property that has a natural origin', was declared as public land (RGC, 2001b, Article 15).

The government elaborated on the definition of forests the following year with the Law on Forestry.[7] The law divided the forest estate into Permanent Forest Reserves and Private Forests, each with its own sub-categories and principles, and placed customary user rights under the second article. Forest concessions were not mentioned until Article 10. This new legal framework and the government's moratorium on concessions may have suggested to observers on the ground that the government was willing to create a new legal framework for forestry that abided by the conventional principles of sustainable forest extraction while also reconsidering the role of local communities. This was most apparent, according to the 2004 Independent Forest Sector Review, in the emergence of small-scale community forestry (Miller, 2004). The model of community forestry provided both the government and international donors an opportunity to merge the decentralisation and forestry reform agendas. The model that emerged, however, was more a decoupling of the two agendas rather than a merging. This, in turn, further centralised control over forest resources.

A 'decentralised' model of forest management

Local communities had practised intricate forms of sustainable forest use and management based on customary models long before the passing of the 2002 Law on Forestry. In 1992, the government had already piloted the first 'official' model of community forestry with the help of the Mennonite Central Committee (MCC) in Takeo Province. Soon after, Concern Worldwide, a non-governmental organisation, began working in the western provinces of Kampong Chhnang and Pursat, while the International Development Research Centre (IDRC) worked in Ratanakiri and Mondulkiri Provinces. Meanwhile, the Food and Agriculture Organisation of the United Nations (FAO) began piloting community forestry projects in Siem Reap (Poffenberger & Smith-Hanssen, 2013). These projects were largely spearheaded by dedicated individuals within the government who were working on finding alternatives to the dominant forest concession model (RECOFTC, 2021). For these individuals, community forestry was viewed as the middle ground between conservation and development.

This was a difficult balancing act during the 1990s. Not only was the political economy skewed towards forest concessions, but the larger donor community also supported mainstreaming sustainable forest management principles into the concessions system. Moreover, there was little trust between the government and communities, with the latter sceptical that community forestry was another in a long line of attempts by the government to take their lands.

Community forestry thus operated on the margins at the beginning, with senior government officials 'giv[ing] the impression that they believe that community-led forest management warrants little attention', (Miller, 2004, p. 18). But as reports began to highlight the incompatibility of concessions with sustainable forest management in Cambodia, donors had no viable alternative to put forward. It was within this context that community forestry was able to gather momentum at the legal level. As Hun Sen moved into the 'accommodation period', community forestry may have been seen as another way for the government to appeal to donors, retain aid, and increase its political legitimacy in upcoming elections. Community forestry, for example, was included in the policy reforms that produced the 2001 Land Law and 2002 Law on Forestry, the latter providing the legal basis for the model. Overall, the integration of community forestry into the legal code indicated that the government was moving towards a decentralised form of forest management (Sithirith, M., Honey, H., & Raingsey, P., 2005). The procedural aspect of community forestry, which was largely absent in the 2002 Law on Forestry, was subsequently clarified with the eventual passing of the Community Forestry Sub-Decree in 2003.[8] The preface was even written by Hun Sen himself.

Connected reforms?

These laws were conceptualised and developed as understandings of forestry reform were shifting and while the government began experimenting with decentralisation reforms. Furthermore, these laws, which formalised the structure of community forestry in the country, were ratified while Seila, the capstone decentralisation project, was at the peak of its second phase (2001–2005). The formalisation of community forestry thus fits in Cambodia's larger push for decentralisation, particularly as a method to do so in the forestry sector (Ratner and Parnell, 2011). During the previous decade, however, the two processes – forest management and decentralisation – had little overlap. Even though the Seila task force helped villagers develop a proposal for community forestry in Pursat Province, Seila's first phase did not explicitly support environmental concerns (Kurauchi, La Vina, Badenoch, & Fransen, 2006). Natural resource management remained secondary despite the importance of natural resources for rural development (Sithirith et al., 2005).

At the policy level, the legal framework was developed in a way that decoupled decentralisation from forest management. This would prove to be problematic for the development of community forestry. For example, the 2001 Law on Administration and Management of the Commune/Sangkat provided the communes with the responsibility to protect and conserve the environment as well as the accountability derived through local elections. However, the law explicitly stated that Commune/Sangkat Councils had no power over forestry (RGC, 2001a, Article 45). Under Article 45, which states the specific arenas where the council has no power, forestry is the only natural resource referenced. The 2002 Law on Forestry reduced the commune's authority over these issues as well. The law dictates that only the Ministry of Agriculture, Forestry, and Fisheries (MAFF) can designate and approve an area as a community forest (RGC, 2002b). The role of the commune council in the process of authorising and managing a community forest is not mentioned. According to Oberndorf (2006), commune councils were only able to support the Forestry Administration's provincial officers with the identification of different land uses in their commune.

It is possible that if decentralisation and forestry had been considered in parallel and as interlinking reform processes, then a more coherent legal framework could have been produced that placed more decision-making power over forests in the purview of locally elected officials and local communities. However, since the two reform processes were decoupled, two separate legal frameworks were created that often contradict one another. This was particularly apparent in how forestry was excluded from decentralised reform, which consequently provided ambiguous

lines of authority for locally elected communes and minimised local decision-making for communities. Local authorities were not given a proper mandate to act, forced to operate within a rigid bureaucratic state structure that limited their ability to respond to their community's needs (Kim & Öjendal, 2011). As argued by Craig and Porter (2011), sub-national authorities were thus required to operate in a system of layered governance, where funds could be obtained from party lines and donor aid, with the former being more profitable and the latter being more legitimate. In other words, local actors kept illegal activities behind 'legitimate laws, programs and projects' (ibid, p. 379).

Despite a legal system that had decoupled decentralisation and forest management, it seemed that by the mid-2000s, Seila could still link the two. One project, which was jointly funded by Denmark and the United Kingdom, provided US$ 20 million of grants over four years to sub-national authorities to work on providing communes with clear mandates over land. The political realities, however, limited the actual authority commune councils had.[9] The project, according to one evaluation, merely followed a standard template, which 'did not adequately reflect local conditions' (Craig & Porter, 2011, p. 397). It is therefore important to note that commune councils were, and still can be, an obstacle to successful community forestry. Not only did the political economy of land use during the early 2000s provide little incentive for commune councils to fully support community forestry, but the increase in economic land concessions (ELCs) also provided another route to secure political and financial capital. By 2005, ELCs became, in essence, a more convoluted form of forestry concessions, with many companies being suspected of receiving licenses to simply 'clear' land for agriculture (Slocomb, 2010). The timber harvested from these clearing operations was then sold by a consortium of powerfully connected actors (Milne, 2015). In sum, the conceptualisation of *how* to link decentralisation with forestry reform was too rigid, just as was the case with forest concessions. Instead of approaching decentralised forest management as a model that is built on customary rights of forest users, the government approached it as a top-down process. Rather, the decoupling of decentralisation from forestry reform created a model of decentralised forest management, represented through community forestry, that paradoxically centralised decision-making power while symbolically adhering to a decentralised forest management approach on paper.

The paradox of decentralisation: Codifying forest power

By excluding forests from the decentralisation framework, the central government was able to decouple two mutually compatible reform agendas, limit the power of local institutions, and centralise its own authority over forests. The codification of community forestry was the outcome of this decoupling strategy and thus fits into a pattern of engagement between donors and Cambodia's elites where, according to Cock (2016, p. 173), 'policy reforms, including the array of institutional innovations countenanced, tended to be adopted if they assisted in the centralization of control over forest resources'. The decoupling strategy meant that early legal frameworks for community forestry did not translate to the democratic decentralisation that was happening under the 2001 Law on Administration and Management of the Commune/Sangkat. Instead of providing more authority and decision-making power to local communities, the legal framework only devolved administrative responsibilities (Nathan & Boon, 2012). This diluted model of forest decentralisation paradoxically further centralised control over forests in the country, with ramifications for how community forestry is practised today.

Most notable is how the government framed the definition and process of establishing community forests (Sithirith et al., 2005). By declaring all Permanent Forest Reserves in the country as property of the state, the 2002 Law on Forestry undercut customary models of management

that had existed in the country for centuries (Poffenberger & Smith-Hanssen, 2013). To compensate for this, Article 40 provided communities with customary user rights for non-timber forest products. Communities, however, did not have the right to define what was exactly used (management rights) or who could use what (exclusion rights) until they entered into a community forest agreement and a community forest management plan. Community forestry thus became an important channel to operationalise the rights outlined in Article 40. In essence, as described by Persson and Prowse (2017, p. 70), the only channel for 'institutionalising democratic decision-making and devolving rights over forest governance to local communities' became predicated on a complex set of regulatory frameworks dictated by the central government. This, in turn, constrained a community's ability to define management and exclusion rights to specifically defined zones instead of the larger forest estate.

According to Article 10 of the Law on Forestry, the Permanent Forest Reserves are broken into three categories: Production Forest, Protection Forest, and Conversion Forest. Community forests could only be established in Production Forests, meaning that community forests are classified as a model of forest management that requires sustainable use and the production of timber and non-timber forest products. Communities, however, are not allowed to harvest timber – one of the main motivations for initiating a community forest and part of the specifications for Production Forests – until five years after their community forest management plan is approved.[10] The plan is a highly technical document that requires communities to specify management activities in line with centrally dictated guidelines. To date, no community has been able to legally harvest timber from their community forest in Cambodia.[11]

Besides defining where customary rights could become legal and statutory, the 2002 Law on Forestry and the 2003 Community Forestry Sub-Decree also provided guidance on the establishment process. Either a community can request an area of the Permanent Forest Reserve, or the Forestry Administration identifies areas suitable for a community to manage. Yet the actual designation of a community forest depends on an assessment of the area, which is done through the Forestry Administration with limited support from local authorities (Oberndorf, 2006). This creates a system of identification and development that is primarily conducted by authorities of the central government, converting the process from a horizontal discussion of land use between communes and communities to a vertical decision by forestry officials. For communities who move through the process of establishing a community forest, ownership rights are still limited. Under the Law on Forestry and the Land Law, all forest land in the Kingdom is owned by the government. Community forests could only be leased and re-negotiated every 15 years. Not only is this timeframe too restrictive for the sustainable production of timber, but it is also not feasible for reforestation efforts. For example, the same year community forestry was codified, one study found that 67 per cent of community forests were located in areas defined as 'heavily degraded' or having 'little to no forest' (Biddulph, 2010).

By 2004, it was clear that community forestry was not thriving in this legal framework. The number of approved community forests had only reached 150, most of which had been the same community forests piloted in the 1990s (RECOFTC, 2021). According to the International Forestry Sector Review, investment in community forestry was minimal. The review noted that not much had changed, with land tenure continuing to be practised based on customary practices, informal arrangements with commune councils, or 'the rule of might' (Hobley, 2004, p. 7). This observation highlighted the inherent ambiguity of the legal system that communities now had to navigate to legalise and secure their customary tenure rights. In sum, communities were reliant on commune councils, which had little legal standing with community forests, within a political economy that prioritised rents coming from economic land concessions (RECOFTC, 2021).

Solidifying control, finalising the disconnect

The slow progress on community forestry and lack of tangible benefits resulted in a greater push by civil society and donors to request clearer guidelines on how to establish community forests. In 2006, the Community Forestry *Prakas* (guidelines), which had been drafted in 2002, was finally enacted as a set of legal guidelines for establishing community forests.[12] The Prakas was supposed to be the guiding principles for how to set up a community forest, how to establish community forest management plans, and how to ensure that a community forest could be implemented correctly.

From the beginning, the guidelines were complicated, lengthy, and inefficient, which meant that implementation of community forestry was still a major problem (Carson & Kalyan, 2009). They also further tightened government control over forest management by outlining the conditions for which a community forest could be terminated and clarifying the roles and duties of community forestry members. The 15-year lease could be terminated if the government decided that 'there is another purpose for which provides a higher social and public benefit' to the Kingdom (RGC, 2006, Article 31). The ambiguity in the clause, as well as the lack of substantial grievance mechanisms, left communities dependent on the central government to define what constitutes a higher social and public benefit. In addition, Article 7 states that the first role and duty of a community forest member is to 'follow the instruction of the Forestry Administration and MAFF'. Consequently, the system misplaced accountability. Instead of being downwardly accountable to the community themselves, elected community forest committee members were instead accountable to the Forestry Administration (Nathan & Boon, 2012).

After the Prakas was passed, there was a quick uptake by non-governmental organisations in the establishment of community forests. As before, the political economy of land use generated a sense of urgency amongst practitioners. Economic land concessions were being allocated at an astonishing speed. In 2008, almost 1 Mha of economic land concessions had been granted compared to just 60,000 hectares of community forest (see Figure 27.2). This urgency led to the establishment of 353 community forests by 2008; however, only 127 were officially approved by MAFF (RECOFTC, 2020).

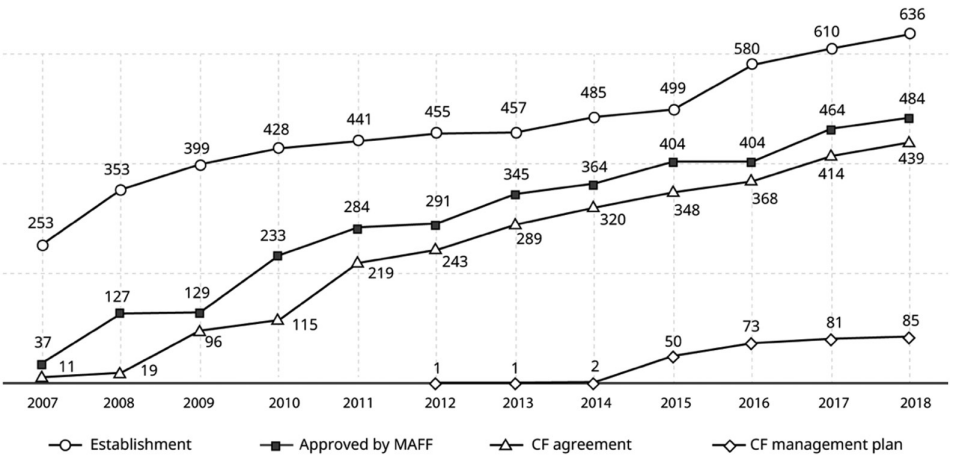


Figure 27.2 Comparison of area under Community Forestry and Economic Land Concessions in Cambodia, 2002–2010. Source: Dahal et al. (2011, p. 21).

Besides clarifying the steps to establish a community forest, the 2006 Prakas also clarified the space where local authorities could participate in community forestry. According to the Prakas, the community is required to work with the commune council to develop a community forest management plan, one of the many requirements to obtain a community forest. The commune council is also responsible for signing the management committee's by-laws (RGC, 2006). Regardless, the document makes it clear that the centralised Forestry Administration has the right to legalise a community forest. The 2006 Prakas thus solidified the commune council's role in forestry: the commune council was to support the central government.

The 2006 Prakas was complemented by the 2008 Organic Law.[13] The Organic Law specified the roles and responsibilities of provincial and district governments, but also provided a set of criteria for transferring functions and resources from the national to the provincial or commune levels. This included, according to Van Acker (2010),

> The function's relevance to the area of a council, the extent to which a council will be able to practically manage a function, how beneficial and useful the function will be within the area of a council and the impact the function will have within the area of a council.
>
> *(p. 131)*

This suggests that forests would be included; however, similar to previous laws related to decentralisation, the commune council's mandate over forestry remained ambiguous. Despite the relevance of forestry to the area under the jurisdiction of a commune council, it was still excluded (Van Acker, 2010). The 2006 Prakas and 2008 Organic Law finalised the decoupling between forestry reform and decentralisation reform in the late 1990s and early 2000s. The consequence of explicitly leaving forestry outside the realm of legitimate decentralisation reform was that community forestry became embedded between two parallel structures of authority. On one hand, it required following a systematic process outlined and determined by the central government in Phnom Penh. Yet it also required close participation with the local authorities who were responsible for commune development. Community forestry, therefore, had to exist within a forest governance system that was vertical while requiring co-operation and co-ordination that was horizontal. This has inhibited the implementation of community forestry models to this day.[14]

Conclusion

By the time community forestry was declared as one of the six components in Cambodia's National Forest Program in 2010, the legal framework for community forestry had reached its peak. The goal, according to the plan, was to have 2 Mha of community forests by 2029. Ironically, these 2 Mha were all that was left after the other goals for protection and production forest had been established (RECOFTC, 2021). The 2010 National Forest Program was a symbolic ending to Cambodia's first large-scale efforts at forestry reform and decentralisation, which reached back to 1992 with the introduction of the first community forest in Takeo. Community forestry, as the closest form of decentralisation of natural resources in the country, was relegated last.

Since 2010, community forestry has slowly overcome the legal restrictions described in this chapter. Dedicated individuals at the community level, the government, civil society, and the international community have worked to push community forestry towards the centre of think-

ing on forest management in the country. These efforts have also been coupled with activities focused on integrating decentralisation and forestry, including from donors like the World Bank who had led the previous centralising reforms in the 1990s and 2000s. In Cambodia's Cardamom Mountains, for example, a project funded by UNDP in 2012 piloted new ways to use community forest management plans to minimise deforestation and alleviate poverty (RECOFTC, 2021). The project looked at how community forests could be integrated into the commune land use plans, furthering the integration of decentralisation and forestry reform. This model contributed to the increase of management plans from two in 2014 to 73 in 2016 and provides an example of how the ambiguous legal frameworks have also been contested at the ground level (see Figure 27.3).[15]

This chapter has sought to explain how the government decoupled the two reform processes and the consequences of this for community forestry in the country. As such, this chapter has bypassed attempts to describe an ideal model of community forestry in Cambodia. It is quite possible that one does not exist, and that more attention should be paid to the local context of each community forest. Any such model should, however, recognise full user rights and be situated in areas where the resources actually provide economic benefits to communities. The current national model in Cambodia thus falls short of the stated desires and principles of democratic decentralisation and sustainable forest management as intended by international development interventions.

There are, however, tangible steps Phnom Penh can take to support the most recent progress. As this chapter suggests, commune councils can both assist and impede successful community forestry. The central government could, therefore, revise legal codes to integrate forestry into the decentralisation laws. These revisions should occur concurrently with capacity development programs to ensure communes have the full financial capacity and political will to support local initiatives. The result would be a more integrated process of decentralised forest management in the country, where decision-making power rests in the hands of local communities who are able to seek technical support from centralised agencies.

Nonetheless, there is still a long way to go. In 2018, there were 636 community forests established in the country according to government data; of these, 484 were approved by MAFF and only 85 had successfully developed community forest management plans (See Figure 27.3). This

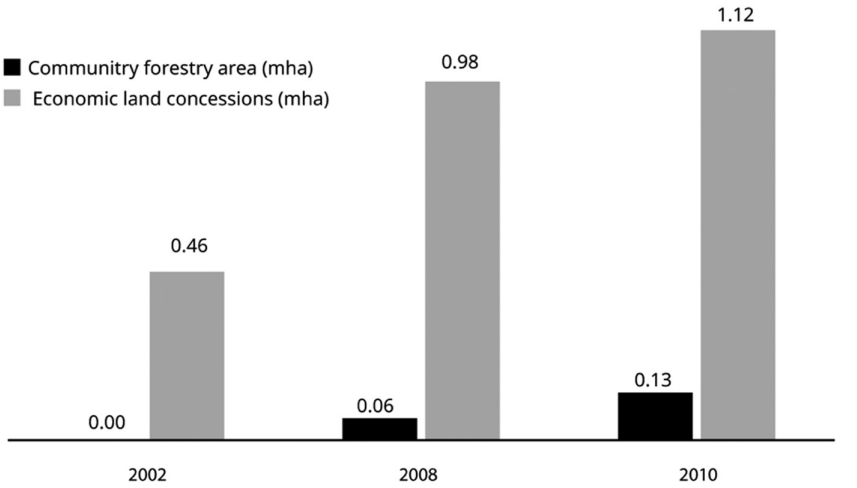


Figure 27.3 Number of official community forests in Cambodia, 2007–2018. Source: RECOFTC (2020, p. 47).

represents approximately 362,209 hectares of forests, totalling 18 per cent of the government's goal under the 2010 National Forest Program. Despite these low numbers, research suggests that in certain parts of the country, community forests have been positive for forest conditions (Lambrick, Brown, Lawrence, & Bebbers, 2014). However, as the first round of community forests come under review following their 15-year lease, it is uncertain how the government will assess their progress. As noted by Persson and Prowse (2017, p. 77), community forests are 'held accountable for forest loss they cannot realistically be expected to prevent'. Meanwhile, jurisdictional reforms in 2016 transferred 74 ELCs from the Ministry of Environment (MoE) to MAFF and 18 protected forests and production forests from MAFF to MoE. These reforms are seen as another tactic by the ruling party to exert its control over land (Loughlin & Milne, 2021). This may, in turn, change the significance of community forestry for MAFF.

As this chapter has argued, the slow progress of community forestry in Cambodia is a direct result of the policy environment and political economy in which its legal framework was developed and designed during the late 1990s and early 2000s. Community forestry presented the donor community, as well as the government, with an opportunity to merge decentralisation and forestry reform. Yet the government was able to decouple the two institutional reforms, resulting in a model of community forestry that was a diluted form of devolution and deconcentration. Rather, the decoupling of reforms and the codification of community forestry paradoxically allowed for the further centralisation of forest power (see Ribot et al., 2006). As the current political landscape continues to shift and influence the development of the country's new Environment and Natural Resources Code, as well as the amendment of the Law on Forestry, it is imperative that future research builds on these findings to fully explore the relationship between community forestry, decentralisation, and forest power in Cambodia.

Notes

1 We use Larson and Soto's (2008, p. 216) definition of democratic decentralisation, which has 'representative and downwardly accountable local actors who have autonomous, discretionary decision-making spheres with the power and resources to make significant decisions pertaining to local people's lives'. This is compared to administrative decentralisation, or deconcentration, which is when power and/or administrative functions are transferred from the central ministries to their line agencies (ibid).
2 Preach Reach Kram/CH-RKM-0298/03/25Feb98
3 Preach Reach Kram NS/RKM/0301/05
4 Cambodia's sub-national governance level includes Phnom Penh (capital) and 23 provinces, 194 districts and municipalities, the latter which is divided into 1,633 communes and sangkat (urban communities). As per the 2001 Law on the Administration and Management of the Commune/Sangkat, commune councils are elected by popular vote. Commune councils select village chiefs, which is the lowest level of governance (Milne et al., 2015).
5 This is an unofficial translation of the Royal Government of Cambodia's statement on forestry number 57 Sor Chor Nor, 2002.
6 Preach Reach Kram NS/RKM/0801/14.
7 Preach Reach Kram NS/RKM/0802/016.
8 No: 79 Or Nor Krar. Bor Kar.
9 Biddulph (2010) provides insight into how political realities shifted geographical distribution of land titling programs in Cambodia.
10 This is a common problem with community forestry. For more information on benefit-sharing in community forest management, see Mahanty, Guernier, and Yasmi (2009).
11 To the authors' knowledge at the time of writing.
12 This is an unofficial translation of the Royal Government of Cambodia's Prakas on Guideline on Community Forestry. No: 219 Prar Kar. Kar Sar Kar. 2006.

13 Royal Kram No. NS/RKM/0508/017

14 Robin Biddulph (2010) provides an excellent analysis of another government strategy to evade meaningful community forest reform. Biddulph coins the term 'geographies of evasion' to indicate a space paradigm where solutions to issues such as land rights and poverty reduction miss the very problems they are claiming to address. Community forestry was relegated to degraded land with low economic vitality. Biddulph's model became a key part of the donor–government relationship following the passing of the necessary legal codes and the switch by donors to focusing on poverty reduction practices in 2004.

15 This topic is, unfortunately, not discussed in this paper but serves as an important starting point for future research on how the inherent ambiguity that results from the tactics of policy adaptation and evasion described by Cock (2016) and Biddulph (2010) is contested at the ground level and used for communal advantage.

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28

LIBERIA'S PRIVATE USE PERMITS

Elite capture and dubious community title documents

David Young, Silas Kpanan'Ayoung Siakor, and Jonathan W. Yiah

Community rights and Liberia's conflict

Liberia's evergreen and moist semi-deciduous forest ecosystems constitute the largest remaining blocks – some 42 per cent – of the Upper Guinea Forest of West Africa (EPA, 2017). The country has nearly 4.4 million hectares (Mha) of forested land (Metria Geoville, 2016), and is classified as one of 36 hotspots in the world that are both biologically rich and deeply threatened due to anthropogenic habitat loss (Conservation International, 2020). Over a third of the country's population of 5 million lives in and is directly dependent on forests (World Bank, 2018), but even in the urban areas, forest resources provide food, fuel, building materials, medicinal plants, ecosystem services, etc.

Liberia is one of only two countries in Africa commonly described as having never been colonised. Its origins as a nation state lie in the voluntary settlement of some 15,000 freed slaves from the United States between 1821 and 1862, made as part of an effort to achieve 'the gradual separation of the black from the white population' (Finley, 1834). Unlike European colonists, these early American Liberians 'set about systematically purchasing the lands they needed for settlements, albeit at knock down prices' (Alden Wily, 2007, p. 17).

Despite American Liberians being only 3 per cent of the population (FCNL, 2003), some 40 per cent of the country was purchased in this way. Furthermore, 133 years of one-party rule eroded collective customary rights. First, purchased land was mainly coastal, and indigenous Liberians were hired to work in houses, farms, and enterprises. Next, formal independence from the 'American Colonization Society' in 1847 provided the basis for political control of the hinterland and impetus to further dilute customary rights (Alden Wily, 2007). Whereas introduction of Aborigines Land Grants in the 1930s enabled formalisation of collective customary land ownership in the hinterland, the passage of the Aborigines Law in 1956 reduced this to only the right to occupy and use land (De Wit, 2012). Much like the situation in colonies, Liberians became 'no better off than their counterparts throughout the continent … in effect permissive squatters on national or "public lands"' (Alden Wily, 2007, p. 19).

The establishment of the Firestone rubber plantation in 1926 set the course for significant parcels of Liberia's land to be leased to agribusiness, mining, or logging concessionaires. During President William Tubman's Open Door economic policy, 'a majority of the government's revenue came from natural resources but the profits accrued disproportionally to landowners,

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political elites and foreign businesses, leaving the country underdeveloped and the population disenfranchised' (Beevers, 2015, p. 29). The absence of any meaningful policy on concessions meant that 'until 2002, management of Liberia's forests … was done in the absence of a coherent legal framework' (UNEP, 2004, p. 49). As a consequence, 'in the 1980s, the logging industry expanded unsustainably – producing almost three million cubic meters a year' (Woods, Blundell, & Simpson, 2008).

Samuel Doe's coup d'état, in 1980, led to two decades of kleptocratic leadership and brutal civil conflict that took the lives of some 250,000 people, about one in eight of the country's population (TRC, 2009). Both Doe – Liberia's first indigenous leader – and Charles Taylor, who overthrew him in 1989, used the rhetoric of community rights to garner popular support and accumulated power, money, and patronage from the timber industry (Blundell, 2008). While contested control over the country's land and natural resources was a driving force for these years of civil unrest, it is rooted in Liberia's foundation in the mid-19th century.

The first authoritative evidence of the sale of timber being used to purchase weapons was in a report in late 2000 from a Panel of Experts put in place by the UN Security Council to monitor UN sanctions in Sierra Leone (UNSC, 2000, para. 49). Investigative non-governmental organisations (NGOs) such as Global Witness provided detailed evidence of 'several suspicious incidents in the ports of Liberia and Côte d'Ivoire where a strong link between the Liberian logging industry and the shipment of armaments was vital' for arming Taylor's forces in Sierra Leone (Global Witness and ITWF, 2001, p. 7). A subsequent authoritative assessment found that 'half of the 70 existing concessions were demonstrably associated with generating and channelling illicit funds to warlords and criminals to support civil disturbance, insurrection, usurpation of property and corrupt business practices' (Rochow, Simpson, Brownell, & Pierson, 2006). A later Panel of Experts report, focussed on Liberia, made a clear recommendation 'that the United Nations should impose a ban on all round log exports from Liberia' (UNSC, 2001, para. 40).

A UN Panel of Experts' analysis noted that President Taylor allocated 5.7 Mha to logging concessions, about six times the 2020 area under logging permits and '95 per cent of the total area available for concessions [at the time] … apparently without compensation to previous concessionaires' (UNSC, 2004a, para. 108). The UN Security Council placed sanctions on all timber products originating in Liberia in May 2003 (UNSC, 2003a).

The effect was immediate. Within three months, Taylor was in exile in Nigeria, and peace negotiations held in Ghana had concluded. Liberia had UN peacekeepers and a National Transitional Government (NTGL) with a two-year mandate to prepare for elections. A subsequent Panel of Experts report was unequivocal about the links between logging revenues and violence: 'During the Taylor regime, militias represented one of the largest sources of violent conflict in rural Liberia. In many cases, ex-generals ran timber companies … in other cases, the militias were paid by local timber companies' (UNSC, 2004a, para. 115).

New rules: Liberia's post-conflict recovery

The sanctions were renewed in December 2003, with the condition that Liberia 'take all necessary steps to ensure that government revenues from the Liberian timber industry are not used to fuel conflict … but are used for legitimate purposes for the benefit of the Liberian people' (UNSC, 2003b, para. 10-11). Continued failure to put the necessary steps in place resulted in these sanctions being renewed in December 2004 (UNSC, 2004), and a year later (UNSC, 2005).

In early 2004, Liberian CSOs called for wide-ranging reforms starting with an independent review of the logging sector (Siakor, 2004). Their proposal was embraced by the Liberia Forest

Initiative, a donor and international NGO coordination group, which included it in an 'Action plan for forest sector rehabilitation and reform' in June that year (Liberia Forest Initiative, 2004).

In response, in July 2004, the NTGL created an 18-person committee to review all 70 logging concession agreements in the country (McAlpine, O'Donohue, & Pierson, 2006). After two false starts, the third phase of the review was extremely thorough, took a full year, and ran to hundreds of pages. The Liberia Forest Initiative summarised that:

> The Committee determined that no concession holder complied with the minimum requirements for operating under the rule of law in Liberia. Invalid concession procurement, non-payment of taxes, support to militia and involvement in the arms for timber trade were cited in the report as some of the issues of non-compliance. The key recommendations of the Committee's report are that the NTGL should cancel all concessions and swiftly move to reform the timber sector.
>
> *(Liberia Forest Initiative, 2006)*

Given that the exploitation of land and forests had been a root cause of the conflict, there was momentum to reform both land rights and forest management legal frameworks, but the need for sanctions to remain in place until major reforms were undertaken was also clear. Following the first post-conflict general election in 2005, newly elected President Ellen Johnson Sirleaf issued Executive Order No.1, which declared 'all purported forest concessions null and void ab-initio – including "concession agreements", "management contracts", "non-concession operator permits", "forest management utilization contracts", and "salvage permits"' (Executive Mansion, 2006, para. 2).

The Executive Order went on to lay out the basic requirements for a wholesale redesign of the legal framework. In 2006, a ground-breaking National Forestry Reform Law was passed. For the first time, forest legislation in Liberia acknowledged some rights of forest-dependent communities; it offered space for an inclusive process in decision-making and committed to a benefit-sharing mechanism for communities affected by concessions.

The National Forestry Reform Law mandated four types of logging permit: Forestry Management Contracts, or large-scale, long-term concessions; Timber Sales Contracts, for small parcels of forest likely to be converted to non-forest use; Forest Use Permits, primarily for non-timber forest products; and Private Use Permits (PUPs) (GoL, 2006). The last category acknowledged that timber might be held on private land and could be exploited by a commercial logging company provided it had the consent of the landowner. Thus, at that time there was no recognition of collective customary ownership of forests, nor mandate for community management rights. Advocates of secure customary land tenure and community forest rights noted the law 'fails to recognise pre-existing customary interests in Liberia's forests, perpetuating instead the legislative paradigm that Liberia's forestland is public and de facto government land, free of the "tribal" interests' (Lomax, 2008, pp. 16–17).

The law did, however, provide a window of opportunity to further community rights by stating 'the [Forestry Development] Authority shall, within one year of the effective date of this law, present to the legislature for consideration and passage a comprehensive law governing community rights with respect to forest lands' (GoL, 2006, Section 10.1(c)). The law provides that a community rights law and regulations would 'grant to local communities user and management rights, transfer to them control of forest use, and build their capacity for sustainable forest management' (GoL, 2006, Section 10.1).

In November 2007, European NGO Fern and Liberia's Sustainable Development Institute (SDI) published an authoritative study of land tenure in Liberia (Alden Wily, 2007) that became

the central focus of civil society advocacy for land tenure reforms and community rights with respect to forestry. The SDI and other Liberian NGOs pressing for reforms envisaged a three-step strategy: first, include an opening in the National Forestry Reform Law; second, draft a community rights law that gave community ownership to forest land; and third, draft a land rights policy and then law that would extend and broaden these rights. The second of these took three years to negotiate, and the Community Rights Law with Respect to Forest Lands was passed in 2009 (GoL, 2009), although its implementing regulations were somewhat rushed (in 2011) and required wholesale revision in 2017 (FDA, 2011, 2017).

Following the tentative lifting of UN sanctions on timber in June 2006 (UNSC, 2006), the passage of the National Forestry Reform Law in September that year, and of its core implementing regulations the following year (FDA, 2007), the sector was once again open for business. Some of those involved with logging companies that had operated during the war re-emerged, particularly at the level of local operational managers and amongst some politicians who retained an (illegal) stake in some companies. New international players arrived and quickly took advantage of the local knowledge of both these types of people – to locate the timber-rich forests and to subvert the concession allocation system, respectively.

The response: Elite capture

With the legal framework in place, and considerable external technical and financial support to conduct competitive auctions for logging permits, seven large-scale concessions were allocated in 2008–2009. Concerned about the fragility of the sector despite the lifting of sanctions, the UN Security Council continued to instruct its Panel of Experts to monitor the sector. Following the auction of the first three concessions in 2008, the Panel documented in detail how, after the auction but before signature by the President or ratification by the national legislature, the concession agreements were amended. Payment of land rental – the primary basis for the competitive tendering process – had been changed from an annual amount to a one-off payment, potentially leading to losses of US$ million in revenue for the Government of Liberia (UNSC, 2008). Although these revisions were overturned (UNSC, 2009), it was clear that for the industry it was business as usual. Importantly, given the new era of communities' rights to a share of the revenues from commercial logging (as celebrated when the National Forest Reform Law was passed, 30 per cent of this revenue stream was earmarked for communities), these beneficiaries now stood to lose it, without any opportunity to contribute to the decision to do so.

Further attempts to reduce the fiscal burden have been more successful. Although a 2010 An Act to Abolish the Payment of Annual Land Rental Bid Premium on Contract Area and Merging of Export Taxes into Stumpage/Production Fee in the Forestry Sector of the Liberian Economy was reportedly passed by the legislature, but subsequently vetoed by the President (UNSC, 2010), three years later a more elaborate bill did pass (GoL, 2013), in which the abolition of this area-based payment was promised to be replaced by an equivalent volume-based tax. This never happened, and is almost impossible to achieve, as an NGO critique pointed out at the time (CS-IFM and NGO Coalition, 2014). Finally, in 2017, another law was passed that gave companies a three-year period to write off unpaid tax arrears against ill-defined and unmonitored 'investments' (GoL, 2017; Global Witness, 2017).

The pressure to make these changes might be interpreted as the push and pull of a democratic process, whereby citizens and the industries that drive their economy are free to lobby for legislative change in their interests. However, it was more insidious. There is evidence that both before and after the award of the first three Forestry Management Contracts in 2008, executives from logging companies were colluding with officials in the FDA.

Between the first (2010) and second (2013) attempt to reduce bid premiums the logging companies felt that – despite the money they were charged being *voluntary* bids in a competitive process – they were unable to pay, and huge arrears built up. At the same time, the FDA appeared to lose interest in allocating large-scale, long-term concessions, and none have been awarded since 2009. On the one hand, the Authority received criticism for its failure to follow – or even to understand – the new legislative framework for permit allocation (SDI, 2009; 2010; Pichet, Laval, & de La Rochefordière, 2009). On the other, the forests had lacked any meaningful control in recent years and were suffering increased pressure from small groups of freelance artisanal chainsaw operators (including ex-combatants) who were seeking an income and responding to local demand for reconstruction timber. As a result, the FDA had struggled to produce convincing inventories of the likely commercial timber that it could offer through any bidding process (World Bank, 2012). This combination of factors led logging companies to strengthen their political connections and look for other, cheaper, and easier ways to access timber.

The fraud: Land-grab in the name of communities

Private Use Permits are included in the National Forest Reform Law as the means by which the state can authorise logging on private land, and are issued to the land owner or an entity that has written permission from the land owner to undertake a commercial use (De Wit, 2012; GoL, 2006). Any such permit is founded on a contract between a logging company and a private individual, and the state would have no right to area-based fees or taxes, but could charge stumpage tax in the usual way (GoL, 2006).

In 2009, two PUPs were issued for 203 hectares and 4,058 hectares to two landowning individuals. When the legality of these were questioned by Liberian NGOs, no more were issued. However, by early 2012, and following a change in the leadership at the FDA, there were 25 Private Use Permits (PUPs), covering a further 690,000 hectares (NGO Coalition of Liberia, 2012). Of these, 17, amounting to over 1.1 Mha, were issued on a single day, 6 October 2011 (SIIB, 2012). By the end of 2012, this had increased to 65 PUPs, covering over 2.5 Mha, nearly a quarter of Liberia's entire land area (SIIB, 2012), or 40 per cent of its forests, and all issued to 'communities'. A single Malaysian-backed company controlled 10 per cent of Liberia's land area through its web of local subsidiaries (Global Witness, SAMFU & SDI, 2012b).

The National Forest Reform Law imposed comparatively few obligations on PUPs, and the ten core regulations did not cover them. By exploiting these and other legislative loopholes, PUP holders did not have to compete for their permits, could clear the forests completely, and paid much less revenue to either the state or communities. The PUPs permitted companies and FDA to coerce community elites to participate in a criminal enterprise of fraud and corruption.

Dubious title deeds

Collective land title documents formed the basis of this massive, and rapid, allocation of forests to logging companies. The 'private ownership' required to obtain a permit was often another type of antiquated and unverified community land title, some of which were blatantly forged. An examination by Liberia's Land Commission of the land title documents underpinning 59 of the PUPs concluded, 'nearly all of the Certified Copies of deeds which we have examined have multiple irregularities, such as dating and signature inconsistencies. Signature fraud appears widespread' (Land Commission of Liberia, 2012, p. 69).

Researchers heard local chiefs say their signature had been forged, and documents needing endorsement by Liberia's president had been 'signed' years before the person in question took office. One NGO investigation noted that of ten communities visited, 'local leaders in six cases stated they did not believe deeds to their land existed', and, of the deed documents as a whole 'copies are very poor, leaving open the possibility that many additional deeds have been forged' (Global Witness, SAMFU & SDI, 2012b, p. 3).

PUPs never intended for collective titles

PUPs also violated the Community Rights Law, which is clear that forests on land with collective titles in existence in Liberia must be regarded as Community Forest Land, and governed under this law (GoL, 2009). In violation of this law, PUPs were being applied to collectively owned community land, denying communities the right (and obligation) to 'set up governance structures and operational plans to manage them in a participatory and accountable way' (Global Witness, SAMFU & SDI, 2012b, p. 3).

Research for the Land Commission laid out the parameters for each type of title, which clearly advised that almost all explicitly applied to collective land ownership (De Wit, 2012). Hence, the Land Commission was clear on the misappropriation of such documents for community forestry: 'The Commission therefore recommends that all PUPs awarded on the basis of land deeded to "the people of …" be cancelled and appropriate licenses be issued for community logging and forestry activities under the provisions of the Community Rights Law' (Land Commission of Liberia, 2012, p. 69).

A further concern was the risk of uncontrolled complete forest clearance, potentially of over a third of Liberia's forests (Global Witness, SAMFU & SDI, 2012a). Unlike the Community Rights Law (GoL, 2009), where a forest management plan needed to be in place prior to logging commencing, there were no such controls on PUPs. It was revealed that at least one logging company made no secret of its intentions, by seeking agreement with landowning communities to occupy the land for 75 years 'for palm oil, rubber, cocoa, coffee and/or other sustainable and commercially viable plantation business' (ARL, 2012).

Failure to consult

The fact that PUPs were never intended to regard 'private' as a community and the absence of a clear regulatory framework left an ambiguous situation regarding community consent. Where a PUP was issued to a genuinely private landowner, the legislation acknowledged that this land might nonetheless provide goods and services to the wider community, which should benefit. Such benefits would be negotiated with the landowning community – as they were for logging permits on state land – through a Social Agreement.

However, where the landowner is the community, logging companies took advantage of this situation by working with a few members of the local elite to obtain a PUP (or simply forging documents). The companies then treated these permits as they did others, negotiating an agreement with the wider community only after they had obtained the right to log. The Community Rights Law was very clear that the sequence should be as follows: (i) community organises itself in a set of governance institutions led by a representative committee; (ii) a forest management permit is obtained from the state; (iii) a management plan is developed; and (iv) the community may sub-contract a logging company (GoL, 2009).

From the investigations into PUPs, it quickly became clear that ordinary community members had not been consulted. A study for the Land Commission into 25 PUPs concluded the

approach taken by logging companies towards communities 'is not necessarily a balanced partnership between two partners, but rather an exploitative agreement, with communities losing out' (De Wit, 2012, p. 6).

A team of NGO investigators undertook interviews in six communities, where they observed that 'resident communities – the deed holders – had clearly not made decisions to allow logging with the benefit of complete information or with sufficient time for proper consideration' and 'residents had not seen copies of an actual permit and did not understand that such documents existed' (Global Witness, SAMFU & SDI, 2012a, p. 2). They concluded,

> the idea of rural communities living across a quarter of the country suddenly and simultaneously choosing to strike deals with logging companies over the last two years suggests a massive and unlikely country-wide mobilization. Instead, it must be concluded that the initiative came from the authorities and/or from logging companies.
>
> *(Global Witness, SAMFU & SDI, 2012a, p. 2)*

Loss of benefit-share

In the case of the three other types of permit, a proportion of the area-based payment is to be made available to communities, representing 30 per cent in the case of Forest Management Contracts and Timber Sales Contracts (GoL, 2006) on state-owned land, and 55 per cent in the case of community forests (GoL, 2009). In the case of PUPs, however, on the grounds that the forestland is 'private', no obligation to make area-based payments to the state exists, let alone to redistribute any of it to affected communities. The assumption is that the logging company and landowner will reach a private agreement between themselves on this matter.

By selectively following stipulations of the National Forest Reform Law and/or the Community Rights Law to their best advantage, companies obtaining PUPs were able to avoid any obligation to make area-based payments, although some did agree to include area-based as well as the obligatory volume-based payments to communities in the Social Agreements. Nonetheless, if the holders of PUPs across the total area of 2.58 Mha had paid the standard land rental tax of US$1.25 per hectare, this would have generated US$3.2 million per year. If treated as state land, this would have provided almost US$1 million per year (at 30 per cent) to communities, and if treated as community land, it would have provided US$1.75 million per year (at 55 per cent) of community revenue.

Official investigations, and repercussions?

As PUPs began to be exposed as a sham, a series of increasingly authoritative investigations were commissioned. The FDA Board of Directors produced the first in February 2012. This listed 55 PUPs and was accompanied by a robust rebuttal of concerns expressed by the NGO Coalition of Liberia a month earlier (NGO Coalition of Liberia, 2012). The report concluded instructed that the 'FDA recalls all PUPs that it has issued for renegotiation' (FDA, 2012, pp. 8–9).

The Liberia Land Commission was more circumspect, and first sought a technical analysis of the title deeds that underlay each PUP, which was presented in April 2012. It concluded that local elites acted in the name of the community yet took personal advantage of the situation, with the likely result that the community would lose its forest but, as a group, gain little (De Wit, 2012, p. 24). This initial research examined just 25 PUPs. A few months later, and at the behest of a dedicated investigative committee, the Land Commission examined 59 land deeds and concluded that '57 are not eligible for the PUP license' (SIIB, 2012).

Continued procrastination by the FDA, and consequent pressure from civil society to enforce the moratorium first announced in February, led President Johnson Sirleaf to take the first decisive action on 31 August 2012. She suspended the Managing Director of the FDA, announced the formation of a Special Independent Investigative Body (SIIB), and reasserted the moratorium.

The SIIB report remains the most authoritative examination of the multiple failures in the PUP debacle. It concluded 'the level of abuse of power and public trust that characterised the transactional relationship that evolved amongst various actors in the forestry sector, was led and sanctioned by FDA' (SIIB, 2012, p. vii). The SIIB recommended sanctions against seven individuals in the FDA and other government agencies, as well as corrective actions by the FDA Board. It also recommended action against nine logging companies or associated individuals, including that they be 'permanently barred from engaging in commercial forestry activities' (SIIB, 2012, pp. x–xi).

Pressure on the Government of Liberia undoubtedly also came from civil society lobbying the European Commission and EU member states. European states had been negotiating a Voluntary Partnership Agreement with Liberia since 2009, which was intended to assure the European market that only verified legal timber was coming from Liberia. The timing of the PUP scandal could not have been more worrisome as the agreement had been initialled in May 2011 (just as the swathes of PUPs were beginning to be issued) and was awaiting ratification by European institutions and Liberia's legislature. This happened in December 2013, so the exposure of the PUPs story, and how the Government of Liberia responded to it, had a critical bearing on the credibility of a flagship European international forest policy.

Ultimately, barely two weeks after the publication of the SIIB report, President Johnson Sirleaf issued Executive Order No.44, cancelling all PUPs. Controversially, the Order also suspended all logging operations being carried out by any company, irrespective of the permit, if it also held a PUP (Executive Mansion, 2013). A criminal investigation followed, and in February 2014, the Managing Director of the FDA at the time the PUPs were allocated and seven other government officials were indicted on charges including economic sabotage to the amount of US$6 million, criminal conspiracy, forgery, and obstruction of government function (MoJ, 2014). The following year, six of them were convicted, but two technicians were dropped from the convictions, and the Minister of Agriculture at the time, whose signature appeared on all but the 17 PUPs she delegated to a colleague, was never indicted (SIIB, 2012; Sieh, 2014).

Despite the official investigation recommending permanent debarment of the family of logging companies that held the biggest stake in the PUPs, no logging companies were prosecuted, and the sanctions against them in the Executive Order were never carried out.

The reprise: Community forestry

The passing of the Community Rights Law in 2009 paved the way for a completely new approach to forest management in Liberia, one that was widely hoped would be community-centred and empowering. The United States, in particular, was enthusiastic to support the FDA and communities and instigated a succession of programmes to pilot community forestry and help develop regulations, procedures, and templates as well as train community members.

With the passage of the first Regulations to the Community Rights Law with Respect to Forest Lands in 2011 (FDA), the scene was set to approve five US-supported conservation forests – average size 4,000 hectares (PROSPER, 2015) – alongside the first five commercial community forests, which had been nurtured by the FDA and averaged 40,000 hectares each (FDA, 2018). These were the only community forest permits to be approved for the next six

years. Once PUPs became common, they were the preferred route for companies to access timber, but such was the concern raised by the PUP fraud that the moratorium also imposed a 'review of the relevant legal and regulatory framework' (Executive Mansion, 2013, para. 4). This commitment was strengthened when in 2015 Liberia agreed a funding deal with Norway, a condition of which was also a 'moratorium on the award of new industrial logging concessions, including [community forests] that are backed by companies, until all concessions have been independently reviewed' (GoL and Government of Norway, 2014).

These rulings in effect placed a moratorium on the approval of any new forest permits until new regulations were passed (EU and GoL, 2014), but the logging companies took full advantage of the hiatus. Whilst policy-makers, NGOs, and donors were busy developing a regulatory regime governing community management of forests, companies were busy in forests looking for timber and in villages offering incentives, and the number of community forestry permit applications to the FDA increased rapidly, from 14 in 2008–2012 to 19 in 2013 and 74 in 2014 (FDA, 2018; Global Witness, 2018). Companies once again used a regulatory vacuum to do deals with community elites in anticipation of a new wave of approvals from the authorities, just as soon as it was politically acceptable to lift the moratorium. By early 2019, the FDA reported a total of 140 applications, of which 122 had passed an initial desk-based multi-stakeholder review and 37 had been approved (EU and GoL, 2019).

The moratorium on any new permits was lifted in 2017 when major revisions to the community rights regulations were adopted (FDA, 2017). The commitment to a wholesale concession review in the Norway agreement was not undertaken until 2019 (SOFRECO & EQO NIXUS, 2019), and has failed so far to have any real impact.

In a clear effort to prevent the kind of elite capture experienced with the PUPs, the new community forestry regulation laid out key preconditions before commercial logging could start (FDA, 2017):

- Prior to being awarded a community forestry permit, a Community Assembly and its appointed Community Forest Management Body must be established.
- Once the community forestry permit is obtained, any commercial activities in the forest must be considered alongside other forest land uses in a Community Forest Management Plan. This plan must be developed by the Community Forest Management Body and approved by the Community Assembly and the FDA before any logging company can be contracted.

In a newspaper interview, the head of community forestry in the FDA emphasised if and when a community could engage the services of a logging company: 'At no point in time companies are allowed to interact with these people … [Communities] must provide a community forest management plan that will give the FDA an opportunity to vet logging companies they want to enter an agreement with' (Giahyue, 2017).

Alongside these improvements in regulation, donors and NGOs have supported the development of guidelines for community forest management planning, a template Commercial Use Contract to clarify and improve a community's sub-contracting of operations to a logging company, and the expansion of Liberia's definition of legal timber to enable timber exports from community forests to be accepted in the EU market. Despite years of discussion, exchange of drafts, and appeals to the FDA for final approval, none of these three processes have been finalised, and yet timber has been harvested in community forests since 2013.

This is all too little, too late, as the policy process appears to operate in a parallel universe to what happens on the ground. From as far back as 2009 to an extensive exposé in 2018, there is

evidence of logging companies, local elites, and the FDA working in collusion to coerce communities into signing undisclosed agreements as early in the permit approval process as possible, which assure the companies obtain rights to the timber. In return, the companies pre-finance the application process, including the community forest management plans.

The lessons

The Private Use Permits fiasco occurred due to many circumstantial factors. The head of the FDA at the time was out of his depth and easily manipulated by vested interests. The regulatory framework was weak and loopholes easily exploited. Liberia's complex historical contest over land tenure and long civil conflict made it easy to forge title documents (Brown, 2017).

There was also a constellation of different actions that led to their cessation: effective civil society organisations and international allies who documented and highlighted the problem; donor and diplomatic pressure stemming from an imminent and critically important EU–Liberia forest governance and timber trade agreement; and a president able to make a stand, not least because she had done it before by cancelling all logging concessions a decade earlier. UN peacekeepers were still in Liberia in 2013 (and did not leave until 2018), perhaps providing additional confidence to President Johnson Sirleaf to take decisive action. A long view would, however, see the PUPs episode as just one in a long history of dominance by plantation owners, concession holders, and logging companies over Liberia's land and forests, and their wholehearted capture of the state (Brown, 2017, p.O283).

Logging companies are always ahead of the rules. In 2008–2009, they sought to by-pass the transparent competitive process of permit allocation covering 10 per cent of Liberia through surreptitious agreements to over-bid and then have the government change the payment obligations. In 2010–2012, they co-opted local elites to exploit PUPs, covering a further 25 per cent. And, when it was clear PUPs were no longer an option, they switched to community forests, which they regard as the same as PUPs in all but name and could cover 45 per cent of the country (Global Witness, 2018).

As much as they also suffer from elite capture, communities with community forests, where the legislative framework is more comprehensive than for PUPs, face poor facilitation and inadequate technical support by the FDA and others, leaving companies to take advantage of a weak system. Governance of social and environmental obligations has never been taken seriously. In the case of concessions, the Social Agreements that formalise benefit-sharing arrangements were only fully developed nine years after the concessions were first allocated (Client Earth, 2017). To date, none of the seven concessions has a full forest management plan. In community forests, neither the Commercial Use Contracts – to govern a community sub-contract to a logging company – nor Community Forestry Management Plans are fully operationalised.

These oversights put even those communities that own their forests in the position of passive landlord, receiving rent and other benefits from the logging company only at the whim of the latter and the government, and having weak negotiating power in agreeing these terms in the first place. They have almost no agency in decision-making about their own valuable and customary assets.

The lessons here are about the challenges of rolling out a rights-based, locally controlled, and multi-purpose forest management system in the face of an entrenched, powerful business-political elite. A similar criticism could be made of the Voluntary Partnership Agreement with the EU. Almost a decade has passed since the agreement was finalised, yet implementation has concentrated on technical aspects such as a timber-tracking system and on a multi-stakeholder dialogue. Both, whilst valuable, have proven insufficient to forge a

shared vision for managing Liberia's forests to the extent that deep-seated issues such as corruption are effectively confronted.

Liberia shows what goes wrong if elites are allowed to set the terms in advance of either the rules and regulations or of the capacity to nurture genuine community forestry. Even if one gave the forestry authority the benefit of doubt over its genuine enthusiasm for the concept (rather than its wholesale capture by the business-political elite), it is short in skills and staff to perform the role of community facilitator. Likewise, the intermediaries – a handful of national level civil society organisations that really have the skills to work with communities and the knowledge and expertise to navigate political processes – are woefully under-resourced and over-stretched in the face of the comparatively limitless power of international companies and the overwhelming number of over 100 'community forests'.

The SDI and other Liberian NGOs believe that, with the adoption of a land rights policy and the subsequent law, which formalises community ownership of land and forest and legally protects community land rights, the Government of Liberia has created a window of opportunity for stakeholders to work together to strengthen governance across the natural resource sector. Additionally, communities now have an opportunity to consolidate their ownership and control of their customary land and forest, two critical resources they depend on for their livelihoods and well-being.

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29

COMMUNITY FORESTRY IN THE CHANGING POLITICAL AND SOCIAL CONTEXT OF NEPAL

Mary Hobley and Yam B. Malla

Introduction

The story of community forestry in Nepal is not just one of large-scale community movements but also one of remarkable success of protecting and increasing forest cover. By 2020, forest cover had increased from 40 per cent in 1994 to 45 per cent. More than 22,000 community-based forest management groups across the country are directly engaged in managing about 40 per cent of the country's total forest area (2.3 million ha), benefiting more than 2.9 million households. Other forms of community-based management co-exist with community forestry, including 7,000 Leasehold Forestry Groups involved in managing 45,000 ha of forest and, in the Tarai (the plains bordering India), 600,000 households engaged in managing 75,000 ha of forest land under Collaborative Forest Management (World Bank, 2019).

Behind these numbers is a story of today's community forestry with roots deep into the history of Nepal, a history that continues to cast long shadows over the current context. Understanding this history allows us to understand the issues that continue to permeate forests and their management and control. This chapter draws on the authors' long association with community forestry in Nepal as implementers and researchers; it is based on a recent detailed review of the forest sector involving in-depth interviews with community forestry groups, the private sector, civil society, and local, provincial, and federal government staff and politicians (Hobley and Malla, 2020).[1]

We focus on the historical political context and its inter-relationships with community forestry, as well as the major changes to the political system under the new Constitution of 2015.[2]

In addition, in spite of progress, community forestry faces myriad challenges as the economy of Nepal changes and opportunities for employment open both within and outside Nepal. The reliance on subsistence agriculture is diminishing as households diversify their livelihood base, many now accessing remittances from seasonal and longer-term migration. There is major agrarian change in progress, as people move out of rural areas seeking opportunities in small and larger towns. The reliance on forests for inputs to agriculture is also declining, with clear indications that the links between households and community forests are weakening, as is the interest in long-term engagement with collective action to maintain the forests. What the future holds for community forestry is now uncertain and contested.

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The long roots of community forestry

Community forestry is shadowed by Nepal's past and the way in which forests and land were used by successive regimes to consolidate power and extend the reach of the state. The roots stretch back to the 18th century and the unification of Nepal, a nation that stretches across mountains, hills, and the Tarai. From this time, forest and land resources were used by the monarchy and then the Rana regime to extend control through taxation and the gift of land to supporters, irrespective of the people already occupying that land through customary systems. While Nepal was never colonised, the Rana regime which ruled during the 19th century aligned with the British East India company and opened Nepal to exploitation of its forest resources by the British in India. This left a patchwork legacy of exclusion from forests in some areas, and the continuing existence of customary practice in others.

Inspired and supported by India, the Nepali Congress revolution of 1951 overthrew the Rana regime, which led to a ten-year experiment with democracy, with the reinstatement of the Shah Kings as constitutional monarchs. This was a period of great uncertainty, which eventually ended with the first general election and the promulgation of a constitution for parliamentary democracy in 1960.

In 1952–1953, a forest policy was drafted by Emerald J.B. Rana with E. Robbe (a Food and Agriculture Organisation (FAO) expert). Bartlett and Malla (1992) show how the rudiments of community forestry were laid down in this draft (see also Gilmour & Fisher, 1991), with many of the most important tenets of current community forestry policy recognised, including the need for partnerships between local people and Forest Departments to protect the resource for future generations. There are several key messages that resonate today, including using revenues to develop the forests and the community.

This remarkably far-sighted draft policy never entered the formal arena but rather was replaced with the Private Forests Nationalisation Act of 1957, which nationalised the forests and regulated access to and use of the forests in an attempt to centralise revenue flows and forest control in Nepal. Although the Act appeared draconian, many owners managed to evade nationalisation and continued to use their forests. In other cases, however, families who owned large tracts of forest indicate that trees were felled to prevent the government gaining control of the land (Hobley, 1996). Local control over forests remained in places where strong local leadership had excluded government interference.

The Land Reform Act passed in 1958 with an accompanying cadastral survey marked the start of serious deforestation in the hills, caused by perverse incentives. The survey allowed any land within the government forest that was considered 'barren' to be demarcated as private agricultural land. Older people in the hills often trace deforestation to this moment, as people deforested land ahead of the surveyors' arrival. Across Nepal, studies indicate that these surveys were more influential in hastening the degradation of forests than any other policy or legislation (Chhetri & Pandey, 1992; Dahal, 1994; Loughhead, Shrestha, & Raj, 1994).

Changing regimes and laws did not rapidly replace the old systems established by the Rana regime. Nationalisation may have become government policy in 1957, but it had little effect even in areas relatively close to Kathmandu:

> In 1957 the forest was nationalised by the King but the people living in the remote hill areas did not know about this. I also did not know until much later. We continued to preserve the forest in the same way as we had since 1951.
>
> *(Laxman Dong, 1986 cited in Hobley, 1996)*

In 1959, the first national Forest Ministry was established. There were still very few trained staff and thus management of each patch of forest was not possible. The hill forests remained unmanaged in the formal sense, and the forest administration understaffed and underdeveloped.

The panchayat era and the return to autocracy, extension of state control of the forests, and Himalayan degradation (1960–1990)

In 1960, the democratic experiment came to an end with the expulsion of the elected government by King Mahendra on charges of corruption (Joshi & Rose, 1966). Following the failure of the democracy movement and the reassertion of monarchical rule in the early 1960s, a new partyless panchayat system was introduced, which was to remain in place until 1990. The panchayats involved a four-tier system of government with the village panchayats as the lowest unit of governance at the local level. Strict control was maintained by the monarchy and the bureaucracy through this system. For 30 years, there was relative stability under an authoritarian monarchy in which opposition was firmly controlled, and civil society remained underdeveloped.

Together with the Forest Conservation Act of 1961, the panchayat system had far-reaching consequences for local control of resources. The Forest Act included a provision for handing over forest protection to the newly formed panchayats (a provision which was adopted by several panchayats, particularly those close to Kathmandu). Several categories of forest were delineated, each with different access rights. The central government retained ownership rights and could resume control whenever it was deemed necessary. The panchayat had some powers to fine those who transgressed the law, but management decisions remained with the national forest service.

With the passing of the 1967 Forest Preservation (Special Arrangement) Act, Nepal, like India, introduced more punitive forms of forest policy. This defined forest offences and prescribed penalties, including the provision to 'empower district forest officers and guards to shoot wrongdoers below the kneecap if they in any way imperilled the life or health of forest officials' (Talbott & Khadka, 1994), thus confirming the role of the nascent forest service as one of policing. This Act, together with several other land-related acts, increased the power of the Forest Department and extended government control to all areas of land outside private cultivation and ownership. However, despite all these powers, the small size of the Forest Department continued to render it ineffective in most remote hill areas (Gilmour & Fisher, 1991).

Despite the state control exerted through the panchayat system, there were increasing protests that challenged aspects of the panchayat system and the hegemony of the state. These movements were relevant to forests, with a growing contestation of the rights of the state to control and limit access to forest resources. This culminated in the Ninth Forestry Conference held in 1974 in Kathmandu, which convened forest officers from all over Nepal. Here community forestry was born, based on the work of a small group of foresters. They had demonstrated that it was possible to engage local people in forest management. They called this type of forestry 'community forestry' and attached practical experience to what had been only policy rhetoric until this time (T.B.S. Mahat, pers. comm quoted in Hobley, 1996). At this stage, the ideas of community involvement were heavily contested by many forest officials, and the planned 3-day conference extended to some 23 days to try to build some form of consensus (Khadka, 2009).

The proceedings of this conference formed the basis of the 1976 National Forestry Plan and the subsequent Panchayat Rules of 1978 for community forests; together they provided a framework for the operation of a new fleet of externally funded community forestry projects. What

we see here for the first time in Nepal is the coming together of an endogenously generated approach to local forest management with international funds and interest. International donors poured funds into Nepal on the basis of 'saving the environment' from further degradation and unfettered deforestation (Eckholm, 1976; Gilmour & Fisher, 1991; Ives & Messerli, 1989). It focused international attention on the importance of the forest sector and reforestation of the Nepal hills to prevent downstream flooding, and to ensure a supply of firewood for local people. Forests were an intrinsic part of rural Nepalese livelihood strategies, with forests and farms closely integrated through a transfer of products, nutrients, and services from forests to the small subsistence farms. From this period, the international donor community began the process of shaping a forest sector that had been underdeveloped since the 1960s.

Three different dynamics came together to lay the groundwork for the CF model that proliferated in the 1980s: a group of innovative foresters, international concern over 'eco-doom', and political decentralisation. In 1983, the Decentralisation Act laid the foundations for shifting control and management of forest resources to local government and highlighted the key role of user groups in control of natural resources and other services. This Act effectively provided the space for the proliferation of community groups formed to take on services and resource management across Nepal.

The decade of the 1980s was an extraordinary period of experimentation with different forms of community forestry and unprecedented donor activity, with each donor adopting a different district and implementing its own interpretation of what constituted best community forestry practice. This cauldron of ideas allowed the emergence of a form of community forestry highly suited to the particular needs of the hills environment. The Government of Nepal's forest sector policy was first declared in the Sixth Five-Year Plan (1981–1985) which emphasised community participation in the management, conservation, and utilisation of forest resources, and a complete retraining of the government forestry staff for their new roles as advisers and extensionists to local people. This commitment to community forestry, following the principles of the decentralisation policy, was embedded in the influential Master Plan for the Forest Sector (MPFS) 1989, a long-term strategy for the sector.

This period of innovation was marked by a high degree of collective action and learning between key individuals in government. They drew on ideas from other sectors, and donors' experimentation, in particular the bilateral development organisations from the United Kingdom, Switzerland, Denmark, and Australia, and the World Bank/UNDP/FAO supported the national Community Forestry Development Project. A network of friendships and trust grew between project staff and between projects and key government individuals in the forest sector. Rapid scale-up of good ideas from different projects spread across Nepal. High investments in training of forest department staff both on-the-job and through international courses further deepened and broadened the transfer of ideas and skills (Prajapati & Tuladhar, 1987; Malla, Jackson, & Ingles, 1989).

As project and government staff gained more experience, there was a more general questioning of the underlying causes of deforestation. Several projects reappraised their interpretation of community forestry and began to look in detail at the communities and their existing forest practices. The evidence showed that farmers are not ignorant but rather are quite capable of managing their natural resources, including forests (Molnar, 1981; Fisher, 1989; Thwaites, Fisher, & Poudel, 2018). This led to a major reorientation of practice in which projects, together with Forest Department staff, began to support local-level management of existing government-owned forests. This represented a fundamental shift from panchayat-controlled forests to a recognition of forest users as the unit for organisation. It led to the introduction of community forestry user groups (CFUGs) comprised of those individuals who actually used the forests,

irrespective of the village in which they lived. Kanel and Acharya (2008:139) cite an important quote from Narayan Kaji Shrestha, who worked with the Australian and UK-funded forestry projects: 'If forest is to be effectively protected, managed, and used they need to be handed over to the actual users, not to the political bodies as provisioned by the Panchayat and Panchayat Protected rules'.

Despite the enormous amount of energy and commitment from government staff and donor organisations, by 1987 only about 2 per cent of the available local forests had been handed over to local management, and community forestry still did not seem to be more than a minor addition to Forest Department practice (Talbott & Khadka, 1994). In many cases, local people still considered the plantations created through their labour as government forests and were generally unaware of their forest rights (Baral, 1993). Other problems, particularly structural problems within user groups, were also becoming apparent, with domination by local elites and the continued existence of patronage relations that excluded women and poorer ethnic and Dalit[3] groups (Bartlett & Malla, 1992; Hobley, 1996; Malla, Neupane, & Branney, 2003).

The recognition of the diversity of users and their needs also shifted attention from timber, which had been the main interest of state forest management, to other forest products such as firewood, fodder, leaf litter, and non-timber forest products. This spawned new forest management practices and forced changes in forest department nurseries from just producing pine seedlings to a diversity of tree species for planting on private as well as public land.

Revolution and the 1990s: Democracy, the emergence of civil society voice and conflict

Following the first Jana Andolan or People's Movement of 1990, there was a push for a more democratic system, resulting in an opening of political space for civic engagement, and the promulgation of the 1990 Constitution. The Constitution provided for a new tier of elected local government structures stretching down to the former village panchayats and replacing them, as the lowest unit of administration, with village development committees. In 1991, general elections followed, and a democratically elected Congress Government came to power.

The legal framework under which community forestry then operated had three principal guiding documents: the revised 1989 Forest Policy of the Master Plan for the Forest Sector; the Eighth Five-Year Plan; and the new Forest Act of 1993. Although the Forest Act was progressive in many ways and provided the framework for community forestry, it still shared many similarities with earlier legislation, and ensured that the Forest Department still retained control over forest management and planning.

The genesis of the Act provides some interesting insights into the power of different groups to get their voices heard and reflected in the legal provisions and is a foreshadowing of many of the same issues that faced the Act passed in 2019. On the one hand, the 1993 Act, as the main legal instrument for the forest sector, reflected the degree of political change in Nepal. On the other, the first draft was highly contested by those who did not want change. The first draft presented to the natural resources parliamentary committee for scrutiny had rolled-back some of the key community forestry principles, including the rights to autonomy and to 100 per cent of the forest product benefits going to community forestry users, as well as the commitment to the user group concept, which was replaced with the more elite construct of a committee. In response, following significant behind-the-scenes discussion with parliamentarians, a long process of amendments and redrafting led to a compromise. The Act acknowledged the user group rights to manage and protect forest areas, but also retained government ownership and its sovereign right to take back possession if the terms and conditions of the handover were

not met. The new legislation gave unlimited powers to the District Forest Officer (DFO) to control user groups, and offered little protection for the users in case of a dispute with the Forest Department. Community forestry was still seen by the Forest Department as a means to protect and retain the forest boundaries against those who were determined to encroach for agriculture.

In 1997, the first local governments were elected, followed by the Local Self Governance Act (LSGA) in 1999. Despite reports from a High Level Decentralisation Committee on contradictions between the Forest Act and the LSGA regarding local government income from natural resources, this remained unresolved and is still a source of conflict under the new political system (Belbase & Regmi, 2002; Ojha et al., 2021). Despite the move to democracy, widespread unrest began to build from 1996. The political space began to shrink, and further local government elections were stopped due to threats from the Maoist insurgency. This led to the deeply damaging decision to replace local democratically elected institutions with centrally appointed bureaucrats, and non-elected political representatives to make decisions through an all-party mechanism. From the end of the last tenure of local governments in 2002 until 2017, no local elections were held. The implications of this absence of political process and accountability have been profound and also affected the CFUGs. From the 1990s onwards, CFUGs grew in number and power with a major increase in their influence beyond the local level.

The first organised manifestation of this was the emergence of the Federation of Community Forest Users Nepal (FECOFUN) in 1994. The origins of this network extend back into the 1980s and the extensive action-learning exchange meetings between user groups supported by different projects (Ojha, 2009). This brought the organised voice of forest users into the forest sector and to policy deliberation. FECOFUN became an immensely powerful voice for forest users, managing to protect user rights and challenge government over numerous policy and legislative changes that threatened them. Today, with 22,000 CFUGs as members and the presence of office structures at all levels, FECOFUN is Nepal's largest civil society organisation.

If we characterise the 1980s as a period of radical experimentation and policy evolution, the 1990s were a period of rapid expansion of community forestry and the restructuring and reorientation of the government forest service to respond to these policy and legal changes. The work that started in the 1980s to reorient forest department staff continued in the 1990s. Foresters at different levels were trained in new participatory approaches with the skills and capabilities needed for community forestry. This included major changes in technical skills for different forms of silviculture and forest management. During this period, we see a flourishing of projects and training courses, revised forestry curricula, and large amounts of technical advice focused on these elements of organisational change (Gronow & Shrestha, 1990; Moench, 1990; Acharya, 2002; Ojha et al., 2009).

Despite the innovative work to develop new forms of training (Fisher and Malla, 1987), it was clear there was little fundamental change within the implementing organisations. Structures and functions remained the same, and many of the relationships that hindered the development of more responsive and flexible action were firmly fixed. Pokharel (1997) and Khadka (2009) show how old cultures and behaviours persist to define patronage systems (Malla, 2001). This reflects the earlier work by Gilmour and Fisher (1991) identifying the importance of 'source-force' (who you know) rather than career development based on performance or meritocratic assessment. These same patronage systems permeated the CFUGs, which also showed evidence of elite capture of decision-making and benefits (Pokharel, 1997; Malla et al., 2003; Thoms, 2008). Thus, although there was rapid and impressive expansion of community forestry during the 1990s, which mirrored the emerging pressure for wider political engagement, history shows how shallow the wider institutional changes were as well.

Conflict, autocracy, peace, democracy, growth, migration (2000–2016)

The promise of the early 1990s was followed by a long period of stagnation and roll-back of commitments. The early years of the new millennium were deeply affected by escalating conflict with the Maoist insurgency and a return to autocracy with the King dissolving parliament in 2002 and assuming executive power. Major civil unrest continued with massive demonstrations in 2006, again with community forestry groups as key players. Finally, the 2006 Comprehensive Peace Agreement paved the way for the major political restructuring of Nepal with an interim constitution in 2007, followed by the popular election of a Constituent Assembly (CA) in 2008. Even though the 2007 interim constitution established a secular, federal, and republican state and abolished the monarchy, deeply entrenched differences about the ideal form of the future state impeded agreement between party leaders. This led to a series of interim governments unable to break the constitutional deadlock. In April and May 2015, two devastating earthquakes hit Nepal, causing great loss of life and economic destruction. The natural disasters acted as catalysts for the constitution drafting process, which was then fast-tracked by Nepal's political leaders. Amidst much controversy, violent protests in the Tarai, and an unofficial Indian blockade, the new, controversial constitution was eventually promulgated on 20 September 2015. For community forestry there are important omissions. The constitution only considered the state, the private sector, and co-operatives as key institutional actors, leaving out Nepal's major networks of community-based groups and therefore consideration of their relationships to local government.

Community forestry, as with any development process, was not immune from the major political changes as they unfolded. The problems caused by conflict and the ensuing political turmoil were compounded by shifts in attitude to community forestry within the forest bureaucracy. In sharp contrast to rewards and career promotion in the 1990s, in the early 2000s DFOs were more likely to be penalised for actively supporting community forestry through handover of forests (especially in the Tarai). Growing resistance to community forestry within the forest bureaucracy was sharpened by the pressure to hand over forests in the Tarai, which was strongly opposed. At the same time, during this period many forest sector donors withdrew from Nepal because of the conflict, in some cases virtually overnight, leaving a weakened donor voice and less challenge from outside.

In contrast to many other groups, community forestry user groups showed a high degree of resilience to conflict and were able to continue to function in many areas (Sharma and Nightingale 2013). The withdrawal of government and many development projects during the ten years of conflict removed state presence from rural areas. As a result, more service provision occurred through NGOs rather than through the forest department since government officials were not easily able to visit rural areas. Local NGOs were increasingly accepted by government and donors as social mobilisers working with CFUGs, further distancing them from the bureaucracy. The increasing 'NGO-isation' of civil society, encouraged by donors as a way to bypass government during the conflict period, also had the negative effect of fracturing and diluting the civic voice of membership associations such as FECOFUN and shifting their focus more to the provision of paid services for donor programmes (Ojha, 2009).

The spirit of co-production of ideas that dominated the 1980s and early 1990s was beginning to reverse as a result of many factors, not least the conflict and the resultant loss of connection between local forest user groups, the forest bureaucracy, and the donors. There were two major exceptions to the declining donor presence: both the UK-funded Livelihoods and Forestry Programme (LFP) and the Swiss-funded Nepal Swiss Community Forestry Project (NSCFP) continued to function during this period and maintained the community forestry

groups where possible. The importance of this continued presence during the conflict ensured that both donor-supported projects were well placed to continue with community forestry as a testing ground for democratic processes in the post-conflict period. However, it was clear that the isolated project modality could not be sustained and that donor harmonisation around a Nepali-led national programme must be the way forward.

At the same time, the donor agenda was shifting. The global poverty agenda predominated over the first decade, with donor support provided on the condition that community forestry demonstrate clear impacts on poverty through the institutions and natural assets built up over the previous two decades. In addition, three newer agendas – governance, economic growth, and climate change – were added to the community forestry objectives. These separate strands were built into the new national Multistakeholder Forest Programme (MSFP) and shaped the way in which the sector was to develop from 2010 onwards.

MSFP was an important response to both the social and political context, recognising the need to provide space for multiple interests and voices to build consensus through a collective decision-making process. It brought together key players from the private sector, government, and civil society to engage in a national programme that moved beyond community forestry and embraced the whole sector. It recognised the importance of forests as productive economic resources that could stimulate local economies and provide a range of jobs and opportunities for small business.

Unfortunately, the programme was brought to an early conclusion in 2016 after the completion of its first phase and the withdrawal of key donor agencies, mired in controversy over questions of politicisation and internal governance, with limited evidence that it had been able to move away from a project to a national programme approach (IOD, 2015).

During this period, other major transitions were occurring, partly driven by the conflict, but perhaps as importantly by the absence of economic opportunity within Nepal. Migration became the major livelihood choice for most young men, facilitated by the signing of formal labour agreements with the Gulf nations, Malaysia, South Korea, and Japan. Currently, some 5–6 million Nepalese are reported to be formally employed in these countries. The absence of a large part of the active male population has led to high wages for labour, labour shortages, and additional workload falling on the remaining family members, mainly the elderly, women, and children (Giri & Darnhofer, 2010; Adhikari & Hobley, 2011; Tamang, Paudel, & Shrestha, 2014). Rural households were forced to change their farming practices, adopt less intensive farming, leave parts of farmland uncultivated (planted with trees or allowing natural regeneration of forests) and for many shift to non-farming livelihoods (Ojha et al., 2017; Dahal, Pandit, & Shah, 2020; KC & Race, 2020). Migration has reduced forest users' dependency on, interest in, and involvement in forest management and has created the conditions for young people to become involved in other businesses elsewhere. Young people are exiting labour-intensive agriculture and show limited interest in group-based collective action for forest management and protection (Adhikari & Hobley, 2011; Shrestha & Fisher, 2018; KC, Race, Fisher, & Jackson, 2021). This means the succession of future generations to support community forestry groups is unclear (Adhikari & Hobley, 2011; Shrestha & Fisher, 2018). The need to meet the basic forest needs of local communities – one of the primary objectives of community forestry in the 1980s and 1990s – is no longer relevant to most households, and programmes fashioned on these old models have lost their appeal.

Bringing forests into a new political system: Conflict, contestation, and contradiction (2016–present)[4]

Following the promulgation of the Constitution in 2015, the historic elections of 2017 led to Nepal becoming a federal republic with three spheres of government – federal, provincial,

and local. It is now in the middle of an ambitious and important political reform which entails the constitutional devolution of powers to the three government spheres. This marks a radical shift from a central unitary government where the sub-national levels were designated central government agents that implemented programmes designed at national level across the country. Under the federal system, the different spheres of government have autonomy to set their own priorities, as well as decide how and where they allocate resources and execute their functions. Over the last three years, the public sector has been and continues to be restructured. Sectors, services, and the civil service have been reassigned to the three spheres of government.

The forest sector has been fundamentally transformed through these political processes with far-reaching consequences for how it is governed and administered and how forest resources are managed (Nightingale, Lenaerts, Shrestha, Lama 'Tsumpa', & Ojha, 2019). This includes a new forest policy (2019) and forest law (2019). These new framing conditions have significant and contested implications for community forestry.

The Constitution and the Local Government Operation Act, 2017 (LGOA) provides the only legal guidance on the functions of the forest sector in each sphere of government. In 2017, the 'Unbundling Report' for the Council of Ministers, based on the powers in the five schedules of the Constitution, details which functions are exclusive to each sphere of government and which are shared or concurrent. This unbundling was then reflected in the 2019 Forest Policy and in the Allocation of Business Rules 2018,[5] which also detail functions at the three spheres. For forestry, federal government is responsible for setting policy, laws, standards, and regulations for the whole of Nepal. The provincial governments have the sole authority for planning, management, and utilisation of forests within the province and for setting associated policies, standards, and regulations. Local governments have been given the functions for protection, promotion, management and regulation of community-based forest systems, plantation management, maintenance, and use.

The Forest Policy is the principal policy for the forestry sector and guides all other policies and strategies. It broadly follows the assignment of functions determined in the Unbundling Report and reflected in the LGOA, providing support to the role of local governments for forest resources operation and management. What appears to be clear in these documents, however, is contested by the new Forest Act (2019).

It is important to understand why this major disjuncture exists, as it reveals the depths of the existing structural constraints to real change in the sector and the difficulties that community forestry faces to place itself within the federal system.[6] The process underpinning the development of the draft bill appears to have played a key role in the conflict that has now emerged (Shrestha & Poudel, 2019). There was a heavy dominance by forest bureaucrats in the drafting of the legal content of the law with limited discussion with other major stakeholders, particularly the provinces and local governments (Pokharel et al., 2020). Feedback regarding changes to the draft bill was rarely acted on. Scrutiny within parliamentary committees was limited by a lack of awareness of the implications and sensitivities of many of the issues. As a result, the new Act continues to replicate a long history of forest legislation. In an uncanny echo of the past, the 2019 Act mirrors the provision where, on the order of the DFO, security personnel may 'shoot the offender under the knee' (Special Powers 57(1)).

The lack of mechanisms to build consensus between federal, provincial, and local governments over concurrent powers has only fuelled the debate. Province 2 has been at the forefront of the legal challenge to the Forest Act, asserting that federal government had no right to solely enact a law on issues of concurrent powers.[7] Other petitions from Province 2 have also challenged the federal government assertion of control over forest resources.[8] The contestation caused by the federal Forest Act continues to create legal problems for provincial and local

governments, where the lack of clarity between jurisdictions has led to a faltering roll-out of provincial and local government forest legislation.

Progress has been made in restructuring sector administration between the three spheres of government, but the lack of clarity and agreement means that there are many issues still to resolve. The early work to design these structures apparently did not ask the fundamental question: what does a federal system require from a forest service? Nor was there careful consideration of which sphere of government is best positioned to offer different services, including technical advisory, managerial, administrative, regulatory, and judicial services. For example, given that a large proportion of forest land falls under some form of community-based management regime, local governments have the closest relationship to these groups and are the most obvious sphere for provision of technical advisory services, but currently this is provided by the provincial government.

The federal Forest Act continues the control that DFOs (who are federal employees) can exert over community forestry groups and allows decisions to be taken without reference to local governments. Control over the group in terms of registration, permission to operate, approval for operational plans, and powers to retake the forest and cancel the group all lie with the DFO. Furthermore, recent reviews of community forest operational plans (OP) reveal that many are not in active implementation, threatening the very existence of large numbers of CFUGs if DFOs decide the groups are not functioning properly.

In contrast with the Forest Act 2019, in the new forest policy and local government legislation, local governments play a pivotal role with forests in their jurisdictions. Local governments are increasingly asking for clarity and resolution of these areas of ambiguity, but unfortunately much of this interest focuses on forests as a source of revenue (Shrestha, 2020) rather than offering support to community-based management. Forest land and its availability for community forestry or other management regimes is now more politically charged, as local governments struggle to find land that can be used for development projects. This immediately brings them into conflict with CFUGs, who hold management control over large areas of land resources.

There are, however, some local governments planning to create community forest support funds, expressly recognising the mutual benefits of working with CFUGs. In the words of one mayor, 'There are many CFUGs – they are also part of local government – they can't act independently, we support them, but they are part of us'. For their part, CFUGs remain ambivalent in their relationships to local government and wish to retain the autonomy protected under forest law:

> CF is the business of the CFUG – we operate independently and do not want to be associated with the palika or ward, we may become politicised. A joint venture is not good, and we cannot work with elected bodies. CFUGs should be independent.
>
> *(CFUG member)*

There is much still to be resolved in terms of the jurisdictions, control over forest lands, and community forestry. For community forestry, some of the biggest challenges now lie ahead, both with its positioning in the new federal system and adjusting to the impacts of major drivers of societal change.

Conclusions

Change is an ongoing process in Nepal, and no more so than for community forestry. It is time to revisit its underlying assumptions (Fisher et al., 2018; Banjade, Paudel, & Mwangi, 2020), as

reflected in the words of a senior forest bureaucrat interviewed during the study: 'Interest is dying in community forestry, just as the trees are dying, it's just for protection there is no other interest. Division Forest Officers are continuing to do things as in the past, but there must be change'.

As we have seen, community forestry grew during a very different period in Nepal's political and economic history. The models that underpin it were all constructed during the 1980s and 1990s, based on the intimate relationships between forests and agriculture with livelihoods dependent on the sustenance of these relationships. The 1990s were a period of intense focus on questions of participation, inclusion, and equity. Today, however, foreign migration and remittances are driving major agrarian change, with high levels of internal migration from rural to urban, and from the hills to the Tarai. As migration drives change, so livelihoods change. Fewer people are reliant on the forests for multiple elements of their livelihoods. The old systems based on these linkages are dissolving as new economic opportunities and relationships with natural resources develop.

There is also a new political context. Community forestry grew when where there were no elected local governments. CFUGs filled the gap and in effect became mini governments, managing funds and decisions on resource allocation for development. They became a breeding ground for political leadership; they were vibrant institutions and the birthplace of local leaders. The most influential of these leaders have moved into the newly elected local governments and have in effect left a vacuum in community forestry. The symbolic value of leadership in CFUGs has now decreased, as instead those who are politically ambitious can find their space directly in local government.

Elected local governments also mean there are new relationships to be forged between community-based groups and local governments. There are questions to be addressed about the role of community forest funds, how the funds are used and by whom, and taxation of community forestry by different governments (Mandal, 2020). And whereas political parties were strongly supportive of community forestry run by CFUGs when there was no elected local government, there are now legitimate elected governments who are demanding the authority for community forestry.

The major changes in livelihoods, the decreased dependence on forests, and the new political system all require community forestry to change to respond to new dynamics. Community forestry has to be re-thought. Forests as a productive economic resource may continue to play a useful role in rural livelihoods, but only when there are conducive legal and regulatory frameworks that enable the development of enterprise and markets.

Looking back over the last 40 years, there have been remarkable successes in terms of building the social, institutional, and natural resource foundations for community forestry (Ojha & Hall, 2021). The future now stands on how community forestry makes itself relevant in the rapidly changing rural context and depends on the resolution of powers between CFUGs and local government, and between the local, provincial, and federal government jurisdictions:

> We are still a very young federal system, there is a lot to sort out, all is still temporary – the only permanent elements are the land and our constitution. Everyone wants to hold power, they don't want to delegate. Local government acts as kings and queens, the provincial assembly wants to hold power, the centre wants to keep power and won't let go. There are lots of good things, but implementation is superficial. This is the beginning, we need to put everything in place, we are now building the foundations.
>
> *(Provincial Assembly member)*

Notes

1 An institutional review of the forest sector for the World Bank in early 2020 as part of the Forests for Prosperity Project.
2 For a comprehensive discussion of community forestry in Nepal, readers are referred to the books produced for the Ministry of Forests and Soil Conservation 2015 and Thwaites, Fisher and Poudel 2018.
3 Caste, as an institution and system, is a hierarchical differentiation of ritual status. The term *Dalit* is used to identify those on the lowest rung in the caste hierarchy. As a socio-cultural construction, caste broadly corresponds to the economic position of various caste groups. Dalits are considered impure by society, impeding their social interactions, and this is reflected in their low socio-cultural, economic, and political participation, reducing their life chances, leading to greater poverty and deprivation.
4 This section draws on interviews conducted in early 2020 with politicians, bureaucrats, private sector, NGOs, and community groups.
5 The Allocation of Business Rules 2018, determines the terms of reference for the sector ministries (for federal and provincial government) and for the sections in local government.
6 Critique of the consultation processes for the Forest Bill https://kathmandupost.com/climate-environment/2019/07/01/forest-bill-is-faulty-and-it-raises-questions-over-ownership-experts
7 Reported in 2019 by the Himalayan News Service, https://thehimalayantimes.com/nepal/province-2-takes-centre-to-court-over-forest-act
8 The writ petition to the Supreme Court claimed that the federal government had 'usurped the provincial government's power' in a decision that was unconstitutional since forest resources fall under the jurisdiction of provincial government, according to Schedule 6 of the Constitution. https://thehimalayantimes.com/nepal/province-2-sues-federal-government

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PART VIII

New directions in community forestry



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MEXICAN COMMUNITY FORESTRY AS A GLOBAL MODEL FOR BIODIVERSITY CONSERVATION AND CLIMATE CHANGE ADAPTATION AND MITIGATION

David Barton Bray and Elvira Durán

Introduction

Community forestry in general has been widely associated with positive outcomes for forests and people (Agrawal et al., 2008; Ostrom & Nagendra, 2006). Researchers have presented an array of evidence that strengthened community rights over forests may avoid emissions from deforestation and increases in carbon storage, and provide multiple benefits for both human communities and the environment (Phelps et al., 2010; Stevens et al., 2014). Mexico is in the top ten countries globally in terms of extension of forests (FAO, 2020). It is also among the top five most biodiverse countries in vascular plants and mammals, much of which is harboured in forest ecosystems (CONABIO, 2008). Around 60 per cent of the nation's forests were officially recognised on community lands in successive degrees of actual control, stretching from the 1920s to the 1990s, beginning with the Mexican Revolution (1911–1917). This 'transformative decentralization' (Larson & Soto, 2008, p. 213) resulted in Mexico's common property forest sector, which is on a scale unmatched globally. Mexican community forestry constitutes a natural, national-level experiment in political, economic, social, and ecological benefits, giving forest and eventually tree rights to local communities with a top-down supply of governance institutions and the five capitals (natural, social, human, physical, financial) necessary for production of timber, and promoting market-oriented community forest enterprises (CFEs) (Antinori & Bray, 2005; Bray, 2020). Mexican CFEs are businesses focused on the commercial production of timber, and in some cases on other forest goods and services (such as ecotourism), based on community ownership of a forest, with governance institutions largely supplied through agrarian reform processes. They also typically have multiple functions, with profits as only one of many goals (Antinori & Bray, 2005).

In addition to timber production, a 1996 modification to the *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (LGEEPA) (General Law of Ecological Equilibrium and

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Environmental Protection) encouraging conservation on community lands resulted in some notable experiences in participatory community biodiversity conservation (Bray et al., 2012). These processes opened political and economic spaces that were occupied and extended by vigorous community collective action. Many hundreds of these Mexican forest communities have been able to combine logging, income generation, and forest conservation. There are still others that are trapped in corruption, boundary and other forms of conflict, and forest degradation and are increasingly impacted by organised crime (CCMSS, 2006). However, the large number of cases with considerable success in both timber extraction and conservation show the potential of devolving rights over forests to subsistence farmers, supported by state policy. Well-managed forests, many of them certified by the Forest Stewardship Council (FSC), maintain and expand forest cover for carbon capture, jointly produce stored carbon and timber, and also contribute to biodiversity conservation. The objective in this chapter is to provide evidence that Mexican community forestry is a global model for biodiversity conservation and climate change adaptation and mitigation.

Evolution of Mexican community forestry

The Mexican Revolution (1911–1917) resulted in Article 27 of the Constitution of 1917, laying the legal foundation for the distribution of communal land to peasant communities in long-term usufruct, including a reference to conservation (Boyer, 2015). Legislation in the 1920s and 1930s established two kinds of agrarian property: *ejidos* were land grants to landless workers, and *comunidades* constituted the recognition of land rights given to Indigenous communities by the Crown during the colonial period. It also established who were legal members of the community and a form of multi-level governance including the Assembly of all rights-holders, a Governing Council (*Comisariado*), and an Oversight Council (*Consejo de Vigilancia*), with the requirement of democratic election by majority vote in the Assembly (see historical timeline in Figure 30.1). The elected officials represent the village to other levels of government and manage the common property, among other duties. Agrarian legislation also established a land-use zoning model, a crucial element in forest management, defining village residential areas, individual agricultural areas, and common pastures and/or forests; and a rule that communal lands could not be sold or mortgaged (Simpson, 1937). As early as 1931 some communities received enormous grants of forestland, such as the community of Pueblo Nuevo in Durango, which received 166,754 hectares (Guerra Lizarraga, 1991). The reform presidency of Lázaro Cárdenas (1934–1940) deepened land and forest distributions and established 866 forest co-operatives with management plans, 64 per cent of the estimated 1,350 forest communities at the time. Most of the co-operatives were fictions that disguised logging in exploitative arrangements, but they did lay the foundations for many successful CFEs to emerge decades later (Boyer, 2015). Cárdenas was also a pioneer in establishing the first national parks, founding some 40 of them in the late 1930s (Wakild, 2011).

Following Cárdenas, the 1940–1970 period is known in Mexican political history as the 'counter-reform', with community forestry being almost entirely ignored in favour of economic development. This period was dominated by three frequently contradictory policy initiatives, while a fourth underlying trend began to influence policy (Bray, 2020). The three policies were a) import-substitution industrialisation for paper, linked to a policy of granting huge logging concessions to state-owned and private companies; b) logging bans as an effort to halt clandestine extraction; and c) isolated efforts in the 1950s in Chihuahua and Chiapas to train local communities to manage their own CFEs. The efforts in Chihuahua had notable success, with the Mexican indigenous agency making sustained investments in human capital and endow-

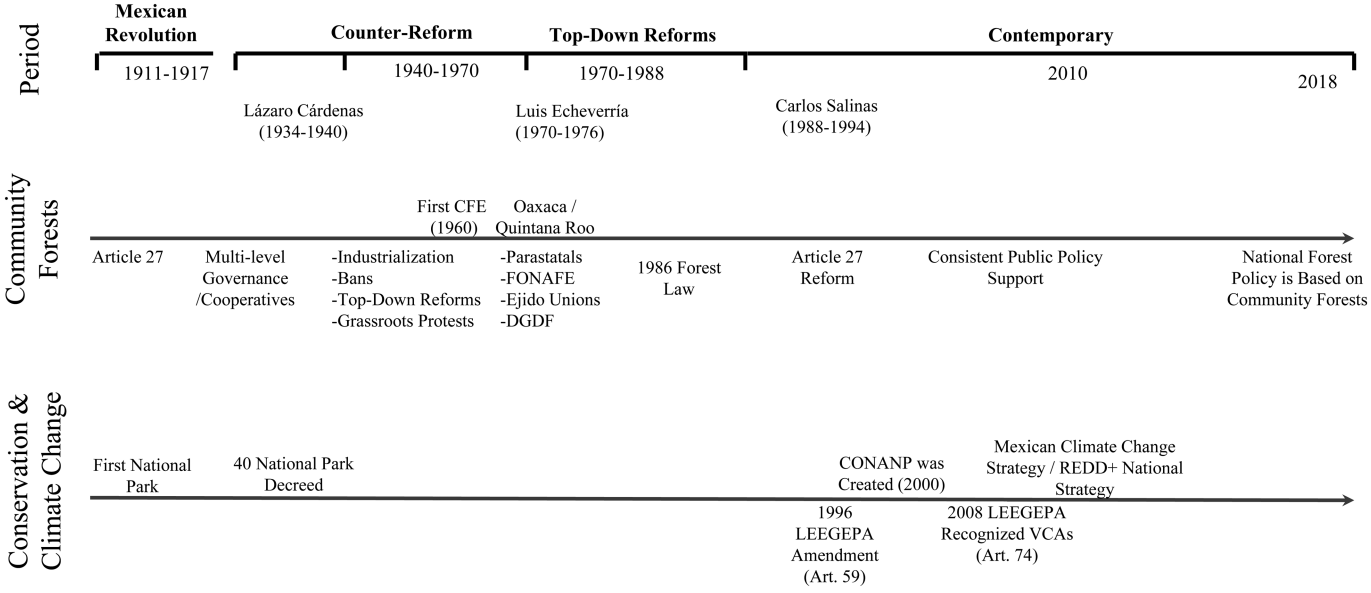


Figure 30.1 Historical timeline of Mexican community forestry for timber and conservation (1911–2018).

ments of natural and physical capital, establishing incipient CFEs in 16 communities and an inter-community *ejido* union. This was the first of what would become persistent efforts by top-down state reformers opening spaces that were occupied by community entrepreneurial vigour (Boyer, 2015; Bray, 2020). Finally, d) the fourth significant trend was the emergence of grassroots protests and community resistance to logging on their lands and demands for the creation of CFEs, particularly in Durango in the 1960s. This resulted in the first CFEs in Mexico being established in that state in the late 1960s (Bray, 2020).

The presidency of Luis Echeverría (1970–1976) (see Figure 30.1) was the second great reform period that helped to launch the community forest sector, featuring four different state policies that affected forest communities. These were the creation of state-owned timber companies, which were designed to exercise greater state control, but also served as regional development agencies organising incipient CFEs, particularly in states marked by unrest such as Chihuahua and Guerrero; the substantial expansion of the *Fondo Nacional de Fomento Ejidal* (FONAFE) (National Fund for Ejido Promotion) to provide human, social, and physical capital to forest communities to establish their own CFEs; a continued agrarian reform process of land and forest distribution and the creation of new collective action spaces in ejido unions; and the establishment of the *Dirección General de Desarrollo Forestal* (DGDF) (General Directorate of Forest Development) within the Forestry Sub-secretariat of the Secretary of Agriculture in 1973 (Bray, 2020).

FONAFE specialised in physical and human capital by financing sawmills and training in sawmill operation, logging, and marketing, with the explicit goal of creating '*ejido* forest enterprises' in areas under logging concessions. It promoted 135 CFEs in 15 states, with 87 of them being funded for sawmills. The DGDF marked a state-led reform effort at developing CFEs outside of the concession areas and was conceived as 'an agent of change' (Castaños Martínez, 2015, p. 90). In the early 1980s, there were important community mobilisations against the renewal of a concession to a state-owned timber company in Oaxaca that launched the emergence of autonomous CFEs there. In the same period there was a major public policy initiative in the tropical state of Quintana Roo, the Plan Piloto Forestal (Forest Pilot Plan), which helped organise the CFE sector. Thus, it has been estimated that by 1988 there may have been over 1,300 CFEs operating (Bray, 2020). The presidency of Carlos Salinas de Gotari (1988–1994) was the only period since 1970 when there was little policy support for community forestry, focusing instead on a failed effort to promote forest plantations. Nonetheless, a 1992 reform to Article 27 of the Mexican Constitution devolved a nearly full bundle of rights to Mexican communities, with the only restriction being that they could not sell forestlands. Since 1994, the Mexican community forest sector has received largely consistent policy support from the Mexican government and has become the dominant presence in the forest sector. Although the number varies from year to year, there are likely in the range of 1,600–1,800 CFEs operating in any given year, accounting for most of national timber production. The first government conservation agency was created in the 1980s, but in 2000 the *Comisión Nacional de Areas Nacionales Protegidas* (CONANP) (National Commission of Natural Protected Areas) was created, and it currently governs conservation in Mexico (Bray, 2020).

Power relations and economics

The seismic shifts represented by the Mexican Revolution and the presidencies of Lázaro Cárdenas and Luis Echeverría changed power relations and opened political and economic spaces for the emergence of CFEs. The Mexican Revolution mostly ended the presence of foreign capital in timber, and logging became dominated by family companies with limited capital

(Boyer, 2015). Echeverría displayed the political will to expropriate forestlands from both small regional logging companies, such as in Guerrero, and from politically powerful Mexican timber companies such as *Bosques de Chihuahua (*Forests of Chihuahua), shifting control to state-owned logging companies. Echeverría's reforms placed serious limitations on the role of national capital in timber and introduced a new policy current of state subsidies for the sector. Reforms in the forest sector opened up a political space where rural people could demand more accountability from the state (Kashwan, 2017), as well as an institutional and economic space insulated from national and foreign capital and with property rights over a valuable natural resource. Secure forest tenure gave forest communities natural capital, and varying state investments in social, human, physical, and financial capital helped create a defensive perimeter against the deleterious impacts of global capitalism. Forest communities also had a viable channel to engage with national markets in Mexico in non-exploitative relations since timber is a commodity that had good market prices. Communities also demonstrated the capacity to protest and expand this operating space when necessary.

The economic gains of Mexican community forestry have not been well-documented, particularly at the household level. Existing studies have shown that profits from the community timber industry are channelled into employment and benefits, public goods for the community, reinvestment in the forest enterprise and other community businesses, and profit sharing to legal members of the community. The ability of Mexican CFEs to deliver multiple benefits to their communities is possible because, as studies have found, they are generally quite profitable. One study of forest inventories in 30 CFEs found that the standing stock average was 178 m^3/hectare, with six of the communities having more than 280 m^3/hectare of standing stock, indicating that the trees were more than 100 years old. Excess growing stock is a primary explanation for why many Mexican CFEs remain profitable in the face of competition from foreign plantation timber (Cubbage et al., 2015).

The study of 30 CFEs also evaluated costs, revenues, and profits in three stages of vertical integration: forest management, harvesting, and milling. Only one of the 30 communities was not profitable at the forest management stage. Harvesting costs (cutting trees and delivering logwood to the roadside) were considered somewhat high but reasonable, and 22 of the 30 CFEs made a profit on harvesting. Of the 23, 18 (78 per cent) sawmill operations in the sample had profits, with only 5 losing money. These 18 had average profits of US$53/m3 which were considered 'quite large', and 'returns on investment for the Mexican mills are still generally positive for the entire value chain, based apparently on the relatively high price for lumber in the Mexican market, where demand has been high' (Cubbage et al., 2015, p. 643). Although Mexican CFEs face stiff competition in many forest products, the higher quality of the wood from natural forests has won them a 50 per cent share of the domestic demand for sawnwood, giving them a degree of insulation from global competition and relatively high prices in the national market (Cubbage et al., 2015).

Silvicultural practices and conservation

Silvicultural practices

Silvicultural practices refer to interventions that control tree growth, composition, structure, and forest quality for productive purposes, commonly focused on timber or related forest products. Studies demonstrate that selectively logged forests have 'relatively benign' impacts on biodiversity, although concerns continue to be expressed about ancillary impacts (Gibson et al., 2011, p. 380). Nonetheless, as Mexico demonstrates, sustainable silvicultural practices in both

temperate and tropical forests can be carried out while providing sustainable livelihoods and conserving biodiversity. In both temperate and tropical areas in Mexico, CFEs log only in the zoned production areas and use government-regulated silvicultural practices that maintain forest cover with a shifting mosaic of logged forests in various stages of succession. In 2016, a total of 1,680 communities obtained authorisations for timber extraction, and hundreds more for extraction of non-timber forest products (Torres-Rojo et al., 2016). Mexican temperate forests are managed with a variety of standardised silvicultural practices, but the two most important in the authorisations are the *Método Mexicano de Ordenacion de Bosques Irregulares* (MMOBI) (Mexican Method for Ordering Irregular Forests) and the *Método de Desarrollo Silvícola* (MDS) (Method for Silvicultural Development, also called the seed-tree method [Ramírez, 2017]; see Figure 30.2).

In temperate forests, MMOBI is used to maintain uneven-aged stands – stands with a variety of age classes and diameters, typical of Mexican forests (Bray, 2020). This maintains a continuous canopy and more of the structure of an uneven-aged natural forest, although with impacts on species composition. MMOBI selection cuts leave only small forest gaps, which do not support regeneration of pine and encourage an ecological succession from pines to lesser-value oak. As Figure 30.2 indicates, it is based on inventories of standing stock that initially focus on old, deformed, bifurcated, and diseased trees, creating space for healthier trees to develop in a subsequent cutting cycle. As an alternative to MMOBI, the MDS was developed in the early 1980s as an even-aged system with several intermediate thinning harvests distributed over 50–80-year rotations with the goal of maintaining a more even-aged forest, or to convert an uneven-aged forest to an even-aged one. In a 1986 Forest Law, both MMOBI and MDS were required to include more provisions for wildlife habitat and biodiversity exclusion areas, spatial arrangements of specific stands, conservation corridors, and riparian buffer zones (Torres-Rojo et al., 2016). In general, Mexican forest and environmental laws call for a substantial amount of environmental protection in logging that has similarities with Reduced Impact Logging (RIL) in Indonesia and elsewhere (Putz et al., 2019). Conservation in logging practices is evident in the Sierra Norte of Oaxaca, where it is common for communities to harvest less than the authorised amount for conservation purposes, with 10 of 19 communities in one sample doing this (Pazos-Almada & Bray, 2018).

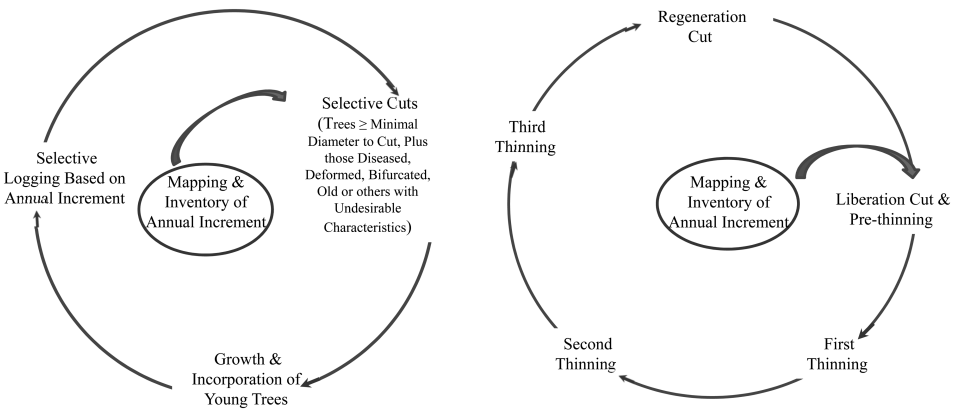


Figure 30.2 The Mexican Method for Ordering Irregular Forests (MMOBI) and the Silvicultural Development Method (MDS). Based on: Ramírez (2017).

In tropical forests, a tropical version of MMOBI was developed with selection cuts in 25-year cycles, a polycyclic system, on the assumption it took 75 years for a mahogany tree to reach full maturity. However, until the early 1980s it was poorly implemented. In 1983, the Forest Pilot Plan, an innovative multi-level stakeholder partnership between the Mexican government, the German development agency GTZ, and the Quintana Roo government, promoted forest management practices that included the establishment of Permanent Forest Areas (PFAs). These were areas where no agriculture or land use change was permitted, only controlled extraction such as logging, chicle tapping, hunting, and collection of polewood and palm thatch for construction. An early study by Snook (1998) argued that these silvicultural practices altered the size and age structure of the forest, increasing the probability of negative impacts for wildlife and biodiversity. The study found that 90 per cent of the mahogany trees grew more slowly than the projected rate and that both minimum diameters and total volumes of harvests in the second and third cutting cycles were projected to be considerably lower, leading to a significant reduction in the number of large mahogany trees. The selective logging practices did not create large enough spaces for the shade-intolerant mahogany seedlings. The traditional openings left by shifting agriculture were ideal for regeneration, and excluding it from the PFAs has been argued to be an error (Snook, 1998).

In addition to the problems created by the silvicultural practices, decades of over-harvesting by a state logging company had reduced the inventory of mahogany in the forests. Beginning in 1984, community management produced a striking reduction and stabilisation of harvests (Bray, 2020). For the 1993–2005 period, harvests represented a 78 per cent reduction from 1978–1983, the last five years of logging by the state logging company. Although mahogany harvests are now low, the current distribution and abundance of mahogany in the Yucatan Peninsula are superior to stocks in Peru and Bolivia, and foresters report that reserves are good (Bray, 2020). A study that placed Mexican selective logging practices in a global comparative perspective found that in a comparison of six tropical countries, Mexico had the highest percentage of intact forest remaining in logged blocks, from 77–97 per cent intact (Putz et al., 2019). Recent comparative studies of silvicultural practices globally and in Quintana Roo and Campeche (Yucatan Peninsula) indicate that the per hectare total carbon emission baseline was up to three times lower compared to similar practices in Brazil and Indonesia, linked to much lower intensity logging in Mexico (Ellis et al., 2019).

Community land use zoning is the practice that heavily determines forest cover processes, silvicultural practices, environmental services, and biodiversity conservation. Land use zoning is part of the government-mandated Forest Management Programmes (FMPs), required in order to get authorisation for logging. A broader, more participatory land use zoning method is the *Ordenamientos Territoriales Comunitarios* (OTCs) (Community Territory Land-Use Zoning) developed by a non-governmental organisation but applied nationally by a government programme. Both practices limit anthropogenic disturbances to particular areas. Conservation areas classified in the FMPs include flora and fauna habitat protection, riparian buffer zones, slopes greater than 45°, areas over 3,000 meters above sea level, cloud forests, recreation areas, and areas of high conservation value, as well as riparian buffer zones within the production forests (Pazos-Almada & Bray, 2018). From 2006 to 2012, a government programme supported 924 OTCs covering 6.2 million hectares (Mha) (Anta Fonseca, 2015). The OTCs are also commonly used to establish written rules governing territorial use and other aspects of community life. Oaxaca has been the most important state in community conservation, both formal and informal, with 126 formal and informal conservation areas covering 375,457 hectares, 14.5 per cent more than the public protected areas in the state (Martin et al., 2011). There is evidence that communities are taking positive action to protect emblematic species such as jaguars (Van Vleet et al., 2016).

Reducing deforestation and conserving biodiversity in Mexican community forests

The end of colonisation in the tropical areas, ongoing outmigration, associated agricultural abandonment and regrowth, and conservation policies have all clearly contributed to the decline of deforestation in Mexico (Bray, 2020). However, there is also evidence that community forest management has been an important factor, comparing positively with public protected areas as a strategy for inhibiting deforestation. A study of central and southern Quintana Roo showed deforestation rates of 0.4 per cent from 1976 to 1984, in the period before the emergence of CFEs. This very low rate was reduced further to 0.1 per cent from 1984 to 2000, after the consolidation of CFEs in the region, in an area where there are no public protected areas (Bray et al., 2004). A comparison of central Quintana Roo, a region with many CFEs, and northern Campeche around the buffer zone of the Calakmul Biosphere Reserve showed that deforestation was 0.7 per cent from 2000 to 2005 in the Calakmul Biosphere Reserve region, while in Quintana Roo there was actually forest recovery, even though it had twice the population density (Ellis & Porter-Boland, 2008).

Another study of deforestation in Quintana Roo found that its drivers were agriculture, livestock production, and tourism, but in the CFE regions, where logging is shared with traditional milpa agriculture, deforestation was substantially lower (Ellis et al., 2017). Also, a comparison of CFE areas from Quintana Roo and Guerrero with 67 public protected areas nationally found that both the public protected areas and CFE regions kept more than 95 per cent of original forest cover, with no significant difference in deforestation rates (Duran et al., 2005). These results could be attributed to logging that is commonly conducted in only small percentages of the community forests, with large areas dedicated entirely to conservation, particularly in larger forests. For example, in Ixtlán de Juárez, Oaxaca, one of the most successful CFEs, 71 per cent of its territory (13,792 hectares) is in conservation (Pacheco-Aquino, 2014). Cubbage et al. (2015) found a lower but still substantial 28 per cent of conserved forest in a study of 30 CFEs in 12 states, with 72 per cent of the forests dedicated to timber production. A study of 59 CFEs in Chihuahua found that 28.2 per cent of their forests were under conservation (Bray & Duran-Medina, 2014). In temperate forests, a study of 733 municipalities with higher percentages of commonly owned forest and higher percentages of common forest under management plans were found to 'both reduce the gross and net rates of deforestation and increase the rate of forest recovery' (Barsimantov & Kendall, 2012, p. 44).

In the Sierra Norte of Oaxaca, the world's greatest centre of endemism for the genera *Pinus* and *Quercus* (Gómez-Mendoza et al., 2008) and an entirely community owned landscape, Pazos-Almada and Bray (2018) found that, in 23 communities with CFEs, 36 per cent of the total area of over 200,000 hectares was under various forms of conservation. After decades of timber extraction, the Sierra Norte still has the highest biodiversity in birds, mammals, and amphibians in Mexico (Brandon et al., 2005; Illodi-Rangel et al., 2008), and new species are regularly found (Canseco-Márquez et al., 2017). Timber extraction is compatible with conservation of epiphytic bromeliads, including threatened species like *Tillansia carlos-hankii* and endemics such as *T. oaxacana* (Carvente-Acteopan et al., 2017). In Chiapas, Ballam-Ballote and León-Cortés (2010) showed that community managed forests increase landscape heterogeneity, contributing to greater butterfly diversity. Meanwhile, in areas with tropical timber harvesting in southern Quintana Roo, Ceballos et al. (2005) found healthy populations of jaguars in forests managed for timber by communities. Jaguars are particularly good indicators of landscape ecological functionality since they require well-conserved habitat.

Formal conservation in Mexico is governed by the environmental law and CONANP. There are 182 public protected areas in various categories covering 21.4 Mha (11 per cent of terres-

trial surface), including many forest ecosystems. New conservation programmes introduced in the last two decades include 1) a Payment for Environmental Services programs (PES), mostly focused on payment for hydrological services (PHS), launched in 2003; 2) a 1996 reform to Article 49 of the LGEEPA, which created a new protected areas category for community conservation called Voluntary Conservation Areas (VCA); and 3) a 2008 reform that allowed VCAs to be incorporated into the national protected areas system. VCAs certified by CONANP represent a bottom-up conservation model, where communities can apply for recognition for time-limited periods of up to 25 years in exchange for modest levels of support. In many cases, the VCAs provide recognition for conservation that had long been practiced by local and Indigenous communities (Van Vleet et al., 2016).

The PHS programme gives economic incentives to communities and individual landowners to conserve forests in areas of hydrological significance and under threat of deforestation (Sims et al., 2014). By 2010, 4,646 communities covering nearly 2.8 Mha were enrolled in the programme. The programme was open to all forest communities. Although communities with CFEs could not overlap with the areas managed for timber, these communities were permitted to generate income from already conserved forests. The PHS programme, together with OTCs and more recently the VCAs, have created new incentives for collective action around forest conservation, consolidating a culture of conservation in forest communities, even in those without CFEs (Bray, 2020). An outstanding example of forest communities that have organised themselves around protection and biodiversity conservation after participating in OTC processes, with incentives provided both by the VCAs and PHS, is the six-community organisation the *Comité de Recursos Naturales de la Chinantla Alta* (CORENCHI) (Natural Resource Committee of the Upper Chinantla) in the Sierra Norte of Oaxaca. There, the establishment of contiguous VCAs in all six communities and the income from the PHS program were key incentives in collective action around strict conservation (Bray et al., 2012).

With this programme, Mexico is responding to new global approaches from the International Union for the Conservation of Nature (IUCN) and the Convention on Biological Diversity (CBD) to incorporate more anthropogenic landscapes with strong community involvement into conservation (Luis-Santiago & Durán, 2020). As of July 2020, a total of 354 VCAs were registered for 551,206 hectares (CONANP, 2020). Timber extraction and conservation are complementary in many instances. This is illustrated in the communities of Ixtlán de Juárez and Santiago Comaltepec in the Sierra Norte of Oaxaca (Bray, 2020). Both communities have territories that combine community-based conservation in VCAs in lower tropical areas with timber extraction in higher altitude temperate forests (Pacheco-Aquino, 2014), and there are similar cases in Guerrero (Botello et al., 2015).

Adaptation and mitigation for climate change

Much of Mexico is being impacted by climate change, and forest regions are experiencing increases in temperature and unprecedented drought conditions (Fernandez-Eguiarte et al., 2020) that will influence distribution, productivity, and stress levels of forests with implications for CFEs. Mexican community forests are also suffering from increasing attacks by bark beetles (*Dendroctonus spp.*) and other pests, increasing threats to rural livelihoods and biodiversity.

Emerging climate stressors have created concern over the scenarios of catastrophic shifts in forest ecosystems (Scheffer et al., 2012), particularly fears that deforestation, fire, and climate-driven drought could lead to a tipping point of rapid ecological deterioration in the Amazon (Nepstad et al., 2008). Mexican CFEs may be resilient to catastrophic tipping points and make substantial contributions to mitigation of and adaptation to climate change (Bray, 2020). Thus,

Mexican forests provide an important model for global forests, particularly in the context of REDD+ (Reducing Emissions from Deforestation and forest Degradation, plus conservation, sustainable management of forests, and enhancement of carbon stocks), the international framework that incorporates forests into efforts to reduce carbon emissions. Mexican community forests were highlighted at the Conference of Parties (COP) 16, held in Cancun in 2010 with carbon generated by travel to the conference offset by purchasing forest carbon credits from the Oaxaca-based NGO *Servicios Ambientales de Oaxaca* (SAO) (Environmental Services of Oaxaca) (Bray, 2012). Despite unclear accomplishments of the Mexican REDD+ initiatives, community forestry continues to stand as a model of sustainable rural development in Mexico. For example, the first objective in the 2020 Work Programme for the National Forest Commission is to 'promote community forest management for sustainable use and diversified forest resources … to reduce the effects of climate change' (CONAFOR, 2020, p. 4). In addition, Mexico has assumed the international commitment to reduce 22 per cent of its emissions of GHG by the year 2030, and the reduction of deforestation and forest degradation through community forest management is a key element in this commitment (CONAFOR, 2020).

Community forests and adaptation to climate change

There do not appear to be any obvious negative impacts from climate change on Mexican CFEs as of 2020, but there are projections of serious impacts. Gómez-Mendoza and Arriaga (2007) modelled climate change scenarios to propose that the current altitudinal ranges of pines could be reduced anywhere from 0.2 per cent to 64 per cent, depending on the species, and include major declines of some commercially important species. Sáenz-Romero et al. (2010) also used modelling to predict reductions in precipitation and increases in temperatures, causing a migration of pines towards higher elevations, likely affecting growth rates by 2030. Both studies posited that lower altitude pine species, such as *Pinus oocarpa*, and higher altitude pines, such as *Pinus hartwegii*, would be especially impacted. The altitudinal requirements for *Pinus oocarpa*, used for resin extraction, may be up to 300 metres higher in 2030. Programmes of assisted migration have been proposed in Michoacán and Oaxaca for commercial pine species, particularly for the commercial pine species *Pinus patula*, in Ixtlán de Juárez. However, as of late 2018, *Pinus patula* was reportedly doing well in both low and high altitudes in the community, not yet displaying any climate-change impacts (Interview with E. Santiago García 9 December 2018). The management of bark beetle outbreaks is another front in which well-managed community forests are adapting to climate change. Although Salinas-Moreno et al. (2010) suggest that poor logging practices are the cause of outbreaks, there is much evidence that CFEs react quickly to bark beetle infestations with participatory sanitation logging, controlling the problem at much higher rates than forest communities without CFEs (Pacheco-Aquino & Durán, 2021).

Community forests and mitigation of climate change

Masera, Ordoñez, and Dirzo (1997) projected a scenario where the forests of Mexico could become a carbon sink by 2025, and this has occurred in temperate forests (CONAFOR, 2020). A 2018 study of carbon storage in above- and below-ground dry woody mass and soil organic matter in 64 countries in tropical, sub-tropical, temperate, and boreal biomes showed that Mexico had the fifth largest carbon storage globally (Frechette et al., 2018). More generally, Griscom et al. (2017) demonstrated that 'natural climate solutions' provide '37 per cent of cost-effective CO_2 mitigation needed by 2030 to have a greater than 66 per cent chance of holding global warming to below 2°C'. They analysed 20 conservation, restoration, and

land management options that increase carbon storage and/or avoid greenhouse gas emissions, taking into account needs for food and fibre security and biodiversity conservation. The third most important is 'Natural Forest Management', suggesting significant mitigation opportunities in Mexico's community forests. As noted earlier, many community forests are in varying degrees of conservation, with maturing trees capturing carbon. Further, the forest areas under management for timber have an enhanced value for carbon storage, since the majority of the harvested timber goes into the 'long-lived forest products pool', such as construction and furniture. Silvicultural practices and conservation have been discussed here, but we will review their implications for carbon (C) capture and mitigation of climate change (Bray & Durán-Medina, 2014).

The time period and magnitude of carbon release and capture can vary greatly between and within different silvicultural treatments and, as noted, the final destination of harvested trees is an important variable. Bragg & Guldin (2010) define 'fast pool' biomass as smaller roots, bark, foliage, and other slash that decomposes quickly and fibre that is converted into short-lived paper products. The 'slow pool' or the 'long-lived forest products pool' refers to stumps or pieces of wood that may be left behind and, as also noted above, timber in long-term storage in furniture and buildings, the uses of most Mexican timber. Uneven-aged and even-aged silvicultural systems have emissions trade-offs, and which system has lower emissions depends significantly on the specific management practices and the time horizon (Bragg & Guldin, 2010). In addition, harvest reductions for conservation motives are frequent among Mexican CFEs.

Conclusion

Mexican CFEs presents the best case in the developing world for how community forestry can achieve biodiversity conservation, mitigation, and adaptation in the face of climate change while at the same time maintaining profitability and generating solid forest-based livelihoods. Alcorn and Toledo (1998) have pointed out the crucial role of property rights for Mexican community forestry. However, it is a range of other large-scale state policy initiatives and market incentives that have been key to the emergence of Mexican community forestry.

> State policy, both unintentionally and intentionally, opened up the spaces for political mobilizations and community entrepreneurial vigor to occupy and expand those spaces, and in providing all or significant measures of the natural, physical, financial, human and social capital necessary to create market-viable CFEs. The market incentive of consistently high prices has ensured that there is a permanent motivation to incur the substantial transaction costs in engaging in the collective action to organize a CFE.
>
> *(Bray, 2020, p. 245)*

In Mexico, in regions where community forests dominate the landscape, there is also low deforestation and degradation. However, it is also true that many CFEs have challenges as enterprises in competitive markets. These include underharvesting, decapitalisation, small production forests, inefficient sawmills, poor timber classification practices, managerial and organisational challenges, high transportation costs, poor understanding of marketing, and many other issues, many of them inherent in communities trying to administer a market-oriented enterprise (Chapela y Mendoza, 2018). However, likely the most significant impacts in recent years have been from organised crime, with CFEs in some regions having to pay protection money or even having been substantially taken over by organised crime. Despite these challenges, many hundreds of CFEs have survived for decades and continue to provide multiple benefits to their communities.

The IPPC (2018) recently recommended strategies for keeping global warming below 1.5 degrees Celsius that included avoidance of forest degradation and deforestation, usage of local and indigenous knowledge, application of biodiversity management, and community-based adaptation. However, these findings neglect a key adaptation option: Mexican community forestry for commercial timber production and conservation. In addition to local and indigenous knowledge, the recognition of emerging community cultures of industrial forestry will have multiple co-benefits, and Mexican CFEs can be interpreted as a successful pre-adaptation to the coming storms of climate change. The Mexican model provides inspiration for how many forest-rich developing countries can promote conservation of biodiversity and resilience to climate change in forest communities.

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31

COMMUNITY-BASED EMPOWERMENT THROUGH LAND REFORM IN SCOTLAND

The case of forest ownership

Anna Lawrence

Introduction

Scotland

Scotland is a small rainy mountainous country on the western edge of Europe. Politically it is a devolved nation within the United Kingdom (UK), having its own government and legal system. Before 1987 Scotland had no community-owned forests. Things started changing as one community after another took matters into their own hands and, often against formidable odds, bought the land they lived on or bought woodlands that were significant to them. The community ownership movement is much wider than forestry, but woodlands have played a key role, and Scotland's thriving community forestry sector is now woven into the country's aspirations for sustainable development.

While early community 'buy-outs' were led by the communities and grassroots support (Bryden & Geisler, 2007; Ritchie & Haggith, 2005), land reform policies have been developed since the restoration of the Scottish Parliament in 1999 and the devolution of legislative powers. Its community-led beginnings were founded on experiences of adversity under absentee landowners, in the context of highly concentrated private landownership (Combe et al., 2020). Scotland's inequitable landownership structure is a concern for Scottish policy goals which promote fairness and social justice.

A remarkable programme of land reform and community ownership is unfolding in Scotland. As a grassroots movement has become politically institutionalised and a focus on land reform has expanded to include other assets, Scotland's experience can provide insights relevant to wider questions of social justice and empowerment. The story is a dynamic one, of 'bottom-up' and 'top-down' influences on change, of hopes and power balances and struggles with bureaucracy. It has been unfolding for 35 years, and the way in which that story has been told has also been evolving.

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The Scottish case has attracted international analysis because of the unusual focus on transfer to community ownership. Land reform in the global sense often refers to the breakup of large landholdings and transfer to small-scale individual ownership, sometimes through compulsory purchase (Hoffman, 2013). That is not the case in Scotland, where a range of new Acts and mechanisms allow for communities to purchase land as it comes to market, or apply to purchase public assets.

The UK context

In the UK, changes in society and policy have created spaces for the emergence of community woodlands. The community forest movement has grown over the last 30 years, from grassroots action demanding change in land tenure in Scotland, to a wide-ranging and diverse sector across the UK (Lawrence et al., 2009; Lawrence & Ambrose-Oji, 2015). On the other hand, the growth of more urban approaches to social forestry has been policy-led in all four countries (Scotland, Wales, Northern Ireland, and England) (Kitchen et al., 2002; Nail, 2008; Williams et al., 2013), with early drivers including New Labour's enthusiasm for the Third Sector, and more recent aims to outsource social and environmental services (Di Domenico et al., 2009; Haugh & Kitson, 2007; Neumeier, 2017), motivated by neo-liberal and austerity politics.

These drivers lead to two broad categories of woodland social enterprise. The first, predominant in Scotland (supported by a series of land reform laws) and increasing in Wales, consists of communities that own or lease forests and manage them to produce (mainly) timber and firewood. The second, more widespread in England and Wales (and recently in Northern Ireland), uses forests as venues for social services including education and training and support for mental and physical health (Ludvig et al., 2018; O'Brien et al., 2014; Williams et al., 2013; Wilson et al., 2011), with the emergence of enterprises to deliver such services, and which may or may not take an active role in woodland management.

Forests and land in Scotland

Changing forest cover, management, and ownership

Woodland spread across Scotland after the end of the last Ice Age, about 11,000 years ago. Its greatest extent was about 5,000 years ago. The first people arrived and spread out at more or less the same time as the first trees; we have colonised the land together, and our histories have been intertwined ever since (Smout, 2003). The decline of forest cover over the last 5,000 years resulted from the interweaving effects of humans clearing woods for agriculture, and the cooling climate which favoured the growth of peat bogs and made it more difficult for the forests to regenerate. By the 14th century, the timber used in significant buildings was increasingly being imported, suggesting that local forests were no longer able to supply large-sized pine and oak (Mills, 2015). Laws to enforce forest protection and encourage replanting appeared from 1424 onwards (Crone & Watson, 2003).

Wealthy landowners began to experiment with introduced conifer species for commercial timber production in the eighteenth century. However, many of the woods and plantations that remained by 1914 were felled for pit props and other demands of the First World War, and by the end of the war only 4 per cent of Scotland was covered in forest (Smout, 2003). Decades of debate about state intervention resulted in the establishment of the Forestry Commission in

1919, with the primary purpose of creating a strategic timber reserve for the UK. It did this by acquiring land which it planted directly, and by creating incentives for private landowners to plant forest. The emphasis was on fast-growing conifers with commercial value.

Forest area rose again, but the forest was very different from the semi-natural mixtures of broadleaves and conifers that had characterised Scotland in earlier centuries. By 2021, still 19 per cent of Scotland was recorded as forest. Three-quarters of this is conifer, and of the conifer, 58 per cent are one species, Sitka spruce (Forest Research, 2021).

Scotland presents a very different forest ownership structure to that of continental Europe, where small-scale, local ownerships by families, communities, co-operatives and local government are much more widespread (UNECE/FAO, 2020). Most of Scotland's forest land is owned by the state, landed estates, and forestry investors (Wightman, 2012). A study in 1999 found that only 1,200 landowners owned two-thirds of the private land (Wightman and Riddoch 1999). The situation only began to move beyond the feudal land laws inherited from the Middle Ages with political devolution and the Land Reform (Scotland) Act of 2003.

Throughout the 20th century, increasing difficulties were experienced with absentee landlords who obstructed attempts at community and regional development and managed their land against the broader community interest (Hunter, 2012; McIntosh, 2004). Initial reactions against particular landlords caught the popular imagination and were gathered into a narrative of addressing historic grievances, injustice, and disinheritance. Early successes included two headline-grabbing cases: the Isle of Eigg, and the crofters of Assynt. These cases were built up by the communities and their supporters; there was no policy to support them. In the last two decades, a more dominant (although not uncontested) vision of community ownership of land has developed, which is not only a reaction against the past but also a positive model of collectivist, asset-based community development (Bryden & Geisler, 2007; Shucksmith, 2010).

In many ways, the first community purchase of *woodland* was atypical – partly because it was in the south of Scotland, partly because the woodland was not particularly close to the community. But Wooplaw has an indelible place in the history of community woodland in Scotland. A craftsman and artist, Tim Stead, began making carved hardwood axe-heads to raise money to purchase an area of land in the Borders to plant trees. His work attracted others who formed Borders Community Woodlands and were able to respond quickly when a 23-hectare wood called Wooplaw came on the market in 1987. Funds to buy it were raised through personal gifts and public grants. Wooplaw is still thriving today, but the epicentre of land ownership change has been in the north and west of Scotland, much further from the densely populated cities of the central lowlands. To look at this change in context, we need to step back and look at the overall patterns of land ownership in Scotland.

Data challenges in understanding landownership in Scotland

Land ownership in Scotland is notoriously difficult to research because much ownership is undocumented from its obscure origins in the Middle Ages (Wightman, 2010). Legal developments are changing this, and a new Land Register should be completed by 2024. By 2019, 34 per cent of Scotland's land area and 67 per cent of its 'title units' were on the new Land Register.

Official (albeit messy) statistics exist on community-owned land because this is a policy target. The latest assessment puts 191,261 hectares of land in community ownership (approximately 2.4 per cent of all land), with 612 assets owned by 422 community groups (Scottish Government, 2021). The data (Figure 31.1) show that much of this community ownership is in

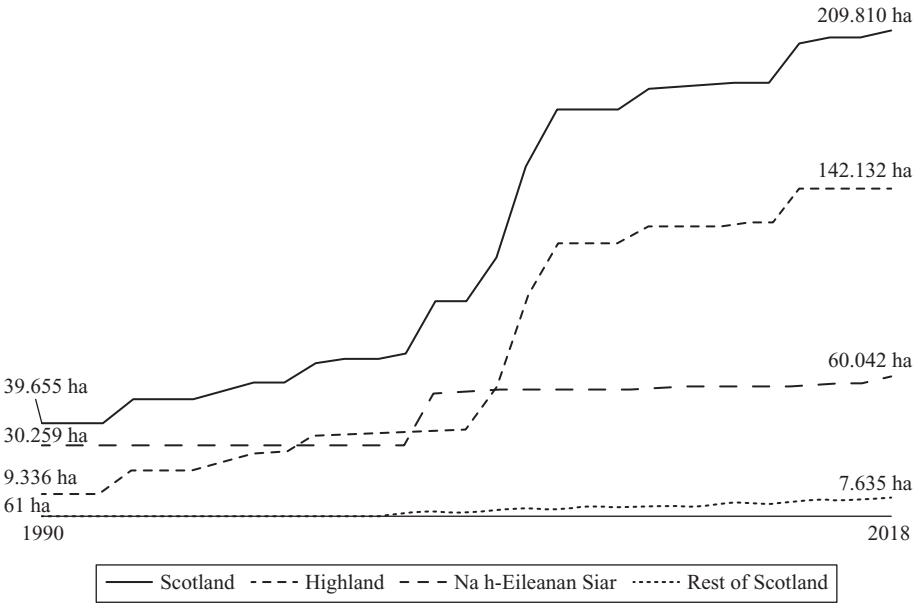


Figure 31.1 Community ownership of land in Scotland between 1990 and 2018. Source: Scottish Government, 2021.

the Highlands and Western Isles (*na h-Eileanan an Siar*) – the areas most 'remote' or distant from centres of population and industry.

Forest ownership is measured differently (Box 31.1). Official statistics only report 'public' and 'private' forest ownership, which does not distinguish community woodlands. The Community Woodland Association estimates that between 20,000 and 30,000 hectares of woodland are community owned, or 1.4–2 per cent of all forests (J. Hollingdale, pers. comm).

Another way of looking at this is through an official indicator included in the 2006 Scottish Forestry Strategy: 'number of community woodland groups'. This indicator was first measured in 2002 by Reforesting Scotland, when a total of 51 groups were identified; in 2007, the measurement was conducted by Forest Research, and 138 groups were recorded; in 2012, a total of 204 community groups was counted, representing a 67 per cent increase in the number of community woodlands in five years. Of these 204 groups, 72 groups owned their woodlands, 19 leased their woodlands, and 113 managed them in partnership with the owner (Edwards et al., 2009; Stewart & Edwards, 2013). Following the revision of the Scottish Forestry Strategy, this indicator is no longer collected on behalf of the Scottish Government. However, the growth of community woodlands is evident from the growing membership of the Community Woodland Association (now over 250 members), the uptake of the Community Asset Transfer Scheme (see later in this chapter), and the widespread publicity given to numerous community groups.

Community woods and forests range in size from hundreds of hectares of commercial conifer plantation (e.g. Aigas Community Forest, 270 ha; Kilfinan Community Forest, 561 ha), to very small (e.g. Jubilee Wood in Peebles, 1 ha mixed broadleaf and conifer).

Box 31.1 Data on forest ownership

The UK relies on forest inventory and statistics that to date pay more attention to the timber volume than the ownership. Forests are reported under two categories, 'public' and 'private', but even these are problematic, as the 'private' category includes any public forest that does not belong to the Forestry Commission (and its subsequent devolved forms). Thus, any forest owned by local government, or the Ministry of Defence, is included in the 'private' category. This makes the official statistics a rather blunt instrument for analysis of forest ownership in the UK, which compares poorly with other European countries (UNECE/FAO, 2020).

A study in 2012 provides a more nuanced picture, based on detailed empirical investigation. This study sampled two case study areas of Scotland and traced the ownership of every forest in that sample (Wightman, 2012). This provided important insights, indicating that Scotland has the most concentrated pattern of private forest ownership in Europe. For example:

- 55 per cent of forest holdings in Scotland are over 50 ha (compared to 1.6 per cent in Europe).
- 6.3 per cent of forest holdings in Scotland are under 1 ha (compared to 55 per cent in Europe).
- 55 per cent of Scotland's private forest area is owned by absentee landowners, and 32 per cent live outside Scotland.

Policy

When the Labour government came to power in 1997, Scotland's people took the opportunity to vote for a devolved government. Devolved policy areas included forestry, and for the first time national forest strategies were prepared for each of England, Scotland, and Wales. Scotland has always had a different legal system from that of England and Wales, including different rights of access, inheritance, and use of land, and devolution provided the stimulus for a range of new legislation, including land reform.

Land reform

The roots of the current land reform policy in Scotland began with the New Labour government in 1997. The Scottish Office established a Land Reform Policy Group which concluded that the existing system of landownership in Scotland was inhibiting development in rural communities and causing natural heritage degradation as a result of poor land management. This led to the adoption of the core objective of Scottish land reform policy: 'to remove the land-based barriers to the sustainable development of rural communities' (Lloyd & Danson, 2000).

Designed to address long-standing ambiguities and grievances, the Land Reform Act (Scotland) (2003) established a statutory right of access to most land in Scotland, and a community right to buy land which comes up for sale, subject to having registered an interest. Furthermore, communities within the very specific tenure category of crofting[1] were given a right-to-buy the crofting land (even if not on the market).

The 'Community Right to Buy' is a pre-emptive right to buy land for eligible community bodies (see later). It provides for those communities who successfully register a community

interest in land to have the first option to buy when the registered land is offered for sale.[2] Community bodies can register an interest in any land, such as churches, pubs, estates, empty shops, woodland, fields, and more. The 2003 Act applied only to rural land, i.e., where the settlements have a population of less than 10,000 persons. Uptake of these opportunities, and conversion of initial applications into full community land acquisitions, has been limited; by 2018, just 22 (13 per cent) of the 174 community bodies which had applied to register an interest in land had successfully acquired the land/asset of interest (Mc Morran et al., 2018).

Land reform has continued to pre-occupy Scottish policy makers. The Land Reform Review Group (LRRG) was established by the Scottish Government in 2012 to identify how land reform could enable more people to have a stake in the ownership, governance, management, and use of land, and to assist with the acquisition and management of land by communities (Land Reform Review Group, 2014). The LRRG highlighted the concentrated ownership of land as a barrier to well-being and social justice:

> The relationship between the land and the people of Scotland is fundamental to the wellbeing, economic success, environmental sustainability and social justice of the country. The structure of land ownership is a defining factor in that relationship … various approaches to land reform, not least the expansion of community ownership, have contributed positively.

The Group's thinking has contributed to a move away from seeing private land ownership as a human right to an emphasis on public interest (Peacock, 2018), a trend that is in direct contrast to the reduction of access rights in neighbouring England (Monbiot, 2020).

Empowerment

Further opportunities have been provided by the Community Empowerment (Scotland) Act (2015), enabling communities to buy land in urban areas, and expanding the definition of community to include communities of interest as well as communities of place. It also introduces a right for community bodies to make requests for transfer of public assets (under ownership or leasehold), whether or not they are on the market. Such requests can be made to local authorities, Scottish Ministers, and a range of public bodies for any land or buildings they feel they could make better use of. This Act is highly significant for community forest acquisition in particular, as explained in the next section.

Empowerment is an important part of this legislative narrative. The Organisation for Economic Co-operation and Development's 2008 review of rural policy concluded that Scottish policy was disaggregated, centralised, and with little genuine community empowerment (OECD, 2008). Partly in response, the 2009 Community Empowerment Action Plan (CEAP) sees community ownership as one aspect of community empowerment (Sayers & Follan, 2010):

> Asset ownership won't be the answer for all communities … but it can be very powerful.
>
> *(Scottish Government, 2009)*

Within the Scottish Government's National Performance Framework, 'empowerment' is a key component for achieving the National Outcome: 'We live in communities that are inclusive, empowered, resilient and safe' (https://nationalperformance.gov.scot/index.php/national-out-

comes/communities). The number of assets in community ownership has been used as an indicator for measuring progress towards this outcome since 2013 (but does not distinguish between woodland and other lands).

Defining community

Globally, definitions of community property are fraught with diversity (Lawrence, Gatto, Bogataj, & Lidestav, 2020). While there is growing statutory recognition of rural communities as collective owners of land (UNECE/FAO, 2020), Scotland is relatively unusual in creating *new* community ownership structures, rights, and realities (Hoffman, 2013; Lovett, 2020).

In Scotland, community ownership is a form of private ownership which is quite different from the communal (local government) land, or the traditional commons, widely encountered in continental Europe (Lawrence et al., 2020; UNECE/FAO, 2020). It usually refers to legal ownership of title by a company or charitable organisation with a constitutional type tightly defined by law. A range of other models of joint or community ownership, including co-operatives, syndicates, and community benefit societies, are also valid in Scotland, but they may not be eligible to acquire assets through the routes prescribed by the various land reform acts, nor to receive support from various public funds.

An eligible community body is defined in the 2003 Act and must be either a company limited by guarantee, a Scottish Charitable Incorporated Organisation (SCIO), or a community benefit society. While these technical terms may seem abstract, they are all legal forms that provide a form of business structure that serves social and environmental objectives. Typically, surplus income is used for the non-profit objectives of the business rather than distributed as profits to members. The company or charity is a separate legal entity from its members, so property and other assets can be held in the company's name and the company can enter into contracts and employ people, while limited liability protects the members of the company from personal liability for the company's debts.

This legal entity, the 'community body', must be controlled by members of the community, be defined geographically, and ensure its main purpose is consistent with furthering the achievement of sustainable development (Community Ownership Support Service, 2020).

The developing legislation around community asset ownership in Scotland provides an interesting commentary on the definition of community. With the 2015 Community Empowerment Act a new concept of 'community of interest' has been introduced, which allows an expanded understanding of 'community' as follows:

> The legislation on asset transfer does not define what a community can be. It simply requires a community transfer body to define the community it relates to, and ensure the body is open to and controlled by members of that community, and uses its assets to benefit that community … A community can be any group of people who feel they have something in common. In many cases, it is that they live in the same area. However, it can also be that they share an interest or characteristic. Communities of interest could include faith groups, ethnic or cultural groups, people affected by a particular illness or disability, sports clubs, conservation groups, clan and heritage associations, etc. They may be very specialised or local, ranging up to national or international groups with thousands of members.[3]

This is a significant change in the understanding of community. It is important to note that it is a *recent* change and, to date, relatively untested; and that it applies only with respect to applications

to transfer assets in public ownership. The legislative protection is provided by the conditions of constitution of a community *body*.

Forest policy

Community forestry in the policy framework has followed its own trajectory, sometimes accompanying the land reform agenda but with additional community motives and policy opportunities.

From the policy side, the initial focus was more on partnership between communities and the public forests managed by the Forestry Commission. One of the strategic directions of the Scottish Government's first Scottish Forestry Strategy (Scottish Government, 2002) was 'helping communities benefit from woods and forests'. Priorities included the provision of opportunities for community involvement in forestry, and support for community ownership where it brings local benefits. In 2000, Forestry Commission Scotland (FCS)[4] established a Forests for People Panel to advise on community involvement in forestry. A 'health check' of this process in 2014 found mixed progress in the public forest domain, noting that staff commitment to community involvement varied widely (from enthusiastic to sceptical), and that legal agreements between the public forest body and community groups often took years to finalise (Lawrence, Ambrose-Oji, & O'Brien, 2014). Despite some high-profile and sustained efforts to make community–public partnerships work in a few locations such as Laggan,[5] attention has shifted to community ownership rather than community partnership.

Following the Land Reform (Scotland) Act of 2003, FCS introduced the National Forest Land Scheme (NFLS), which gave community organisations the opportunity to apply to purchase any part of the national forest estate, even if the land was not on the market, if it could be demonstrated that purchase would be in the public interest (Forestry Commission Scotland, 2013). The process was overseen by an independent panel which evaluated applications from communities. The NFLS ran for ten years and transferred a total of almost 7,000 ha, of which only 4,000 ha were ultimately owned by communities. It is interesting to note that despite all the efforts put into the NFLS by both government and community bodies, during the same period, 50,000 ha of the national forest estate were sold to the private sector.[6]

The NFLS was wound up in 2016 and replaced by the Community Asset Transfer Scheme (CATS), to comply with the Community Empowerment Act, whereby all public bodies must engage with the right of community bodies to apply to acquire assets. The public forests are a significant component of all public assets, and prior experience with NFLS gave the state forest sector an opportunity to develop a clear process and dedicate resources to helping communities to apply. After five years, 19 properties totalling around 600 ha have been transferred[7].

Policy support

The first Scottish Land Fund was established in 2001 (SLF 2001–2006), providing financial resources to communities to support land purchase. It was relaunched in 2016, funded by the Scottish Government and delivered in partnership by the Big Lottery Fund and Highlands and Islands Enterprise, with a new two-stage process whereby community bodies could apply for support to develop their application (stage 1) and apply for help to take ownership of the asset, usually with an upper limit of £1 million.

Advisory services were also established. The Community Land Unit was established by the regional development agency, Highlands and Islands Enterprise, to assist communities in

drawing up their plans and in the purchase and management of land. Later, the Community Ownership Support Service was established with government funds to provide advice to community groups considering asset acquisition.

These government services are distinct from two membership organisations which provide significant support to community landowners. The Community Woodlands Association (CWA) was established in 2003 as the representative body of Scotland's community woodland groups. There are around 200 groups across Scotland, involved in or responsible for the management of thousands of hectares of woodland and open space. Just over half of the members own their woodlands, while the remainder lease them or have a variety of formal and informal partnership arrangements. CWA was set up by its members to promote and represent community woodland groups within the political arena and more widely, and to support established and new community woodland groups to achieve their aspirations.[8] Community Land Scotland (CLS) was established in 2010 as a membership organisation representing and advising community landowners throughout Scotland, representing and supporting land reform through community land ownership. CWA and CLS often work together and, while independent, also contribute to policy delivery.

Case studies

The range of community woodlands and forests in Scotland is enormous, in terms of scale, forest type, and community management objectives. Two contrasting examples are described in the following case studies.

Gordon Community Woodland Trust (GCWT)[9]

Kirkcal Wood is a 23-hectare wood, one mile away from the village of Gordon and a popular place with local people. It is a good example of a relatively under-managed woodland being brought into more intensive, productive management, mainly as a result of increased and improved access for the local population. The wood came on the market in 2002. People in the community organised themselves to form a company limited by guarantee and purchased the wood for £90,000. Of the purchase price, 75 per cent came from the Scottish Land Fund, the first such assistance given for a land purchase in the south of Scotland. The group wanted to secure ownership of the wood, a popular place for local people, so that it could continue to be a local resource. With time it has evolved into a self-sustaining community woodland with a small-scale but replicable business model. At the time of purchase, Borders Forest Trust (BFT), a regional environmental charity, was supporting local community woodlands. It provided guidance on funding, legal, and management aspects for the first dozen or so years, and wrote the original management plan.

The group has about 50 members, who pay a small membership fee to cover running costs of the woodland, and jointly contribute at least 60 hours of voluntary work per month for woodland work, mostly maintaining the footpaths and boardwalks. Success has depended on a number of committed and enthusiastic individuals. The community organisation has developed an extensive network of woodland paths, including parts suitable for wheelchair users; built two car parks; constructed an educational facility; and managed tree establishment and woodland operations. Members receive firewood in return for voluntary work such as woodland thinning, and the wood is used by the local primary school as an educational resource. The wood is also regarded as a haven for scarce species and semi-natural habitats in an otherwise intensively farmed landscape.

The group operates a not-for-profit business model. As the management plan supports a shift of species composition back to mostly native broadleaved tree species, there is an opportunity for income from the sale of Norway spruce Christmas trees. This provides the main income source of about £1,000 every year. The community group considered commercial production of firewood but was reluctant to compete with other local suppliers. Other sources of income have included a forestry grant from the Scottish Government for improving access, and a significant lump sum from a utility company in return for access to the site for fibre-optic cabling. This security is important because the group has to spend about £500 per annum for public liability and woodland insurance.

Support from Borders Forest Trust was important to the development of GCWT, in the form of woodland management advice, volunteering support, and education input. GCWT was a member of the Community Woodlands Association but has allowed its membership to lapse. A local forestry consultant has provided the group with *pro bono* woodland management advice. This type of support is important. It provides professional guidance on woodland management and it reassures the group that they are managing the woodland in a responsible and sustainable manner. The experience of Gordon Community Woodland Trust highlights the value of support in the early stages, but they do not seem to feel a need to continue networking, now that their woodland group is established.

North West Mull Community Woodland Company (NWMCWC) [10]

NWMCWC was the first community purchase through the NFLS and consequently had to face many challenges as an 'early adopter', finding its way through a new scheme. As a result of community ownership, two landlocked, commercially challenging conifer plantations have been turned into a significant asset for the community. NWMCWC has featured in many case studies because of its experience, and the commitment of staff and directors.

Dervaig is a community of about 200 households in the north coast of Mull, an island in the west of Scotland. While the remote location and natural setting attract incomers seeking lifestyle change, who are often able to draw on savings, those who have grown up on the island find it difficult to balance the cost of living with the scarce opportunities for income. A particular issue is the cost of housing, which has risen in response to immigration, often becoming unaffordable for local families. This leads to earlier outmigration of local people. Most of the forests on the island are conifer plantations established decades ago, providing little or no employment for residents.

In 2005, the conifer plantations around the village were offered for sale by FCS and a group of locals decided that they would try to purchase them to retain control within the community. An open meeting was held and a working group formed. After detailed public consultation, this developed into a community company fulfilling the eligibility requirements for the NFLS. The NWMCWC describes its original purpose as being 'to purchase and manage, in the interest of the local community' these two plantations, specifically 'to maintain and improve the amenity, recreational access and biodiversity value of the woodlands'. The land was purchased in 2006 at a price of £343,000, using a range of public funded awards, trust funds, local fundraising activities, and an interest-free loan. The 2014 company accounts note 'a recent valuation of the land at £1,000,000 despite the extraction [of timber]' (from the plantations), i.e. a tripling of asset worth.

The two forests purchased consist mainly of plantations of exotic conifers (Langamull 251 ha and West Ardhu 421 ha), predominantly Sitka spruce planted in the 1960s on wet peaty soils where the natural forest cover would consist of low oak and birch forest. This part of Scotland

is very exposed to wind. When the community company NWMCWC bought Langamull and Ardhu, there were concerns that the forests were rapidly reaching economic maturity and at increasing risk of wind-throw, which would drastically reduce both their natural capital and financial value. An NWMCWC director described the forests as 'neglected' in 2009. As a result of community ownership, the forests have been brought into silvicultural management and have been harvested, and a wider range of species has been established, thereby diversifying the biological resource. At least 60 ha of native broadleaf trees and planned restructuring of the forest will bring stand diversity. It is likely that the forests will provide a greater range of ecosystem services as a result of these changes.

The achievements of NCMCWC as owners of these forests are numerous. Currently the company employs three people, provides a fully accredited local source of quality firewood, is the sole supplier of government-accredited woodchip, has supported forest-based education initiatives, has hosted tree-planting events to increase the percentage of native broadleaves, and has facilitated annual archaeological training courses and studies by two universities which are attended by many overseas students. It has improved local tourist values and pride in place, pioneered affordable housing, and delivered a joint venture 99 Kw micro hydro project.

Possibly the most significant achievement has been one that was not even listed as an original objective of community acquisition: the commercial production of timber. The forests were formerly considered unharvestable by the Forestry Commission because of the remote location, weight restrictions on the narrow public roads, and technical difficulties with a floating pier. Community ownership has made it possible for one to be clear-felled and the other partially harvested. The community company put together a successful plan to finance the new haul road at a total cost of £2.3 million, of which 36 per cent was funded through a grant from the EU Strategic Timber Transport Scheme (STTS), 23 per cent from local and national government agencies, 11 per cent from contributions in kind from local landowners, and 29 per cent through an innovative arrangement with an international forest management company, UPM Tilhill. As a government body, the Forestry Commission was not eligible for funding from this EU scheme, and so the change in ownership made access to this capital possible. This community–private finance initiative was the first of its kind in Scottish forestry, and has attracted considerable attention. The investment from Tilhill was fully repaid through the sale of timber by January 2015. This was the first application from a community company, and the scale, complexity, and social negotiations required took four years and doubled the initial expected cost.

Overall, infrastructure has been improved through the construction or upgrading of 16.5 km of forest road and four bridges, including improved access to two farms plus an upgrade of 3 km of the public road. This upgrade completed the North West Mull Timber Extraction route servicing state and private woodlands, which, over a 20-year period, will bring 600,000 tonnes of previously landlocked timber to market. The new access road has helped to provide recreational access, and the planned footpaths will further add to this physical asset.

The purchase of forest land has given the community the opportunity for other important developments, especially housing and sustainable renewable power generation. A high priority for communities in the Scottish Highlands and Islands is the provision of affordable housing. Because local employment is often on relatively low wages, and housing is also in demand as second homes for relatively wealthy city-dwellers, younger people in particular find themselves under economic pressure to leave their home communities. NWMCWC has pioneered the development of woodland crofts, a new secure tenure arrangement created by recent legislation. Furthermore, the micro-hydro scheme not only provides sustainable power, but may also provide the most regular and reliable source of income. According to the 2019–2020 company

accounts, even in dry years the scheme is expected to provide a net income of £20,000, which will underpin the day-to-day running costs of the company.[11]

As a result of all this activity, the community has gone from 'knowing nothing' about forest management (in the words of one director) to gaining much experience in managing forests, projects, and business, and in accessing funding and support. The community forest has been a significant pioneer, and generous in sharing its knowledge and experience with other existing and aspiring community woodland groups, and with policy stakeholders, through many invitations to contribute to training and case studies. As a pioneer and innovator, NWMCWC has been the subject of several case studies, reviews, and evaluations (e.g. Lawrence, 2009; Lidestav et al, 2017; McIntyre & Frost, 2011) and has accumulated plenty of quantitative, external, and objective evidence.

Achievements include the long-term management plan, FSC certification, production of a directors' information pack with information on the roles and responsibilities of a company director and charity trustee, recruitment training, presentation skills, woodfuel training for four people, chainsaw use for 32 participants including commercial operators, logistics equipment training (tractor and telehandler driving, timber loading crane operations and delivery vehicle training) for six, and mobile sawmill use for eight participants. Knowledge has also grown in other parts of the community, for example through the involvement of schoolchildren.

In line with the requirements of the NFLS (and land reform law), all the decisions were made by a board of elected, unpaid directors, supported by the membership (open to all residents) and implemented by the voluntary directors and paid staff. However, these achievements are the result of great effort on the part of a small number of people who, like many other community bodies, have experienced considerable frustration with bureaucratic process and difficulty finding candidates willing to act as directors. Community support for the project has been high, and current members (152 individuals) represent 38 per cent of those on the electoral register. As with all community groups, some people do not feel involved or are not very interested. More significantly, there have been tensions between the needs of the business and community benefits. For example, both NWMCWC and the community were disappointed that contracts for road construction and part of the timber harvesting were awarded by Tilhill not to local but instead to mainland businesses, which were found to be more competitive.

Reflections and conclusions

This chapter has focused largely on the evolution of policy opportunities and understanding of community, creating new spaces for community forestry to expand from the more locally led movement of the 1980s and 1990s. Scotland lacks the definitions of community tenure established over centuries that are found widely across continental Europe, so it has had to create a new concept which works in Scotland's context. It has responded through legislation which is based on the idea of the community body, often a non-profit company. The concepts of equality of access (to membership and decision-making) and community empowerment are built into the definitions. The idea of 'what is a community' is seen to be socially or politically constructed, which is why it requires definition in policy and why new definitions (such as the inclusion of the new 'community of interest' mode in the Community Empowerment Act) have arisen and can help to inform thinking beyond Scotland.

Nevertheless, it is important to note that thinking about community forestry in Scotland and the wider UK has included a wider range of tenure modes such as leaseholds, management agreements, and partnership arrangements, and while these still exist, the current focus of policy

and public discourse is on ownership. Earlier hopes of building better relationships between communities and the state forests seem to have quietly been side-lined, but there is still room for imagination and diversity in developing a range of models in parallel with ownership (Lawrence & McGhee, 2021).

The move to ownership models, the diversity of the resulting community forests, and the fact that many community assets include land other than forests creates a situation where it is difficult to make broad generalisations about outcomes. Earlier attempts to summarise the evidence on community forestry outcomes in the UK found that only about a fifth of evaluations referred to community-owned resources, and only about a fifth evaluated outcomes (Lawrence & Ambrose-Oji, 2015). Scotland is engaged in a developing and learning policy environment. The [Scottish] Land Commission was established by the Scottish Government in 2017 to 'review the effectiveness and impact of laws and policies relating to land, and to make recommendations to Scottish Ministers on future land reform'. This has resulted in a large body of evidence, including the struggles and challenges for communities seeking to acquire assets (Mc Morran et al., 2018), and the implications for sustainable development of the continuing concentration of ownership (Glass, Mc Morran, & Thompson, 2019). The Land Commission's work does not (to date) distinguish community woodlands from other community assets, and more specific inspiration can be drawn from the large range of case studies available through the websites of the CWA and the independent think-tank Forest Policy Group.[12] As highlighted in this chapter, these show groups engaging with woodlands of widely diverse sizes and compositions, some providing a sense of place and amenity for the group, others becoming the economic engine for rural communities. Importantly, the woodland is not just providing trees – it is a route into other assets such as housing and sustainable power.

There are many stories of extraordinary achievement, and each of them contains individual stories of vision and effort. These stories are evolving and interacting with the development of policy, creating a dynamic situation and a rich context for continued learning.

Notes

1 Crofting is a form of tenure unique to Scotland. According to the Scottish Government, there are over 20,000 crofts with over 33,000 people living in crofting households. A croft is a small unit of land traditionally situated in … the Highlands and Islands of Scotland. A crofter is normally the tenant of a croft, and pays rent to the landlord of the croft for the land only. The crofter owns the house. Crofting tenure includes security of tenure, fair rents and the right to pass on their tenancies to members of their families. https://www.gov.scot/policies/agricultural-holdings-crofting/crofting/

2 https://dtascommunityownership.org.uk/community/community-rights/land-reform-act/community-right-buy

3 https://www.gov.scot/policies/community-empowerment/asset-transfer/

4 The agency responsible for implementing and regulating forest policy, particularly in the private forest sector, was the Forestry Commission Scotland (FCS) until April 2019. At that point, devolution of forest policy was completed, and the English, Welsh, and Scottish parts of the former Forestry Commission became fully separate from each other. FCS was replaced by Scottish Forestry, a departmental agency of the Scottish Government.

5 For information about Laggan Forest Trust see e.g. https://www.communitywoods.org/s/CWCS21-Laggan-Forest-Trust.pdf and Inglis, A. and S. Guy (1998). Scottish forestry policy 'U-turn': was PRA in Laggan behind it? Whose voice? participatory research and policy change. J. Holland and J. Blackburn, IT**:** 80-84.

6 https://forestryandland.gov.scot/business-and-services/buy-land-or-buildings/new-woodland-investment-programme

7 https://forestryandland.gov.scot/what-we-do/communities/community-asset-transfer-scheme

8 https://www.communitywoods.org/about-the-cwa

9 The Gordon case study draws on two published case studies: https://www.communitywoods.org/s/CWCS23-Gordon-Community-Woodland-Trust.pdf and http://www.forestpolicygroup.org/wp-content/uploads/2021/03/Gordon-FPG-case-study.pdf

10 The North West Mull case study draws on various published case studies, including: http://www.forestpolicygroup.org/wp-content/uploads/2021/03/NW-Mull-FPG-case-study.pdf https://www.communitywoods.org/s/CWCS24-North-West-Mull-Community-Woodland-Company.pdf and Lidestav et al. (2017)

11 The accounts for NWMCWC can be found at https://find-and-update.company-information.service.gov.uk/company/SC287343

12 See https://www.communitywoods.org/case-studies and http://www.forestpolicygroup.org/case-studies/

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32

DYNAMICS IN COMMUNITY FORESTRY IN THE NETHERLANDS

Impacts of changing cultural ecological knowledge

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Introduction

At the time of the initial interest in community forestry, attention was mostly focused on its potential in countries with developing economies. This focus was coherent with the relatively high occurrence of rural communities in those countries, which were often dependent for their livelihoods on natural resources, whether they be forests or otherwise. Yet, in the past two decades, interest in community forestry in economically developed countries has gradually increased as well (Jeanrenaud, 2001; Lawrence & Ambrose-Oji, 2015; Poffenberg & Selin, 1998; Wiersum et al., 2004). The Netherlands is an interesting example of such a country. Historically, Dutch community forestry was characterised by common property management of forest resources as part of local and regional rural economies. However, in the 19th century, these communal forestry systems were discouraged and finally outlawed for their alleged inefficiency to foster reclamation of new agricultural lands. Consequently, forests were either privatised or their ownership was transferred to local authorities, and in the 20th century, interest in community forestry was largely lost. However, in the early 21st century, a new appetite for community forestry is arising. This development is based on local interests in developing novel ways of engaging with forests, nature areas, and other green spaces. Examples include the re-emergence of rural co-operatives for local landscape management and community-based ecological restoration practices. These novel forms of community forestry are not only located in modernised rural areas, but also in urbanised areas. Urban examples resonate with suggestions that urban forests in economically developed societies may be considered as an example of the manifold expressions of community forestry (Johnston, 1985; Sheppard et al., 2017).

These new manifestations resemble the original forms of community forestry by being based on community action. Community endeavours, however, do not simply reflect the community forestry practices from earlier centuries. Rather they reflect new types of community relations and showcase that the denominator 'community' may have different meanings. Sociologists have

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identified three different interpretations of a community: it may refer to a locality, to a local social system involving inter-relationships among people living in the same geographic region, or to a relationship based on a sense of shared identity (Lee et al., 1990; Li, 1996). Initially the development of community forestry, predominantly in countries with developing economies, has strongly been influenced by the notion of a community as a locality where people share natural resources. In order to understand the features of such local systems, much attention was given to the theories of common property resources (Agrawal, 2001; Ostrom, 1990). Consequently, to identify the main characteristics of community forestry (Arnold, 1998; Gibson et al., 2000), consideration of the role of local rules and institutions on successful community forestry development became central (Agrawal, 2005; Casse & Milhøj, 2011). This institutional model of a community (Agrawal and Gibson, 1999) stresses the rules and institutions that underpin collective action. Consequently, two basic factors influencing successful community forest management were identified: (1) forest ownership as a crucial factor determining community control over forest lands; and (2) appropriate community-level arrangements for adjusting management to location-specific conditions. In addition, it was identified that effective community forestry requires the appropriate blending of community-level management arrangements to external socio-economic and policy conditions (Agrawal, 2001; Li, 1996; Waylen et al., 2010).

The recent interest in community forestry in the Netherlands is not primarily related to common property arrangements; most modern forms of community forestry are rather based on common interests and identities (Wiersum et al., 2004). Thus, while acknowledging the importance of the ownership model for understanding the characteristics of traditional types of community forestry in tropical countries, the awareness model as identified by Arts et al. (2017) seems to offer a better perspective for analysing the emergence of new types of community forestry in economically developed societies. Consequently, in this article, we will highlight which processes have resulted in a new awareness about the merits of community forestry in the Netherlands. The emergence of these novel forms of community forestry offers new insights on the potential of community forestry in economically developed countries. They also shed a new light on community forestry as a dynamic movement that reflects contemporary relations between local people and forests and other green spaces.

The aim of this chapter is to open up the concept of community forestry so that it can appropriately reflect its dynamic nature under a wide array of socio-economic and cultural conditions. This conceptual journey is empirically introduced in the following section by means of a brief description of the present status of community forestry development in the Netherlands. In the section thereafter, these cases are further assessed in respect of the theoretical understandings of the main features of community forestry. Taking the awareness model as a starting point, specific attention is given to the socio-cultural dynamics impacting on community forestry. Consequently, the notion of indigenous knowledge as an important socio-cultural factor shaping community forestry is adjusted to the notion of community forestry being impacted by changing cultural ecological knowledge.

Community-based approaches to green space management in the Netherlands

Considering the dynamics in development of community forestry in the Netherlands, two main types of community forestry under modernised conditions may be distinguished: (1) community-based management based on the recollection of historical community organisations in rural areas; and (2) new types of communal management of green spaces in urban areas.

Community-based management based on historical marke *organisations*

Although the traditional community forestry organisations in the Netherlands were officially abandoned in the 19th century, these organisations have not been entirely forgotten. Especially in the north-eastern part of the Netherlands, there are still several remnants of these organisations. Notably in rural areas with a feeling of the Saxon cultural heritage, the memories of what locally were called *marke* organisations are increasingly valued as cultural heritage and good neighbourhood relations. From medieval times up to the 19th century, a *marke* was a collective of farmers who jointly managed common property lands. In several localities, the renewed attention for these forms of management is reflected in the revitalisation of lingering memories of the old local *marke* organisations. In other places, the former *marke* organisations inspired the development of community-based programmes for nature and landscape management. In the following section, we elaborate on respectively the revitalisation and recreation of *marke* organisations in the Netherlands.

Revitalisation of remnants of old marke organisations

Possibly the oldest example of a surviving *marke* organisation is the *Buurschap Ede/Veldhuizen* in the province of Gelderland. This communal organisation was originally in charge of the management and regulation of communal land-use activities such as grazing on the common heathlands, maintenance of village woodlots, and water management. Although most communal lands were privatised in the 19th century, some lands remained communally owned. In 1952 even a new communal forest plot of 2.5 hectare was bought. Consequently, several of the old communal regulations were maintained by a local land-use management organisation, which is still active today.

A second example of the survival of a former *marke* organisation is the *Marke Vragender Veen* located in the eastern part of the province of Gelderland. In the 18th century in the seigniory of Lichtenvoorde, several *marke* organisations were responsible for the regulation of animal grazing on peat and heathlands, the collection of heath and woodland products for farm use and heating of houses, and the maintenance of country roads. In 1842, the common lands were formally divided into private plots, but several communal arrangements for their management were maintained. In 1943, plans were developed for including the lands in a formal nature reserve. The local farmers protested against this plan and decided to renormalise the communal *marke* organisation. Consequently, the foundation *Marke Vragender Veen* was established for managing the local peatlands. The resurrection of this *marke* organisation heralded the development of local agrarian nature conservation organisations in the Netherlands. Since its establishment, the organisation has gradually enlarged its land holdings to 40 hectares of peatland and adjacent agricultural lands that serve as a protection zone around the peatlands.

The most extensive efforts to revitalise *marke* organisations have taken place in the province of Drenthe. In an effort to stimulate local involvement in the government programme for rural development, the provincial Agricultural Society established the 'Association of Farmers Marken in Drente'. The establishment of this organisation was based on the observation that in several villages there exist remnants of the former *marke* organisation. These were tasked with the management of various landscape elements such as village squares, country roads and related vegetation belts, and community ice-skating rinks. After their renewed formalisation, the *marke* organisations became engaged in communal landscape conservation and management activities such as maintenance of local woodlots and tree belts, habitat management for wildlife and meadow birds, and conservation of the traditional farm tree species. These activities illustrate how the traditional focus on the integrated livestock and vegetation management of common

lands has been shifted to the conservation and management of rural landscape elements. They no longer focus on the provision of basic needs, but rather on maintaining the socio-cultural identity of the rural territory. This cultural focus is for instance reflected by a renewed interest in traditional farm horns as a heritage object for announcing local meetings and celebrations. The growing popularity of the *marke* organisations is evident from the steadily increasing membership of the Farmers Marke Association; since its establishment in 1979, 87 local organisations have joined this association. The acclaim for their contribution to the conservation of cultural heritage has led to the inclusion of the *Boermarken* in the formal Netherlands inventory of non-material cultural heritage.

Re-creation of modern forms of marke organisations

In addition to the efforts to revitalise former *marke* organisations, the growing interest in stimulating local forms of community forest and nature management can also be seen in several efforts to establish new local co-operative organisations for managing rural landscapes. Since the 1990s, a number of such efforts refer to the old *marke* traditions. For instance, in the early 21st century, the province of Groningen started to design an ecological corridor for conserving a traditional cultural landscape bordering two small local rivers. The inhabitants wanted to be involved in this and prepared a local plan for the conservation and management of their age-old cultural landscape. This plan was inspired by the recollection of the former communal management of the local landscape. The local authorities reacted favourably, and consequently several local hamlets created the '*Boermarke Essen en Aa's*' (Farmers' association for managing the agricultural fields and rivers) to stimulate local development in their area. The organisation manages several landscape elements such as tree alleys. Also, in co-operation with the government organisation for rural areas, a new bridge was constructed and new walking tracks and an art project were established. These activities contributed not only to the realisation of the planned ecological corridor preserving the historic landscape, but also towards the creation of a local meeting place for social interaction.

A second example of the re-creation of a *marke* organisation is present in the province of Gelderland. Historically, the heathlands of the village of Gorssel were managed by a local *marke* organisation. This commonage was officially dismantled in the mid-19th century, and in 1908 the lands were transferred to the Ministry of Defence for use as a military training ground. At the beginning of the 21st century, these training grounds were no longer needed, and local people became interested in managing the area again. In claiming local control over the lands, they referred to the former commonage arrangements and established a local foundation: *Marke Gorsselse Heide*. This foundation joined forces with a private foundation for conserving the regional landscape and its historic estate houses. The co-operation between the two organisations was successful in creating acceptance of a present-day *marke* organisation as the new owner of the heathlands and its management in accordance with its former status as a commonage used by local farmers.

A third example in the province of Gelderland illustrates how the recreation of modern types of *marke* organisations does not necessarily result from local initiatives, but may also be initiated by professional management organisations. In 2009, the regional water board of the district Rhine and IJssel decided to experiment with local self-governance of riverbanks and adjacent lands. In the village of Eibergen, they initiated a co-operative project with local inhabitants. During the negotiations, it was recalled that from the 16th century, the former *Marke Mallem* had been present in the area. Although the communal lands were formally privatised between 1840 and 1859, the *marke* maintained possession of some small parcels of land. The proceeds of

those lands were used to fund the maintenance of roads and bridges. This arrangement was only ended in 1974. The memories about these communal land management arrangements stimulated the deliberations of the water board about options for local self-governance of lands along the river. After a long process of negotiation and planning, a new local foundation with the former name of *Marke Mallem* was created in 2013. This foundation obtained the full management responsibility for 43 hectares of lands along the river Berkel.

Emergence of new types of communal green space management in urban and peri-urban areas

The examples of the revitalisation of former *marke* organisations illustrate that many forms of community-based management are not exclusively focused on the management of forests, but rather on the management of forested landscapes. A broader 'green space' orientation is also dominant in newly emerging forms of community-based management in peri-urban areas (Mattijssen et al., 2018a). These (peri-)urban forms of community-based management do not just re-create the traditional communal structures for managing the landscape, but rather also reflect an interest in developing novel green spaces which denote present-day appreciation for cultural landscapes. Consequently, they predominantly focus on biodiversity conservation as well as on the cultural functions of green urban spaces (Mattijssen et al., 2018b). These peri-urban types of community management are not so much directed at developing new forms of ownership but rather at creating a new shared sense of stewardship. In most cases, the ownership of green spaces is in the hands of local authorities rather than the community. Nonetheless, several scholars argue that such green spaces can be considered as a new form of 'commons': publicly accessible land which is managed through shared governance – regardless of actual ownership (Bendt et al., 2013; Colding et al., 2013).

Due to their focus on creating and maintaining inspiring green spaces, the community activities are often not merely driven by ecological aims; they also inspired by social and cultural objectives. These are expressed in different forms of socio-cultural practice in respect of education, social cohesion, food production, and recreation. Two ideal typical types of these peri-urban types of community management of green spaces may be distinguished: (1) conservation-oriented approaches in which much attention is given towards conservation of biodiversity and/or cultural landscapes; and (2) use-oriented approaches which predominantly focus on the provision of ecological services for people living in close proximity to the green spaces.

Community management of cultural landscapes

The cases of community-based conservation of urban landscapes are not primarily characterised by a clearly delineated geographical location, but by the presence of 'communities of interest' where people with a similar interest in green-space management meet. Often, such communities have a relatively strong focus on biodiversity and/or cultural history of the landscape – and members are willing to travel to these green spaces if necessary.

An interesting example is Natuurvereniging *De Ruige Hof* (Nature Association of the Wild Court) in the Dutch capital of Amsterdam (Mattijssen et al., 2017). The association was established in 1986, when a group of citizens joined up to protect spontaneously developing nature on abandoned, municipality-owned construction sites. Since then, the association has been working on the restoration of the traditional medieval cultural landscape in two areas that together span 13 hectares. *Klarenbeek* is an area reminiscent of the 11th–16th-century cultural landscape of the lower parts of the Netherlands. It is a diverse and relatively wet area with

small landscape elements such as flowery meadows, marsh reeds, scrubs, willows, poplars, ponds, ditches, and a medicinal herb garden. *De Riethoek* is an area consisting of a combination of dune-like drier areas and swamp areas. This results in a diverse vegetation including swamp species, flowery meadows, and thickets. As a 'community of interest', the association attracts volunteers from all over Amsterdam and even outside of the city. A particular feature is that about half of the volunteers have a psychiatric history. Thus, *De Ruige Hof* not only serves to restore and maintain a traditional cultural landscape, but also provides a sense of purpose to the members of the association.

A second example is *Stichting Doornik Natuurakkers* (Foundation Doornik natural arable lands). Doornik is a hamlet in the peri-urban municipality of Lingewaard between the cities of Arnhem and Nijmegen. The historic, small-scale agricultural landscape of this area has disappeared due to urbanisation and agricultural intensification. When a part of the current location and adjacent polders were designated as a formal nature reserve, local citizens who were already active in nature conservation made a plan to restore the original cultural landscape. Their plans focused on meadow-bird conservation and restoration of traditional landscape elements consisting of a mixture of small forest plots and agricultural fields. The restoration activities took the form of cultivating traditional varieties of cereal crops and the development of a food forest of 32 hectares. Recently, another 30 hectares of lands in the nearby polder has been added to the original area, including a patch of forest and two bodies of water. The site has become a hotspot for all kinds of community activities such as maintenance of community gardens, organisation of outside school classes for primary school children, excursions, and sports activities. The activities also include traditional landscape management practices such as pollarding willows and braiding hedges. In just ten years, the area has become highly biodiverse and a popular visiting destination for people living in the nearby towns and cities.

A third example is *Stichting De Dommelbimd* (The Dommelbimd Foundation). This foundation manages a small-scale 'traditional' cultural landscape, totalling 6.5 hectares situated on the border of the city of Boxtel. The area was originally a private property which was closed off to the general public. When this land came up for sale in 2013, local citizens were afraid that the area would be developed for housing or commerce. Therefore, they decided to protect the area. They set up a foundation and, in co-operation with Stichting Brabants Landschap (a provincial landscape foundation), raised over €300,000 in crowdfunding for purchasing the land. In this case, and in contrast to most community-based green space management in the Netherlands, the lands thus came into actual ownership of the foundation. Since 2013, Foundation Dommelbimd has worked on making the area accessible to the public and providing educational activities. They have also worked on restoring and reconstructing former cultural elements in the landscape such as fruit orchards, a lake, braid hedges, reed vegetation, and a walking path.

Community management focused on daily use

The second category of community-based green space management in (peri-)urban areas is characterised by new forms of co-operation between daily users of specific urban spaces. These activities usually involve urban people who live in the close vicinity of the site. Generally, these groups of local users do not so much focus on biodiversity and cultural history of the landscape, but rather on the local use values, e.g., recreation, amenity, or social activities (Mattijssen et al., 2018b).

A prominent example of this type of community-based green space management is *Torentuin Zaltbommel* (Tower Garden Zaltbommel). A group of inhabitants of the town of Zaltbommel has developed a 1.5-hectare brownfield into a popular and well-visited green space. The 'tower

garden' includes small-scale urban agriculture, a natural playground for children, an orchard with 'traditional' breeds of fruit trees and also flowering beds. The garden thus included a combination of 'traditional' and 'modern' cultural elements that not only reflect the traditional regional landscape, but also include modern urban landscape elements. The citizens emphasised the cultural heritage nature of the park by restoring a part of the original city walls and presenting some of the archaeological findings from the site. Originally, the project was only meant to be temporary. However, due to the popularity of the newly created green urban space, the municipal council decided that the fruit trees and natural playground will remain after further urban development of the area.

A second example is *Stichting Parkplezier* (The Park Pleasure Foundation) in the town of Dongen. This foundation is involved in the management of a small local park of about 1 hectare that is 'sandwiched' in between high-rise buildings. Although the area had a relatively high natural value, local people experienced it as an unattractive and inaccessible location. In 2010, they decided to make a plan to revitalise the plot into a city park with a positive image. They established a foundation and started to search for allies in order to realise a community-based urban park. The plans were accepted by the municipality, and the foundation became responsible for its management. Since then, the members planted new trees, installed playground equipment, and developed an instructive tree path. They also installed a number of educational information panels and they organize events in the park. Consequently, the park is not only a biodiverse enclave, but has also become a site for social activities and is visited much more often than it was in the past. Although the municipality is formally in charge of the management of the park, the local people play an active role in the governance and planning of the area; they also have a key role in the organisation of a variety of social and educational activities in the park.

A third example of a community of daily users involved in the maintenance of a community park is *Postzegelpark Leusderweg* (Briefmark Park Leusderweg) in the city of Amersfoort. Located in a highly urbanised area, the original brownfield of 0.2 hectare was owned by a local estate developer. This plot was considered an eyesore by inhabitants of the neighbourhood, and a group of local citizens asked the owner if they could temporarily develop it into a green space. In 2013, an agreement was made that local people were allowed to develop and manage the area for a period of at least five years. They subsequently developed the plot into a green meeting space that included a tree-covered lawn, a vegetable garden, and recreational facilities for organising neighbourhood events such as a Christmas market. Similar to the Torentuin Zaltbommel, this Postzegelpark is only temporary as it will eventually be developed into an area for housing. As explained by a local volunteer, this temporary nature is a major reason for the success of this community park; the formal land owner would otherwise never have agreed to the greening of this space.

Conceptual analysis of the emergent features of community forestry in the Netherlands

Emergence of new types of community forestry

The Dutch cases of community management of what may collectively be termed green spaces illustrate the variety of ways in which local communities in economically developed societies may engage in the management of forested landscapes. Some of these engagements are based on the recollection of the local history in respect of communal landscape management in rural areas. Others reflect new types of communal arrangements in (peri-)urbanised areas. Consequently, the Dutch cases do not just focus on 'traditional' forested landscapes, but also on

green spaces in peri-urban areas or sometimes even in 'grey' cityscapes in which green spaces are integrated (Pauleit et al., 2019). This new orientation reflects how the traditional focus of community forestry on material products for local livelihoods is increasingly replaced by a focus on ecological, aesthetic, and recreational interests (Wiersum et al., 2004). The examples of the revitalisation and recreation of the former communal management of *marke* forests and the emergence of new types of (peri-)urban types of green space management indicate the relevance of not considering community forestry as essentially an isolated local activity, but placing it in a wider socio-economic, cultural, and ecological context.

The Dutch examples of modern forms of community-based green space management also illustrate the dynamic nature of community forestry. They reflect two main types of dynamics. The first involves a shift in the institutional arrangements; these are increasingly characterised by common interests and social relations rather than by common property. The second involves a new orientation at the role of forests in landscapes. The traditional systems of community forestry mostly focus on forests as a landscape component of traditional rural landscapes, in which forests provide basic services such as wood production and grazing ground. The modernised versions of community forestry have a more diverse orientation. In some cases they focus on the conservation of ancient forested landscape elements and biodiversity as valuable manifestations of biocultural heritage. However, they may also include the creation of new types of forested landscapes, providing space for relaxation and recreation as well as nature enjoyment.

In considering what analytical lessons can be learned from the Dutch cases, the observation that they are primarily based on common identity rather than on common property may serve as a starting point. Although *Stichting de Dommelbimd* and *Marke Gorsselse Heide* do reflect common property arrangements, such examples are rare in a Dutch context (Mattijssen et al., 2018b). Most arrangements are based on a shared interest in green space management as a means to conserve cultural landscapes and biodiversity and to create new spaces for social interaction. Thus, the Dutch cases are predominantly based on common social and cultural orientations. This shared interest in green space management not only incorporates attention to cultural landscape elements and biodiversity, but also includes interests in new forms of using forest landscapes for recreational purposes and local products. Thus, the Dutch cases highlight a need to give focused attention to the dynamic of cultural orientations that may shape community forestry.

From indigenous knowledge to cultural ecological knowledge

In the original approaches to community forestry in economically developing countries, it has been argued that this requires paying attention to the role of indigenous knowledge regarding the use and management of local forests. The examples from the resurgence of community forestry in the Netherlands indicate the need to further scrutinise the nature and significance of indigenous knowledge and to expand this analytical concept to reflect the dynamics in knowledge in economically more developed countries.

The concept of indigenous knowledge was originally introduced in the 1980s, when much attention focused on its potential as a device for rural development (Brokensha et al., 1980; Sillitoe and Marzano, 2009; Warren et al., 1991). At the UNCED conference at Rio de Janeiro in 1992, it also became acknowledged as an important device for biodiversity conservation. Since then, much attention has been given to its further operationalisation. As a result, different domains of knowledge in respect to biodiversity were identified, including cognitive and expressive features and daily livelihood practices (Orcherton, 2012; Pilgrim and Pretty, 2010; see also Houde, 2007). Alternatively, the concept of indigenous knowledge has also been identified as referring to an integrated knowledge-practice-value system (Berkes et al., 2000; Wiersum,

2000). These interpretations illustrate that the concept of indigenous knowledge does not only include the cognitive, practical, and cultural manifestations of ecological objects, but also the social institutions that are developed in the process of actually living with nature (Turnhout et al., 2013). During the process of living with biodiversity, a set of practices in respect of the generation, internalisation, and transmission of ecological values and practices takes place. This process is affected not only by local socio-cultural conditions, but also by education and exposure to generic scientific knowledge.

While the notion of indigenous (forest-related) knowledge often focuses on rural communities in economically developing countries, the notion of integrated knowledge-practice-value systems seems more appropriate to reflect the characteristics of green space management in a more economically developed context. This concept acknowledges that knowledge is closely related to value systems. This is clearly expressed in the Dutch cases; they all incorporate an important cultural dimension which relates to present meanings, understandings, and customs of engaging with nature. Whereas the cases involving new forms of *marke* organisations reflect an interest in the cultural heritage value of former rural neighbourhood relations, the (peri-)urban cases reflect the emergence of new community organisations based on novel cultural orientations. The cases thus illustrate that also in a more economically developed context, local people are culturally knowledgeable on how to engage with biodiversity, passing on experiential knowledge and sharing practices with others (Krasny and Tidball, 2012; Mattijssen et al., 2017). While this knowledge might not be labelled as 'indigenous' as per the original definition, it just as well reflects shared cognitions, expressions, and practices related to living with nature.

The notion that the concept of indigenous knowledge can form a foundation for different interpretations is reflected in several alternative concepts, such as traditional ecological knowledge, local ecological knowledge, and cultural ecological knowledge. In order to understand the cultural dimension of community forestry, it is useful to consider the meaning and relevance of these concept in some more detail. Traditional ecological knowledge is often used in relation to traditional indigenous people (Berkes, 1999; Posey, 1999) and emphasises the role of the knowledge and practices of these communities in shaping a close and unique relationship with nature. In this interpretation, it is considered that both biological and cultural diversity face many common threats (Rapport & Maffi, 2010). In order to specify the cultural foundation of indigenous knowledge, the alternative term of *cultural ecological knowledge* has been proposed (Orcherton, 2012). This term emphasises that the ecological knowledge is culturally embedded and that it is important to acknowledge this cultural foundation and to conserve the different forms of cultural interaction with biodiversity (Ellen et al., 2000). Studies on cultural ecological knowledge tend to interpret this knowledge not only as a means to contribute towards biodiversity conservation, but also as an element to be considered in cultural heritage conservation, with special attention to the conservation of the threatened cultural identity of indigenous people. In this context, studies on cultural ecological knowledge often emphasise the need to better control loss of indigenous knowledge and their related features of biocultural diversity (Pilgrim et al., 2008; Rapport and Maffi, 2010). Thus, whereas the notion of traditional ecological knowledge stresses the relevance of ancientry, the concept of cultural ecological knowledge stresses cultural integrity. Such integrity is often not simply lost with modernisation, but is rather adapted. Due to cultural specificity, such knowledge adaptations are often location specific. Thus, cultural ecological knowledge is dynamic in response to the world-wide processes of socio-economic change and cultural modernisation (Cocks, 2006; Gómez-Baggethun & Reyes-García, 2013).

Cultural ecological knowledge in contemporary contexts

The identification of the various manifestations of local knowledge illustrates that it is incorrect to consider that such knowledge only is present under traditional conditions, but that rather it is subject to cultural dynamics. Although the concept of cultural ecological knowledge has often been used in respect of the cultural dimensions of the integrated knowledge-practice-belief systems of indigenous communities, it is also of relevance for understanding the cultural embeddedness of knowledge systems within economically developed societies. The concept of biocultural diversity has recently gained prominence for highlighting the interplay and co-evolution between biodiversity and cultural diversity. This concept calls specific attention to cultural and spiritual values as well as worldviews of human interactions with different types of biodiversity. It also considers that the process of co-evolution between the natural environment and local livelihood practices not only involves technical changes in dealing with biodiversity, but also includes the social and cultural dimensions of how local communities live with biodiversity (Cocks, 2006; Ellen et al., 2000). Although it is acknowledged that socio-economic change and rural modernisation may result in the demise of certain traditional forms of knowledge, it is also recognised that it may involve development of new types of practices (Cocks and Wiersum, 2014; Elands et al., 2015). Thus, the concept of biocultural diversity not only emphasises the historically constituted cultural foundation of ecological knowledge, but also considers the dynamics of knowledge systems in the form of evolution and hybridisation with externally induced knowledge systems. This implies that cultural ecological knowledge may not only inform traditional forms of biodiversity and nature conservation, but that it can also result in the creation of new ways of living with novel forms of agrobiodiversity and cultural landscapes.

The dynamic nature of cultural ecological knowledge is very relevant considering that traditional rural communities have been rapidly changing over the past two decades or so. Moreover, the advance of urban life across the globe and related processes of modernisation have also resulted in new forms of cultural interaction with forests and nature. They have also resulted in the incorporation of local communities in wider social and cultural networks. Ojha et al. (2016) capture this process with the notion of 'delocalising communities'. This conceptualisation may be contrasted with the traditional 'spatial model' of community in which the locals are framed as a geographically isolated entity with strong internal bonding and no interaction with external actors. The newly coined term of *delocalised community* asserts spatial community to be almost irrelevant, as communities tend to be embedded in larger networks that surpass the local domain (Ojha et al., 2016). The notion of delocalised communities emphasises that many social groups in modern societies, be they in urbanised settings or not, interact with fellow community members on the basis of 'larger' shared norms, values, or interests. These are often communicated through modern means of communication such as digital social media (Arts et al., 2015).

The notion of biocultural diversity as denoting the co-evolution between biodiversity and cultural diversity and the notion of delocalised communities of interest interacting through modern types of communication challenge the traditional notions of a community as being primarily a place-based, culturally homogeneous, norms-and-values-sharing, interest-convergent entity. Rather, it calls attention to the dynamics of how communities interact with forests and nature, and how present-day interactions in economically developed societies are not only based on the cultural heritage value of ancient landscapes and management systems, but may also be overhauled by new scientific knowledge (Agrawal, 1995) and new socio-cultural realities in urbanised regions (Bendt et al., 2013; Elands et al., 2019; Vierikko et al., 2016). Examples of such changes in cultural orientations on forest resources are the growing importance of forests as a place of recreation and relaxation (Pauleit et al., 2019; Sheppard et al., 2017) and the evolution in appreciation of wild and non-wood forest products in Europe (Wiersum et al., 2018) and the USA (Chamberlain et al., 2018).

Two key manifestations of cultural ecological knowledge: 'Biocultural memory carriers' and 'biocultural creatives'

Linking up with notions of biocultural diversity as a dynamic process of interaction between biodiversity and cultural ecological knowledge, Andersson and Barthel (2016)introduced the concept of biocultural memory carriers. They characterise these memory carriers as the motors of long-term socio-ecological dynamics and suggest that these act as both repositories and transmitters of experience, knowledge, and meaning. They furthermore specify that these memory carriers consist of a foundation of ecological memory carriers that is manifested in biodiversity. This foundation is complemented by social memory carriers in the form of recollections of culturally venerated forms of managing specific assemblages of biodiversity. Andersson and Barthel (2016) and Colding and Barthel (2013) argue that the linkage between the social and the ecological memory carriers underpins the resilience of biocultural memory carriers. The Dutch cases reflect the notion of biocultural memory carriers as sources of resilience for community forestry in two different ways. The revitalisation and recreation of the *marke* organisations are primarily based on the memories of the former neighbourhood relations as well as the former cultural landscapes based on local forms of integrated land use and neighbourhood control. Thus, these cases illustrate the intersection between ecological memory carriers and social memory carriers. Alternatively, the reconstruction of historical landscapes by new forms of community-based green space management in (peri-)urban areas such as *Doornik Natuurakkers* or *De Ruige Hof* is indicative for the significance of ecological memory carriers.

A second, recently identified manifestation of cultural ecological knowledge are biocultural creatives**.** Elands and Van Koppen (2012) propose this concept as an important vehicle in bio-cultural processes of adaptation. They define it as 'groups of people who, driven by an engagement with society and nature, create new cultural models and practices for interaction with biodiversity' (2012, p. 184). This engagement may be reflected in volunteering activities in nature conservation, recreation or in new types of 'green' initiatives by citizens, e.g., in respect of novel ways of using nature products. Indeed, biocultural creativity reflects new forms of engagements with biodiversity and ecosystems that arise during the ongoing process of biocultural co-evolution. The (peri-)urban cases of community-based management of green spaces provides several showcases of how local people creatively combine historical and modern cultural elements in their green space management activities. For instance, the case of *Torentuin* combines traditional forms of orchard tree management with a modern 'green playground' for children. *De Ruige Hof* maintains a traditional Dutch landscape, but also creatively involves (former) psychiatric patients in the management activities. And *Dommelbimd* managed to fund their purchase and management of the green space through a crowd-funding scheme. All these examples highlight how creative citizens are able to combine traditional cultural customs and novel forms of biocultural interaction for engaging in green space management.

Conclusion: Emerging properties of community-based green space management

Traditionally, the concept of community forestry has been interpreted as referring to a localised management system that is based on a sense of shared identity of people who make use of common lands. The notion of indigenous knowledge is often considered as a major factor informing the use and management practices of these lands. Such a conceptualisation of community forestry is ill-suited to understand the characteristics of contemporary community-based arrangements in economically developed countries. As illustrated by examples of community-based management of green spaces in the Netherlands, community-based forest

management in economically developed conditions may better be conceptualised as an activity by a group of people with a similar awareness regarding the biocultural value of forests and related landscapes. Consequently, the notion of community forestry as essentially involving common resources may be amended to a notion of community forestry as essentially involving a 'community of practice' (Arts & De Koning, 2017) with a common biocultural orientation. We identified 'cultural ecological knowledge' as a more useful and appropriate concept than 'indigenous knowledge' for understanding the emergence of novel forms of community forestry. This concept reflects the growing recognition of biocultural diversity as reflecting the interaction and co-evolution of biodiversity and cultural diversity. It stresses cultural adaptivity and does not assume ancientry or cultural originality. Moreover, it accommodates understandings of local 'delocalised' communities operating in economically developed or developing societies. Finally, it does not adopt an alarmistic point-of-view about the demise of indigenous knowledge, but rather emphasises the new types of knowledge that are created. It thus opens up new vistas on the stewardship of forested landscapes that are characterised by self-determination and participatory governance.

The notion of dynamics in cultural ecological knowledge was further specified by (re-)introducing the concepts of 'biocultural memory carriers' and 'biocultural creatives'. The first concept relates to the capacity of landscape elements that act as both a repository and a transmitter of experience, knowledge and meaning. The latter concept refers to groups of people who create new cultural models and practices for interaction with biodiversity. These concepts assist in the identification of two present-day categories of community forestry in the Netherlands: (1) either revitalised or re-created historic landscape management arrangements in rural areas, and (2) new types of communal green space management arrangements in urban and peri-urban areas. The analysis of the emergent features of the Dutch cases of community-based green space management thus resulted in a reconceptualisation of the main characteristics of community forestry. The conceptual steps in this process are summarised in Figure 32.1.

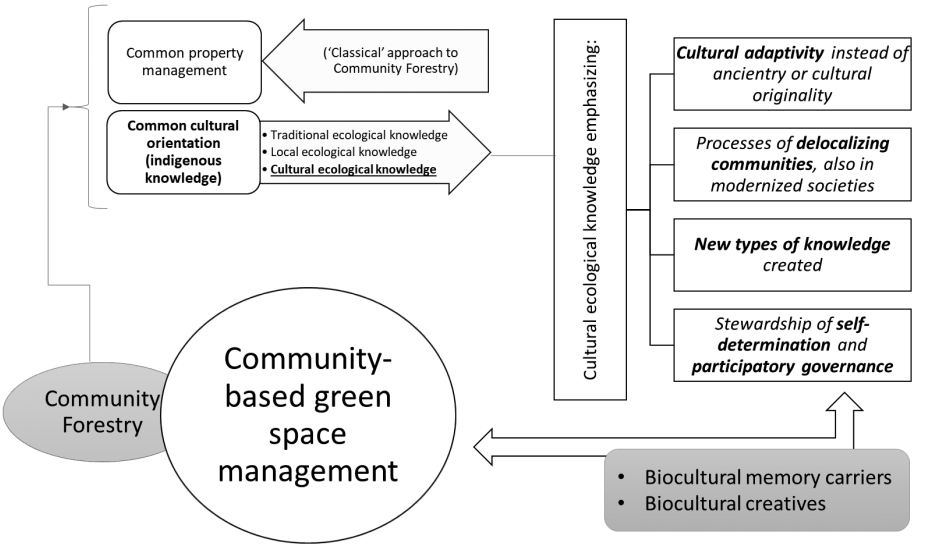


Figure 32.1 Overview of conceptual steps from 'community forestry' to 'community-based green space management'.

In conclusion, the examples of the Dutch cases of modern manifestations of community forestry indicate the need to consider its scope beyond the original conceptualisation of community forestry as a common resource management practice to a more dynamic concept of community forestry management as reflecting biocultural interactions. In order to reflect these dynamics, we propose the concept of community-based green space management as a logical elaboration of 'community forestry' beyond the 'traditional' contexts in which it has been used. Importantly, community-based green space management acknowledges delocalisation of communities; the importance of green spaces involving different kinds of (tree) vegetation, also in peri-urban or urban settings; and the primacy of participatory governance structures or self-governance practices that are based on location- and time-specific cultural interactions of communities of practitioners with their forested environment.

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33
CONCLUSION
Some paths ahead for community forestry

Janette Bulkan, John Palmer, Anne M. Larson, and Mary Hobley

Introduction

What can we conclude from these diverse 30 chapters of geographic case studies which we did not know before – at least in general terms? We suggest that it was significant that we had no response to a call for chapters on specific themes, such as how community forestry (CF) is helped or hindered by developments in resource tenure or by the spread of e-commerce. That is, there is such a diversity of interactions between community forestry situations and evolving aspects of governance, rights, markets and marketing, product technologies and material properties, and constraints and opportunities related to gender that generalised valid conclusions are difficult or ephemeral. Perhaps the most obvious feature of community forestry shown by these chapters is its heterogeneity.

The chapters show how far community forestry has come – how diverse it is today in comparison to the early, external models of communities being required to plant trees and the later, also external models of commercial logging (Arnold, 1991, 2001; Gilmour, 2016). Bear in mind that 'early' and 'late' are relative terms for the second half of the 20th century, because most forestry was community forestry for centuries until the advent of industrial steam power for traction and mills.

While these models still exist, CF has taken off in new directions, sometimes as a response to local possibilities, priorities, and demand (e.g., fire management in California [Chapter 11, Danks & Everett; Chapter 13, Wilkinson & Sahara]; social enterprises in Mexico [Chapter 30, Bray and Duran]) and sometimes in response to project variations on the model. Although always about communities managing forest or tree landscapes, who does the managing, how, and for what varies widely, as does the level of success in terms of social justice (who benefits) and environmental sustainability. Far too commonly, as Hajjar et al. found in their systematic review of 643 cases in 51 countries, 'forest access and resource rights were often negatively affected by policies to formalise CFM, countering one of CFM's principal goals' (Hajjar et al., 2021).

We can argue from some of the cases in the *Handbook* that these results are likely tied to the challenge of the ongoing outsized role and power of external actors in the community forestry arena, and in tropical forests in particular, although not in the long-established community forestry situations in northern Europe. This category includes consultancy companies and NGOs in community forestry, and Western donors in relation to initiatives such as REDD+,

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tree planting pledges, and forest landscape restoration. It also includes governments that fail to provide the legal and institutional framework to facilitate community forestry, often working, instead, to co-opt the community forestry model as a means to control communities in a political sense and undermine local initiative. Two examples are Myanmar (Chapter 25, Springate-Baginski) and Cambodia (Chapter 27, Williamson et al.). Although this outside support is not necessarily inherently problematic (and has proven very helpful when done well), patterns of community engagement may involve the imposition of outside models on local people who are seen as beneficiaries rather than full and equal partners (Sarmiento Barletti et al., 2020).

Before more external funding is poured into community forestry, it is essential there is challenge to the assumptions that community forestry is necessarily always beneficial to local communities and is unproblematic because it is 'community' based. Both the co-optation of community forestry by governments and the private sector show how vulnerable local communities are to exploitation. Various chapters reveal how often elites at all levels are able to manipulate these apparently benign community forestry models, funded by donors and often designed with limited understanding of power dynamics and how these impact control over valuable forest resources (see Chapter 7, Tshidzumba et al. for South Africa; Chapter 28, Young et al. for Liberia).

Some of the chapters point to some new directions for community forestry and raise the question of whether the current models of CF remain fit for purpose. The forest landscape – communities, climate, politics – is changing. What will happen to Nepal's forests under a new, federated government system (Chapter 29, Hobley & Malla)? Who will manage the forests where young people are migrating out as forest managers and community leaders are ageing (Chapter 23, Stevens & Krishnamurthy)? How will communities respond, or adapt, to new demands for biodiversity and carbon storage (Chapter 30, Bray & Durán? What role will the new and growing pledges for tree planting and forest landscape restoration play (Chapter 22, German)?

Rather than building governance and technical capacities for forest management, it seems that building capacity for resilience to change may be more important. Securing land and forest resource tenure rights has become a top political priority for Indigenous Peoples and others living in and around the world's forests, together with community self-governance and food security/sovereignty. Securing rights for women and other marginalised groups in communities is still an imperative that has received far too little attention.

Here we offer some final thoughts to readers of this *Handbook of Community Forestry*.

Governance

Stable, democratic, decentralised governance systems allow closer fits between bio-physical forest potentials for sustainable material products and environmental services and local decision-making systems. Local decisions made over small-scale forest assets may not produce the anticipated benefits, but at least any damage is limited and lessons learned can be applied immediately. When the management of community forests is tightly constricted by central government decisions (Bulkan, 2015), including in some REDD+ schemes (Bayrak & Marafa, 2016), the loss of local control may discourage or prevent ecologically informed, locally directed conservation-minded management.

The project-based efforts in the 20th century to revive or construct organised community forestry often led to the creation or co-option of formal co-ordination mechanisms, to help in co-operative learning and sharing of lessons learned as well as the more usual agriculture-based models of co-operative bulk-buying of inputs at discount prices. In some countries, this

movement has led to co-ordinating institutions which have become ossified, too similar to the inflexible government structures which the original projects were trying to replace or adapt. It is not so much that 'small is beautiful'; there is more a need for the co-ordinators to be aware of and responsive to political, social, and economic trends which affect CF members and to evolve responsively.

This tension between supporting traditional rural decision-making systems and the need to be knowledgeable about, and capable of, operating with capitalist business-minded accountants is visible, especially in donor-funded programmes and projects. Several of the REDD-related chapters note how CF projects intended to aid rural communities may be forced instead into activities which allow managers to tick off progress indicators which do not reflect what the communities actually want (e.g., Chapter 26, Ramcilovic-Suominen & Mustalahti). This is caused often by the expectation in the original project planning that there is a more uniform agreement on objectives and feasible timelines than actually exists in the target communities, and because internal negotiations take longer and are more influenced by historical community dynamics (such as inter-family feuds based on long-ago arguments over land ownerships) than urban project planners can easily comprehend. There is no simple solution to this common problem; see Chapter 24 (Ece, Murombedzi & Ribot). However, CF projects and initiatives which have had patient government and donor support for attention to a range of forest values have been rated more highly in the communities than those which may count on larger funds but more incompatible schedules and narrower focus; see, e.g., Chapter 4 (Butler et al.).

Communities of interest as well as communities of locality

We understand easily that 'community' usually means 'placed-based' or 'legally required'. Increasingly we recognise the legitimate interests of those who may not have historical land-based associations with a forest but who may have dependency at a distance (such as a water users' association) or who have a strong linkage through one or more of the values embedded in the forest (such as aesthetically pleasing and healthful landscapes for pensioners or urban dwellers forming a recreational support group); see Chapter 32 (Arts, Mattijssen & Wiersum). Such 'communities of interest' may mobilise positively both public opinion and financial resources for forest maintenance and restoration. Notably in countries which have formal charters of human rights, law courts may accept such communities of interest as having a legitimate legal interest in the evolution of a forest, as 'intervenors' whose voice must be taken into account when changes are planned in the appearance or usage of a forest, or in policies affecting a forest; see Chapter 20 on British Columbia, Canada (Gunter). This right to be heard may be further developed into a full legal right to participate in decisions about the management and evolution of a forest, equivalent to a property right, as described in Chapter 31 (Lawrence) on Scotland.

Indigenous cultural capital

Respect for group values, norms, and beliefs, and a visceral relationship with ancestral land held by Indigenous Peoples in particular, underpin long-lasting community forestry (Chapter 17, Andrews-Key et al.; Chapter 19, Gabay & Apaza). Long-term community-based collaborations also provide opportunities to show the shifting nature of governance challenges. For example, when Julie Velásquez Runk first began working on a Panamanian government and Smithsonian Tropical Research Institute project in 1996, the goal was to understand the ecology and socio-economics of non-timber forest products (seeds of *Phytelephas seemannii*, roots and branches of fallen *Dalbergia retusa*, and fibres from *Astrocaryum standleyanum*) that Emberá and Wounaan

Indigenous Peoples used to make carvings and basketry (J. Velásquez Runk et al., 2004). She worked with Indigenous authorities (the congresses) in their communal reserve lands – the Comarca Emberá-Wounaan – and outside of it – in the legally unrecognised collective lands. Looking back, those were the boom years of Indigenous art, when communities were able to maintain sovereignty by agriculture, hunting, gathering, and art (Julie Velásquez Runk, 2020). But that region of eastern Panama held the country's majority forest stocks, and over the next few years, over US$110 million were spent on conservation and development projects in the region (ibid.). The largest of these included the paving of the Pan-American Highway into the region and the establishment of the Darién Province cadastre, but Indigenous lands were not titled as their authorities had been promised; over the next 25 years, Emberá and Wounaan sovereignty was continually eroded by formal education, loggers, land invaders, and traffickers (Vardeman & Velásquez Runk, 2020; Julie Velásquez Runk, 2012).

In this context, community-based socio-ecological research supported Wounaan sovereignty. Wounaan had separated from Emberá in 1999 to form the Wounaan National Congress and its sibling organisation, the Foundation for the Development of Wounaan People, and both worked with Velásquez Runk to create research that addressed their needs and also built Wounaan expertise. Initially, Wounaan authorities had collaborated with Velásquez Runk, who was at that time a doctoral student, so that she could show how they were indeed distinct from Emberá People. They continued working together, planning, carrying out, and presenting and publishing research. They embrace a more Indigenous conception of community forestry – that people, land, animals, language, plants, and things are all convivially dependent on one another. The result is that their research has developed organically, based on Wounaan interests and needs. It has included work on language and stories, illegal logging, ethnohistory, ceremonies, and relationships among birds, people, and forest restoration. They have developed maps, a draft dictionary, curricular materials, peer-reviewed journal articles, a guide for schoolchildren, a forest management manual on Wounaan techniques, and a children's book about relationships with birds, among others (Carpio Opua, Chenier, Doris Cheucarama Membache, Elizabeth Lapovsky Kennedy, Chivio Membora Peña, Tonny Membora Peña, Toño Peña Conquista, Chindío Peña Ismare, 2013; Carpio Opua et al., 2015; Equipo Cultural Wounaan, 2019, 2021; Peña Ismare et al., 2020; J. Velásquez Runk & Chenier Carpio, 2018). Other collaborative works include (Ismare Peña et al., 2021; Osorio Chiripua et al., 2020; Velásquez Runk, J., Gervacio Ortíz Negría, Leonardo Peña Conquista, Gelo Mejía Peña, Freicer Peña Cheucarama, 2010; J. Velásquez Runk et al., 2019). Now, it is Wounaan who ask Velásquez Runk to collaborate on their projects.

Organisation of community stewardship/management of forest

Clearly, expanding the number of categories of stakeholder who can be involved in CF management may reduce the work load on the core group of managers but will also complicate how decisions are made. The principle of subsidiarity – of allowing decision-making to be made at the lowest effective level – has to be balanced to prevent capture of the decision process by local mafia or higher castes. The chapters on western North America (10, McGinley, et al.), (11, Danks & Everett), (12, Frost & Sheen) and (13, Wilkinson & Sahara), show how secondary or tertiary-level education and understanding of national and State laws can enable a diverse group of stakeholders to understand and form productive alliances with complex interlacing federal and State agencies in order to finance CF management and comply with bureaucratic requirements. It certainly helps that corruption is not a conspicuous problem. Conversely, where there are educational, language, and cultural barriers between forest-dependent rights-holders and other stakeholders, one group may be able to exert an unfair degree of dominance over forest

decision-making. A significant proportion of CF resources may need to be devoted to capacity building of the less-advantaged stakeholders in order to reduce the asymmetry of information and knowledge and to 'level the playing field'.

The chapters in this *Handbook* show the need to orientate students and practitioners on how the national and local government systems work in theory and in practice, how ethnic imbalance (especially leading to discrimination against Indigenous Peoples) can be countered, how to form alliances, how to elect spokespersons, how to make use of social media, how decision-making power is acquired and used and secured and democratically limited, and how to learn about and use the legal rights of community foresters. The notable success of the Mistik joint enterprise in Canada shows what may be possible with a combination of realistic understanding of diverse stakeholders, willingness to compromise, and substantial financial resources at start-up (Chapter 17).

Tenure is related to governance, in that, if local users and user groups are assured that they have secure authority over management decisions, they are much more likely to think and act conservatively and have regard to the wants and needs of future generations of community foresters. Using community forestry activity to demonstrate active sovereignty over lands, territories, and resources may help to solidify internal and external support but may also stimulate urban-based opposition if the rural movement is perceived to be unfriendly to concession-type exploitation of those resources (e.g., Chapter 2, Bouthillier et al.). Communities which have a sound understanding of their rights as expressed in the dominant legal system (as opposed to only traditional laws and customs) at least can use the platform of the law courts to attract urban understanding and support. Examples from elsewhere show that tenurial claims in law courts make Indigenous Peoples more visible to dominant societies, and may make the urban dominants more sympathetic.

Supporting institutions

Moving from *ad hoc* sales to itinerant buyers of forest products at tree stump or forest gate to planned, scheduled, and sustainable offtake may appear to be similar to a routine for selling annual harvests of farm crops. Daily experience shows that many community foresters struggle with balancing the lure of immediate cash-in-hand from a one-time sale of timber logs against a regular perhaps annual sale of small amounts of a diverse range of forest products (Shanley et al., 2012). Helping the community foresters to make transitions in decision-making calls for a range of accessible and supportive institutions. Many communities need sustained support to create or use secure local money savings schemes, account for communal costs, and share communal income. Linking the community foresters to agricultural extension agencies and rural development banks may be more tedious than setting up forest project–specific support but is surely more durable (Macqueen, 2019). Helping the agricultural aid systems to adjust to the intermittent sale of forest goods but potentially regular sales of ecosystem services by small-scale forest farmers is still a rarity.

Marketing

Long-term attention to better marketing of forest goods and services has been a focus of the International Institute for Environment and Development (IIED), now linked with the Forestry Department of FAO in the 'Forest and Farm Facility'. The Forest Stewardship Council also had developed a 'Small and Community Label Option' to give more explicit market recognition to small-scale forest producers. Chapter 15 (Karmann et al.) examined the reasons for the poor uptake of that label.

Forest-based ecosystem services

The list is long of forest-based ecosystem services which may be open to everyone or may be privatised. Water supplies originating in forests may be pure and perennial because of precautionary management (preventing sedimentation from forest roads, not blocking natural drainage systems, channelling streams through culverts under roads, etc.) and the cost of such management is usually carried by the timber management side (Smith et al., 2019). Forest as a habitat for agriculturally important pollinators and seed dispersers in adjacent fields is also viewed usually as a free good for the beneficiaries – for example, manuka honey in New Zealand. Deliberate shifting from the production of saleable timber to the management of forest primarily for biodiversity conservation or sequestration of additional forest carbon is a policy decision and a measurable cost to the owner. It fits with the proper definition of Reducing Emissions from Deforestation and forest Degradation (REDD+). A tremendous amount of international effort – for example, the World Bank's Forest Carbon Partnership – has been devoted to making REDD+ carbon offsetting consistent, workable, reliable, and beneficial to small-scale forest owners and communities as well as government agencies. The costs of documentation and audit (transaction costs) have put REDD+ projects out of practicable reach for most communities and yet have been unable to prevent high levels of fraud (allegedly, and because of the difficulty of proving additivity over short periods of time; see REDD-Monitor, edited by Chris Lang) and re-centralisation of forest control. The international calls for a great increase in forest conservation for biodiversity and ecosystem diversity, partly for mitigation of climate heating and future climate resilience, should help to finance a more balanced approach to forest ecosystem and integrated forest management.

Evolving Community Forestry

Scope

During the second half of the 20th century, formal attention to CF tended to treat it as a source of wood fibre to supplement industrial forestry. These chapters show that CF is both more profound and more varied – profound in the sense that it can be a manifestation of the deep spiritual and cultural roots of some communities in their lands. The practising of forestry activities is part of the engagement of individuals, families, user groups, and the community at large, a kind of 'muscle memory' by which people remember and revive their place-based sense of belonging. These chapters also show that the material scope of CF is or can be much wider than wood products, recalling the great UNESCO *Man and the Biosphere* series of volumes on tropical forests in the 1990s in the variety of human uses and offtakes in forest foods and fibres and ecosystem services, especially perennial flows of clean water.

Spatial scale

Perhaps influenced in the past by the long-established Scandinavian community forestry organisations operating on an industrial scale, promoters of community forestry now need to look more at the tens of millions of very small-scale forest farmers with a few tens or hundreds of trees or hectares on- or off-farm, harvesting intermittently (possibly only one harvest per human generation), but collectively important as sources of a wide range of products. This adjustment also needs to be taken up more professionally by the global forest certification schemes.

Finally, the increasing unpredictability in weather patterns, evidence of degradation in many ecosystems, including catastrophic reductions in numbers of species of flora and fauna, under-

line the importance of collective and considered responses in the epoch of the Anthropocene. The case studies of group actions in different social and historical settings documented in these chapters offer signposts on the road ahead and potential adaptable solutions for human societies in the 21st century.

With wide recognition for the first time that Indigenous Peoples have largely been successful forest stewards of protected areas (Fa et al., 2020; FAO and FILAC, 2021; Garnett et al., 2018), the United Nations Framework Convention on Climate Change 26th Conference of Parties (COP26, October–November 2021) closed with new pledges to work with Indigenous Peoples and Local Communities. In particular, several new pledges aim specifically to get funds into the hands of the organisations representing and working with these Indigenous Peoples and Local Communities to support land tenure rights and community conservation (see for example https://www.bezosearthfund.org/announcements). The amount of funding and the speed with which these pledges are moving toward field implementation are unprecedented and exciting.

But the lessons from this *Handbook* also reveal the risks and the massive governance challenges this effort poses. Who will decide how this funding is spent? Will it secure Indigenous Peoples' and Local Communities' rights to land and forests or be syphoned off by others, generating greater insecurity? How will such efforts support Indigenous Peoples where governments still discriminate against them? How will differences within communities be reconciled? What will happen to women's rights? How will the capacities of grassroots actors – to organise, negotiate, and govern as well as manage the technical and financial skills – be addressed?

All of this is happening in a rural arena that, as noted previously, is under transformation. The case studies of group actions in different social and historical settings documented in these chapters offer signposts on the road ahead and potential adaptable solutions for human societies in the 21st century. We hope they will bring new ways of engaging forest communities.

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