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Effective forest and farm producer organizations

EUROPEAN TROPICAL FOREST RESEARCH NETWORK

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ETFRN NEWS



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Preface

There is a growing consensus that producer organizations are critically important for the sustainable use of natural resources. Representing the collective voices of farmers and forest-dependent people, indigenous groups and rural communities, they provide essential services to their members and are the building blocks of local democracy. Formal or informal, effective producer organizations identify and agree upon the means to manage their natural resources. And when they are truly inclusive — and with the right support — their management choices are more sustainable and the benefits are more equitably shared. In this way, they offer solutions to many issues that otherwise hinder our ability to achieve the Sustainable Development Goals.

ETFRN News has been reporting on issues of topical importance for almost a quarter of a century. Editions in the past six years in the current “book” format have covered landscape approaches, REDD and FLEGT, private investment, forest financing, forest governance, chainsaw milling, biodiversity conservation, and climate change. The latest edition continues this tradition.

This issue brings together 30 articles — 26 full papers and 4 sidebars — that include experiences from more than 30 countries. Most contributions are from the Global South, representing NGOs, UN organizations, government bodies and private companies. Women make up one-third of the 80 contributing (co)authors. The list also includes some founders and members of producer organizations.

The result is a compilation of experiences that adds significantly to the growing body of knowledge on forest and farm producer organizations. Authors write of their achievements and challenges, how they have organized themselves, what support they have received, and whether this has helped them or not.

As well as the experiences of individual producer organizations, we also hear from umbrella organizations, national or regional federations or associations, and the pivotal role that they are playing in scaling up benefits. This shows that to have a meaningful influence on public and corporate policies and practices, becoming better organized at higher levels is a key requirement. Well-organized and articulate producer organizations have been instrumental in making the necessary changes for local producers to improve and sustain the benefits to their lands and their livelihoods.

In the end, as emphasized in most of the articles, the goal is to ensure people's rights to land, natural, social and financial resources. And here, much remains to be done. But there is a lot to learn from the contributions in this *ETFRN News* and we hope you will take encouragement from the stories that are shared here.



René Boot
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Chair, ETFRN



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Overview

Key issues

Photo credits, Overview

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What makes producer organizations effective?

NICK PASIECZNIK, HERMAN SAVENIJE, JEFFREY Y. CAMPBELL and DUNCAN MACQUEEN

Key issues

Internal organization – the foundation

- Self-governance is crucial, with financial and political independence, openness and equitable benefit-sharing the keys to success.
- Federations and umbrella organizations are vital in scaling up influence and power.

Tenure and governance – the critical preconditions

- Access and clear rights to land, justice and equality are fundamental prerequisites.

What you know and who you know – the key entry points

- Learning from each other is essential, as is access to technical knowledge, skills and training.
- Local producers' active participation and influence in processes of governance reform pave the way for progress.

External services and support – the enabling environment

- Government agencies and services must adapt their "offer" to better meet smallholder needs, seeing them as partners.
- International organizations and NGOs would do well to learn lessons from the past.
- The large-scale private sector can play a greater role, but must accept the fair sharing of benefits, investments and responsibilities.

Markets and business opportunities – the end game

- Building on local markets will help increase resilience to market shocks.
- Building brand recognition though business support remains a common gap.
- Increasing access to affordable finance will be increasingly important.

In conclusion - one way forward

- Producer organizations should be included in all programmes related to climate change, food security and nutrition, landscape restoration, rural livelihoods, and engagements with the large-scale private sector.

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Introduction

Why are producer organizations critical?

The economic activities of forest and farming families, indigenous communities, and small- and medium-scale producers and enterprises are the basis of local livelihoods. They are also critical for achieving or maintaining a sustainable and durable future for the natural resources on which such activities are based. These producers manage most of the world's agricultural land and forests and produce more than three-quarters of the food that we consume, even though they do not always have the legal rights to use the land or to what grows on it. But who represents them? And how are they engaged in policy processes to secure their, and the planet's, future?

Throughout the world, small-scale producers operate through a vast network of locally controlled forest and farm enterprises. They are likely to be the most important suppliers of food and other resources for direct local consumption, processing or resale, including agricultural goods, timber and non-timber forest products (NTFPs). And since their day-to-day existence and future economic survival depends on the health of the natural environment, they have a powerful incentive to combat land degradation and deforestation, and to conserve, use and manage their landscapes sustainably. But this is true only *if* they have rights to the land and resources through some form of local control.

Local producers can be landscape stewards while ensuring that forest and farm activities provide sustainable sources of income and improve well-being within their communities. However, their rights to use and own the land and the resources on which they depend are often insecure and unclear, due to overlapping and conflicting tenure regimes (such as customary, informal and formal systems), and the expansion of large-scale agriculture, forest and mining concessions, urbanization and industrial development.

Local producers often operate in relative isolation in remote areas with poor infrastructure. They have limited access to markets, technical support, business development and financial services, and they struggle with inadequate information and frequent neglect by governments. Complex and inaccessible administrative rules and procedures geared to larger enterprises also hamper their efforts to secure rights and develop potential.

To strengthen their economic and political muscle, local producers are increasingly seeing the value of organizing themselves into producer organizations. Working together creates a larger scale of production that improves access to markets and their bargaining position in these markets. Strength in numbers also empowers them in policy development. Increased financial returns open up the possibility of investing in services for their members, such as market information, credit, training to develop technical and entrepreneurial skills, and developing value-added processing. Forest and farm producers that are organized, associated and federated are also easier for governments, service providers, development organizations and companies to communicate with than a multitude of individual operators.

Managing landscapes to provide multiple local — and global — goods and services often requires complicated and negotiated trade-offs. The democratic nature of producer organizations is particularly well suited to reconciling difficult compromises between development and the environment, compared with profit-oriented business models. Forest and farm producer organizations must take on more responsibility for ensuring sustainable land use and forest management while simultaneously reducing poverty and inequity. To be effective, more producer organizations need to be established locally, associated provincially, and federated nationally, and existing groups need to become stronger and more effective in meeting their objectives.

What is a forest and farm producer organization?

As defined by the Forest and Farm Facility, forest and farm producer organizations vary widely in size and institutional form, and may include indigenous peoples and local community organizations; tree-grower, agroforestry or forest owners' associations; producer cooperatives and companies; umbrella groups and federations. Their members include women and men, smallholder families, indigenous peoples and local communities who have a strong relationship with forests and farms. They grow, manage, harvest and process a range of natural resource-based goods and services for home use and for local, national or international markets. Coming together in traditional, informal and formal producer organizations helps producers share knowledge and experience, engage in advocacy, secure tenure and access rights, improve sustainable forest and farm management, expand markets, build enterprises and increase income and well-being.

The term *producer organizations* implies inclusion of any of the above groups, associations, cooperatives or institutions that produce, process or market goods originating from agricultural or forest products. The term includes groups such as forest and farm producer organizations (FFPOs), forest producer organizations (FPOs), small and medium-sized forest enterprises (SMFEs), broader small and medium-sized enterprises (SMEs), community forest enterprises (CFEs), locally controlled forestry (LCF), and community-based natural resource management organizations.

Effective, well-functioning producer organizations tend to have an integrated view on what constitutes success, marrying economic viability and competitiveness based on farm and forest products with broader objectives. These objectives relate to sustainable landscape stewardship, harmonious social relations, development of human potential, respect for cultural practices, and resilience to economic, social or environmental shocks. With a goal of financial and political independence, democratic leadership and internal governance, with broad representation and social diversity in voluntary membership — including women and youth — are equally important.

This issue

The call for papers asked a range of questions to assist in defining what makes forest and farm producer organizations more effective. Not all questions were answered, but the diverse experiences described in this issue outline many problems and how they were (or

were not) overcome, what producer organizations have done themselves, what initiatives, policies and strategies supported them, and what is still holding them back. The 26 full articles and four sidebars in this book are divided into three sections, and the most common lessons learned and recommendations from these experiences are summarized here.

The first section includes ten experiences of local producer organizations from the Americas, Africa and Asia. Women are lead authors on half of these articles, but only four include actual members of the respective producer organizations as co-authors. Most articles describe the history of the organization, and how growth has been assisted by a NGO or government agency. The second section provides examples of national and regional federations and umbrella organizations. The third section covers cross-cutting issues such as certification, extension, government support and finance.

This overview summarizes how the articles offer insights in a number of identified key areas. This is not intended as a policy paper, nor does it claim to present a detailed and thorough global synthesis. But it brings together 30 experiences, stories from producer organizations and those who work with them, and highlights evidence for and against current thinking. Together, they provide an overview of experiences that can be used as a reference and inspiration to reflect on our own situations or those of others.

Producer organizations in perspective

From where to where?

Much has been written on the foundations of successful forest and farm producer organizations. What is more recent, however, is the growing evidence of their significance in larger emerging issues such as climate change adaptation and mitigation, biodiversity conservation, and achieving Sustainable Development Goals (Bowler et al. 2010; Porter-Bolland et al. 2012; ILEIA 2012; Macqueen et al. 2014b; Stevens et al. 2014).

European production and marketing cooperatives have a strong presence in many areas of business, especially in agriculture, where they make up 30–70% of the market, and their influence in other regions is increasing. Producer groups fall into one of five tiers of organization, each with a corresponding level of business capacity, benefits, potential impact and risk (Macqueen, Campbell and deMarsh 2014). Within this framework, many cooperatives or producer organizations in Northern countries are in the most developed stage 5, whereas most examples in this issue of *ETFRN News* are in stages 3 or 4. Authors of the articles explain their evolution from lower tiers, what helped them grow, and what is holding them from advancing further.

Farmer and agriculture-based organizations are generally much more advanced than forest-based groups, with stronger market links and a much longer history. Looking at the changes in producer organization as they develop, such as self-governance and links between broad social representation and business, is enlightening in analyzing how organizations grow and what provides the effective triggers, support and motivation to

do so. It is hoped that summaries of such insights are forthcoming and will be available in a format and language that will benefit producer organizations of all stages and types.

Building momentum

This issue of *ETFRN News* was produced as part of a multi-agency momentum-building initiative that aims to give more visibility and voice to producer organizations. It was produced in part as a response to the recommendations from the *Strength in Numbers* report (FAO and AgriCord 2012) and the international conference of the same name in Guilin, China (FAO 2013), along with the *Making change happen* (DeMarsh et al. 2014) and the *Multi-sectoral platforms for planning and implementation* (Macqueen et al. 2014a) working papers, the *Roadmap for strengthening forest and farm organizations* policy brief (FFF 2014), and *Democratising forest business: a compendium of successful locally controlled forest and farm business models* (Macqueen, Bolin and Greijmans 2015).

This issue extends the important work of the Forest Connect programme, which links a strong network of organizations supporting enterprises and producer organizations. It is one of a series of joint activities involving the Food and Agriculture Organization (FAO), the Forest and Farm Facility (FFF), the International Institute for Environment and Development (IIED), the International Union for the Conservation of Nature (IUCN), the Center for People and Forests (RECOFTC), Tropenbos International, and five regional and global producer organizations. These are the International Family Forestry Alliance (IFFA), the *Alianza Mesoamericana de Pueblos y Bosques*/ Mesoamerican Alliance of People and Forests (AMPB), the Asian Farmers' Association for Sustainable Rural Development (AFA), the Global Alliance for Community Forestry (GACF), the International Alliance of Indigenous and Tribal Peoples of the Tropical Forests (IAITPTF). The FFF is itself a partnership between FAO, IUCN and IIED, working in ten countries and at the regional and global level on three key pillars: 1) strengthening smallholder, women, community and indigenous peoples' producer organizations for business/livelihoods and policy engagement; 2) catalyzing multi-sectoral stakeholder policy platforms with governments at local and national levels; and 3) linking local voices and learning to the global level through genuinely participatory processes, communication and information sharing.



The combined aim is to put people and their organizations at the heart of the XIV World Forestry Congress in Durban, South Africa in September 2015, including a two-day pre-congress event: "Building momentum for community-based forestry and forest and farm producer organizations." As part of this effort, regional events in the Americas, Africa and Asia brought together producer organizations to take stock of the current situation and develop messages for global events, including the World Forestry Congress.

Everybody talks about them, but few fund them

There is much talk about the value of producer organizations across a wide range of issues, especially by donors and governments. But when one looks at budgets, priorities, plans and programmes, it appears that this talk is largely rhetoric. Do forest and farm producer organizations fall through the gap between the priorities of bilateral and international donors? They don't *directly* or *specifically* involve biodiversity conservation or climate change adaptation or mitigation. It's not solely about increasing crop yields or reducing losses to drought, pests and diseases, new crop varieties, genetically modified organisms or biofortification. It's not just about aquaculture, animal breeding or biofuels. It's not *exactly* poverty reduction or building resilience. And it doesn't directly deal with water, sanitation, health or education. Producer organizations actually encompass a bit of all of these – in one integrated package.

Most attention is focused elsewhere. At the macro level, resources are funnelled to global policy changes, or coming up with big solutions to shape the practice of corporate giants. At the micro level, one-off efforts that support individuals and small projects abound. But the tremendous potential of the “mezzo” level — the vast private-sector middle ground — is mostly overlooked. Vertical linkages between smallholders and the machinery of government and giant market actors need to be strengthened. More important though are opportunities to strengthen horizontal linkages between those who know and love their communities, their forests and their land. Such people generally want to build their own social enterprises to ensure sustainable livelihoods and community well-being. The mezzo layer could be filled with producer organizations and their own large private-sector networks and federations, as prime movers for a more appropriate sustainable development model.

As primary and secondary producers, members of producer organizations are very different from NGOs and civil society organizations. Working directly with them is a move away from decades of support to service providers who speak on behalf of — but rarely represent — farmers and indigenous and forest peoples. Strong producer organizations hold the key to reversing the unsustainable trends that are destroying landscapes and communities. They can increase decent rural job opportunities that in turn can help stem the flow of youth to cities, which fuels discontent, anxiety and a sense of separation from culture and place. They can take a vital part in strengthening the rural economy, and as their capacity grows, innovative processing and marketing can add to the diversity of forest and farm products.

Organized groups of people who still possess indigenous and local knowledge at a landscape scale are best positioned to respond to the ongoing challenges of climate change and adapt the new wave of climate change solutions. They can do so in ways that could actually lead to mitigation and spur practical innovative adaptations. Scientists, policy makers and even the large-scale private sector cannot do their job without organized small-scale producers. This is why strengthened and more effective producer organizations are an essential element for scaling up efforts. Investing in them will have larger and longer-term multiplier effects on social, economic and environmental impacts

than many other approaches. Evidence shows that a lot can be done with the support that is provided (FFF 2014), and the articles in this issue add to that evidence. Much more could be done, however, with only a moderate increase in funding, at both the national and international level.

Internal organization

Crucial issues in self-governance

There are three basic purposes of any local forest and farm producer organization (Macqueen et al. 2006; deMarsh et al. 2014: to speak with a more powerful voice and lobby buyers and decision makers; to reduce transaction costs and provide services for their members; and to adapt strategically to new opportunities. Other requisites, also highlighted by deMarsh et al. (2014), include strong collective and evolving interests, autonomy from government or other agencies and institutions, democratic decision making, clarity of internal roles and responsibilities, transparent financial reporting, successful experiences across members, self-reliance and internal management. Most of these qualities are also observed with agricultural cooperatives and associations, community forest management, civil society, community-based, non-governmental and other grassroots organizations.

Each producer organization has developed its own organizational structure, but some common elements and processes are apparent. First, there is always a clearly defined structure. Ad hoc organizations are reported, but those that have grown to any size and sustained themselves over any length of time tend to have an elected committee. These committees have a number of names, such as executive or governing committee, council or board. Positions include a president, secretary and treasurer, and in most local producer organizations, the responsibilities are carried out on a voluntary basis.

In larger organizations, however, or those that have several quite different activities or value chains, maintaining a feeling of inclusion is sometimes an issue. In such cases, the formation of sub-groups, sub-committees or even separate businesses has proved helpful (Playfair and Esseboom 1.3; Restrepo et al. 1.7). Smaller organizations can meet at a member's farm or house on a rotational basis, which helps in learning and sharing (Restrepo et al. 1.7), but as they grow, the need for a dedicated institutional centre (often a building or set of buildings) becomes more important. This is one area where outside support tends to be crucial, in providing material resources for establishing such a centre (Parra et al. 1.4; Foundjem-Tita et al. 1.6).

Issues related to youth and gender are worthy of specific analysis, although these were only touched on in several articles. Rural out-migration and the declining interest of youth in agrarian livelihoods leave mostly older people to manage farming affairs (Slusser, Calle and Garen 1.2). The important work of women's groups in forming and sustaining producer organizations is also clear; for example, in the collection, processing and marketing of NTFPs in Suriname (Playfair and Esseboom 1.3), and women are a vital part in many other ventures, including dairy farming in Kenya (Restrepo et al. 1.7) and small farm surpluses in India (Bisht, Maheshwari and Pant 1.8).

Federations and umbrella organizations

Umbrella organizations unite local producer organizations in provincial, national or regional associations or federations. They have fundamentally similar organizational structures, and through active membership, local organizations should have a direct influence over the functioning of umbrella groups. (External organizations — governmental, non-governmental, civil society, academic or private — are discussed below).



Although both umbrella and external organizations can provide support and services to individual producer organizations, they do so in different ways.

Care must be taken with definitions, as the term *umbrella* can be used to describe producer organizations that federate local communities (Pforte, Postorius and Pawlowski 2.1), when such a group might otherwise be seen as a single producer organization. The five tiers of organizational development (Macqueen, Campbell and deMarsh, 2014) can be applied to federations as well as to

individual producer organizations, from a single cooperative with multiple activities in Peru (Rodríguez Zunino 2.2) or based on timber in Indonesia (Tri Wahyudiyati and Irawanti 2.6), to a national organization with only a few members based around a single product in Cambodia (Chey et al. 2.5) or a very large national federation in Nepal (Pathak, Parajuli and Pandey 2.4), and the beginning of regional development in the Caribbean (Eckelmann and Sandy 2.3) and the Pacific (Stice and Toleafoa 2.7). Clearly, the potential for expansion is huge.

Umbrella organizations have benefited very diverse groups of producers, including farmers on small islands (Stice and Toleafoa 2.7), and small forest producers in developed countries (deMarsh and Dansereau 2.8) and developing countries (Pathak, Parajuli and Pandey 2.4). The reasons for their creation are similar, as are their roles and member benefits. However, how they are supported and their past experience and future prospects are quite different. All these groups show that national and regional federations have significant positive impacts by aggregate the many into the millions, and by taking small-holders voices into multilateral debates and multinational boardrooms, and many other international forums where peoples' rights, needs and well-being are being discussed, but where they have historically had little input. One example of the impacts that can be achieved comes from Guatemala, where 250 local producer organizations are aggregated into 11 provincial associations that together form one national alliance (the AMPB). Representing 388,000 producers and sustainably managing 750,000 hectares (ha), or 17.5% of the national forest cover, in negotiations with the government they secured a forest incentive programme for their members worth 1% of Guatemala's GDP.

Tenure and governance – the critical preconditions

Access to land

Without the right to land or what grows on it, there is little security, and therefore little incentive to manage, restore or develop productive systems within forest landscapes. The crucial issue of secure land tenure is mentioned frequently in the articles in this issue, as it has been in previous studies. It is not the ownership of land per se, but the right to harvest what you sow, to profit or otherwise benefit from your, your family's or your community's collective labour.

There have been changes for the better toward more community management and local control, especially in recent decades. Hodgdon and Sandoval (1.1) note the marked shift in tropical forest tenure in the past twenty years, with more than 30% of forest land now under some form of local control (RRI 2012). In other cases, change has come about through the legal recognition of customary or informal arrangements on the access, use and control of lands and other resources. This has resulted in part from a shift toward decentralized governance, from mounting evidence that indigenous and community management can conserve forests as well or better than strict protection (Seymour, La Vina and Hite 2014), and that well-managed forests can power economic development through locally driven enterprises.

Opposing forces remain strong, however, and sometimes make things worse (RRI 2014). Conversion of forests, savannah or smallholder agricultural landscapes to plantations (oil palm, bio-energy, pulp wood, etc.), industrial agriculture, mining, urban development, tourism and other competing land uses continues and is increasing in some places. Large-scale concessions for forest exploitation are still being issued alongside newly protected areas. Although the demands of an increasing urban population must be considered, so must landscape-level considerations, including the livelihoods of those who live in and depend on those landscapes. Producer organizations can bring these concerns forward, and so they must have a seat at the negotiating table. Their work as custodians of the soil and all that grows in it must be adequately acknowledged; by doing so, economic and environmental benefits need not be trade-offs (Das, Sidebar 4).

Access to justice

One cannot lay any claim to land or the fruits of it without recourse to justice as the fundamental basis. Ownership, rights and access to land and other resources are key, and inequality and injustice in their distribution are the roots of so much human suffering. Yet in all of our considerations on human rights, there remains little said on the connections between (freedom of) association, (access to) land, justice, equality, poverty and "progress." None of this is new, however; as long ago as 1879 Henry George concluded that "*association in equality is the law of progress*" (George 1953: 196).

Where an individual producer may be at risk from resource grabs for land and natural resources, a strong producer organization is much less vulnerable. In part this has to do with the formal registration of organizational structures and their articles of association

required by the state and for the internal peace of mind of members. Such registration can stake a claim to land and natural resources even in situations where the legislative provisions for local tenure are weak. Additionally, a strong producer organization is more likely to be able to afford to pursue justice with representatives equipped for that task, or to at least be able to threaten so to do. A number of national federations and alliances have successfully used legal means, up to and including through supreme courts to push for rights critical to their members.

Membership size gives larger organizations political weight with decision makers and the judiciary, in view of their voter numbers and combined connections. The more that such organizations interact politically to shape policies that further secure their rights, the stronger this position becomes. In Sweden for example, a century of political engagement by forest and farm producer cooperatives has led to the restriction of corporate land holdings to 25% of total land area. Conversely, in regions dominated by large corporate interests and investment contracts, the rights of local producers can be constantly eroded in law, but even in these contexts vital gains are being made.

Who you know and what you know – the key entry points

Access to each other, and to technical knowledge, skills and training

Many of those working with producer organizations have the distinct advantage of being able to compare and contrast the varied experiences within and between them and have important observations to make –one of the aims of this publication. The learning value of sharing experiences among and between producer organizations is highlighted again and again, and its importance in growing through the stages of organizational development. This can be facilitated through federated umbrella organizations that can also share experiences between different countries (Stice and Tolefoa 2.7; deMarsh and Dansereau 2.8; and the work of international organizations or NGOs).

Increased access to knowledge, skills and training, often grouped under the term *capacity building*, is a commonly cited demand by producer organizations and is highlighted in many previous and parallel analyses. This also encompasses follow-on support once the necessary knowledge, skills and technical have been obtained, as it should be not be seen as a 'one-off' activity, rather as a process of continually building and developing the knowledge and skill-set. This can be achieved, at least partially, by farmer-to-farmer or organization-to-organization sharing and learning, but often requires external support (see below, and specifically, Simpson and Bingen 3.5).

Access to influence

This includes access to decision makers and decision making, including in the policy arena, but can also involve access to finance, markets (national and international) or any other type of external support. Access is increased through greater numbers; associations and federations are able to represent many voices and have political power. Such is the case in Nepal (Pathak, Parajuli and Pandey 2.4), where the umbrella organization for forest producer groups counts 8.5 million members: 30% of the national population. But it is not

just a numbers game. Respect increases influence, and respect is earned through the way an organization is managed. Inclusivity, democracy, transparency and accountability give organizations an inner strength, which leads to outer strength, assuming that equal and fair rules are in place.

Decentralization of the power and authority of central government to provincial, municipal and local authorities can assist the growth of producer organizations, but does not always do so (Simpson and Bingen 3.5). Although individual producer organizations rarely have sufficient influence, federations do. If governments want to see policy changes transformed into real impact on the ground, the effective participation of producer groups is essential. And if producers want to have their opinions considered in such debates, their voices must be aggregated. We see how effective policies can assist the development of producer organizations as in Vietnam (Ngo, Pinchot and Current 1.9), or hinder them as in Ghana (Mensah and Nketiah 1.5), and Greijmans et al. (3.1) puts such policies in the broader context.

The geographic scale of a forest and farm producer organization or federation is determined by three basic functions: the size of area that would allow a particular service to be provided most efficiently to its members; the area required to supply the demand from value added processing facilities; and crucially, the level of government whose policy the forest producers most want to influence. In most long-term successes in locally controlled forest landscape management, national federations evolved at a fairly early stage, e.g., The Central Union of Agricultural Producers and Forest Owners in Finland, the Federation of Swedish Farmers and the AMPB in Guatemala, as well as FECOFUN in Nepal (Pathak, Parajuli and Pandey 2.4).

Access to processes of policy and governance reform can also extend to the international level. For example, representatives of family, community and indigenous forestry groups began a process in 2009 to discuss a common agenda. This was undertaken via leaders of the International Family Forestry Alliance, the Global Alliance for Community Forestry, and the International Alliance of Indigenous and Tribal Peoples of the Tropical Forests (the Three Rights Holders Group, or G3). They agreed to work through their differences, and developed a mutually acceptable agenda and terminology to pursue locally controlled forestry, which they defined as “the local right for forest owner families and communities to make decisions on commercial forest management and land use, with secure tenure rights, freedom of association and access to markets and technology.” The process led to strong advocacy positions agreed by all parties as to the terminology and agenda that they jointly wished to pursue in a range of international processes (G3 2011).

At the regional level, the AMPB is another strong umbrella organization of ten national and sub-national groups in Central America. It engages in a range of regional events through highly effective “pre-congresses” and the production of communications materials in support of issues important to their members. It recently linked up with producer organizations in South America, Africa and Asia to develop a highly effective media campaign — *If not us, then who?* — that gave them high visibility in global events related to climate change in 2014, including New York and Lima.

External services and support – the enabling environment

Service providers, governments and international organizations can support the formation and strengthening of producer organizations by helping to develop suitable conditions. These conditions include secure tenure, fair market access and high-quality support services for capacity development. Of vital importance is the promotion of interactions at all levels for joint learning to share experiences, gain ideas, spread innovations and build best practices that can help producer organizations reflect on and strengthen their effective functioning, and gain confidence in what they are doing in their specific context.

Government agencies and services

Central governments are key players, as makers and enforcers of national policies and legislation, and as signatories and interpreters of international treaties. They interact with land users through national agencies, provincial (district, county) governments and their local representatives. The services offered vary greatly from country to country, and improving them has been an important component of support for producer organizations (deMarsh et al. 2014). An excellent example of a new approach (Boscolo et al. 3.4) is a self-assessment tool developed by FAO to evaluate the effectiveness of public forest agencies in supporting producer organizations. Too often, however, extension has focused on the individual farmer, with less attention paid to the economies of scale and impact that can be reached by strengthening enterprises and producer organizations. A number of countries who have had success with farmer field school approaches are now seeing the field school members as the basis of producer groups and are extending this effective learning approach to forest product producers and tree farmers. Kenya is an interesting example (Boscolo et al. 3.4).

Governments provide capacity and organizational support in many ways. In Suriname, the Centre for Agricultural Research in Suriname supports women's NTFP producer organizations (Playfair and Esseboom 1.3); in Indonesia the forest department encourages forest farmer groups (Wahyudiyati and Irawanti 2.6); and in the Philippines municipalities have important functions (van der Ploeg, Balbas and van Weerd 1.10). One specific area merits a separate mention: extension services, although these are often coupled to other types of support. There are positive cases such as in sub-Saharan Africa, although many situations are noted where improvements can be made (Simpson and Bingen 3.5). Government support was cut drastically in the Pacific, although this had a positive effect by encouraging the development of farmer organizations to fill the gap (Stice and Toleafoa 2.7).

International organizations and NGOs

Many producer organizations have been supported through interventions by NGOs and international groups; some owe their very existence to these bodies. These groups do positive and important work: Rainforest Alliance supported an indigenous organization to become Forest Stewardship Council (FSC) certified in Honduras and linked them to an international buyer for batana oil (Hodgdon and Sandoval 1.1); the Forest Trust supports FSC-certified timber in Indonesia (Cohen 3.2) and the UNDP Small Grants Program supports a producer group in Peru (Parra et al. 1.4), among many others.

However, many producer organizations fail as soon as such support ends and well-meaning interventions can also have the opposite effects to those intended. In the final article in this issue Elson and Unggul (3.8) observe that “the best of intentions is not good enough,” “don’t turn a business into a project,” and “a debt is an obligation to repay; a grant is an obligation to report.” For established producer organizations, partnering with development projects has clear potential advantages, but it can also bring challenges. In an example from Cameroon, members’ expectations of direct financial benefits could not be met, since the group had to pay secretaries and technical staff to complement in-house expertise (Foundjem-Tita et al. 1.6). In some cases, partnerships with development projects took group members away from their farming activities, especially the most enthusiastic members, who served as field guides and interpreters, and these frustrations led to a strong desire to do things differently. Other types of support may also be needed, and chance has a part to play too. As van der Ploeg, Balbas and van Weerd (1.10) point out, “Successfully restoring forest vegetation requires a great deal of labour, money, expertise, support and time — and a little luck.”

Linking to the large-scale private sector

The largest private sector in the world is probably the aggregate total of all smallholder producers, whether informal and unrecognized, or those categorized as micro, small and medium scale enterprises. However, too often the term *private sector* is used to imply only larger scale actors. There are many examples of direct links between large companies and producer organizations. Companies increase profits by reducing the costs of administration, management and business transactions, and so they prefer to deal with a single organizational focal point than with a multitude of individual producers. Examples are numerous, including local communities getting together to sell NTFPs in Peru (Parra et al. 1.4); smallholder farmers in Kenya forming a producer organization to sell milk (Restrepo et al. 1.7); and forest farmer groups forming to facilitate deals with timber companies in Indonesia (Wahyudiyati and Irawanti 2.6). In some cases, links made via higher-level national umbrella organizations, such as with NTFPs in Nepal (Pathak, Parajuli and Pandey 2.4) and rattan furniture in Cambodia (Chey et al. 2.5), facilitate connections to international markets that would be inaccessible to local producer organizations. More commonly, NGOs or international organizations provide the main or only link to international markets and to organic or FSC certification.

There are increasing efforts to attract the private sector to take a more active part in supporting producer organizations, either through guaranteeing markets, training, providing planting or other materials, or by direct financing (Nugnes 3.6; Meyer and Johnson, Sidebar 4). More could be done, but assuring equitable benefit sharing is a common stumbling block. Although problems regarding implementation of REDD+ and carbon projects are not covered in this issue, a related issue for producer organizations is the cost of and lack of capacity for accurate data collection. Baker (Sidebar 2) offers a solution.

Business partnerships with small producers are most successful if they are equitable and based on good co-planning, co-investment, co-responsibilities, sharing of co-benefits (including costs and risks), and on an understanding and recognition of local realities,

needs and interests. It is essential that adequate time and resources are available for active engagement with local communities from the start, to invest in reciprocal relations and build trust through effective and transparency communication. Often the first issue is addressing land tenure and governance, which must be clarified in order to provide long-term security.

Markets and business opportunities

Access to markets

Where the focus of many experiences is on accessing major national or international markets, many articles show a welcome return to valuing local and provincial markets. In the case of smallholder surpluses in India (Bisht, Maheshwari and Pant 1.8), the producer organization stretched reached out to far-off markets, before coming back to safer markets nearer to home. The balance between profit margin and risk is dependent on the amount of capital available, not on the demands of a few clients or donors. Often, success in local markets — where risks and returns are lower — leads to international market opportunities with higher risks and returns.

Interestingly, not many articles discuss this important subject in the detail it would appear to merit, though all cover the point in various other ways, either by discussing certification or the role of external support. There are repeated confirmations of the essential need for financial viability if any organization is to survive, but much less information about on the best way to attain it. This may be due in part to author bias. There is much written on the benefits of certification (Box 1), although only a very small fraction of producer organizations are in fact certified and the actual benefits are far from clear. Although certification can increase income by leapfrogging directly to a lucrative international market with NGO or donor support, it appears to be a risky approach, and it depends on a number of associated factors. Many articles highlight the basic need to satisfy subsistence needs first. And following the “small is beautiful” mantra, it may be best to focus on local, provincial and national markets only after meeting subsistence needs. International markets can then be assessed and developed, depending on connections both personal and geographical, and perhaps “a little luck.”

Building brand recognition

There are many dimensions to the information that customers link with a brand, and many ways to alter customers’ perceptions by changing the sort of information that is available about the company or producer organization in question, including the use of imagery and promotion. Brand recognition is often associated with international markets, but is by no means exclusive to them. Strong local brands — backed by recognition of the contribution that the product makes to the local economy — can be an effective way to consolidate local market access. In India, Himalayan Fresh has become a well-known local and national brand (Bisht, Maheshwari and Pant 1.8).

There are several ways to achieve better brand recognition. In addition to a do-it-yourself approach, there is adopting a certification standard recognized by consumers; FSC,

Programme for the Endorsement of Forest Certification, Fairtrade International and organic standards are the most well known globally. Due to their importance and the controversy surrounding the actual and perceived costs and benefits, certification merits a detailed discussion (Box 1). Producer organizations usually have a strong brand, because of the many benefits described in the opening section of this overview.

Box 1. The double-edged sword of certification

Producer organizations see increased revenue from price premiums and volume sales as the chief benefit of adopting certification practices. However, actual financial returns from timber have generally been small and have been realized only for some products and some markets. For this reason, the costs of initial investment and ongoing auditing are too high for many small to medium-sized enterprises, unless these costs can be covered by external donors such as NGOs (Cohen 3.2). In response, FSC is focusing on assisting smallholders, who manage more than 1.5 million ha of certified forests in the Global South, (three-quarters being community forests), and a further 6 million ha in the Global North (Meier-Dörnberg and Karmann 3.3). In the case of timber, an increasing number of eco-labels provide “soft” self-regulation that is less strict than certification schemes, but more work is needed to qualify their transparency, impartiality and sustainability impacts (Tegegne and Tuomasjukka, Sidebar 1).

Organic certification of agricultural produce also has costs as well as benefits, with changing regulations making it harder and more expensive for organizations to maintain their certificate. Bisht, Maheshwari and Pant (1.8) wonder “why there are so many roadblocks for people who want to grow and supply safe and nutritious food and so few for those who sell less healthy foods.” In addition, the export of some organically certified NTFPs, as seen in Suriname (Playfair and Esseboom 1.3), depends on a single buyer, which brings its own risks.

Benefits from certification may not always be immediately apparent. Independent of increased sales or revenues, some smaller enterprises regard the status of being certified as a means of attracting financial and technical support from the international community (Cohen 3.2). In any case, formal certification is less important for national and especially local markets where quality standards can be assured through associating the product with the producer organization itself. This may be the way to go for low-cost, low-risk marketing.

Access to finance

There is money out there: lots of it. But the decisions on who has access to it and for what purposes and under what conditions are still largely made by formal financial institutions. Investments by large-scale farmers and enterprises tend to guarantee better or more secure returns, and are preferred over the perceived high risks and high transaction costs of investments in smallholder farming and forestry activities by producer organizations

or small and medium sized enterprises. Where financing is made available, it is often for environmentally unsustainable practices. Slusser, Calle and Garen (1.2) note that national and international banks have historically funded the expansion of Panama's agricultural frontier by loaning to farmers who transformed unsettled forests into pasture lands. Alternative tenure and business models should be further assessed when investing and working with communities.

Increasing access to credit and micro-financing and support from NGOs show that alternative models are viable, not least in the area of internal savings schemes, which provide revolving loan funds for members or serve larger investment needs. Existing informal financing systems should also be acknowledged, as they can be a crucial component at the local level as an alternative or complement to the formal system. Much could be learned from these systems in terms of arrangements, conditions and risk management, and they could provide the basis of more effective formal mechanisms. Most successes to date have been seen in agriculture, with forestry slow to catch up, perhaps due to the longer periods for returns and the more uncertain profits from timber and NTFPs. Nugnes (3.6) looks at increasing investors' interest in sustainable forestry management by improving the collection of impact data by producer organizations. Baker (Sidebar 2) offers a new approach to data collection, and Meyer and Johnson (Sidebar 3) propose a new financing model for smallholder and indigenous communities. Producer organizations can also benefit from increased investments in forest landscape conservation (Buffle and Buss 3.7), as it clear that increased income generation need not be at the expense of biodiversity conservation (Das, Sidebar 4).



However, Elson and Unggul (3.8) make an important contribution in noting the need for donors to find ways to channel funds to innovative enterprises in a manner that mimics conventional investment; for instance, through debt and equity financing, to avoid moral hazards, keep management focused on commercial goals, and enhance opportunities for learning. They suggest that enabling investments can be channelled to NGOs that support social enterprises; asset investments can be made directly in the company itself.

Conclusions

The experiences and views shared in this edition of *ETFRN News* confirm a number of increasingly widespread beliefs of those people who work with producer organizations regarding what helps them to survive and thrive, and what does not. These are separated into the five areas summarized at the beginning of this overview. A number of issues clearly overlap, but this could be a framework for further analysis. Although all elements are needed, they also have a sequential nature. Having one helps to secure the next.

Producer organizations need to have a democratic and open structure, and will benefit greatly from the support of a federation, if it belongs to one. This helps to secure clear rights to land and what grows on it, to participate in debates and to advocate for changes

to these rights and justice for their members. Capacity and influence are crucial, as is external support in some form or other, and these all lead to securing markets for forest and farm products, financial benefits and the resulting economic viability that underpins an organization's sustainability and its ability to fulfil its many responsibilities, both social and environmental.

But unless there are fundamental changes in the context in which producer organizations operate, real lasting change and the positive impacts that this would bring may be limited and short-lived. Simpson and Bingen (3.5) conclude with a quote from a Ugandan activist, including the observation that "Strong grass-roots organizations and mobilization processes pose a formidable political risk for most governments; it is therefore not surprising that many organizations of small farmers have remained weak.... In most cases these cooperatives keep small-scale farms in the background, forced to work under oppressive market relationships."

There is an increasing emphasis on strengthening producer organizations, but only by simultaneously addressing the underlying causes of equality and justice can significant and sustainable advances be made in reducing poverty and improving well-being. Those with power rarely relinquish it without some form of struggle. Lasting change will require more than just waiting for opportunities; it needs people to actively create them, if the needs of the many are to outweigh the needs of the few.

What is required now is a much more conscious inclusion of producer organizations in all programmes and policies related to climate change, food security and nutrition, landscape restoration, rural livelihoods, and engagements with the private sector. Helping forest and farm producers become better organized is a lever for transformational change. And such change is an absolute necessity to ensure that rural communities can prosper on their own terms, adapting and responding to change and challenges of maintaining their legal rights amidst renewed pressures for land and resources.

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Section 1

Local producer organizations

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1.1 The Moskibatana indigenous forest enterprise in Honduras

BENJAMIN HODGDON and CARLOS SANDOVAL

Introduction

Indigenous Miskitu communities in Honduras manage and market batana oil, produced from the American oil palm (*Elaeis oleifera*), which is used to make hair care products. Working in partnership with MOPAWI, a local NGO, Rainforest Alliance provided technical assistance to more than 2,000 producers in 40 communities to strengthen local systems of sustainable forest management and social organization for community enterprise development. Successes include Forest Stewardship Council (FSC) certification of more than 55,000 hectares (ha) and the establishment of a producer-led enterprise to improve production, processing and marketing.

A key finding of the initiative is that the world view of the indigenous Miskitu (*cosmo-visión* in Spanish) is compatible with enterprise development and market principles, as long as the social organization of the enterprise respects local norms. The establishment of a local enterprise was driven by a desire to develop local business capacities, and it demonstrated the ability to merge new business models with traditional institutions. Moreover, achieving FSC certification led to the mapping, documenting — and ultimately to the legitimizing — of indigenous management practices. These results have global relevance given the increasing number of indigenous groups in the tropics who are regaining control over ancestral lands.



THE ESTABLISHMENT OF A LOCAL ENTERPRISE DEMONSTRATED THE ABILITY TO MERGE NEW BUSINESS MODELS WITH TRADITIONAL INSTITUTIONS.

Background

There has been a marked shift in tropical forest tenure in the past 20 years. More than 30% of forest land is now under some form of local control (RRI 2012). This is the result of a shift toward decentralized governance, and a growing recognition that security of tenure is fundamental to protecting forests. There is mounting evidence that indigenous and community management can conserve forests as well as, if not better, than strict protection (Porter-Bolland et al. 2012), and that well-managed forests can power economic development through locally driven enterprises (Molnar et al. 2011).

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Honduras has allowed the development of community-based forest concessions (called agroforestry cooperatives) since the 1970s, but has only recently started to recognize indigenous customary tenure. After decades of antagonism between indigenous groups and the government, the first land titles were recently issued to indigenous communities. They cover one million ha in seven territories, some 7% of the country's land area. Now that many of these communities have secure tenure, they can undertake formalized long-range forest management and enterprise development.

The northeastern region of Honduras, known as *La Mosquitia* or the Muskitia, covers two million ha (Figure 1). Its cultural, economic and political dynamics set it apart from the rest of the country.

Figure 1. The Muskitia region, Honduras



Most of the 125,000 people in the region are indigenous. Primarily Miskitu, Pech and Tawakha, with Afro-descendant Garifuna along the north coast, the people of the Muskitia were until recently remarkably isolated from the centres of political and economic power.

Forests still make up 80% of the region, but they are coming under increased pressure for conversion to agriculture. From 2005 to 2010, Honduras had the highest deforestation rate in the Americas. In the Muskitia, deforestation is often linked to narcotics trafficking rings who launder money through illegal land deals and livestock operations. This has resulted in a forest frontier fraught with violence and criminality, which is worsened by the scarcity of civilian government institutions.

In this context, efforts to recognize and strengthen local systems of sustainable management are a critical priority. With funding from the Inter-American Development Bank, USAID and the Ojon Corporation, Rainforest Alliance supported a range of technical assistance activities to document traditional management practices, delineate

management areas, form a new multi-community enterprise, and bring systems up to FSC standards. Coupled with the Honduran government's move to formalize tenure of the region's indigenous territories, this has helped to ensure the sustainability of forest management and built competitive, locally-driven enterprises that provide a viable alternative to deforestation (Box 1).

Box 1. Batana ecology, harvesting and evolving use

The American oil palm (*Elaeis oleifera*) occurs naturally over a large part of the Mosquitia, and is especially common along the low-lying coast. Unlike its well-known relative, the African oil palm (*Elaeis guineensis*), it is rarely planted. It grows in marshland, swamps, secondary seasonally flooded forests and among mangroves. These ecosystems are found around Caratasca and other lagoons, and in the network of canals that branch out from the Kruta River.

Miskitu communities use the leaves of the oil palm in house construction, but they value the fruit more. Harvesting can be undertaken year-round, and is commonly done by men; women typically handle processing. Fruits are sun-dried for two to three days, cooked, and processed with a mortar and pestle to separate the fibrous pulp from the seed. The pulp (*wina batana* in Miskitu) is used in cooking and as a fuel, and the white endocarp surrounding the seed (*kisuma batana*) is processed into batana oil (*ojón*), which has been used for generations as a skin treatment and hair care product.

In the 1990s the Mosquitia Development Association (*Mosquitia Pawisa Apiska*, or MOPAWI) began working with producers to improve batana production and processing. Representatives from a Canadian beauty products firm, the Ojon Corporation, became interested, and in 2003 it began to purchase oil from the Mosquitia. In 2007, the company was acquired by the New York-based cosmetics firm, Estée Lauder Companies. Rainforest Alliance began working with MOPAWI and producer groups in 2009 with two broad goals: FSC certification, and the creation of a community enterprise to improve quality, supply and delivery.

Achieving FSC certification

To prepare for FSC certification, producers engaged an 18-month process that ultimately resulted in the formation of the Moskitabana Multiple Services Enterprise (see Table 1). FSC certificates for forest management and chain of custody were issued to the newly formed enterprise in September 2010.

The following notable outcomes were achieved as a result of FSC certification:

- spatial definition of indigenous natural resource management areas, including the mapping of traditional resource use areas;
- documentation of indigenous natural resource management practices and the design of a management plan for monitoring and control;

- establishment of a standard for the management of non-timber forest products (NTFPs), for which there was previously no formal guidance;
- identification of weaknesses in batana management and chain-of-custody systems, and actions to address these problems to meet certification requirements; and
- establishment of a cooperative enterprise of producers to achieve scale, improve quality, and extend local control over the batana oil value chain.

Table 1. Steps in achieving FSC certification

Activity	Description
Community consultation	Meetings with producers to explain the certification process, potential benefits and information needs; formal approval for seeking certification requested, granted and documented
Resource management documentation	Determination of management areas and documentation of harvesting practices
Chain-of-custody protocol review and control system design	Transport, processing, storage and sales protocols reviewed; controls documented
Development of a monitoring plan	Creation of a plan covering batana harvest, transport and processing
Assessment of legal and regulatory framework	Development of legal, regulatory and technical specifications related to handling, stratification, coverage and mapping
Development of a batana management addendum to FSC interim standards for Honduras	Protocols for auditing the sustainability of batana management established and reviewed by community counterparts and the Honduran Council for Voluntary Forest Certification, as well as regional and international actors
Consultation on group certification and formation of a producer enterprise	Informational events and technical training in the group certification concept, enterprise formation requirements, and producer roles, rights and responsibilities in enterprises
Training in management systems to meet FSC standards	Necessary improvements to the identified group management system drafted, reviewed and approved by Moskibatana
Field auditing	Audit conducted against batana addendum to the FSC interim standard; findings report issued; action plan agreed upon with Moskibatana
Certificate issued	Major corrective actions addressed and FSC certificate issued; action plan to address minor corrective actions agreed for maintenance of certification at the first annual audit

MOPAWI and external consultants led training courses over three months to address the corrective actions identified. Once these corrective actions were completed and verified during a follow-up audit, Moskibatana was issued an FSC certificate. With a management plan in place that documented producers' traditional natural resource practices, Rainforest Alliance begin offering assistance to help producers achieve legal recognition of their enterprise, and to build governance and administrative capacities.

Moskibatana governance structure and functions

Moskibatana is made up of 2,007 producers (1,186 of whom are women) from 40 communities, organized into 36 community committees. Because of the relatively large area covered and the overlapping indigenous and government administrative areas, the enterprise organized itself into five zone councils. Members make up about 8% of the total population of 25,770 individuals in the communities, with one member for every two to three households.

Moskibatana was formally recognized by the Honduran government in November 2011, becoming the first indigenous NTFP enterprise in the country. As part of the formalization process, it developed a governance structure with defined roles, rights and responsibilities for its members and leaders. These were approved by the Honduran Secretariat for Commerce and Industry.

The enterprise is overseen by its General Assembly, which is made up of all members and serves as the ultimate decision-making body. It is led by a seven-member Board of Directors. An Oversight Committee ensures compliance with statutes, agreements and resolutions dealt with by the General Assembly. Elections are held during General Assembly meetings, with one vote for each member and a simple majority required. Elections are staggered to ensure continuity and avoid replacing all leadership positions simultaneously, which can be disruptive. All posts have a two-year period, with a possible second term.

Critically, the group's legitimacy is rooted in its link to indigenous community institutions and structures. Most of Moskibatana's leaders are active in MASTA (*Muskitia Asla Takanka*), the most influential indigenous organization in the Muskitia.

At present, Moskibatana has no paid staff. Key tasks are performed on a voluntary basis by members from various zone councils. MOPAWI still has a role in the governance structure and operations, but the vision is for the enterprise to eventually control all aspects of harvesting, processing and sales.

Enterprise economics and functions

Soon after beginning to provide support to Moskibatana, Rainforest Alliance carried out an assessment of financial performance. Increasing membership and falling demand were among the key issues identified. From 2003 to 2013, the number of producers increased fourfold, while volume per producer has fallen by 70% per year since 2007, and income has declined by 14%. Demand from Ojon, which was the enterprise's sole buyer, has also fallen since 2007.

The cost of producing batana oil was calculated to be 111 lempiras (US\$5.88) per litre, and the selling price was 150 lempiras (US\$7.94). Although this net profit of 26% could be considered acceptable, the average producer sold only 21 litres per year, so the actual annual profit was only US\$43.



The price is set by Ojon Corporation in consultation with producers and is facilitated by MOPAWI. The price has not increased since 2008. Ojon also pays a premium directly to MOPAWI to cover management and transport costs. Once Moskibatana takes control of these functions, the enterprise should be able to capture more revenue by carrying out more tasks.

Technical assistance for capacity building

Moskibatana was initially formed only to hold the FSC group certificate. It became clear, however, that the enterprise could do more than just ensure certification compliance. It could also drive improvements in product quality and expand market opportunities. In order to achieve this, Rainforest Alliance helped to build capacity in several key areas:

- attaining legal status for Moskibatana, formalizing its structure, and participatory awareness-raising regarding governance issues;
- training members in basic business management skills, including baseline analysis, enterprise organization and governance, business planning and financial assessment;
- exchange visits with other community-based natural resource cooperatives;
- assistance for improved value chain monitoring and quality control;
- training in the use of an auto-diagnostic tool for regular self-assessments;
- development and reassessment of enterprise action plans;
- establishment of new business alliances; and
- training in market assessment and business strategies.

During 2010–12, a total of 2,752 people — 56% of whom were women — participated in more than 50 workshops and training events. The emphasis in the early sessions was on building the fundamentals for success, such as organizational structure and governance

mechanisms to ensure effectiveness, participation and transparency. Training later shifted to building capacities to manage the value chain and improve internal control systems. Through the articulation of an overall enterprise strategy and the formulation of a business plan, Rainforest Alliance and MOPAWI supported Moskibatana as it defined its own path and articulated its own goals. Diversification into new markets was a major priority, given the risks involved with having only one buyer.



Results of technical assistance

A key result was the official recognition of indigenous practices in the production of batana oil. Working towards certification required that harvesting, transporting and processing be documented and open to be audited, which supported the visibility of indigenous practices.

Likewise, mapping of traditional management areas helped to make indigenous management practices more widely known. Another result was the creation of a chain-of-custody system. The main challenge in attaining FSC certification was to design a documentation system that could be used by local producers to register and monitor production along the value chain.

The most notable achievement was establishing Moskibatana as the country's first legally recognized enterprise for NTFP producers among indigenous communities. It was essential that Moskibatana be a transparent and well-organized community enterprise that uses participatory processes, ensures consistency with indigenous leadership norms, and articulates clear rules for enterprise governance. These critical foundations for community forestry development often receive less attention than they should. Once Moskibatana was established, the focus shifted to building on longstanding indigenous management practices.

This process helped Moskibatana evolve from being an entity that would simply hold the group FSC certificate to becoming a representative community-owned business with a long-term vision and management plan. Control of production, monitoring and quality has now been handed over by MOPAWI to group members. Achieving full control of all administrative, sales and marketing activities is the critical next step. Members also recommend that processing shift slowly from individual homes to processing centres; this would improve monitoring and quality control while also reducing costs. Such a move would require financing for new infrastructure.

Moskibatana's certification and enterprise development is a powerful example for the region, particularly as more indigenous people gain title to their land. The attention paid to ensuring respect for and linkages with indigenous governance systems, the support of MASTA, and the overall goal of building on — instead of replacing — an indigenous management system provide an important model for the development of new producer groups.



Recommendations

A detailed and scheduled plan of action should be agreed on for handing over control to Moskibatana regarding all enterprise activities, including sales and marketing.

Training in business administration skills, internal management systems, production monitoring, quality control, sales and marketing, with a core group of managing members, should continue.

Support should be given to help Moskibatana obtain financing for improved infrastructure, especially in the consolidation of processing and quality control, to improve efficiencies and increase returns.

Clearer policies should be articulated related to benefit sharing and social investment.

There is an urgent need to identify and build new markets for batana oil. The decreased demand over the last few years from its sole buyer is a clear indication of the risks posed by a lack of market diversification.

Lessons learned

The experience of Moskibatana demonstrates that preparing for and achieving certification can be a transformative process. Mapping and documenting traditional management systems and building on local governance systems to establish a formal enterprise can be an effective way to legitimize and make visible indigenous management systems. Such processes are particularly critical at a time when changes in land tenure make similar models replicable on a much larger scale.



When introducing new management and administration systems, it is important to respect indigenous traditions. Although innovation in business practices is necessary to improve profitability and maximize returns, participants should not replace existing practices with externally imposed structures, but should instead adapt new tools and systems to local traditions and ways of operating, using participatory methods.

Although there is continuing debate, both globally and locally, about the commodification of indigenous livelihoods through the imposition of Northern models of conservation and development (e.g., REDD+), it is clear that many indigenous peoples have themselves long managed natural resources for the purposes of selling them. Miskitu groups are no exception. Moskibatana is an example of an indigenous community enterprise based on traditional practices, with the addition of external principles of business development and entrepreneurship that benefit marginalized communities while also conserving natural resources and local traditions.

Adopting and adapting to new organizational and business practices tend to be slow, however. Continued technical assistance will remain crucial, but it is essential that such support respects Moskibatana's own strategic vision and development plans. These articulate a clear desire to increase members' control over the value chain, and improve the group's capacity to expand markets. Efforts that support financial autonomy will be important steps forward.

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1.2 Sustainable ranching and restoring forests in agricultural landscapes, Panama

JACOB L. SLUSSER, ALICIA CALLE
and EVA GAREN

Introduction

In Panama, conventional cattle-ranching practices have led to the degradation of more than one-quarter of the country's agricultural land. Cattle ranchers in Panama have little access to information about sustainable practices, and lack the economic support and incentives to implement them. In 2010, the Association of Livestock and Agro-Silvopastoral Producers of Pedasí (*Asociación de Productores Pecuarios y Agro-silvopastoriles de Pedasí*, or APASPE) was the first community-based sustainable cattle ranching association to be established in Panama. Its mission is to improve on-farm productivity and increase the integrity of ecosystem services by restoring forest cover in degraded landscapes.

As pioneers in sustainable cattle ranching, APASPE members faced many technical, cultural and financial hurdles. To support them, the Environmental Leadership and Training Initiative (ELTI) at Yale University began training and leadership activities, supported APASPE to create a project funding strategy, and provided on-site technical assistance to establish model farms. Despite many setbacks and challenges, APASPE members have learned how to better manage their association and implement a sustainable ranching project. Through this experience, many members are now local experts on sustainable ranching and forest restoration, and they train ranchers and extension agents throughout the country.



INVESTING IN BUILDING CAPACITY
AND FOREST AND FARM PRODUCER
ORGANIZATIONS EMPOWERS
LAND-OWNERS TO MAKE POSITIVE
LAND-USE DECISIONS.

The Panamanian context

Conventional and extensive cattle ranching systems are the last productive resort before abandoning degraded lands. Land degradation is the result of prior agricultural failures that drove deforestation (Murgueitio 2004). Cattle ranching relies on cutting trees,

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repeated burning and use of agrochemicals, which quickly degrade soils and ecosystem functions. From 1960 to 2000, Central American forests were reduced by more than 40%. Panama was no exception, and forest degradation has continued, although forest loss has decreased since 2000. Today, 27% of Panama's once arable land is now considered degraded; overgrazing is the primary cause.

The Dry Arch region of the Azuero Peninsula is one of Panama's most critically threatened ecosystems. It comprises dry tropical forests with limited rainfall and a pronounced dry season of five to six months, making it particularly vulnerable to the impacts of climate change. As a result of unsustainable practices, the area has suffered high levels of environmental degradation. This has led to widespread economic losses in the agricultural sector and the degradation of ecosystem services that local people rely on.



A sustainable alternative

Although it is widely believed that trees in the landscape interfere with cattle production, evidence shows that tree cover can improve productivity (e.g., Garen et al. 2011). Colombia's Centre for Research in Sustainable Agricultural Production Systems (CIPAV) demonstrated that integrating trees and shrubs into livestock production increases the amount and diversity of forage for cattle, and also provides timber and non-timber forest products. Increasing tree cover in pastures also restores degraded grazing lands, protects soils and riparian areas, and increases biodiversity. Silvopastoral systems also maintain and regulate critical ecosystem services for forage and livestock production, such as moderating microclimates, cycling nutrients and hydrological factors, and supporting pollination and pest management (Murgueitio et al. 2011). This more sustainable form of ranching is not commonly practiced in the Azuero Peninsula, however, due to a lack of technical knowledge, limited economic incentives to implement it, and widespread cultural and traditional beliefs that oppose the presence of trees in pastures (Slusser, Calle and Garen 2014).

ELTI's approach to promoting alternatives

ELTI has supported forest and farm producer organizations in Panama's Azuero Peninsula since 2009, when it held its first course on incorporating native trees into the landscape. Several farmers from the District of Pedasí had previously taken part in a native species reforestation project (PRORENA) and were keen to learn about agroforestry (Garen et al. 2009). After this first training session, they identified silvopastoral systems as most relevant to their region's main economic activities, and requested assistance to implement them.

In response, ELTI partnered with CIPAV; their goal was to introduce local producers to more sustainable alternatives to cattle production through a series of training courses and leadership initiatives that focused on silvopastoral systems. The first session was a three-

day field trip to visit six model farms in another region of Panama, where agroforestry areas had previously been established with CIPAV's technical assistance. Facilitated by CIPAV, these training sessions provided abundant opportunities for farmer-to-farmer learning. When the farmers returned to their communities, a small group of them were determined to plant their own silvopastoral systems. They once again asked for support.

A sustainable ranching forest and farm producer organization

During the first ELTI course, the Panama representative of the Global Environment Facility's Small Grants Program expressed his interest in supporting community-based forest restoration and sustainable agriculture projects in the Azuero region. However, he stressed that — as was the case with other international donor agencies — grants could provide support only to legally recognized cooperatives. This provided an incentive to form a cooperative. ELTI provided motivation and assistance as the group of farmers navigated the bureaucratic process to legally register an association, form an executive board and set up a bank account. In 2010 APASPE was legally recognized.

Since the beginning, APASPE's Executive Board has been the main force that drives project implementation. The board consists of four members: a president, secretary, production secretary and treasurer; they have held these positions since 2011. Three are the youngest members of the association (in their late 30s), and all four have post-secondary school education; most other members have only primary school education. Board members receive no financial compensation and all have full-time jobs in addition to responsibilities on their farms.

The Executive Board's primary responsibilities are to provide leadership for the association's development, and manage project resources so they are allocated according to requirements. APASPE holds monthly meetings to discuss progress and plan for upcoming planting seasons. Individual members can request specific agricultural inputs needed for their farms, such as fencing materials, pasture seeds, agrochemicals, organic fertilizer and tree seedlings. To receive these, members must meet two criteria: they must develop a farm management plan, and must fence or plough the plots. The board monitors progress and provides or requests technical support from ELTI and CIPAV as needed. It submits financial and progress reports directly to donors, and holds quarterly progress meetings.

Initial successes

ELTI and CIPAV conducted a two-day workshop to collect members' input to a draft project proposal to implement sustainable ranching systems that would improve cattle productivity and protect water sources in Los Asientos County. The idea was that in exchange for protecting water sources on their farms through fencing and reforestation, farmers would receive technical and material support to establish silvopastoral demonstration plots. These plots



could then be used as examples to disseminate knowledge to other ranchers. The workshop also provided a venue to discuss and better articulate a clear mission and objectives for APASPE. CIPAV and ELTI provided expertise in drafting a proposal to meet the funders' technical standards, but the project fully reflected APASPE members' vision and interests.

APASPE then submitted its first proposal, for a sustainable ranching and riparian area restoration project. The group received US\$27,000 in 2012 to carry out five tasks:

- conserve three kilometres of riparian area;
- establish 18.5 hectares (ha) of silvopastoral systems;
- reforest degraded areas with 10,000 native trees;
- participate in ten forest restoration training sessions; and
- facilitate eight outreach events with communities in the region.

Early hurdles

As part of the project, ELTI facilitated eight practical training courses with help from CIPAV technicians. Despite these efforts, implementation soon fell behind schedule. Workshop participation was consistently low, and even those who attended felt uncertain about applying the techniques on their own without on-site professional guidance. Without regular in-field assistance, many APASPE members failed to implement the project on their farms at the beginning of the planting season. Many people then grew frustrated and began to lose confidence in APASPE.

APASPE's board members quickly recognized this problem and asked ELTI to provide more frequent technical assistance. Due to the lack of local expertise with silvopastoral systems and the high costs of bringing CIPAV experts from Colombia on a regular basis, ELTI turned to the U.S. Peace Corps Response Program in Panama for assistance. The



assigned volunteer, who had experience working on agroforestry in rural communities, was able to quickly develop trusting relationships with APASPE members. Once credibility was established, the volunteer helped to build capacity, provided prompt troubleshooting assistance, coached board members in information technology, and helped to develop a communications strategy to share their results with other community members. Sharing project progress proved to be an effective way to neutralize gossip about project failures and helped to promote APASPE in the community. The assistance of a technically competent

individual, who was able to earn the trust of the community, was instrumental in improving the confidence and capacity of the APASPE board and members. It empowered them and got their project back on track.

Longer-term successes

APASPE members were then better able to see their project through. By the end of the grant period, they had established the first two model farms, with combinations of intensive silvopastoral systems (up to 10,000 trees/shrubs per ha); low-density timber trees in small pastures with short grazing and long recovery times (Murgueitio et al. 2011), and mixed forage banks and reforested riparian areas. APASPE members also protected riparian areas and planted more than 8,000 trees of 25 different native species. Soon after implementation, the model farms began to show higher levels of milk production, with a 50% increase in overall forage biomass thanks to the trees and shrubs. This higher production persisted even throughout the dry season, when pastures dried out.

With these successes, APASPE quickly gained recognition for its alternative ranching methods. Awareness-raising strategies included communicating results via public outreach events, social media (Facebook and a blog), and hosting interested farmers and professionals. Interest in their work was also reflected in an increase in APASPE's membership, from 15 to 28 active members. Other landholders also began to carry out some of APASPE's activities on their own farms.



The donor was impressed with the success of the first one-year grant, and invited APASPE to apply for a larger two-year grant to scale up silvopastoral systems and riparian area restoration. With support from ELTI and CATIE, the second grant from GEF (2013–2015), for US\$134,000, also included \$257,000 in matching in-kind funds from other collaborating organizations and institutions.

APASPE members then expanded to 11 model farms, where they demonstrated a range of sustainable ranching systems and forest restoration practices. This includes almost 40 ha of low- and high-intensity silvopastoral areas. ELTI and CIPAV continue to provide assistance and facilitate workshops on silvopastoralism, forest restoration management, and monitoring and evaluation.

After only four years of experimenting with silvopastoral systems, APASPE is widely recognized throughout Panama. Since 2012, the group has hosted more than 700 visitors and trained hundreds of national and international professionals and other farmers through ELTI's field-based and on-line forest restoration training courses. APASPE members also serve as co-facilitators during the courses, sharing lessons on their technical experiences and candidly discussing successes and failures in implementing a project as a newly formed group. In addition, APASPE has directly mentored other ranchers in forming their own producer organizations and preparing project grants.

Long-term challenges

APASPE's successes have not occurred without setbacks. The most basic, but most ingrained challenge was the deeply held cultural belief that cattle and trees do not mix. The conventional cattle pastures that have dominated the region for the past 100 years are mostly devoid of trees. Spanish colonizers cut down forests and fenced pastures with



barbed wire; this was the way that homesteaders claimed land (Connelly and Shapiro 2006). This preference for “clean” pastures is rooted in cultural beliefs, and in the assumption that trees shade out pasture grasses and harbour predators (Heckadon-Moreno 1984 and 2009). For traditional ranchers, pastures with trees are aesthetically displeasing, the sign of a “lazy-man’s ranch” or a “widow’s farm.”

Historically, national and international banks have funded the expansion of Panama’s agricultural frontier by loaning to farmers who transformed unsettled forests into pasture land (Heckadon-Moreno 1984 and 2009; Mozejko 2009). This meant that APASPE members had to not only defy a traditional style of ranching, but had to do so in a context where financial institutions, agricultural authorities and universities lacked any knowledge of agroforestry.

Also, as APASPE members found out for themselves, inspiring changes at the landscape scale remains elusive due to financial constraints. This is the case even if model farms can demonstrate benefits in terms of productivity and ecosystem services. Sustainable ranching systems are intensive by nature, requiring initial investments of US\$500–1,000 per ha to cover high labour costs. Although farmers who join APASPE are provided with materials and inputs, they still have to provide or pay for the labour needed to establish and manage the system. As a result of rapid economic development in Panama’s urban centres and Azuero’s own thriving tourism industry, the national demand for labour has increased. Youth are migrating out of the region or choosing to work in construction, which pays higher wages than farming. This has created a severe shortage of agricultural labour in the region and a corresponding 50% increase in labour costs in the past five years.

To overcome this, APASPE members relied on one of their main assets: being an organized group. They realized that they and their families could provide the necessary labour, and so decided to revive the “juntas,” a traditional system of community work for harvesting corn or rice, or for the construction of adobe homes. During juntas, landholders provide food and drink in exchange for labour. Work parties commonly include more than 100 people, and are extremely efficient in the hilly landscapes of the region where mechanization is not possible. APASPE organized the members in juntas that prepared land and planted trees; individual farmers could then take over the maintenance work.

Continuing challenges

Although the use of the junta tradition in agroforestry has helped to alleviate some financial burdens, APASPE members face challenges that may be more difficult to overcome. Interest in maintaining agrarian livelihoods in the region is waning, especially among youth, who prefer to work in other sectors. Today, most APASPE members are older men.

Despite the proven potential of silvopastoral systems and forest restoration to increase on-farm productivity and improve rural employment opportunities, distant markets and other socio-economic factors are important barriers to the long-term adoption of these more sustainable systems.

Conclusions

These were the key findings:

- In the absence of incentives for small producers, the development of local grass-roots environmental leaders and organizations, such as forest and farm producer organizations, can help to generate local interest and enthusiasm for sustainable land and natural resource management.
- During the initial stages, producer organizations require frequent support to facilitate ongoing capacity and leadership development in order to guarantee long-term success.
- Facilitating formal and informal capacity-building opportunities for farmer-to-farmer learning allows producer organizations to share experiences with others, and to clearly communicate the effort and investment needed.

APASPE provides a clear example of how a producer organization can effectively tackle the challenge of improving the sustainability of farming systems and restoring local ecosystems in order to improve the quality of life. Through their struggles, members have learned to overcome many obstacles, and have emerged as insightful examples in the region for other forest restoration practitioners. In particular, they have inspired cattle ranchers and community leaders who are interested in forming producer organizations to implement sustainable agricultural systems. APASPE's experience illustrates the necessity of providing long-term support and assistance through project funding and development strategies. It also demonstrates that broader larger socio-economic and cultural contexts may hinder the long-term success of any such initiatives.

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1.3 Increasing sales and internal ownership: a basis for collaboration, Suriname

MAUREEN PLAYFAIR and MAYRA ESSEBOOM

Introduction

Gathering and processing non-timber forest products (NTFPs) provides income for villagers from tribal communities in the interior of Suriname. The demand for NTFPs is growing, and many products previously used exclusively on a subsistence basis are now sold in both domestic and export markets. For communities to benefit from these opportunities, producers need to understand that capacity building and appropriate organizations are key requirements.

In 2009, as part of its programme on promoting community forestry, the Centre for Agricultural Research in Suriname (CELOS) began working on the sustainable use of NTFPs. CELOS works on projects in close cooperation with local stakeholder groups and non-government organizations (NGOs) to establish sustainable producer organizations that become engaged in NTFP market opportunities.

The work began with traditional oil producers in the indigenous village of Apura and the Maroon village of Pokigron. It very soon became clear that protecting forest resources and their vast wealth of NTFPs against other competing land uses can be achieved only once the economic value of the products is understood. The organizational structure of producer organizations and the way that internal ownership is manifested differs in the two villages, and this affects the success of the business.

Research began in Pokigron. The village has a population of about 500 and is about 200 kilometres (km) from the country's capital, Paramaribo. The local partners were the Foundation for Reconstructing and Developing Pokigron (*Stichting Wederopbouw en Ontwikkeling Pokigron*, or STIWEPO), and the women's organization, Akatta. Pokigron had shifted from a highly subsistence existence towards a more cash-based economy, but



UNDERSTANDING AND TAKING PRIDE IN THE VALUE OF CULTURAL HERITAGE ADDS TO THE COHESION OF PRODUCER GROUPS AND THE WHOLE COMMUNITY.

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neither forestry nor agriculture were a large source of cash income (Zito 2009). The community forest is about 12,000 hectares (ha). CELOS provides assistance to women who gather fruits from the maripa palm (*Attalea maripa*) and amana palm (*Astrocaryum aculeatum*) and process them into edible palm oils. Most of the oil is used for subsistence, but women now produce small quantities for sale as well. CELOS studied the possibilities for improved processing technologies, and for assisting local producers in improving their business and marketing skills (Playfair and Esseboom 2012).

In Apura, with around 2,500 mainly indigenous people and located about 325 km from Paramaribo, about 40 micro-entrepreneurs produce carapa oil, a therapeutic product from the seed of *Carapa guianensis*, using traditional methods. The community has rights to a community forest of about 19,000 ha. Local livelihoods depend mainly on agriculture, logging and paid labour in the timber and mining industries. The local partner is the women's organization UJEMA ("Women help each other"). Carapa oil producers have a long history in commercializing their oil, and some producers have ties to local cosmetic manufacturers. CELOS worked to safeguard traditional knowledge related to carapa oil production, and to increase income by improving marketing and business skills.

The role of producer organizations for community development

NTFP producer organizations are relatively new in the interior of the country. Traditionally, tribal chiefs functioned as local executive counterparts to the central government. In the aftermath of the armed conflict between the tribal community and the government (1986–1992), special development funds were allocated for poverty alleviation. Few of these community development projects were successful, however, and relics of failed projects such as abandoned rice and cassava mills remain as witness.



The chiefs were responsible for dealing with the government and NGOs. In the period after the armed conflict ended, the government also considered creating administrative resource centres to assist in the development and maintenance of the wide range of outside relationships each village has to deal with. But because of the low educational and literacy levels of tribal chiefs, an alternate proposal was made for training to develop their skills, especially in economic areas. At one point, the largest donor — the Netherlands government —

demanded that funds for the development of the interior should not be managed by the government alone, but also by civil society (Kruijt and Maks 2001); as a result, local communities were encouraged to establish their own community-based organizations (CBOs).

Local community organizations

The common definition of a CBO is a not-for-profit organization that provides social services at the local level, based primarily on volunteer efforts. Most villages have several formal or informal CBOs, formed from church, cultural, youth and women's organizations. Since the 1990s, these socially-oriented organizations have been complemented by groups whose sole objective is the development of local communities. These groups are often poorly organized and lack well-defined goals. In general, if organizations are clear about their goal, management strategies, techniques and processes can all work better together to achieve it.

In many villages, women's organizations are the most active groups, although both men and women are engaged in the production of various NTFPs. In Pokigron and Apura, NTFP producers are organized through their respective women's organizations. In Pokigron, palm oil production is exclusively a women's activity (Playfair and Esseboom 2009), but in Apura, carapa oil production is a family activity, where men are assigned specific tasks (Esseboom and Playfair 2012).



Pokigron's CBO, STIWEPO, was established in 1991. It is based in Paramaribo, which gives it easy access to NGOs and government institutions. STIWEPO supports local organizations in and around Pokigron, including Akatta, as well as traditional authorities; both types of groups are represented on their board. Akatta's goal is to increase women's resilience and community development, with activities that concentrate on facilitating various training courses, and coordination of festivities and sports.

Apura does not have a development organization, but people feel represented through the local government and their traditional authorities. The women's organization UJEMA was established in 2007, making it a relatively inexperienced group. Its goal is to look after the material and socio-cultural interests of women in Apura and the surrounding area, and stimulate women's self-confidence. A place is reserved for a member of the traditional authority on the board of UJEMA.

Community organizations must have legal status in order to receive assistance or funding from external sources. Local organizations can choose to form an association, cooperative or foundation to achieve legal status. A foundation led by a board is the most popular organizational form, for its ease of establishment and administration, and all of the three CBOs mentioned above chose this structure.

Internal ownership: the position of stakeholders

The level of participation in organizational activities depends on the group's sense of being involved — their "ownership" — although a distinction should be made between stakeholders and so-called "constituents." Stakeholders are those who care about an organization and consider it their own, whereas constituents are those who directly

benefit from an organization's work, the people it serves, advocates for, or organizes (Minieri et al. 2005).

In many foundations in Suriname, it is the board, the governing body or more often just the chairperson who decides on and directs activities. There are occasional stakeholder meetings to discuss upcoming or ongoing activities. With UJEMA and Akatta, participation in meetings goes beyond that of board members, but the level of participation tends to depend on the interest that people have in the matters to be discussed.



Analyses of these two local organizations show that in Pokigron, women identify with Akatta, their women's organization. The group's regular activities have been at the heart of the community for more than twenty years, and women are familiar with them and understand them. On the other hand, Akatta's efforts as a producer organization that serves commercial interests are new and not fully known or accepted in the village. Another

hindrance for Akatta is that even with external assistance, the group cannot yet fulfill the urgent requirements of NTFP producers. Neither the need for improved processing technologies or having easier access to markets could be met, which meant that people lost interest. STIWEPO's task was to link Akatta with CELOS, but it also continued to be involved in project activities, since women are not direct stakeholders in STIWEPO.

The situation is different in Apura. Through its relationship with CELOS, UJEMA has embraced the role of becoming a development agency to improve carapa oil production and marketing. UJEMA changed from being engaged only in women's group activities to serving its entire target group by coordinating the external relationships necessary for expanding businesses.

When constituents participate in an organization, they help to ensure that the solutions it puts forward are relevant and effective (Minieri et al. 2005). Karabasjee, a producer working group established within UJEMA, shows that such a sub-group is an effective way to focus activities. UJEMA is increasing the sense of ownership of some of their constituents in the organization (the carapa oil producers) and strengthening their position as stakeholders.

One of the strategies for encouraging stakeholder participation and internal ownership is to connect around deeply held cultural or spiritual values. With UJEMA, these are linked to their collective heritage of traditional knowledge on carapa oil. Indigenous women in Apura take pride in this and want to preserve it. In Pokigron, people feel that palm oil quality depends on the particular skills of an individual producer, and place less importance on the recognition and protection of collective traditional knowledge.

Economics also matter

The interest that people have in their organization seems to be linked to the commercial value of the NTFP, and is related to the opportunity to generate household income. Carapa oil is sold in national markets, whereas maripa and amana palm oils are barely known outside the production region. The demand for carapa oil is rising, while palm oil is only slowly receiving recognition as a specialty product in the local market.

Producers in Apura, where the remoteness of the village hampers people's access to markets, noticed that joint efforts could help them overcome their problems. Important activities of UJEMA include facilitating the organization of marketing and establishing a brand name and standardized products that distinguish them from similar products in other regions. Participation levels in meetings on these subjects are high. Of the 40 registered carapa oil producers, about 10 volunteered to take seats on the steering committee of the newly formed working group. In Pokigron, 15 of the 29 producers registered by CELOS participated in a workshop to discuss business requirements in the NTFP industry.

Organizational life cycle and market readiness

Other important aspects of internal ownership are the pressures and threats that arise at various stages in the organizational life cycle. In general, organizations experience four overlapping phases: start-up, emerging growth, maturity and revival (Jawahar and McLaughlin 2001). Since the carapa producers are building on individual market experiences and are now expanding with a degree of success, this means that Ujema is in the maturity stage.

This stage is characterized by stabilizing production and product reliability, and matching these to rising demand. Common problems at this stage are maintaining cash flow and formalizing the organizational structure. The carapa oil producers from Apura have established a working group within their women's organization. In this model, a collective (umbrella) brand name was chosen and labels and bottles were sold to producers; a small amount was returned to UJEMA to cover management costs and contribute to community activities. It was agreed that every entrepreneur who wants to use the label would sign an individual contract with UJEMA.

Akatta, the women's organization of Pokigron, has existed for longer than UJEMA, but individual palm oil producers have experience only with the local market. According to criteria used by Dodge, Fullerton and Robbins (1994), Akatta is still in the start-up stage as a NTFP producer organization. Entering the marketplace is one of the group's dominant concerns, and its most critical needs are start-up funds, cash flow and customer acceptance. During marketing training with palm oil producers in Pokigron, it was seen that



participants were not aware of the value of their oils and could not explain it to potential customers (Brunst 2013). Specific marketing tasks include the establishment of customer contacts and definition and assessment of target markets. The palm oil producer group should devote more time to exploring new marketing opportunities.

The way forward

Although no member of the UJEMA board was a carapa oil producer, every member of the newly formed Karabasjee working group has a direct interest in oil production. This will allow carapa oil producers to have more decision-making power in this forum, where they can discuss matters related to production and livelihoods. Being under the umbrella of UJEMA helps the women deal with administrative and legal issues, and they receive secretarial assistance and financial administration from UJEMA. Furthermore, UJEMA remains the point of contact with other local organizations, local authorities and external institutions, and will work at a policy level on issues such as access to the forest, traditional knowledge and intellectual property rights.

A big setback was that under the present legislation, carapa producers cannot protect their traditional knowledge. Since they want to retain their collective rights regarding the oil they produce and do not want to be swallowed up by a CBO, the only way to protect their knowledge would be to confirm their intellectual property rights to specific localities, but it is not possible to register this at the IPR bureau in Suriname.

To increase the scale of their operations, Pokigron palm oil producers need to strengthen their organization around technological improvements in processing. Entering external markets will require them to improve individual marketing skills or establish a professional marketing body. Having a specific marketing organization, as Apura does, will be complicated by the fact that producers of individually processed and marketed oils want to protect their distinctive identities.

Lessons learned

Having producers in the decision-making structure of organizations promotes involvement and improves performance. Umbrella organizations can help by coping with administrative and legal issues, especially for less advanced groups. Understanding and taking pride in the value of cultural heritage adds to the cohesion of producer groups and the whole community, but the government's role in providing enabling policy is also vital.

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1.4 Conservation and sustainable management of dry forests in Peru

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Introduction

Northern Peru still has more than three millions of hectares (ha) of tropical dry forest, even after centuries of exploitation. Harvesting for wood and charcoal, overgrazing by goats, drought, and more recently, expansion of agro-industry, contribute to a clearance rate of about 20,000 ha per year. This triggers soil erosion and loss of biodiversity and increases the vulnerability of local people to climate change. Rural communities are working against these pressures, and the impacts of El Niño weather events, to maintain the traditional use and management of these dry forests, and in doing so, to conserve them for future generations.

In 2002 members of the community of Tongorrape in Motupe District, in the province of Lambayeque, created the Association for the Protection of Dry Forests (*La Asociación de Protección de los Bosques Secos*, or ASPROBOS). The association was initiated by former patrolers (*ronderos*) and volunteer park rangers who were increasingly concerned about the threats to their forest. ASPROBOS members developed its constitution; it is managed by its members and is based on the fair distribution of income. The association has formed and maintained strategic alliances with local government and with other rural communities in the area.

The example of ASPROBOS has also spurred the creation of nine similar organizations in the Olos and Chiniama watersheds, and the establishment of an Area of Regional Conservation. Through its own efforts and these spin-off impacts, it has contributed to the conservation and sustainable management of more than 1,000 ha of endangered dry forest in northern Peru. These forests provide essential ecosystem services and are sources of income for the community. The principal economic activities of ASPROBOS are the production of honey,



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collecting honey from stingless bees, and making marmalade from mamey (*Mammea americana*) in agroforestry systems.

Deserts and forests in northern Peru

Since the mid-1900s, the desert of the northern coast of Peru has been called *eriazó* (bare ground) or “virgin land,” despite the presence of remnant native seasonally dry forests. These are diminishing in area. According to the Ministry of Environment’s Map of Vegetation Types (MINAM 2012), there are seven types of dry forest, including dry forest savannah, *algarrobales* (*Prosopis*-dominated woodlands), and those that differ by topography, on *lomadas* (a kind of hill), foothills, low hills, high hills and mountains. About 70% of the three million ha of dry forests is in the province of Piura. In 2010 the provinces of Tumbes and Piura had the longest continuous stretch of this forest, which is also known as the Equatorial Pacific Dry Forest biome. Farther south, in the provinces of Lambayeque and La Libertad, deforestation has caused this area to become very fragmented, and remaining forests exist only as isolated patches.

These forests are located in arid and hyper-arid areas, where extreme temperatures and very scarce and uncertain rainfall are the common denominators. Summer daytime temperatures can exceed 40°C; mean annual rainfall can be less than 40 mm in some areas, and rain may not fall at all in some years. The biological and cultural diversity of these forests has adapted to this harsh environment and lack of rainfall. El Niño also determines the dynamics of these ecosystems: in 1982–83 there was up to 4,000 mm rainfall in just six months. As local people say, “These rains wake the forest up from a long sleep,” and they stimulate processes of natural regeneration from the seed bank that has remained dormant for decades. This in turn leads to the revival of traditional practices by local people. They make use of the water by cultivating seasonal crops, using stored seed or seeds exchanged from distant locations, storing seed for the future, and making full use of forest resources.

Unfortunately, since the late 1990s illegal logging has led to deforestation rates of 7,000–12,000 ha per year, mostly in Piura province. The most common trees, algarrobo (*Prosopis pallida*), are usually cut for charcoal making; sapote (*Capparis scabrida*) and overo (*Cordia lutea*) on forests plains are cut for timber and wood for handicrafts; and hualtaco (*Loxopterygium huasango*) and palo santo (*Bursera graveolens*) in the hill forests are felled for wood for making fruit boxes. The deforested land is overgrazed, mainly by goats, which limits regeneration.



In addition, the rights to large areas of remaining forests are being awarded to the owners of various companies, mostly privately and foreign-owned, for conversion to biofuel production based on sugar cane for oil companies and for other agro-industrial uses. Land is being distributed without adequate planning for agriculture, livestock

activities and changes in tenure. In Piura province, these activities — as well as illegal logging — result in deforestation that exceeds 20,000 ha per year (Castillo 2011). According to regional government figures, in Lambayeque, with nearly 20% of the dry forest area, deforestation has reached 10,000 ha per year.

Outside support

In this context of great environmental and socio-economic pressures, producer associations began to emerge, especially after the El Niño event in 1997–98. Heavy rains led to a series of development projects that promoted the conservation and management of the resulting forest regeneration, and took advantage of the increased productivity of the desert trees, especially the dominant algarrobo.



The Small Grants Programme of UNDP's Global Environmental Facility (GEF-SGP) sought to strengthen the capacities and infrastructure of existing producer associations in the region. They financed small projects to promote sustainable management and use of dry forest resources, working closely with other activities in the wider agricultural landscape.

This work is being built on by the Center for Arid Lands Research of the National Agrarian University (CIZA-UNAM) in La Molina district with the project "Seasonally dry forest conservation through productive consolidation of small producers and promoting advocacy for its sustainability." This project, which is also supported by GEF-SGP, is dedicated to learning the lessons of previous projects in the Peruvian north coast, integrating these lessons and identifying the most successful initiatives for up-scaling.

A local initiative is born

ASPROBOS was one of the organizations supported by GEF-SGP between 2003 and 2009, and one of the most successful. It was established in 2002 with nearly 60 members from the villages of El Choloque, El Cardo, Yocape, Higuieron and Marripón in the peasant community of Tongorrape in Lambayeque. Its origins go back further, with a history that dates back to the 1980s. At that time the villagers of El Choloque were organized into a group of forest guards, as in other departments of the Sierra, to counteract minor crime, illegal logging and cattle rustling and to bring security and comfort to their families. The association thus reflects a long period of self-management.

ASPROBOS currently has 33 members, including men and women. It is made up of a board council with a president, vice president, secretary, treasurer and spokesperson, who are elected every two years. Through assembly meetings, council members decide which members will receive payments from ASPROBOS and how payments will be calculated; i.e., by the days or hours worked, or through a share of product sales. Surpluses are invested by the association in infrastructure and equipment, and to support the search for new sources of financing.

The deep concern of the members of ASPROBOS to protect their forests resulted in the creation of a Committee to Protect the Forest only a year after the association was formed. This is a group of volunteer park rangers whose task is to stop illegal logging through prevention and through continual surveillance with the support of the police and district and departmental authorities. The volunteer park rangers were trained by the Lambayeque Forestry and Wildlife Administration in the legal aspects of illegal logging and in intervention procedures in control and surveillance. They were given basic equipment and supplies to make them better able to perform their functions.

Production and diversification

ASPROBOS is a community-based organization whose members carry out multiple activities to earn income. One of the most important is the production of honey from various trees in the area, as is done in other towns of the north coast. In 2005 ASPROBOS was the first association in Lambayeque to obtain organic certification (BIOLATINA). The association allocated nearly 50% of its land to establish beehives far away from areas of intensive or semi-intensive agriculture where agrochemical use is widespread.

This was a milestone in the region. Having organic certification of honey and other bee products showed that there are sustainable ways to earn a livelihood from dry forests while conserving them, rather than logging and converting them to agriculture. Producers in the hills also found that honey from two abundant tree species, *pasallo* (*Eriotheca ruizii*) and *hualtaco*, was very high-quality and was well received in the market, so they decided to expand its production. Honey from algarrobo trees on the plains is also of high quality.

One activity that emerged from local experiences — especially from observations of children and youth — was the production of honey from small native stingless *alpargate* bees. The resulting honey is rich in potassium, and is used as a medicine and a relaxant to combat respiratory diseases. These bees build their hives on tree trunks, and the association has developed a low-input, low-cost and chemical-free system of moving swarms into hives made from gourds. The honey is treated by producers and consumers alike as “organic by default,” and has been well received in the market even without being certified. Although the volumes produced are relatively low, the honey fetches twice the price of honey from European honeybees (*Apis mellifera*).

One of the association’s most profitable activities is preparing marmalade from mamey (*Mammea americana*). ASPROBOS members tried out various recipes. To reduce the amount of firewood needed to cook and prepare the marmalade, the association has developed and promoted improved stoves (which are more efficient and also produce less smoke) as well as other adapted equipment and infrastructure. This activity is dominated by women in the association, and has proved to be a driving force within households due to its large impact on improving family income. ASPROBOS has also produced *algarrobina*, a



molasses-like syrup made by boiling the sweet beans (or fruit pods) of prosopis trees, but this activity has declined in recent years due to the scarcity of fruit as a result of pest infestations.

Managing the Tongorrape dry forests

In the area where the association is based, illegal logging is widespread because of the diversity of its forests and its large trees, which are commercially attractive. El Choloque is located at the base of the western slopes of the northern Andes, bounded by the Yocape and Chiñama rivers, at 150–600 metres in elevation. It experiences prolonged droughts, with an annual rainfall between 40 and 100 mm (except in El Niño years), and a mean annual temperature of 23–25°C.

In the more than a thousand hectares that ASPROBOS manages, there are two distinct areas. In the hilly dry forest there is a wide diversity of trees, shrubs and other plant species. On the plains between agricultural areas and the hills are the algarrobal woodlands dominated by *Prosopis pallida*, which is the typical vegetation of the north coast and in Tongorrape. During the rainy season, it is transformed into a meadow with abundant grasses.

At the outset, the association prepared long-term (20-year) management plans for these different forests for the period 2003–23. This work included forest inventories, participatory planning workshops, a silvicultural plan (protection of natural regeneration and reforestation) and a forestry plan. The forestry plan also incorporates territorial zoning and forest management based on the current and potential use of forests that are in the best interests of local households. In addition, the association proposed a map of territorial zoning based on community review meetings and participatory diagnosis. In 2011 this experience of self-management helped ASPROBOS — along with other producer associations and the regional government of Lambayeque — to promote the creation of the Mollan Palacios Regional Conservation Area in the Olos and Chiniama watersheds.



ASPROBOS is highly regarded by local and regional authorities as an agent of local development and conservation due to these initiatives and its local accomplishments. As a respected representative of local communities, its members are frequently asked to participate in departmental planning activities in Lambayeque, including the Bureau of Forestry

Coalition, the Regional System of Conservation Areas, and the Honey Bureau of Consultations. The association also maintains conservation agreements with various communities.

Conclusions

The association has had important outcomes and has maintained its activities over the years. This is due to good leadership, good financial management (based on reinvestment and resource management), adequate and committed technical assistance during project implementation, and equitable distribution of benefits. In 2014, ASPROBOS arranged with the local government to install electricity and potable water services in their facilities so they could better develop their activities in terms of product processing and organization of meetings.

Perhaps its greatest achievement is the interest that ASPROBOS generates in replicating its experience. This has motivated nearby villages such as La Capilla, Marripón and Yocape to use improved stoves and begin beekeeping, thanks to the support and advice of supporters trained through farmer-to-farmer methodologies. Thanks to these successes, nine other groups involved in forest conservation and management have been created in Olos and Chiniama watersheds. ASPROBOS has evolved from a community-based organization to a regional network. It has been recognized at the national level and internationally (Medina and Calderón 2014). In 2010 the Food and Agriculture Organization cited it as a model of sustainable forest management in Latin America and the Caribbean (FAO 2010).

ASPROBOS is revising its business plans to improve the production of mamey marmalade and honey through better management of forest and water resources. The association has also received visits from the Promotion Fund of Protected Natural Areas of Peru and from representatives of the World Bank. Through the regional government of Lambayeque, these organizations will support ASBROBOS with a new five-year project. The project will execute the Intervention Plan of the Mollan Palacios Protected Area by implementing sustainable dry forest management in the area.

Through its good management and its ability to raise funds from forest product sales and donors, ASPROBOS has achieved a level of self-management and established a local and regional presence. This will allow the association to sustain new resources and maintain the livelihoods of local families well into the future.

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1.5 Learning lessons slowly: artisanal millers associations in Ghana

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Introduction

Artisanal millers associations include many people who previously worked illegally as chainsaw millers. The associations were established in response to the concept of artisanal milling, which was introduced to replace illegal chainsaw milling. The formation of the associations was facilitated through a donor-funded project starting in 2007 that aimed to address the lack of supply of legal lumber to the domestic market. The project supported capacity building for individual members and the associations as a whole, and facilitated linkages between the associations and key institutions and stakeholders.

The associations have rapidly grown in numbers and in technical knowledge.

However, due to the slow pace of the legislative process, artisanal milling is still in the pilot stage. This is resulting in disenchantment, disillusionment and sheer frustration, and some members are returning to illegal activities.



THE FORMATION OF ARTISANAL MILLERS ASSOCIATIONS STARTED AS A POLICY INTERVENTION. THEY ARE STILL EVOLVING, AND CHALLENGES REMAIN.

The history of chainsaw milling in Ghana

Chainsaws were introduced in Ghana in the 1960s, but their use was mainly limited to harvesting or logging and cross-cutting, not lumber production. In the mid-1980s, however, when the wood-processing sector in Ghana collapsed, illegal chainsaw milling was able to provide a major part of the supply of lumber, particularly to the domestic market. When the processing sector began to bounce back in the 1990s, the government tried to regulate chainsaw milling, but by then it had become widespread, due to a regulatory vacuum (Agyeman, Agyeman and Kyere 2004).

The practice was banned in 1997, but for various reasons — including the lower price of chainsaw lumber, direct revenue for farmers who had trees on their land, and a generally ineffective forest governance regime — the practice persisted and even escalated. By 2007,

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illegal chainsawn lumber constituted as much as 84% of the lumber on the domestic market. All attempts to enforce the ban failed.

A 2010 study critically examined the drivers and consequences of chainsaw milling in Ghana (Marfo 2010). The practice was found to have a number of negative effects, including high inefficiencies and loss of revenue to the government (in unpaid stumpage fees) as well as environmental and ecological damage (Adam and Dua-Gyamfi 2009a; 2009b). In terms of positive effects, the study found that chainsaw milling provided employment and livelihood opportunities for many people, with immediate returns (in cash or in kind) to farmers with trees on their farms. (Under the current legal regime farmers who tend trees on their farms receive no share of the benefits of timber harvesting).

The emergence of artisanal milling

The concept of artisanal milling was developed through a multi-stakeholder consultative process. The goal was to minimize the negative effects of chainsaw milling while optimizing its benefits. In response, a new policy initiative was created. Artisanal millers would work jointly with the formal forestry, timber and wood-based industries to supply legal lumber to the domestic market (Box 1).

Box 1. Artisanal milling

Artisanal milling is small-scale milling of timber from specified legal sources by a trained, certified, registered and licensed Ghanaian artisan, using licensed mobile sawmilling equipment that excludes any form of freehand chainsaw milling and is capable of recovering at least 50% of dimension lumber from logs for the domestic market only.

In 2012, a project funded by the Food and Agriculture Organization and the African, Caribbean and Pacific Group of States and implemented by TBI Ghana initiated a process to advance artisanal milling from a policy strategy to a business practice. The project developed methods and strategies for linking artisanal milling groups/associations to timber utilization contract holders (concessionaires), so they could form partnerships to produce legal lumber for the domestic market. Links were established with ODEN (Husqvarna) Ghana Limited, a supplier of mobile sawmilling machines. The company provided milling equipment and a Norwood milling machine for converting wood into lumber through a hire-purchase arrangement to an artisanal milling group in the community of Obogu. The Ghana government's Forestry Commission also procured two LT20 Wood Mizer band-saw mills.

TBI Ghana — in partnership with the Forestry Research Institute of Ghana, the Forestry Commission Training Centre and Rabmill, a small-scale sawmill company — developed a curriculum for the technical training of the artisanal millers association members in the safe handling and efficient use of portable band-saw mills. Other capacity-building

activities, which were carried out in collaboration with the Business Advisory Centre, covered “soft skills” such as group dynamics and leadership development as well as business management and development of a business plans.

Role and status of the association

The concept of artisanal milling is being piloted by the associations. In all, six artisanal millers associations were formed; four have been legally registered and have acquired licenses. Associations first need to register with the registrar general department of Ghana to obtain a certificate to commence business, and then register their timber-processing equipment with the timber industry development division of the Forestry Commission.

The four associations established to date are in Assin-Fosu (Assin-Fosu Forest District), Sankore and Akrodie (Goaso Forest District), and Insu-Siding (Tarkwa Forest District). Each association is made up of about 50 former illegal chainsaw millers, who are linked to timber utilization contract holders through a business partnership agreement to obtain legal logs for producing lumber for the domestic market. The Forestry Commission also gives confiscated logs (from illegal loggers) to the associations for processing.

Currently, the associations are milling efficiently, with recovery rates of 55 to 70%, and are adhering to milling and transportation regulations. Residues from their milling activities are being used for commercial charcoal production using efficient metal kilns by former lumber carriers (mostly women) who have also been trained by the project. The artisanal millers associations have also been linked to members of the Domestic Lumber Traders’ Association, who sometimes pre-finance their activities and who also buy the legal lumber produced by the associations through formal business agreements.



Factors that strengthen the associations

A number of factors account for the current strength of the associations. Paramount among these is the mutually beneficial situation created by the artisanal milling concept for many, if not all, stakeholders. Artisanal milling provides an opportunity for previously criminalized actors to operate legally. This has motivated association members

to expand their legitimate business activities and reduces illegal operations. This in turn benefits the Forestry Commission and law enforcement agencies as it frees up time and resources that were previously spent on trying — unsuccessfully — to enforce the ban. Timber utilization contract holders also gain from the arrangement, since in principle it reduces the number of trees that are poached from their concession areas. They now have formal agreements to sell any unremoved timber yield to artisanal millers, who commit to helping protect the resource.

Other crucial factors include the diverse capacity-building activities carried out by TBI Ghana and its partners, the linkages brokered with key sector stakeholders, and the in-kind support in the form of equipment received from the government and equipment

suppliers. None of these factors would have amounted to much, however, without a policy that allowed artisanal millers to operate legally.

Another key factor that has generated much support for the artisanal millers associations has been Ghana's Voluntary Partnership Agreement (VPA) with the European Union.

Through the VPA, Ghana committed not only to selling only legal timber to the EU, but to ensuring that all timber in its domestic market would also be legal. This created the need to address the supply of timber to the domestic market, which as revealed by Marfo (2010) was largely illegal. Ghana sees the artisanal milling concept as an opportunity to address illegal chainsaw milling and to supply legal lumber to the domestic market, while also addressing livelihood needs.



Other factors have also contributed to the momentum of the artisanal millers associations:

- the demand for legal lumber for the domestic market, including the VPA, intensified law enforcement and led to a strong campaign by civil society organizations against illegal chainsaw milling;
- the development of the Public Procurement Policy for Lumber and Lumber Products by the Timber Industries Development Division of the Forestry Commission and major stakeholders, which requires that only legal lumber be used in all public projects;
- the opportunity offered by the artisanal milling concept to transform former illegal chainsaw milling actors into legal producers of lumber for the domestic market;
- the recognition by the Forest Services Division of the Forestry Commission of artisanal millers as partners in helping to sustain forest resources, and the cooperation between the artisanal millers and the division, especially in areas where the concept is being piloted;
- the possibility of traders and concessionaires partnering with artisanal millers associations to buy and sell legal lumber on the domestic market, which was established through the platform created for building trust among major stakeholders; and
- the serious commitment of major stakeholders, the Forestry Commission and the formal timber industry to find an alternative to illegal chainsaw milling, and the unanimous acceptance of the artisanal milling concept.

Challenges

The concept of artisanal milling is a new alternative to illegal chainsaw milling in the forestry sector of Ghana. The formation of artisanal millers associations started as a policy intervention. It is still evolving, and challenges remain (Parker McKeown, Amonoo and Sampene 2014). The main challenge has been the slow pace of policy processes; the necessary legislation to implement artisanal milling has not yet been fully implemented.

The concept is still in the pilot stage, which has given rise to feelings of insecurity among the artisanal millers. This has resulted in disenchantment and frustration, with some members returning to illegal activities.

Members of artisanal millers association members face the following challenges:

- the initial investment cost of equipment, and the need for training;
- the large numbers of former illegal operators who are willing to convert to artisanal milling, which may outstrip the demand;
- a limited supply of logs, since most forest resources have already been allocated in long-term contracts to conventional millers and loggers;
- agreeing on prices for logs, and difficulties and delays during negotiations with concession holders;
- mistrust between artisanal millers and concession holders and lumber traders;
- the persistence of illegal activities in some areas due to political interference and weak enforcement;
- weak controls with respect to overland timber exports, which draw from the supplies to the domestic market;
- abuses of the system, corruption, and adoption of the artisanal milling without the necessary safeguards; and
- the existence of illegal sawmills.

Lessons learned

Artisanal millers associations have the potential to transform illegal chainsaw milling and trade in Ghana. It is anticipated that they will ensure sustainable sources of livelihood, lawful employment, less conflict, improved wood products, better value for money, higher revenues, sustainable forest management practices and efficient milling practices.



The multi-stakeholder platforms created at the district and national levels to discuss chainsaw milling allowed for broad stakeholder participation in policy development, which was innovative. This process helped establish internal structures and mechanisms to monitor and evaluate the activities of the artisanal millers associations. It also allowed for effective communication systems to be put in

place, such as weekly association meetings to share and inform all members of any current events and to hear and respond to their feedback.

Conclusions

The formation of artisanal millers associations provides an opportunity to legalize the domestic lumber market in Ghana. To sustain the gains already achieved and harness the full potential of the concept, the following recommendations are put forward:

- The policy to allow artisanal millers to produce lumber for the domestic market should be implemented nationwide.

- Procedures for resource allocations should be revisited, to make it possible for artisanal millers to have direct access to the resource, rather than going through concessionaires.
- Ongoing capacity building of the artisanal millers' associations across the country is needed, both for advocacy and efficient operations.
- Public awareness campaigns are needed on artisanal milling and its potential to supply legal lumber to the domestic market.
- Intensified enforcement of the ban on illegal chainsaw milling and stiffer punishments for illegal operators are required in order to increase the viability of artisanal milling.
- Facilities should be created to offer micro-credit to members of artisanal millers' associations to enable them acquire the necessary equipment.

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1.6 From demonstration plot to agribusiness and rural tourism, Cameroon

DIVINE FOUNDJEM-TITA, ANN DEGRANDE,
CHARLIE MBOSSO and KUH EMMANUEL LO-AH

Introduction

The Twantoh Mixed Farmer Common Initiative Group (MIFACIG) has grown from an agroforestry demonstration plot to an integrated self-sustaining agricultural business and rural tourism centre in the Boyo Division of the Northwest Province of Cameroon. The group now has 22 satellite branches, which maintain a strong network. This allows them to respond together to the rising demand for tree seedlings. This demand reaches 20,000 in some years, worth about 25 million FCFA (US\$50,000). From a focus on agroforestry in the early 1990s, the producer group has diversified its activities to include animal rearing, beekeeping, horticulture, organic gardening and agricultural tourism. With similar support, this model could surely be replicated by other enterprising producer groups around the world.

Origin of the producer group

The Twantoh Mixed Farmer Common Initiative Group was created in 1993 by Kuh Emmanuel Lo-ah, then an agriculture technician. It was founded as a response to the low yields that were the result of the poor soil fertility that is characteristic of Boyo Division. As a young graduate with no job, Lo-ah was determined to start a private vegetable garden and establish a tree nursery with species that could improve soil fertility. He knew that these issues were not just his own, but concerned the entire community, and he began to raise awareness and mobilize community members who had similar problems and goals. The process was facilitated by a 1992 law that enabled the creation of common initiative groups to support development in the country. These efforts led to the creation of the MIFACIG producer organization, which was registered with 15 members in 1993.



THE ACHIEVEMENTS OF THIS
PRODUCER ORGANIZATION HAVE
NOT DEPENDED SOLELY ON MONEY
— COMMITMENT, HONESTY AND
VISION ARE GUIDING PRINCIPLES.

Divine Foundjem-Tita is a marketing scientist, and **Ann Degrande** and **Charlie Mbosso** are socio-economists; they all work for ICRAF in Yaounde, Cameroon. **Kuh Emmanuel Lo-ah** is leader of the MIFACIG Training and Resource Centre, Njinikejem, Njinikom Boyo Division, Northwest Province, Cameroon.

Evolution of activities

MIFACIG started with an organic vegetable garden and a tree nursery, and gradually integrated other activities such as honey production and livestock farming. With improvements in the members' technical abilities in agriculture and agroforestry, and with increasing demand from other farming communities and development NGOs, the group became a training hub for agroforestry. By 2004, it received financial assistance from the U.S. Peace Corps Volunteer Program to support the completion of a training and meeting hall that the group had started to build with its own money.

By that time, it had grown into a strong farmer organization and was the centrepiece of most rural development projects in Boyo Division. Many research and development organizations entered into partnership with MIFACIG in order to reach more farmers in the community or to use its facilities. These organizations would then reserve part of their budgets for MIFACIG to carry out training and awareness-raising. MIFACIG was often a partner in project proposals, in many cases to meet donor requests for participatory approaches.

Partnering with development projects had clear potential advantages, but also brought with it a major challenge: the revenue generated by such activities could not sustain the members and the group. Members' expectations of direct financial benefits could not be met through such partnerships. The group also had to pay the salaries of secretaries and other technical staff, who were hired from time to time to complement in-house expertise. Furthermore, partnership with development projects took some group members away from their farming activities, especially the most enlightened members, who were serving as field guides and interpreters for many development projects, visitors and researchers.

These frustrations led to a strong desire to do things differently. In response, MIFACIG members diversified their activities and sources of income, and in 2004 embarked on a new approach to share the knowledge and experience they had gained over the years. The organization started providing training to other producer groups through consultancy services; they also began to sell tree seedlings. The group also decided to maintain its partnerships with international development initiatives, especially joint projects, where they made key contributions to awareness-raising, training and knowledge sharing. This approach transformed MIFACIG from a farmer group into an integrated agroforestry resource and training centre. The centre now has a conference hall, lodging facilities and canteen; tree nursery; animal production unit and piggery; organic garden, compost site and medicinal plant garden; soil fertility project, multi-storey home-garden and beekeeping demonstration plots; and a food processing unit with dryers and honey treatment equipment.



Key success factors

Donor and NGO support and trust

NGOs have contributed enormously to building the capacity of members through training in group dynamics and leadership, agroforestry and tree propagation, enterprise development, financial management, communication and marketing techniques (Foundjem-Tita et al. 2012). For example, a partnership with the World Agroforestry Centre (ICRAF) that began in 1998 led to training in tree propagation techniques, enabling the group to further disseminate agroforestry technologies. This led to the creation of 11 nurseries in Boyo Division in 1998–2004 and later in Menchum Division, with a total of 22 by 2014. MIFACIG uses training modules on group dynamics, enterprise development and marketing to empower its network of satellite nurseries and farmer groups. Furthermore, group members now run demonstration plots on agroforestry, beekeeping and medicinal plants as well as a multipurpose tree nursery and an integrated farm and training centre. This work has helped build trust among the group, donors and development NGOs.

Although the group generates substantial income from the sales of crops, trees and other products, donor support has been crucial. Since 2008 MIFACIG and its satellite nursery groups, as well as non-member farmers, have benefited from external support, which has contributed to the group's growth and success.

Generating funding

Income generated from the sale of trees and diversified activities has enabled the centre to improve its infrastructure and training facilities, and helped it to survive with minimal donor support. In order to generate funding, the group helped its satellite nurseries to market the plants they produced by making the resource centre a point of contact for buyers. Orders received at the centre were sent to the satellite nurseries, who fulfilled the demands. This approach led to a significant improvement in the livelihoods of group members.



Adequate infrastructure

Another important element of success in the development of the resource centre has been its extensive infrastructure, which was achieved through financial and material support. This was generated by the sale of agroforestry planting materials and products, services delivered to other actors, and donor support.

The new buildings and infrastructure improved the training facilities, and increased the skills of farmer groups who request services from MIFACIG.

Strong institutions and committed members

Membership is open to anyone in the community who respects the group's bylaws and internal regulations. These bylaws specify that members should be of good morals, must carry out agroforestry activities, must regularly attend meetings, and must pay their

registration and annual dues. The group's leaders testify that strict respect for these rules in the selection of committed members is one of the reasons for its success.

A well organized structure and dedicated leadership

One of the major success factors has been a dedicated leadership capable of defining and implementing the vision and mission of the group. MIFACIG is managed by a seven-member bureau that is elected by a general assembly of 39 members. Bureau members are all farmers with a strong commitment and dedication to success. Group members acknowledge the important role of their leader for his ability to lobby, network and win the trust of other stakeholders who are ready to partner with the group. The qualities of the group leader are highlighted by the requests made for their president to preside over other farmer organizations, including the Ijim Trees Farmers Union (of which MIFACIG is a member) and the national platform of farmers' organizations.

Identification of a niche market

The demand for improved planting material continues to rise, with increasing calls to plant more trees to mitigate the effects of climate change. Here, the producer group has been able to carve out a niche market. Buyers include smallholders as well as leader farmers, but the majority of sales are for large contracts made by city councils and elected officials. The latter two groups rely on MIFACIG because of its reputation for timely service and reliable planting materials in large quantities. Politicians often buy plants from the group to distribute to farmers during political campaigns. These planting materials are used to add value to arable and inhabited land. By 2013, the MIFACIG Resource Centre had produced and sold about 60,000 tree seedlings.



Provision of services to other social groups

In addition to partnering and working with several national and international organizations and institutions, MIFACIG has built strong working relationship with other social groups. These groups use MIFACIG's facilities to host events and lodge guests, for recreation and for practical learning and demonstrations on sustainable agriculture and agroforestry practices. Income generated from hiring out these facilities and services is an important source of revenue for MIFACIG, and supports its sustainability.

Social and environmental impact

The number of members grew from seven in 1992 to 42 in 2013. MIFACIG currently has 41 members: 22 men and 19 women. It considers gender in the implementation of its activities, and women make up 48% of all trainees; members range in age from 20 to 60, meaning that youth also take part. In addition to working with farmers, MIFACIG also carries out awareness-raising with schools on agroforestry and environmental protection.

For example, the promotion of organic gardening in schools, sponsored by the New England Biolabs Foundation, led to 18 schools and 600 pupils benefiting from the establishment of demonstration gardens and lessons in agroforestry and beekeeping.

At the end of one of the gardening projects in 1998, carried out in partnership with the *Cercle International pour la Promotion de la Création* (CIPCRE), there were visible results in terms of improved gardening techniques. Household members saw the need to learn and adopt these innovations, which resulted in an increase in the availability of fresh vegetables all year round.

The Food for Progress project that was run in partnership with ICRAF and the United States Department of Agriculture led to the growth and development of satellite nursery groups. The number of satellite nurseries grew steadily as ever more communities saw the benefits of joining the initiative. By 2003, MIFACIG was managing about 10 satellite nurseries; by 2008 the number had risen to 20; they are now found up to 65 km from the resource centre. Today, the group monitors and manages the field activities of 22 satellite nursery groups involving more than 3,000 farmers in 30 communities. MIFACIG continues to add farmers to its network and engage in training and capacity building for a range of activities. These efforts have improved farmers' livelihoods and promoted the centre's work in agroforestry education.

Table 1. Number of beneficiaries trained at the MIFACIG resource centre, 2005–13

Activities	2005–07	2008–10	2011–13	Total
kola nut market opportunities, post-harvest/marketing techniques	752	255	150	1,157
Agroforestry/poverty alleviation/environmental protection	54 (all women)	60 (all women)	75 (all women)	189
Multipurpose/improved tree integration into coffee farms	782	825	214	1,821
Sustainable development	35 (all youths)	56 (all youths)	28 (all youths)	119
Tree domestication and planting	27 (all youths)	35 (all youths)	55 (all youths)	117
Total	1,650	1,231	522	3,403

Source: MIFACIG 2014

Challenges

Even though MIFACIG generates funding from donor support and its own business efforts, the group still encounters financial difficulties. In fact, income from the nursery, piggery, apiary and garden is not enough to provide free training to farmers and to adequately compensate the staff. Consequently, MIFACIG encounters material constraints in

providing proper training, such as a shortage of beehives and apiary equipment, no piped water in the nursery, no projector and few other communication tools. There is also a need for a service van to transport people and materials, and transportation difficulties are further hampered by poor roads.

There are specific difficulties connected to the lack of adequate technologies to improve honey production and processing, and inefficient marketing strategies. Beekeepers have not been able to succeed, due to the continuing absence of a strong marketing network.

A shortage of competent staff has been a major problem since inception. Although MIFACIG staff have benefited from training courses from ICRAF and other partners since 1998, there is still a need for technical support and capacity building in management and accounting techniques. This lack of capacity impedes the coordination and timely preparation of reports, and means that some activities are difficult to implement because of the low educational level of some members. However, MIFACIG is now entering a new era in which “sharing knowledge that serves life” could be its new motto, based on its achievements and experience.

Conclusion and recommendations

The achievements of this producer organization have not depended solely on money — commitment, honesty and vision are guiding principles in its success. Farmers tend to capitalize on the financial benefits of community projects that rely on external inputs. The case of MIFACIG shows that generating funds through group activities can help realize a vision. However, the guaranteed multiplier effect demonstrated by this producer organization/resource centre, which produces services as well as goods, is a positive example for other producer groups to emulate. The example of MIFACIG also shows that despite the capacity to generate income, external support from donors, NGOs and governments is still necessary to meet the higher objectives of such a group.

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1.7 Kenyan smallholders improving benefits from milk production

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Introduction

As part of a multi-stakeholder research project, two smallholder farmer groups in Nakuru County, Kenya, worked together to develop technical and organizational innovations to increase the benefits from milk production. As a prerequisite for this work, farmers, facilitators and researchers first reached a common understanding of the causes and extent of the problems they wanted to solve. With this solid foundation, farmers could then establish new structures and practices that met their objectives.

Dairy production in Kenya is dominated by smallholder farmers, who rely on their cows (or cow) for both household nutrition and income. Around one million farmers contribute about 70% of gross marketed production (Muriuki 2011). Smallholder dairy production is typically part of mixed crop-livestock farming systems with low external inputs. Access to inputs is constrained by poor infrastructure and by farmers' low cash reserves. In Nakuru County, smallholders usually keep 1 to 3 crossbred cows, and generally feed them with napier grass, crop residues (maize stalks, bean and pea stubble, carrot greens, etc.) and weeds. Lactation periods vary between 7 and 24 months, as cows may continue to be milked even without conceiving. Some milk is consumed at home, but most is sold.



AS PART OF A COLLABORATIVE LEARNING APPROACH, FARMERS THEMSELVES ARE CO-DEVELOPING BOTH ORGANIZATIONAL AND TECHNICAL INNOVATIONS.

Average milk yields per cow in the Nakuru area are less than 7 kg per day (with a range of 4 to 11 kg/cow/day). Average sales from the 138 farms surveyed ranged from 4 to 14 kg of milk per day. Cattle manure is also valued for its use in crop fields. Calves are sold, and represent an important source of family income; this helps to pay school fees and meet other regular financial demands. Milk production for important to household liquidity, as

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cash from sales comes in daily. In addition, cows are a status symbol that demonstrates family prosperity.

From individual problems to “how can we solve them together?”

During the rains there is ample fodder, but in the dry period from January to March there is not enough fodder, and farmers can spend up to six hours a day collecting it. In the rainy season, milk production increases to the point that there is an oversupply. These cyclical patterns of rainfall, fodder and milk production have an impact on price. Forgone benefits are caused by the difference between potential and actual milk yield, mostly during the dry season, and occasional rejection of milk by dairies during the rainy season due to low milk density (i.e., it is low in protein and high in fat).

The cows could produce more milk, but due to problems with feeding, health and other issues, the actual yields are below potential, especially in the dry season. One group member, Lydia Wanjeri of Mukinduri said, “during the dry season when I see the high milk prices, but my cow is producing only one or two cups a day, I just want to cry.” Lydia’s neighbour Francis Kiruka adds, “Those [families with cows that are] producing milk during the dry period are happy, as the family can then eat *ugali* [the traditional maize-based dish] with milk. There are no other sources of food on the farm at that time and it is expensive to buy from outside, while at the same time, you can sell the surplus milk at a good price.”

The dry season is a time when farm-related income is low, and there are fewer opportunities for off-farm casual labour. During the rainy season, fodder is abundant and milk production exceeds demand, but the milk is low in protein and high in fat. This is a possible explanation for rejection by dairies during the rainy season.

In the context of these problems, smallholder dairy farmers in Mukinduri and Lare, 30–50 km from the city of Nakuru, came up with the idea of collective marketing to improve their returns from milk production. From this idea, the Mukinduri Dairy Self-Help Group and the Lare Livelihoods

Improvement community-based organization were born. Before farmers could attract a higher-value market, they first needed to guarantee a continuous supply of milk throughout the year, improve milk quality, and mature as a group to ensure accountability.

Market access is especially difficult in Lare because of the lack of paved roads. In Mukinduri, farmers have more options because of their proximity to the settlement of Mau Narok and to a road used by several milk transporters. Nevertheless, farmers still face difficulties when selling in both informal and formal markets. With informal markets, payment delays are common due to the uncertainty of collection times, and payments are not always guaranteed because some small-scale traders are less than honest.



Farmers who sell milk in formal markets also face problems. When milk volumes exceed processing capacities during peak production in the rainy season, farmers face higher rejection rates from dairies; this rejection is often unjustified. Through a collaborative learning approach co-developed with farmers in both groups, they can now ensure a continuous supply of high-quality milk, and can negotiate for higher milk prices while simultaneously guaranteeing the reliability of delivery and payment.



Learning together: a farmer-to-farmer exchange

To help group members arrive at a common understanding of the problems and possible solutions, they organized several farmer-to-farmer exchange sessions. During these sessions, group members and other farmers shared experiences at the farm level and their perspectives on and knowledge of how to improve milk quality and buffer the effects of seasonality and different feeding strategies. Fieldwork allowed for the recognition of innovative smallholder farmers in the area who applied low-input methods and who have a deep understanding the constraints, challenges and restrictions

faced by group members. Afterwards, some of these innovative farmers facilitated exchange sessions where they shared experiences and knowledge with other members and other farmers in the area.

Innovative approaches to buffer seasonality and improve milk quality

Group members decided to test two new approaches: making silage (stored fodder), and planting fodder crops. As John Kihara Mbugua from Lare said, "Because we have a cow, the best thing to do is to start improving the way we are feeding it." Improvements in feeding resulted in corresponding improvements in milk quantity, animal health and fertility. And depending on how feeding is approached, a more nutritious diet can be possible even while reducing workloads.

Two smallholder farmers from Lare, Joseph Chege and Benjamin Mbutia Gacheche, facilitated farmer-to-farmer exchanges. Together, farmers planted and tested new fodder species, three different ways of making silage (pit, above-ground and tube), and the use of locally available materials (maize, sorghum and maize with napier grass). Sessions were organized where farmers worked together to plant lucerne (*Medicago sativa*, or alfalfa), oats and sorghum. Farmers learned how to plant and harvest these new fodder crops and how to prepare feed mixes.

During the dry season, Duncan Ng'ang'a from Mukinduri started making and feeding silage, noting: "my cow showed signs of heat with no delay, and now she is in calf." According to him, the happiest consequence for his family is that his wife has less work to do: "She does not have to go away to look for fodder anymore." He has already bought maize seeds to plant for the next season, and will use the maize to make more silage. On Beth and Simon Mwathi's family farm in Mukinduri, they now feed lucerne to their cows, and although the cows have recently calved, milk production has not decreased, as usually

happens. As they explained, “Our cows are looking very beautiful. No one can tell it is January [peak of the dry season], and their skin looks as if we were applying milking jelly.”

Organizational innovations

Distribution of functions and responsibilities: meeting in smaller groups

To facilitate their planned activities, group members decided to create thematic teams. The market team took charge of obtaining information on markets, competitors, etc. The patrol team developed and implemented a participatory monitoring and evaluation system. The milk quality team developed standards to guarantee the highest milk quality and learned how to test milk.

This distribution of functions and responsibilities helped with the implementation of activities and with achieving a common goal. In Mukinduri, groups organized themselves into sub-groups of young men, women and elders. In Lare, a sub-group organized by geographical proximity met to plan for and reflect on implemented activities.

Distributing functions and responsibilities among sub-group members provided a level of empowerment not possible in larger groups, since almost all members have a specific responsibility and are enthusiastic about accounting for it. It also promoted inclusion within the community, as the lead management committee, teams and sub-groups included women and men, as well as ethnic minorities. In smaller groups, discussions were more profound because members felt better able to express themselves. These dynamics enhanced the participation of all members and reinforced shared learning. It allowed all voices to be heard, which helps in decision-making. The combination of these factors was very important in balancing power relations among members and leaders.

General meetings as effective communication channels

To improve the attendance at general meetings, Mukinduri group members decided to make general meetings mandatory, and to reward all those who participated with a raffle ticket (after every meeting, the two farmers with winning raffle tickets go home with money in their pockets). Due to the extent of issues to be discussed, members decided to meet twice a month, each time in the house of a different farmer.

A nominated chairperson puts forward an agenda; the treasurer then outlines recent expenditures and reports on the groups’ funds. Members of the various teams and sub-groups report what they have done since the last meeting. The secretary takes notes and reads them out at the end, for approval by all members. This meeting structure allows for adequate time to share and plan as a group, and to solve any problems that may arise. Before and after meetings, there is always time for informal conversation. Since people meet in the home of a different member each time, the meetings are also an opportunity to learn about the various



approaches used on each farm. Under these conditions, the farmers have gotten to know each other better, new friendships have begun, and confidence among them has grown.

The Lare group members meet once a month in a community centre. Since the geographical area where members live and farm is larger than that of the Mukinduri group, the farmers do not necessarily know each other outside of the group context. Meetings are never long enough to cover all the issues, and there are always things postponed until the next meeting. There is not the same level of trust and bonding in Lare as in Mukinduri. The same is true for the implementation of activities. Implementation progress is faster in Mukinduri, and this appears to be affected by the differences in how the meetings are organized.

Being accountable: keeping records and monitoring and evaluation

Keeping records is not common among smallholder farmers in Kenya. In both farmer groups, however, members came to see the need to record some aspects of their dairy activities. Group members started record-keeping by following a role model: an elderly farmer who kept detailed records of his farming for many years. To complement and



reinforce this new practice, the authors met with members of both groups every two weeks for three months to share experiences and help each other. Individual farmers have adapted the structure of their notebooks to focus on the information that they perceive is the most important, but they usually include total production, morning and evening milk volumes, price variation, and money earned at the end of the month. One farmer, Beth Mwathi, even decided to keep track of the milk given to her calf to ensure that when she sells the animal she will not lose money.

As farmers in the two groups started testing innovative practices and recording their farm activities, they welcomed the idea of a monitoring and evaluation system. A patrol team was formed in each group to develop and implement a system that could be used by all group members. As Francis Wanjau of the patrol team in Mukinduri stated, “We are the eyes of the group. We should [see] if the activities planned and implemented are taking us towards our common goal.”

The information collected by the patrol team is analyzed and then shared during general meetings. Individual members use the results to plan for the following season, and the group as a whole is better able to organize further collective activities. The monitoring and evaluation efforts also create a valuable additional opportunity for members to share their experiences and reflect on the effectiveness of various activities.

Lessons learned

Group members have learned several valuable lessons:

- Groups matured by using general meetings as an effective communication channel and by establishing inclusive and collaborative dynamics.

- In Mukinduri, organizing general meetings in members' homes increased communication between individuals and highlighted what they do together as a group.
- The distribution of functions and responsibilities among all group members was key to balancing power relations among members and between members and leaders, and helped maintain the motivation to continue acting toward a common goal.
- In farmer-to-farmer exchange sessions, members shared knowledge, experiences and perspectives, which promoted a willingness to test innovative practices and technologies.
- The monitoring and evaluation system was useful for sharing stories of what individual members were implementing, and for increasing motivation.
- Keeping records, complemented by monitoring and evaluation, enhanced systematic learning. Written documentation — with both words and pictorial material — helped members recount past experiences and reflect on them.
- Linking with other scientists from the authors' research networks and making use of laboratory analysis helped group members deepen their understanding of shared problems.
- Working together to assess technical innovations gave the group time to mature and develop organizational changes. This enabled them to take on more responsibilities, which ultimately supported the goal of selling their milk collectively.



Under this strategy, smallholder farmers worked jointly to improve the benefits from milk production. As part of a collaborative learning approach, farmers are co-developing their own organizational and technical innovations that can support their improved practices. All members are active participants in their process of change.

Meetings are used as effective and inclusive communication channels where achievements are shared and celebrated, activities are planned and problems are solved. Short-term and long-term benefits enhance the motivation to continue working. Peer-to-peer exchange sessions are a powerful empowering tool.

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1.8 Himalayan small-holders create value and maintain agrobiodiversity

SONALI BISHT, MANOJ MAHESHWARI
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Introduction

Smallholder farmers who practise traditional, diversified, largely subsistence agriculture produce a surplus of certain crops at peak times. They are rarely able to profit from the sales of these surpluses, due to the lack of a market or the lack of demand for small and irregular quantities. In the north of India, however, success has been achieved through the formation of a producer group that aggregates surplus produce, adds value to the product and increases its shelf life. Their efforts have also helped to maintain agricultural biodiversity and support soil fertility and health. Their work has also contributed to the food and nutrition security of smallholder farming communities and the consumers of the surplus. Other benefits include conservation of crop genes, provision of diverse and nutritious food, local employment and sustainable livelihoods from agriculture.

The development of the organization

The Inhere Aajivika Utthan Samiti (IAUS) producer group started as an informal association in 2002 and was formally registered in 2005. IAUS is better known by its product brand, Himalayan Fresh. It is a not-for-profit social business organization and is owned and run by a farming community in Almora District, in the central part of the Himalayan state of Uttarakhand in northern India. The objective in setting up the business was to create value from the very small surpluses of poor smallholder producers who are engaged in subsistence farming on small plots of terraced fields on the steep Himalayan slopes. It was intended to help make the community members realize that everything they grew or maintained in this biodiversity-rich area had economic value and a ready market.

The venture went against the established belief that every area is endowed with environmental conditions that are favourable for only one or two commodities and that farmers



VERY SMALL SURPLUSES
FROM SMALLHOLDERS HAVE
BEEN USED TO CREATE A
VIABLE BUSINESS THAT
SUPPORTS BIODIVERSITY
CONSERVATION AND FOOD SECURITY.

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must focus on them to achieve specialization and scale. This view is in line with the prevalent belief in the efficiencies resulting from economies of scale and specialization. The mountain topography of the Himalayas is characterized by scattered and isolated communities, small and fragmented landholdings, rain-fed agriculture, a majority of women farmers, small surpluses of a variety of produce, and poor access to infrastructure, including transport, communication and energy. The lack of warehouses, banking and credit are also major hurdles.

The business grew from small beginnings. In 1997 a women's empowerment programme was implemented by the Institute of Himalayan Environmental Research and Education (INHERE), a local NGO, with support from the German NGO Misereor. Farmers often fed their small amounts of surplus produce to livestock due to a lack of viable selling opportunities. The women wished they could sell the surplus they produced at a decent price. On the other hand, many people felt that the surpluses were too small and infrequent to allow them to be aggregated and sold.

At that time exploratory purchases were made to see whether the aggregated quantity could be sufficient to take to the market. The results were encouraging. In 2002 an opportunity came to incorporate the idea as a minor component of a larger environmental project. INHERE, supported by the India-Canada Environment Facility, was implementing a micro-watershed development and environmental restoration project in the area. The producer group began as a community-based livelihood component within that project. Of all the project activities, community livelihood support came last, only as the water conservation and afforestation efforts were nearing completion in 2004 and a small surplus of funds became available.

Initial challenges

The early days saw a tussle between idealists and realist-pessimists. The idealists believed that the local "organic by default" agriculture and the high agro-biodiversity of the smallholder mountain farmers had untapped monetary value. They also thought it had the potential to create many small-scale but high-quality value chains. Added value would come from sorting, grading, roasting and powdering products or making complex products such as multi-ingredient pickles, preserves and fruit concentrates. The realist-pessimists were convinced that investment in such a venture would be a waste of money due to the many challenges.

The farmers lived in small hamlets and grew a range of produce. Local farmers practised rain-fed farming and used no agrochemicals. The surplus was often so small that it would be fed to cattle; it was uneconomic to take it to a distant, uncertain and often exploitative market. Collecting these small surpluses was seen as a logistical nightmare; settlements were isolated from each other and from the market and farmers had small and fragmented fields and low income. The mountainous topography was another challenge.



Their practices would take three years of conversion to become certified organic. Furthermore, to add the full value and find a niche in the market, processing would also have to be certified organic. This would entail lengthy and tedious paperwork. The process would be a challenge for the facilitators and the local people, and nearly impossible for the

farmers, many of whom were women with little education and experience.



Organic certification and processing

After much deliberation, the idealist-optimist view prevailed. This was due to the efforts of a strong and committed champion, Bharat Singh Bisht, founder of INHERE. It was decided that the villages selected for certification would follow an approach that restricted the flow of contaminants. The group took advantage of a newly introduced provision for group certification in India, which

brought costs down to affordable levels. INHERE decided to have samples tested at an accredited facility in the Netherlands. Positive results from the testing would enable the group to skip the three-year conversion period (this approach is no longer possible). The certifying agency Skal International was setting up business in India and saw the Himalayan Fresh venture as a good business opportunity. It provided some discounts and facilitation services.

The first certification was generated by Skal International as a third-party agency in 2005; the group certification included 1,249 farmers and 278 hectares (ha) of land. In 2007, the number of farmers increased to 2,267 and the area increased to 659 ha in 80 villages. At one point, group certification included 3,528 farmers and 706 ha covering 120 villages. Today, there are 1,935 farmers, with a total land area of 715 ha in 69 villages. A total of 107 crops, grains, spices, pulses, beans, oil seeds, vegetables, fruits, herbs and medicinal plants have organic certification, along with 53 single- and multiple-process products.

A system was worked out to aggregate small surpluses from the organic villages through personal contacts and women's self-help groups. INHERE had already formed 568 of these groups in 377 villages; their main objective was to provide social, economic and decision-making power to women. They also provided thrift and credit groups with bank accounts and access to group credit or individual credit guaranteed by the group. (This programme was supported by the German NGO Misereor in the 1990s.) Organic agriculture and procurement of surpluses was linked to these groups, since most women worked on their own farms. In these mountainous areas almost all agricultural activities are carried out by women.

IAUS set up three units to process various lines of produce. One unit processed cereals, pulses and spices. A second unit processed fruits and vegetables as well as honey. The third took care of herbs and medicinal plants. Each unit followed organic processing norms and quality standards, and adhered to health and safety laws and other requirements.

People from the villages underwent rigorous training in international best practices regarding quality control in organic agriculture and processing. They were also trained in the rules of inspection required for internal control systems, an integral part of the group certification process. This meant that the INHERE team had to study and understand every step of the legal requirements, as well as best practices, from production to procurement to pricing. This information had to be translated into Hindi, the local language, and then transmitted in easily understandable ways – often in the Kumaoni and Garhwali dialects – to all the people involved, with continual follow-up to ensure that they fully understood it and followed best practices. INHERE also established a project to build the competence and skills of village women and women farmers as organic inspectors; this was supported by the South Asia Women's Fund in Sri Lanka from 2005 to 2007.

This activity was funded in 2005 as part of the main environmental project for only one year. The team of smallholder Himalayan mountain farmers was proud of achieving organic certification and creating a range of multi-ingredient certified products, which was a first in the country. A lot of effort was spent on designing attractive packaging. The size of jars and packets was a major issue, as organic produce has a shorter shelf life than non-organic goods and requires more careful handling.

To the brink and back

The project received a six-month extension in 2006, with the possibility of further support for the evaluation work carried out by the donor in the livelihood component of the project. The additional extension depended on a positive evaluation by an external agribusiness expert from a leading business management institute. Although the report acknowledged the project's achievements, it evaluated the venture as being unsustainable and certain to collapse as soon as the project funds ended. This made the donors wary of continuing to support the project.

Any business, especially a social entrepreneurship venture, requires nurturing and is likely to face crises. For example, the unfavourable evaluation by an agribusiness expert affected the availability of funds. Another setback came when the first food technologist who received rigorous training in organic processing was hired shortly afterwards by a company that could afford to pay a much higher salary. The end of the project grant period, the ending of funding and the departure of the food technologist coincided. Fortunately, other local people without professional qualifications had also undergone training; this saved the business.

Another major setback came when goods were sent to market. These were the early days of attention to organic and certified products. Big stores and well-meaning individuals vied for Himalayan Fresh organic produce. Locally and nationally, through word of mouth, the business drew attention for its range and its multi-ingredient processed food. Products were sent over long distances to sellers in good faith, with only partial payment



required. The first few experiences built confidence in this approach, but major problems arose. Messages came from far-off places to pick up unsold items with expiry dates nearing, and debit notes came in fast. Product placement on back shelves and apathetic salesmen also had an impact on sales. The business was at the brink again. It took time to rebuild, with a decision to refocus on local marketing. This brought in less revenue, but gave the group more control over how the products were displayed and greater ability to take back unsold items.

Yet another major challenge came when the national organic certification accreditation body decided to put the process on line in the interests of transparency. The area covered by the business did not have broadband, the electricity supply was irregular and the people handling the certification process had never worked on computers. These obstacles too were slowly overcome as the team came to understand what was required, and trained themselves to do it. This was not easy; the software required information to be filled out in English, which the operational team was not fluent in.

The mistake of expanding faster than could be managed was another mistake. The group needed to downscale their efforts in order to assure quality and reduce waste.

Progress

The business received its own identity in 2005 when it was registered as a community-based not-for-profit organization under the *Indian Societies Registration Act* of 1860. It was also registered with the Khadi and Village Industries Board of the State.

Today, IAUS is an autonomous business promotion organization with the brand name Himalayan Fresh. It has a general body, a governing body elected by the general body, and a small appointed management group, comprising unit heads and heads of finance and administration. All the people involved are local villagers and come from farming families. They have been trained for their positions and have learned a great deal on the job. The system procures and markets 29 crops and processes 36 single- and multi-ingredient products. A team of 20 paid staff — 9 permanent and 11 on a needs-based contract basis — handles the day-to-day operations, carrying out multiple tasks as required.



IAUS products have been sent on request to major cities in India. The products are available through the well-known market chain Fabindia throughout the country. The products have also been sent to markets in France and the United States, although the staff realize that selling to more distant markets brings a higher risk. Although it also creates the possibility of higher revenue, it is more prudent for a farmer-based venture to work at being risk resilient.

The produce received from farmers is processed organically following international standards. IAUS has recently started a business to supply fresh organic vegetables, and

is working on essential oils extraction and development of processes that add value to produce; this will allow them to earn more money.

Lessons and challenges

The business potential of farmer producers and local farming communities in rural areas continues to be fragile. This is due to limited financial resources, infrastructure facilities and warehousing systems, poor transportation infrastructure and lack of access to markets. Internet service is also unreliable. Major setbacks could prove extremely challenging. The lack of ability to take risks has impacts on both growth and profits. Businesses run by farmer organizations in a developing country tend to grow at a slow pace and require support over a long period.

Development and business are closely interrelated. Farmers need to be helped to use their land sustainably and to increase productivity. Increasing productivity requires knowledge of, and access to, better seeds and agricultural practices. This is often not available from research and extension agencies because of the organic requirement.

Organic certification continues to be difficult and expensive. In fact, over time it has become even more so. The group that initially formed for certification comprised nearly 3,000 organic farmers. Group certification under the internal control system is now capped at 500 farmers. This has increased costs. There are new rules regarding expiry dates and storage that make certification extremely difficult in areas with poor infrastructure and for cash-starved businesses. One wonders why there are so many roadblocks for people who want to grow and supply safe and nutritious food and so few for those who sell less healthy foods.

Research into and development and extension of value chains requires financing as well as technical support. These are difficult to obtain for small farmer/rural community-owned and managed businesses. In addition, at every stage of the business personnel need to be trained to handle new circumstances and new stages of growth. It is essential for internal and external champions, as well as supportive institutions, to provide a minimum of six years of support — with flexibility for contingencies and opportunities — in order to achieve stability and growth.





1.9 Assessing community forest enterprises in Vietnam

DUNG TRI NGO, ARIEL PINCHOT
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Introduction

By transferring ownership of and decision making for forest resources to local communities, community forest management was expected to help effectively conserve forests and secure local livelihoods. Most community forest management programmes emphasized forest conservation, however; local livelihoods did not improve due to a lack of business-oriented approaches (Donovan et al. 2006).

A community-based forest enterprise (CFE) was introduced in Thua Thien Hue province in central Vietnam. The goal was to strengthen the livelihoods of forest-dependent people, and build the necessary conditions for community forest management. Based on group discussions in 15 villages, all conditions were present to some extent. They included supportive policy and legislative frameworks, a high level of community interest, and adequate infrastructure and services. Challenges were a lack of access to commercial forest products and lack of business skills on the part of local villagers.

State policies need to include the rights of forest users to commercial products, and government needs to provide training in business skills and access to market information. Access to markets can be enhanced through the integration of payments for forest environmental services (PFES) and for reducing emissions from deforestation and forest degradation (REDD+).



INCREASED PARTICIPATION IN
DECISION MAKING IS NEEDED
TO ACHIEVE SUSTAINABLE
COMMUNITY-BASED FOREST
ENTERPRISES.

Background

Forests resources are an important component of the livelihoods and food security strategies for up to 25 million people in Vietnam (Prime Minister of Viet Nam 2007). For these forest-dependent people, recent policies on forest allocation and community

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forest management have improved forest use rights and offered new opportunities for local livelihoods. The country has also undergone widespread economic transitions that are creating a more conducive context for small-scale private enterprises. Given these changes at the national level, there is growing potential for a CFE approach to the development of rural livelihoods. As demonstrated in other countries, such enterprises can provide a means for forest users to generate diversified income, employment and social benefits, while improving forest conditions (Macqueen 2013; Molnar et al. 2007).

This article provides insights into the feasibility of such an approach as a sustainable livelihood strategy for forest communities in central Vietnam, reporting on a study that applied a generalized assessment framework of enabling conditions for the development of community-based forest enterprises. The specific objective was to characterize the presence, absence and strengths of these enabling factors to understand current gaps, potential opportunities and concerns associated with CFE development in the context of community forest management in the country.

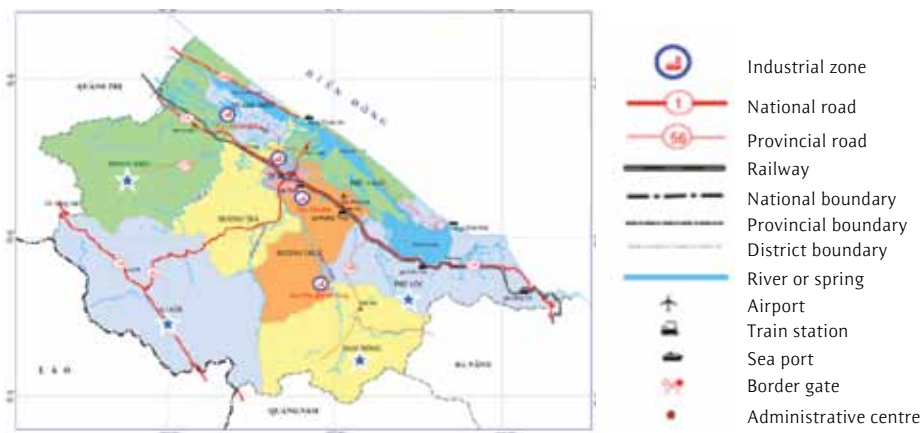
There is a large body of literature documenting cases of successful community-based forest enterprise development, but much less information about the broad conditions that are necessary for success in various contexts. This article proposes an assessment framework based on existing literature and applies it in Thua Thien Hue province. Although it is difficult to strictly define the individual combination of factors necessary in a particular context, this overview presents the conditions that are present in most successful enterprise initiatives.

Study area

Overview of selected villages

Research was conducted in four districts of Thua Thien Hue province: A Luoi, Nam Dong, Phong Dien and Phu Loc. A large amount of forest land has been allocated in these districts since the year 2000 (Figure 1).

Figure 1. Map of study districts



Source: Invest in Vietnam

Group discussions were held in 15 villages in 10 communes. In some cases, forest land had been allocated to one or more groups of households instead of the whole village (Table 1), though the number of households indicates only those members who participated in community forest management.

The sizes of local groups varied. In some villages groups worked together to manage their forests (village management); in others, groups of households participated (group management). The size of allocated forest areas also varied widely, from 53 to 585 hectares (ha), with an average of 3.2 ha managed per household. The majority of forests were classified as being in poor condition, with timber stocks below 100 cubic m/ha, as defined in Circular 34 (MARD 2009). Most of them were allocated after 2007.

Table 1. Selected villages and groups in the study area

Commune	Village	Ethnicity	No. of HH members	Forest area (ha)	ha/HH	Year allocated	Forest condition
A Luoi District							
Bac Son	Village 1-BS	Pako	54	53	1.0	2007	Poor
	Village 4-BS	Pako	64	64	1.0	2007	Poor
Hong Ha	Kan Sam	Co Tu	61	352	5.8	2012	Poor
	Pa Hy	Co Tu	40	429	10.7	2012	Poor
Hong Tien	Village 5-HT	Co Tu	16	91	5.7	2012	Poor
Nam Dong District							
Huong Loc	Village 2-HL	Kinh	27	109	4.0	2011	Poor
	Village 3-HL	Kinh	29	178	6.1	2011	Poor
Thuong Quang	Village 4-TQ	Kinh	5	60	12.1	2012	Poor
	Village 5-TQ	Kinh	8	124	15.6	2003	Poor
Thuong Lo	La Ho	Co Tu	33	226	6.8	2012	Poor
Phong Dien District							
Phong My	Tan My	Kinh	217	561	2.6	2011	Poor/medium
Phong Son	Cong Thanh	Kinh	20	61	3.1	2009	Poor
	Thanh Tan	Kinh	32	212	6.6	2003	Poor
Phu Loc District							
Loc Thuy	Thuy Yen Thuong	Kinh	331	405	1.2	2000	Poor/medium
Loc Tien	Thuy Duong	Kinh	160	585	3.7	2001	Poor/medium

Most of these forests were used for protection because of their degraded status. As stipulated by allocation policies (Decision 178/2001, Decision 106/2006, Circular 38/2007), all the villages concerned have to establish village forest management units, conduct forest inventories (with support from provincial technical agencies), prepare five-year forest management plans, and implement village regulations on forest management.

The assessment framework

The underlying theory of the CFE approach is that linking a viable community enterprise to the biodiversity or ecosystem of an area will support stakeholders and motivate them to counteract the threats to their resources (Salafsky et al. 2010). Through sustainable forest management and the processing and sale of timber or non-timber forest products, CFEs provide significant opportunities to improve household income and strengthen the livelihoods of forest-dependent people, while also conserving forest ecosystems (Donovan et al. 2006; Molnar et al. 2007). Based on a literature review, a framework of enabling conditions for a successful CFE is proposed (Figure 2).

Figure 2. Analytical framework of enabling conditions



Supportive policies and legislative framework

In general, the national policy and legislative framework is supportive of forest tenure and of procedures to establish CFEs. Most forests were allocated in the long term — 50 years — which is long enough to implement business plans for the exploitation of forest products. Almost all villages acquired their land-use certificate (“red book”) immediately

after allocation; one did not, due to administrative issues. In total, 83,300 ha, or 26% of the province's total forest area, are currently being managed by households, groups or villages.

The main challenge in tenure policy is the restriction on harvesting timber for commercial purposes. Local communities can harvest timber only for their own consumption (e.g., house construction, farming tools or community activities). They cannot sell it. In addition, official procedures for harvesting timber are complicated, and need to be approved by many authorities. In some cases, local people harvest timber for house construction without asking for permission from the local government.



The most relevant policy regarding community-based forest enterprise development is Decree No. 151-2007/ND-CP, which governs the organization and operation of cooperative groups. However, this decree was not widely known in most study villages; it was not made widely avail-

able by local authorities. Instead, households usually gather in informal forums such as interest groups or farmers clubs, or function with some of the characteristics of CFEs.

Strong local institutions and governance

Local institutions are defined as those where local people organize themselves in collective bodies (clubs, groups, cooperatives), and set up local regulations and practices related to forest use and management. Local rules can be either traditional norms or village regulations that have more recently been developed through forest allocation procedures. In some of the study areas, for example, ethnic Katu and Pako people maintained their traditional practices in terms of culture, but not in forest management.

Local forest management institutions mainly follow the guidelines of Circular 38/2007, which requires the establishment of village forest management units, plans and regulations. Villagers vote for committee members every three years. Committees often include the village head, representatives of women's and farmers' groups, and public security staff.

Only five villages of the 15 studied received external project support to collect forest and village data for forest management plans. The other ten villages could not afford the cost of this data collection, and did not have the expertise to undertake forest inventories or develop management plans. Furthermore, when forests were allocated to individual households, some local institutions were hindered by the lack of collective action in forest protection or the enforcement of village regulations on forest management.

Accessible commercial forest goods and services

In general, access to non-timber forest products (NTFPs) was allowed in all forests in the areas studied, provided that those NTFPs were not endangered or rare species (Decree

32/2006, Red List of fauna and flora of Vietnam). This open access permitted local people to harvest some commercial products, such as rattan, palm leaves, medicinal plants, wild fruits and honey. Since these NTFPs are not abundant in allocated forests, local people also collect them in protected areas.

Timber is an important and valuable forest product, but harvesting timber for sale is not allowed in forest allocation policy, for three reasons:

- poor quality allocated forests have timber volumes that are below the allowable cut stipulated by forest law;
- most commercial timber species were completely logged by state forest enterprises in the past, and only low volumes or poor-quality trees remain, which means that harvesting costs would exceed revenues; and
- some allocated forests still have substantial amounts of commercial timber, but local people could not harvest it due to complicated administrative procedures.

There is some potential for local forest management to integrate payments from ecosystem services through PFES and REDD+, but local benefits from these programmes have not been realized due to low PFES amounts; limited types of designated forest (PFES was feasible only in watershed areas); and unclear payment mechanisms and an uncertain international market for carbon credits (Vietnam Forestry Administration 2013).

Market access and appropriate incentives

One potential opportunity for CFE development was provided by the national Forestry Development Strategy for 2006–2020 (Prime Minister of Viet Nam 2007). This defined wood processing and the trade of forest products as one of the key areas that could facilitate access to markets for small and medium forest enterprises. There is a high demand for various NTFPs — including rattan, bamboo and palms — in local, domestic and export markets. Some allocated forests also have products with unrealized commercial potential, e.g., palm leaves for hats and *Morinda officinalis* (Indian mulberry) as a valuable medicinal plant.

Most allocated forests are in remote mountainous areas. In addition, local forest users have limited access to the market information that they need in order to start a business in forest products. Markets for high-value NTFPs tend to be dominated by larger traders and companies, who have better access to information and financial services. Furthermore, a lack of appropriate processing techniques has led to most harvested forest products being sold in their raw, unprocessed form, which reduces revenue. This lack of benefits from forests, combined with the high opportunity costs of not converting forests to other commercial crops (e.g., plantations of *Acacia mangium*, rubber or coffee), puts allocated forest areas at a high risk of deforestation. Cases of forest conversion in Nam Dong district, for example, resulted in some allocated forests being returned to state management.



Business and management skills

Most villagers have limited knowledge of forest management and business practices. Decisions regarding the harvesting of forest products are often ad hoc; people harvest NTFPs whenever they can, rather than maximizing product quantity and quality, or responding to market demands. Only one of the study villages has strong business skills, due to experience with an existing cooperative structure for mushroom cultivation. Other villages have received support from NGO projects, but none of these projects specialized in business development. The projects did have a positive impact, however, by helping support dialogue between stakeholders on forest management issues, which facilitates business development in some contexts.

Community interests, participation, and ownership

Local interest in establishing and operating CFEs varied. The nine villages of Kinh people showed greater interest than villages of ethnic minority communities, possibly for cultural and socio-political reasons. Ethnic minorities such as the Pako and Co Tu have traditions of sharing and exchanging products among community members, rather than trading, whereas the Kinh majority run shops and small businesses that buy and sell forest products, and have access to larger markets. Forest management plans as required by Circular 38/2007 did not tend to focus on business aspects, given the limited information on the legal framework and the restricted rights to commercial products. For these reasons, the level of local ownership and entrepreneurship was relatively low, and commercial decision making showed insufficient knowledge of markets and business processes. In addition, lack of business skills and forest management experience limited the feasibility of CFE initiatives.



Supportive infrastructure and services

With strong government support for poverty reduction, access to credit in rural areas has improved in recent years through district-level branches of state banks and People's Credit Funds. Transportation networks have also been substantially upgraded in mountainous areas through state programmes. Some district governments supported local forest management through models such as the NTFP

development strategy (2014–2020) in Nam Dong district and rattan plantations in A Luoi district. However, challenges to CFE development remain. Government services remain targeted to agro-processing industries rather than the forest sector, and to large businesses rather than small-scale and community-based enterprises.

Conclusions

The assessment framework provides a list of enabling conditions for successful community-based forest enterprises. Through forest allocation and community forest management policies in Thua Thien Hue province, government has strongly supported changes in forest tenure, although some restrictions remain in terms of property rights in certain allocated forests. People in all the surveyed villages expressed high interest in and

expectations of managing allocated forests for improved environment and livelihood outcomes. This may imply that an enterprise approach is likely to be consistent with existing forest management goals. Under strong and clearly defined legislative frameworks, local forest institutions were established and effective during the forest allocation process.

Major obstacles for community-based forest enterprises include an inability to obtain the full commercial value from forest resources due to restrictions in harvesting policies and practices. In addition, market information and appropriate incentives for forest protection were not available to most local forest users. Limited knowledge of and skills in business practices in the forestry sector mean that local people have less ability to develop and operate CFEs. These findings show that increased participation in decision making and local interests need to be considered to ensure the long-term operation of community-based forest enterprises.



Several key lessons were learned:

- access to commercial forest products is vital to the development of community-based forest enterprises;
- market information and business networks related to local forest products need to be strengthened; and
- the global trade in ecosystem services can bring a greater chance of success for community-based forest enterprises.

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1.10 Reforestation and producer organizations in the Philippines

JAN VAN DER PLOEG, MARITES BALBAS
and MERLIJN VAN WEERD

Introduction

In Philippine forest policy, forest and farm producer organizations are intended to play a pivotal role in sustainable forest management. The Community-Based Forest Management program initiated in 1995 by President Fidel Ramos, for example, entitles rural cooperatives to harvest and sell timber. In 1996 President Ramos said: “We believe that only by empowering organized local communities and indigenous peoples would we be able to arrest the degradation and loss of our forests.” The *Indigenous People’s Rights Act of 1997* devolves control over large tracts of forest land to indigenous communities. The National Greening Program, which started in 2011, envisions grassroots associations reforesting 1.5 million hectares (ha) in five years.

Over the past two decades the Department of Environment and Natural Resources (DENR), the government agency responsible for forests, along with international donors and NGOs, has established and strengthened people’s organizations. But apart from isolated success stories, these organizations have largely failed to manage forest resources or improve the well-being of their members, and often fall apart once outside support ends (Severino 2000).

The San Isidro Reforestation Association (SIRA) is a people’s organization in San Isidro, a small village in the municipality of San Mariano on Luzon. For 12 years, DENR, NGOs and the municipal government have worked with SIRA to reforest the buffer zone of Northern Sierra Madre Natural Park, the largest protected area in the Philippines. These reforestation efforts were supposed to be highly participatory, but in practice they remained largely donor-driven. In order to effectively restore forests and improve people’s well-being, it is necessary to rethink the roles and responsibilities of people’s organizations, NGOs and government agencies.



DOCUMENTING WHAT WENT
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REFORESTING GRASSLANDS
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CHALLENGE IS HOW TO AVOID
REPEATING THESE MISTAKES.

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San Isidro

In the 1960s the land around San Isidro was still covered with lush tropical rainforest. The indigenous Agta hunter-gatherers and Kalinga shifting cultivators lived in small settlements along the rivers. In the 1970s, logging companies started to harvest timber in the area. They were legally required to reforest their concessions, and they established a tree nursery along the Disulap River. This site eventually became San Isidro, but many people still refer to the village as Nursery. The construction of logging roads facilitated a massive influx of Ilocano and Ifugao farmers, who cleared the remaining forest, cultivated the land for a few years until the soil was exhausted, and then moved farther into the forest. Slash-and-burn farming, known locally as *kaingin*, led to extensive grasslands dominated by cogon grass (*Imperata cylindrica*). These grasslands often burn in the dry season, preventing forest regrowth.

After the fall of the Marcos dictatorship in 1986 all logging concessions in San Mariano were cancelled. In 1999 the secondary forest around San Isidro was included in the newly proclaimed Northern Sierra Madre Natural Park. Timber harvesting remains an important source of income for many households on the forest frontier, however, and intermediaries recruit young men from the village to illegally cut wood in the park, which is a highly profitable business (van der Ploeg et al. 2011).

Nowadays, there are around 100 households in San Isidro; most people live below the Philippine poverty threshold of US\$1.2 per person per day (NCSB 2013). In recent years, farming systems have rapidly intensified. Farmers increasingly rely on chemical fertilizers and herbicides, and no longer maintain long fallows. Maize, cassava and sugarcane have become important cash crops. As a result, most remaining forest vegetation has been cleared. Accessibility is a major problem for farmers: in the rainy season the red earth turns into mud and the unpaved roads become nearly impassable.

Although most of the forest around San Isidro has been felled, it remains officially classified as forest land under the control of DENR. Consequently, farmers do not formally own the land that they till. The “forest land question” remains one of the biggest issues in Philippine forest policy: it is estimated that around 25 million people try to make a living on deforested public land (Pulhin, Inoue and Enters 2007).

Tenure insecurity is a barrier to rural development and continues to fuel violent civil insurgency in rural areas (USAID 2014). A range of government policies aims to formalize farmers’ customary rights, prevent further forest encroachment and encourage the reforestation of grasslands. Farmers can for example apply to DENR for a Socialized Industrial Forest Management Agreement. This provides security of tenure for 25 years on the condition that 90% of the land remains forested or is reforested. People’s organizations can apply for a Community-Based Forest Management Agreement, which entitles the cooperative to utilize forest land for 25 years.



The San Isidro Rainforestation Association

“Go to the people/Live among them/Learn from them...” (Flavier 1970) are the guiding principles of the Philippine Rural Reconstruction Movement. This is one of the oldest and most influential development NGOs in the country. Founded in 1952, it was the first NGO to send community organizers to remote villages to establish rural cooperatives. The idea was that collective action could enhance agricultural productivity, provide a safety net for poor farmers, give them greater leverage in dealing with land-owners, traders and government officials, and ultimately help overcome poverty. This grassroots development approach continues to be a major source of inspiration for many NGOs, and it heavily influenced the people-centred forest policy reforms instituted after the fall of President Ferdinand Marcos in 1986.

In 1996, the Northern Sierra Madre Natural Park Conservation Project, funded by the Government of the Netherlands, was initiated to strengthen the management of the park. One of the target communities was San Isidro. An inventory was made of community needs and aspirations, a community-based resource management and development plan was drafted and a people’s organization was formed. In 1998, the Linglingay organization, with 30 members, was officially registered with the Cooperative Development Authority. In 2013 it was renamed the San Isidro Rainforestation Association (SIRA).

To prevent encroachment into the park, the Northern Sierra Madre Natural Park Conservation Project facilitated the issuance of Socialized Industrial Forest Management Agreements (SIFMAs) to farmers in the buffer zone of the park. In San Isidro the project assisted the members of the newly founded people’s organization with the SIFMA application process and provided them with tree seedlings (General 2005). The impact of providing tenure security to farmers in San Isidro has, however, been limited. Many



farmers have now converted their orchards into maize and cassava fields. The legal status of the SIFMA plots is highly uncertain. In fact, the national government stopped issuing the agreements because of non-compliance with the regulations and persistent irregularities in the implementation of the programme. In the meantime, slash-and-burn farming continued unabated in the protected area.

When the project ended in 2003, some of the staff members founded the Mabuwaya Foundation, an NGO that aims to save the critically endangered Philippine crocodile (*Crocodylus mindorensis*; see van Weerd and van der Ploeg

2012). San Isidro is one of the few areas where this endemic crocodile still occurs in the wild. To effectively protect the species in its natural habitat and to restore the ecological functions of riverbanks and watershed areas, the Mabuwaya Foundation continued working with SIRA, especially in reforestation efforts.

The NARRA project

In 2003 northeast Luzon was hit by a severe typhoon. Most houses in San Isidro were severely damaged, and banana plantations and maize fields were destroyed. In urgent need of cash, the members of SIRA asked the municipal government to allow tree harvesting in the protected area.

The municipal government instead offered an alternative: it would purchase native tree seedlings collected in the park and use them for reforestation. The municipal council then asked the Mabuwaya Foundation to assist the people's organization in developing this ad hoc initiative into a more sustainable project. The resulting project, Native Advocacy for Rural Reconstruction Agro-forestry (NARRA), received a US\$25,000 grant from the World Bank. Narra is also another name for the highly valued hardwood *Pterocarpus indicus*, the national tree of the Philippines. The NARRA project

aimed to reforest 26 ha: 10 ha with fruit trees and the remaining area with native forest trees. The idea was to provide a short-term alternative to illegal logging by paying SIRA members to plant and tend the trees, while at the same time improving livelihoods and resource management in the long term through reforestation and agroforestry.



The project started energetically in 2003. Members constructed a tree nursery, planted seedlings and maintained fire lines. They also applied for a Community-Based Forest Management Agreement (CBFMA), which would provide them with secure tenure over the land and trees. In 2007, however, a fire destroyed 12 ha of plantation. Another setback was DENR's refusal to issue a CBFMA. After a lengthy and expensive process, the department had concluded that official land classification maps showed the reforestation site to be located in Northern Sierra Madre Natural Park, and that it therefore could not approve the application. The department acknowledged that the official land classification maps were inaccurate, but correcting them was considered too difficult.

Despite the efforts of the SIRA members to control fire, and to weed and fertilize all individual trees every year, tree growth has been slow. This is largely due to poor soils and competition from grasses. It was envisioned that canopy closure would eventually control the growth of grasses. By selecting slow-growing premium timber species and by spacing the seedlings in wide rows the NARRA project made the same mistakes that plague many reforestation projects in the tropics. It would have been better to first plant fast-growing, pioneer tree species in mixed high densities, and only later plant forest trees (Kuper and Lixin 2014).

A survey in 2014, ten years after the first trees were planted, found 47 tree species in the plantation, with an average height of 3.3 metres (m) and a range between 1.6 and 10.6 m (Diepenveen 2015). The fruit trees have grown well. SIRA members now harvest jackfruit, guyabano and citrus, although transport problems continue to hamper the marketing of these fruits. In 2014 another fire destroyed 8 ha of the plantation. Successfully restoring forest vegetation requires a great deal of labour, money, expertise, support and time — and a little luck.

Ningas kugon

Ningas kugon (or cogon grass fire) is a common expression in the Philippines. It describes the enthusiasm for a new activity that disappears when things get difficult, just as a grassland fire burns out quickly. At first the SIRA members seemed motivated to reforest the land around San Isidro, but after a few setbacks their interest dwindled and large parts of the plantation burned. This is a familiar pattern in Philippines reforestation projects (Chokkalingam 2006). It is wrong, however, to attribute the problems of reforestation projects solely to the attitudes of local people, as often happens. To understand and overcome the difficulties of community-based forest rehabilitation it is essential to understand the divergent roles and responsibilities of people's organizations, government agencies and NGOs.

In San Isidro, the members of the people's organization see the NARRA project mostly as a source of income; they earn US\$5 a day for planting, tending and clearing. Farmers feel that another important reason to plant trees is to establish or secure a claim to the land (Martín et al. 2012). The long-term benefits of reforestation remain uncertain for SIRA members, especially as trees are not individually owned and transportation remains problematic. Nonetheless, SIRA members see the reforestation project as a success. The NARRA project catalyzed community support and led to investment in other income-generating activities: the cooperative now manages a bakery and shop in San Isidro and runs a generator to provide electricity to members. The members gained valuable skills and knowledge; for example, in tree seedling propagation and vermiculture, and developed new contacts and partnerships with other NGOs and government agencies. The reforestation efforts generated attention, exposure and prestige for the people in San

Isidro. Most significantly, the project kept the people's organization going. The fact that SIRA still exists is a major achievement in itself: of 36 people organizations established by the Northern Sierra Madre Natural Park Conservation Project, SIRA is the only one left.



A key responsibility of government agencies is to create the right conditions for forest rehabilitation, particularly by providing secure land tenure and improving accessibility (Friday, Drilling and Garrity 1999). The devolution process makes municipal governments in the Philippines key participants in community-based forest management.

Municipalities lack the technical capacity to manage, conserve or restore forests, however, and tend to prioritize development over environmental conservation. The San Mariano municipal government actively backed the people's organization when it started, but since then support has been erratic and has depended largely on personal relationships. Some activities of the municipal government, such as the active promotion of industrial-scale sugarcane production for biofuel feedstock, actually counteract reforestation efforts.

Working with DENR is even more difficult. Since the 1990s the department has aimed to reforest denuded public grasslands by contracting people's organizations, but it lacks the staff, capacity and budget to effectively design, implement and monitor these efforts. The issuance of forest management agreements is hampered by red tape, disinterest, incompetence and petty corruption. Despite the official rhetoric on participatory forest management, many DENR employees, who were trained as foresters, still see farmers as a threat to the forest. Another problem is the department's failure to enforce environmental legislation and curb illegal logging in protected areas (van der Ploeg et al. 2011). Illegal logging continues unabated in Northern Sierra Madre Natural Park, which makes reforestation projects seem futile. At the same time, DENR continues to invest in large-scale reforestation, often without taking into account the lessons from previous experiences (Snelder and Lasco 2008).



The primary responsibilities of NGOs in community-based forest management are to facilitate communication between associations and government agencies, and to serve as a conduit of funds (Duthy and Bolo-Duthy 2003). The main reason for the Mabuwaya Foundation to work with SIRA was to strengthen the conservation of the Philippine crocodile. The reforestation project built trust between the cooperative and conservationists; this is an essential precondition in such a poor and isolated community. But not everybody in San Isidro is a member of the people's organization, and there is some friction and conflict within the village over SIRA's activities. Working with a people's organization does not guarantee the participation of all households in a community.

Documenting and sharing what went wrong in 12 years of reforesting grasslands around San Isidro is relatively easy; the challenge is how to avoid repeating the mistakes. In 2012 SIRA and the Mabuwaya Foundation started the Restoration of Degraded Landscapes along the Buffer Zone of Northern Sierra Madre Natural Park project, funded by the Small Grants Programme of the United Nations Development Programme's Global Environment Facility. The initiative tried to implement the lessons of the NARRA project; for example, by focusing on assisted natural regeneration and by planting relatively fast-growing pioneer species such as *kakawate* (*Gliricidia sepium*). Moreover, the new project does not aim to reforest an open-access marginal grassland, but focuses on assisting farmers to plant fruit and forest trees in their own fields. More than 11,000 tree seedlings have now been planted. It will take years before these trees bear fruit and a new rainforest is created. But every seedling planted is a small step forward, a sign of hope of a better future for people and forests in the northern Sierra Madre.

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Section 2

National and regional organizations

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2.1 Community forest management and umbrella organizations in Bolivia

BARBARA PFORTE, TILL PISTORIUS
and GERO PAWLOWSKI

Introduction

Promoting and supporting community forest management in developing countries has been an important concern of international development cooperation over the past three decades. In recent years it has gained further momentum, spurred by international policy developments relevant to the forest sector (Anderson and Mehta 2013). Particularly in the context of addressing deforestation and national REDD+ strategies and action plans (Skutsch and McCall 2012), many governments are considering transferring use rights or even ownership of forest resources to local communities, or have done so. Much effort has been devoted to establishing a legal and institutional basis for community forest management, and enabling frameworks have improved notably in many countries, although this has received significant support from donor organizations (Molnar et al. 2007; Alcorn 2014).

In 2014, the German development organization *Gesellschaft für Internationale Zusammenarbeit* (GIZ) commissioned a study on behalf of the German Federal Ministry for Economic Cooperation and Development. It explored how communities supported by various initiatives performed in the ways they managed their forest resources, and identified examples of best practice. A key finding was that many communities are burdened with technical and managerial tasks, and that despite receiving additional help, specific capacity building is needed to ensure sustainable forest management. The study also found that important benefits came from the support of so-called umbrella organizations (Box 1). These umbrella organizations are effective in coping with identified deficits in individual communities, including organizational issues, marketing, and the technical and silvicultural aspects of forest management.



UMBRELLA ORGANIZATIONS
CAN PROVIDE SOLUTIONS
FOR MANY OF THE PROBLEMS
FACED BY FOREST PRODUCER
ORGANIZATIONS, BUT CLEAR
COMMUNICATION AND TRANSPARENCY ARE
PARAMOUNT.

Box 1. Umbrella organizations

In the context of community forest management, umbrella organizations bundle different groups together to achieve greater scale for cost-effective and efficient management, investment and business opportunities. The organization may focus on specific management, operations, marketing or product processing, or may take a more active part in the management of the forest and other natural resources. In addition, umbrella organizations can provide the technical, political and investment skills that frequently exceed the capacities of individual communities. Umbrella organizations can take various forms and may include community members or hired professional staff who are paid through the revenue from operations. Regardless of the form, the crucial common factors for success are local community ownership and transparency.

The GIZ study analyzed three umbrella organizations: two in Guatemala, and one in Bolivia. These bodies assist communities with the management of specific forest services, and by combining forest areas they achieve the necessary scale for efficient, economical operations. The umbrella organization makes up for management deficits and the lack of capacities of the individual communities — without transferring the community structures to the enterprise. Examples of their activities include administrative and legal matters, investments and loans, representing community interests, and activities related to marketing and improvements of the value chain through processing.

Of the three organizations, the Inter-Community Forestry Committee in Bolivia was particularly successful, and is looked at in detail here. It may serve as an example for community forest management in other countries and contexts, since communities in different countries face similar challenges.



The Inter-Community Forestry Committee

The umbrella organization Inter-Community Forestry Committee (COINFO) was one of the first organizations for forest management to be established in Bolivia. The German Development Cooperation (*Deutscher Entwicklungsdienst*) and the International Center for Tropical Agriculture (CIAT) initiated the development of COINFO in 2005. The goal was to represent the political and forest-related business interests of individual communities with government and private actors.

COINFO was immediately recognized by the government forest authority, municipalities, district governments and the forestry sector of Bolivia. It started work with five communities, and currently represents 17 member communities in Velasco province. It has the management rights to about 90,000 hectares (ha) of rich forests. These forests have up to 30 hardwood species per ha, 15 of which are now being exploited (only five species were being used in 2005).

Before COINFO was established, there were no suitable organizational structures or adequate technical capacities in the communities for the responsible, well-planned management of forest resources. The main motivation for communities to agree to organize collectively was that individually they did not have sufficient negotiating skills or market power, and timber buyers would often capitalize on this. COINFO began its work with basic organizational development and capacity building, and trained three to four people per village. These people were trained for the positions of legal administrator, technical officer responsible for forest management and operations, finance officer for accounting and bookkeeping, and secretary for documentation and correspondence.



By 2013, 11 of the 17 communities were carrying out their own harvesting activities. The other member communities received support from COINFO to obtain their legal forest management rights. For all forest management activities, COINFO pays fair prices at fixed rates and provides qualified personnel — a forest engineer and several forest technicians as inventory and harvesting specialists — to train community members. In addition, COINFO places a great deal of emphasis on helping its member communities carry out effective planning of forest management and harvesting, and organizing timber transport. The main focus is on the supply of logs. Only limited value is added through peeling logs for transmission poles and splitting for fencing stakes, since such processing is highly labour intensive and would greatly benefit from efficiency enhancements.

Impacts of COINFO

Although illegal logging has been widespread in all Bolivia's forests for decades, most of the natural community forests are still largely intact, with a high level of biodiversity and many hardwood species for harvesting. The average price for logs is US\$200/m³, but this varies widely, from US\$120 for lesser-known species up to US\$1,200 for high-quality Bolivian rosewood. In 2013, the harvesting rights to 3,860 ha generated US\$630,000 from selling 3,100 m³ of logs. The profits are first used to pay COINFO's service fee. After this is done, each village uses its own benefit distribution system. Most profits are distributed evenly among the households, but some money is used to fund village festivities or infrastructure projects such as a social centre, school extension or chapel.

Furthermore, there are important social and environmental impacts. COINFO has ensured that no additional forest areas have been converted to farmland. There are more frequent patrols of forest areas, and offenders (illegal loggers) are reported. Villagers are now able to buy new clothes, bicycles, motorbikes, etc., and also benefit from general village development.

The tasks that men, women and youth carry out depend on their physical abilities. Only young or fit men are involved in forest work; women tend to go to the forest with their children to cook for the workers. In some cases, women have taken on the job of secretary.

In summary, COINFO has assisted in organizing communities and training individuals in various matters pertaining to forest management: bookkeeping, harvesting, marketing, training, financing, and communication with government authorities and donor organizations. COINFO's activities have reduced the pressure on natural resources and increased income from forestry, with the potential for additional income. Moreover, the more effective forest management generated sufficient profits to necessitate a benefit-sharing system, which has had a discernible impact on the community development.



Challenges and lessons learned

Transparency, financial administration skills and dependency

Lack of transparency and financial administration skills and dependency are some of the main challenges faced by communities and COINFO. Transparency is of utmost importance for the communities, particularly with following up and administering contracting processes; many villagers are not familiar with these tasks. There have been cases of community leaders who sold the timber to several different buyers and, once they received pre-payments, left the communities with the debts. Another considerable challenge is achieving full economic independence. To date, COINFO has been supported by various institutions such as GIZ, CIAT, *la Fundación para la Conservación del Bosque Chiquitano* and municipalities; it needs to become financially independent.

National Indigenous Forest Association

COINFO is one of ten regional umbrella organizations in Bolivia. They are part of the National Indigenous Forest Association (*Asociación Forestal Indígena Nacional*, or AFIN). Through AFIN, new umbrella organizations can draw on the many lessons learned by COINFO. These include a strong focus on effective communication, since communities need to be convinced of the benefits of sustainable forest management; the need for efficient planning of management activities; the costs of the services provided; and the need to ensure transparency at all levels of operation.

Promoting community forest management

The following activities are key to the further promotion of community forest management. They continue to require considerable support.

Exchange of experiences

Many lessons have already been learned, especially in countries and organizations that have taken the first essential steps toward legal forest management and economic profitability. Those that have not done so can learn and benefit from these experiences, especially in core areas such as organizational structuring, institutional agreements,

timber commercialization and establishing appropriate market structures. Donor organizations should facilitate South-South exchanges and partnerships to support the exchange of information.

Domestic capacity building through education and training

In order to scale up umbrella organizations, there is a need to adapt and revitalize curricula in forest schools and universities regarding community forest management and to train sufficient staff in the required skills. There is also an urgent need for regional training centres that are equipped with practical training material for community forest user groups.

Decentralize authority

Decentralized forest offices are the main access point for communities who carry out legal forest management. Local or regional public offices with well-trained public authorities are a prerequisite for community forest management. In the early phases of community forestry, management activities will be funded entirely by public donors, including national governments. Only later on, when communities begin to make profits, can there be a shift in the source of funding.



Conclusions

Community forest management has gained in importance in many developing countries in recent years, and umbrella organizations have proven to be a highly practical option to implement community forest management. They are able to provide the necessary structures at the appropriate scales for effective forest management. They also link communities with legal authorities, the timber industry and private-sector stakeholders. Furthermore, umbrella organizations can provide the required support and stability for communities to become more organized and to market their timber more efficiently and cost-effectively.

COINFO shows that umbrella organizations can be a highly effective way to promote collective success in sustainable forest management. These organizations must focus on clear communication, sturdy organizational structures and increased transparency.

Umbrella organizations are promising models for other areas of the world, where communities struggle with the same issues. Based on COINFO's structure, the development of an umbrella organization depends strongly on donors who focus on development assistance, and on government support. Donor organizations that work to implement community forest management should promote the establishment of umbrella organizations, and strive to create better organizational and management structures. Prior to establishing these organizations, however, goals need to be well articulated and must be communicated among the founding communities.



In order to motivate community members to establish an umbrella organization, they must be made aware of the prospective direct benefits from the beginning; e.g., improved market access, better prices, higher income, less time spent on overcoming bureaucratic obstacles, etc. Once a number of communities have established and structured an umbrella organization, there is a further need for coherent communication between the group and its members. The organization must ensure that it has the trust of its member communities in order to provide benefits.

This can be facilitated through representative boards, regular meetings and transparent processes and decisions. Another key task is to focus on capacity building and training to gradually develop community skills in forest management. Throughout the entire process, transparency must be emphasized as much as possible.

In summary, umbrella organizations must meet these goals:

- achieve the appropriate scale for economic forest operations;
- address management deficits and compensate for lacking capacities;
- enhance communication among all forest stakeholders;
- achieve positive impacts through reduced pressure on forests and increased income; and
- work toward full transparency and economic independence.

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2.2 Forest production and marketing cooperatives in the Peruvian Andes

ALFREDO RODRÍGUEZ ZUNINO

Introduction

Cooperatives are unions of people who have similar interests and levels of participation and who develop their own structure to achieve a common objective. Production and marketing cooperatives in agriculture and forestry have been established to address market failures, improve management efficiency, provide negotiation power, minimize risks, reduce transaction costs, and secure property rights. Many production and marketing cooperatives are thriving businesses, but what is known about them and their operations within the forest sector is still limited.

Industrial forestry, like industrial agriculture, tends to grow larger, more mechanized, and more highly capitalized in order to take advantage of economies of scale. This can be a challenge for forest management.

Fragmented land ownership and diverse management objectives — and the relationships between cooperatives and large-scale industry — present additional challenges. Ecosystem boundaries do not align with private property boundaries and require intensive and coordinated management. Issues of scale also challenge forest management by cooperatives (Ashton et al. 2011). To achieve productive forests, some form of cross-boundary management and cooperation may be required.



COOPERATIVES ARE ASSOCIATIONS OF PEOPLE WHO UNITE TO MEET COMMON ECONOMIC, SOCIAL AND CULTURAL NEEDS THROUGH JOINTLY OWNED AND DEMOCRATICALLY CONTROLLED ENTERPRISES.

Cooperative concepts and common values

The International Cooperative Alliance defines cooperatives as autonomous associations of people united voluntarily to meet common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise. The Food and Agriculture Organization (FAO) proposes a similar definition of forest cooperatives, as groupings of people who wish to collaborate to their mutual advantage in order to

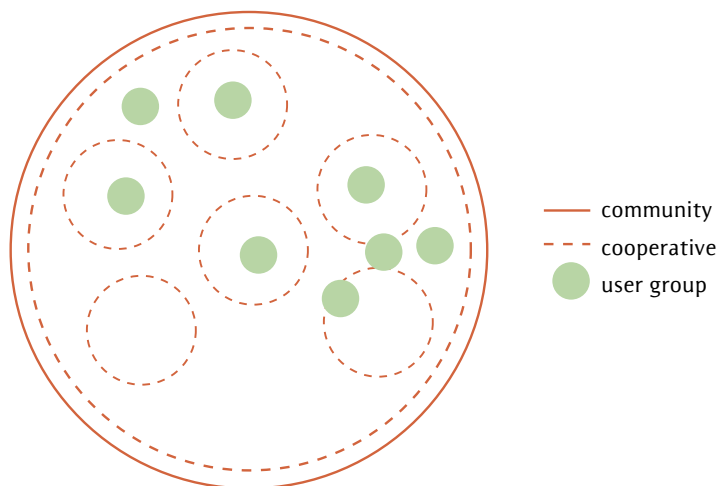
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cope with tasks or undertake operations that a single forest owner would find difficult or impossible to undertake with his or her own resources (François 1956).

European production and marketing cooperatives have a strong presence in many areas of business, especially in the agriculture sector, where they make up between 30% and 70% of the market (Nilsson 2001). These cooperatives are also relevant in retail markets, demonstrating that they do not focus solely on production, but also carry out marketing activities. In Sweden, for example, cooperatives make up 8% of the Gross National Product and consume 14% of the country's private production (Nilsson 2001).

Community forestry may succeed if community members have similar goals (Pretzsch 2009). Unfortunately, many community forestry organizations suffer from unequal power structures and benefit sharing, low motivation on the part of the relatively anonymous members, and lack of economic efficiency (Ostrom 1990). Experience shows that failures in community management lead to subgroups taking over specific tasks from the community under contract. This is not a bad thing — quite the opposite — these forest user groups have common objectives, are homogenous, and are frequently highly efficient in their sustainable forest management practices (Figure 1).

Figure 1. Integration of community, cooperatives and user groups



As pointed out by Morrow and Hull (1996), forestry cooperative organizations can manage common pool resources by implementing eight principles: 1) clearly defined boundaries; 2) congruence between appropriation and provision rules and local conditions; 3) collective choice arrangements; 4) monitoring; 5) graduated sanctions; 6) conflict-resolution mechanisms; 7) minimal recognition of the right to organize; and 8) nested enterprises.

Forest cooperatives in Peru

The development of cooperatives in Latin America goes back hundreds of years to the Inca Empire, when people worked with their neighbours on collective production to meet the needs of the Inca aristocracy (Benecke 1994). A more recent example is the agricultural worker's cooperative system established in Mexico in 1917; this *ejido* system was developed to support subsistence-oriented cooperation within the central state hierarchy. Since 1960, various successful cooperatives have sprung up in other parts of the region, combining traditional forms of production with commercial thinking. These cooperatives were often set up by European immigrants trying to overcome market distance or market failure while respecting local culture, religion and ways of life (Benecke 1994).



For the Yanesha Forestry Cooperative in the Peruvian rainforest, which manages common forest resources, the idea of moving from community to cooperative management came from donor-initiated projects (Morrow and Hull 1996). Mentoring and ongoing support is still needed, and enhancing the organization has required a long-term process that takes into account the differences between a cooperative and a community. While a cooperative is a style of management, a community is a way of life.

The Granja Porcón farm cooperative

Porcón is not far from the city of Cajamarca, in the north of Peru. At an altitude of around 3,000–3,850 metres, its climatic conditions are more favourable for agriculture and forestry than other parts of the Andes. The area receives 1,000–1,200 mm of rainfall per year, has a mean annual temperature of 4–18°C and average humidity of 60–70%. The total land area of greater Porcón covers 12,800 hectares (ha).

Before 1950, the land belonged to a regional public charity that rented some of it to small-scale farmers for ranching (Carton 1997). In 1950, some of these farmers founded the *Servicio Cooperativo de Producción y Alimentos* (SCIPA)-Granja Porcón. They continued to rent land for raising cattle, and also started to produce some minor crops, including potatoes and other tubers. In the early years, SCIPA-Granja Porcón members did not manage the new organization as a cooperative, due to their lack of managerial capability, but they used the name *cooperative*, as they aimed to use that organizational model.

In 1963, the Peruvian government promoted agrarian reform that gave power back to peasant farmers. Land from large ranchers was expropriated and turned into worker-managed cooperatives. At that time, however, the farmers in this area did not have the required technical skills, management or marketing knowledge, and so were unable to take full advantage of this opportunity.

The Peruvian Ministry of Agriculture not only allocated land to the Granja Porcón cooperative, but also provided technical and financial assistance. This helped them to increase cattle production and allowed members to diversify into dairy and wool production. Roads and warehouses were built, and the national forest authority



established plantations of eucalyptus (*Eucalyptus globulus*), cypress (*Cupressus macrocarpa*) and pine (*Pinus radiata*) to satisfy local timber demand and provide raw materials to the pulp and paper industry on the coast.

After a decade, SCIPA changed its name to *Sociedad Agrícola de Interés Social* (SAIS)-Atahualpa. It no longer called itself a cooperative, although its organizational system remained the same. SAIS greatly increased the area under forest plantations to about 950 ha, with assistance from the *Centro de Capacitación e*

Investigacion Forestal, a project funded by the Belgian Technical Cooperation agency. SAIS-Atahualpa then established a strong bond with an evangelical church, which provided a new religious ideology as well as greater confidence and group cohesion.

In the 1980s, the church became the main partner in SAIS-Atahualpa. The name changed again, to the Agrarian Cooperative, or *Atahualpa Jerusalén*, which remains the name to this day, and which indicates the organizational model and the strong bond with the church. Support from the government is no longer provided, but the cooperative receives funding from national and international agencies, including the European Union and the *Asociación Civil para la Investigacion y el Desarrollo Forestal*, a civil association based in Cajamarca that works on forestry research and development. The cooperative's members receive grants and loans that they use mainly for infrastructure, including the maintenance of forest trails. The cooperative became involved in production activities, providing a collective labour force and food for the workers. They increased the forest plantation area to about 2,500 ha, and decreased cattle, livestock and crop production. With the collapse of the Peruvian pulp and paper industry, *Atahualpa Jerusalén* started to market its timber nationally, including the main national markets in Trujillo and Lima; there it is sold to the fibreboard industry (ITTO 2014: 25) and to cabinet makers for furniture (SNV 2009).

Today, the Atahualpa Jerusalén cooperative employs 90% of the people in the local community and is democratically managed on the basis of one person/one vote. The organization is led by a manager, with a full-time workforce that averaged 48 direct employees in 2014 and 2015. Although the organization has a capitalistic goal, its religious philosophy is counter to the approach of a market economy (Figallo 2005).

Atahualpa Jerusalén now manages nearly 6,000 ha of forest plantations and has a forest nursery that produces about 1,200,000 seedlings per year. The forests provide wood and valuable ecosystem services as well as non-timber forest products such as mushrooms.

The cooperative also uses its well-developed infrastructure complex to provide ecotourism accommodation. Nowadays, the members maintain only 200 ha of pasture for dairy cattle for home consumption and for sale through the marketing cooperative (Table 1).

Table 1. The development of the cooperative

Activities/inputs	Note	Entity
pre-1950		
land	√	Regional public charity (Hacienda Porcon)
cattle	√	
1950		
land	=	SCIPA-Granja Porcón
cattle	=	
1960		
land	=	Ministry of Agriculture and SCIPA-Granja Porcón
cattle and sheep	=	
capital	√	
technical assistance	√	
forest plantations	√	
1970		
land	=	SAIS-Atahualpa
cattle	=	
capital	=	
technical assistance	=	
forest plantations	+	
1980		
land	=	<i>Cooperativa Agraria/ Atahualpa Jerusalem</i>
cattle	–	
capital	+	
technical assistance	=	
forest plantations	+	
local labour	√	
outsourcing	√	

Legend: √ joins the system; = remains in the system; + increases; – decreases

Lessons learned

Cohesion

In the case of Atahualpa Jerusalén, and similar organizations in Peru's rural areas, a clearly defined and commonly accepted philosophy has provided cohesion for the group. This cohesion has been useful to its progress as a cooperative, but is not necessarily a reason for the success of the business model. In this case, it was effective to have a strong philosophy, but the approach needs to be adapted to the goals of the business.

Self-assessment

Since the beginning, the business model has focused on increasing production and outputs; it does not carry out any monitoring or evaluation. This limits the organization to a trial-and-error approach.

Market orientation

The cooperative's focus, to meet the demand of the pulp and paper industry and carpenters, was identified by its supporter organizations between 1970 and 1980. Since then, many external factors have changed in the global market, but the cooperative has not taken this into consideration.

Conclusions

Through its membership and strategic partnerships, the Atahualpa Jerusalén cooperative has grown stronger, including its legal, territorial and cultural identity, group cohesion, security of tenure and organizational structure. On the other hand, the cooperative has

some weaknesses, including a deficient business vision, limited knowledge of management tools and the application of action or business plans, a need to improve technical processes for industrial production and a lack of trading skills.

The cooperative's evolution can be seen in the context of the five assets of the livelihood framework: human, natural, social, physical and financial. Physical and financial assets were important in the early stages,

and only later — as the cooperative achieved sustainable well-being — did it include natural, human and social assets. The contribution of social capital has been key to developing cohesion between cooperative members, and to increasing their solidarity, trust and perception of justice and fairness within the system. Monitoring is one of the most important requirements in this type of organization, especially where property rights and limits are poorly defined, and members should be willing to accept the costs of monitoring.



This study case confirms that production and marketing cooperatives can be thriving businesses, but they need time to build their organization, and they require sufficient external technical and managerial support to empower their members. Organizational transformation or even a shift to other businesses may be necessary, as in this case. External business environments can be very aggressive, but one of the aims of a cooperative is to ameliorate market failures.

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2.3 Developing effective forest-based enterprises in the Caribbean

CLAUS-MARTIN ECKELMANN
and KEISHA SANDY

Introduction

Caribbean islands have limited forest resources. Many are densely populated and most of the once-forested land was converted to agriculture and settlements years ago. Although the remaining forests are limited in area, they provide important livelihood opportunities. They are used for the artisanal production of timber through chainsaw milling, the gathering of non-timber forest products for food and handicraft materials, and the provision of ecotourism services.

Caribbean islands are popular tourist destinations and an increasing number of visitors want to see more than sand and sea. They like to explore the interior of the islands and buy local produce. Providing tour services and offering organically grown produce such as cacao can be a lucrative business for local communities in and around the forest. However, the path from idea to successful business venture can be challenging indeed. What are the essential elements of becoming a successful forest producer organization in the Caribbean?



FACILITATING THE DEVELOPMENT
OF FOREST-BASED COMMUNITY
ENTERPRISES CAN IMPROVE
LIVELIHOODS AND HELP
STAKEHOLDERS WORK TOGETHER TO MANAGE
FOREST RESOURCES.

Working within an organizational structure

Forest-based endeavours are not necessarily community-based. In many cases, though, people working in the forest choose to work together. Working in the forest alone can be dangerous, and joining forces reduces this risk. Felling and moving trees and wood requires many hands if heavy equipment is not available. Hunting together is another example where collaboration increases the likelihood of success.

Working together in organized structures is not always easy. It requires specific conditions and capacity. Key conditions are trust among members and a shared vision. The group also needs to have the capacity to manage its own affairs. Effective self-governance is essential in managing a community business and avoiding internal conflicts. A common

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vision on how to work together must be complemented by the technical capacity to develop and market a product. The Brasso Seco Tourism Action Committee in Trinidad and Tobago and the Smithfield Local Forest Management Committee in Jamaica are two examples of well-functioning groups in the Caribbean.

The Brasso Seco Tourism Action Committee

Brasso Seco is a small agricultural village nestled in the mountains of the Northern Range of Trinidad, with approximately 250 permanent residents. In 1997, seven people formed the Brasso Seco Tourism Action Committee (BS TAC) and legally registered the new community-based organization with the Ministry of Community Development. The initiative was part of a project managed by the Tourism and Industrial Development Company of Trinidad and Tobago (TIDCO). The group's vision — since its foundation in 1997 and unchanged to this day — is to develop community ecotourism that is committed to the conservation of the region's resources and to provide for the enhancement of villagers' lives through sustained economic development in a visitor-friendly environment.

To achieve its vision, the group identified several sources of revenue to bring economic development to the community, particularly youth and women. They are accomplishing this through partnerships with technical support organizations. TIDCO assisted the group to begin an ecotourism enterprise that conducts tours to the surrounding forests, waterfall, river and a nearby beach. It also helped the group develop a visitor facility that serves as an information centre for the community. The group sells food items on behalf of community members at the facility. In 2005, the group received a grant from the government to create and maintain trails in the surrounding forests and to clean the nearby beach. Under favourable terms the group was able to lease an abandoned six-hectare (ha) cocoa and coffee estate; it began to produce and sell cocoa and coffee products in 2010. It also developed an agrotourism enterprise. The group now provides employment for more than 40 people in the community.

The Smithfield Local Forest Management Committee

In the mountains of the eastern part of Hanover parish, Jamaica, near the 117-ha Smithfield Forest Reserve, are the communities of Smithfield and Cascade. About 350 people live in the community of Smithfield. The vibrant Smithfield Youth Club was introduced to the concept of the Local Forest Management Committee (LFMC) as a way to conserve the forest resources that many people depend on for their livelihoods. This led to the formation of the 35-member Smithfield LFMC in 2011. In a partnership between community members and the Jamaica Forestry Department, the group practises reforestation, manages forest resources, and improves livelihoods in the communities using forest resources.

The Smithfield LFMC received a grant from the Jamaica Forest Conservation Fund to implement management measures, including agroforestry and beekeeping, to develop and improve livelihoods and help to achieve LFMC goals. With the permission of the Forestry Department, beehives given to the LFMC were placed on land in the forest reserve. They

promote pollination, and the sale of honey generates income. Seven LFMC members are involved in maintaining the hives and extracting honey; other members are involved in agroforestry. Smithfield LFMC also received a grant from the Food and Agriculture Organization (FAO) to build a honey-processing facility.

The group is now in the process of turning several LFMC activities into businesses. The group is developing a business plan for honey production and has started discussions on how the benefits will be shared among members. They have already earned some income from the venture, mostly of which has been reinvested in the enterprise.

There are three key factors that helped these community-based small enterprises succeed:

- Commitment of group members — Throughout the years, the founding members remained committed to the principles developed when the organization was established. They stayed loyal to their group even when not earning any income.
- Clear goals and direction — Both groups have a clearly defined vision that guides the direction of the organizations and remains focused on the economic improvement of the communities.
- Collaboration with support agencies — Both groups have worked with several organizations to develop their enterprises. They have been strategic in choosing organizations to provide assistance with both natural resource management and business development.

Enabling environments

A very important requirement for community enterprises are clearly defined access rights to natural resources. In the case of the Brasso Seco Tourism Action Committee, the group was able to lease an abandoned cocoa estate from the government. In the case of honey producers, the land for the beehives was made available by the Forestry Department.

In most Caribbean countries, forest resources are owned and managed by government authorities. Forestry departments issue licences for the removal of trees, hunting, or gathering non-timber forest products. These systems are geared to individuals and issued on an ad hoc basis. Administrative procedures for long-term agreements to provide legal access to forest resources for community groups are lacking and need to be developed.

Very few Caribbean countries have forest legislation that specifically includes participatory forest management — and there are no regulations for community-based forest businesses. However, most countries have legal provisions to establish such businesses under measures such as a Friendly Societies Act, which provides for some resource rights and self-government, or under agricultural laws for producer associations or agricultural cooperatives. The same mechanisms can be used to make a community-based forest business a legal entity. It is crucial for groups to attain legal status so they can conduct business and receive assistance from support agencies. A further constraint is that commercial banks do not usually provide credit to community-based businesses, although it is legal to do so, since they feel these businesses cannot provide the required security.

Facilitation

A key factor for the success of community-based forest businesses is the group's capacity to make good use of the support offered by facilitating agencies. To be effective, these support agencies have to be capable facilitators. The Caribbean Natural Resources Institute (CANARI), a regional NGO based in Trinidad and Tobago, and FAO, have collaborated over the past 15 years to support participatory forest management and the development of forest-based livelihoods. The following recommendations are based on these experiences and lessons learned.

Local ideas

It is better to nurture business ideas that initiate within the community group than to introduce new ones. Many communities have traditional skills; for example, basket weaving using vines harvested in the local forests, or processing cocoa, as practised by the Brasso Seco Tourism Action Committee. Joining forces to produce and market these products is the first step to creating a community-based business. The proposed product may need modification to be marketable, and the facilitating agency can assist with this process of product development.

Leadership

In the Caribbean, many community-based forest business opportunities were pushed by a charismatic leader. Although strong leadership is important, dominant leaders are seldom team players and they tend to sideline other members. This results in an imbalance in the governance of the group. The leader feels the group is his/her enterprise, while an increasing number of members see themselves as labourers, rather than partners. Any facilitating agency should be aware of these risks and encourage democratic decision-making processes.

Product quality

As with any other business, a community-based enterprise will be judged by the quality of its products. The sustainable market for a product is based on its quality, not on the buyer wanting to help the producer. The facilitating agency can help the community business improve its product and deliver a consistent quality, whether for food products such as organic cocoa or chocolate, handicraft items, or tour guide services. Technical training or exchange visits with other businesses can be provided to train group members and to ensure and maintain the quality of the products. If food or handicraft items are offered to tourists, then their tastes and preferences should be targeted in product design.

Capacity

Many community groups have the ideas and the technical capacity to develop a product or service, but lack the ability to judge if implementation is economically feasible. Weaving a basket for home use and doing this work at times where nothing else can be done is one thing, but producing many baskets to be sold as an economic activity is quite another. It is important to assess the time and money spent on collecting the raw

material, processing it, and making the product. A facilitation agency can help producers assess if production is economically viable. In Saint Vincent and the Grenadines, for example, FAO assisted the Georgetown Craftmakers Association with conducting such an assessment.

Business plan

If production is considered to be economically feasible, the next step is to prepare a business plan. This helps to determine the responsibilities of various people in the enterprises, the inputs and where to find them, ways to market the products or services, and how the benefits are shared. The business plan is useable only if it is designed in a participatory way. A plan drafted by the facilitating agency and handed down to the community group is unlikely to be implemented. A plan developed with and agreed to by the members is likely to be respected by all group members and can form a solid foundation for the business.

Marketing

Marketing is as important as product quality. A business that focuses only on production is doomed to fail, since it is the selling of the product that sustains production. And although it may be feasible for individuals to carry out production, the marketing of a product is more successful if people work together. Bringing group members together to jointly agree on a marketing strategy is an important role of the facilitating agency, and it ensures that all group members understand and respect the strategy.

This process requires a certain amount of discipline. In Dominica, for example, chainsaw lumber producers agreed to jointly market their lumber. Despite this agreement, however, the producers sold the better quality lumber individually and provided only lower-grade lumber to the joint marketing facility. This meant that the endeavour failed shortly after it was established. A facilitating agency can remind group members of their commitments to joint initiatives.

Mentoring

The way in which these facilitation services and assistance are offered by the facilitating agency is also very important. Handing down technical information is unlikely to be successful. Experience has shown that the best approach is using a mentor. A mentor accompanies the group over a long period of time. He or she is from outside the group, but has the trust of all group members. The mentor does not make decisions for the group; he or she facilitates decision-making by asking the right questions at the right time. The mentor's questions should guide the group to review its business proposal and assess product development, production and marketing.

The mentor should also support a robust system of group self-governance. He or she should help the group leader consolidate diverse views within the group in order to come to widely accepted decisions. This is a difficult task, and many people in the Caribbean are not used to openly discussing diverse views. There is a tendency to verbally agree to the

decisions of the leader but to dishonour these agreements through subsequent actions. A mentor can bring these inconsistencies to the attention of the group; if he or she has the trust of the group members, they may act on the recommendations. However, the mentor's influence is limited. A mentor can facilitate an agreement within a group, but cannot create it, far less enforce it.

Improving the legal and policy context

In addition to directly supporting a community group, the facilitating agency can also promote the idea of community-based businesses among political decision makers. These efforts will prepare the political context for participatory management practices by helping to develop legal frameworks that facilitate local communities' access rights to public forest resources. An important tool in this advocacy work is the preparation of policy briefs (CANARI 2012).

Another important task is assisting state agencies to become facilitators. Only a few forest administrations in the Caribbean have distinct community forestry programmes. The Forestry Department of Jamaica, for example, has two sociologists among its staff who are dedicated to supporting local forest management committees. These committees work at the watershed or municipality level and discuss forest-related matters. The Smithfield Local Forest Management Committee started out as such a group.



Many other forestry authorities in the Caribbean have expressed their interest in intensifying community forestry programmes. Although many of these authorities are committed to supporting rural communities, they have little capacity to do so. This can be attributed to the history and administrative culture of these departments. Caribbean forestry departments were created to protect the forest from encroachment and unregulated use. Many foresters still struggle with the change from being a regulatory agency to an entity that facilitates business. CANARI has trained many staff members of state forest administrations in the principles of participatory forest management and conflict resolution (CANARI 2013; Krishnarayan 2005).

A successful programme of forest-based business development starts with an assessment of current practices. For example, FAO, in cooperation with the Dominica Forestry and Parks Department, is carrying out such an assessment in that country.

The need for patience

These initiatives contribute to fighting rural poverty by supporting forest-based communities to develop sustainable business models that generate local income. Forest-based communities will be the most committed custodians to improve the management and protection of the forest around them.

This is a process that takes time. The speed of development is determined by the individuals who participate in the process. Despite good intentions, a facilitation agency has only limited abilities to increase the speed of development. A community-based business is like a tree seedling. It grows at its own speed; one cannot make it grow faster by pulling at its stem — doing so will only disconnect it from its roots and make it wilt.

Conclusions

Several key lessons for facilitating agencies can be derived from these two case studies.

Ideas from within

Facilitating the growth of business ideas that emanate from within the communities, rather than imposing external ideas on them, can lead to a greater likelihood of success. When the ideas are the community's, passion for and dedication to the enterprise keep them interested in its development. The Brasso Seco Tourism Action Committee, for example, proposed the idea for cocoa and coffee production and members have networked extensively to ensure that the enterprise developed.

Trust is a key component

Trust among the members is essential in order for the group to act in a coordinated manner. Trust is equally important to sustaining an enabling environment. Access rights to forest resources for forest-based communities are seldom formalized in the Caribbean. They must be negotiated with the land-owner or government administration. Trust is not a substitute for formalized access rights; however, in the absence of these rights mutual trust between the group and government authorities goes a long way.

Mentors

Experienced mentors can support the development of the enterprise. Mentors provide entrepreneurs with the experience that they lack. They are sounding boards for ideas to develop the groups and they work with entrepreneurs over a long period of time. Both the Brasso Seco Tourism Action Committee and the Smithfield LFMC were provided with mentors as part of a project funded by FAO. They groups were able to improve their enterprises by testing markets and developing the infrastructure associated with their business. An important capacity of the mentor is to be patient and give the group the time it needs to develop.

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2.4 A national umbrella organization in Nepal for community forestry

BHARATI PATHAK, RITA PARAJULI
and GHANSHYAM PANDEY

Introduction

The Federation of Community Forest Users, Nepal (FECOFUN) emerged as a national umbrella organization in 1995. Since then, it has made a crucial contribution to community forestry through policy advocacy and extension campaigns. It has helped establish more than 18,334 community forestry user groups that together manage more than 1.7 million hectares for the benefit of 2.2 million households. These community forestry user groups contribute to the sustainable management of forests and the development of forest enterprises, and can improve the livelihoods of rural forest-dependent peoples.

FECOFUN is the largest peoples' organization in Nepal. It maintains gender balance, democratic and inclusive principles, represents all parts of the country, and includes indigenous peoples and minority groups.

In the past two decades FECOFUN's initiatives in generating community income through small-scale enterprises in the forestry sector have helped significantly to reduce rural poverty. Its work has promoted changes in land cover through forest restoration and biodiversity conservation. It also provides a bridge between local people and governments through supporting discussions and negotiations with policy makers to secure community forestry rights.

Government continues to own the land where community forestry is carried out, and this remains the biggest challenge for community forestry in developing forest enterprises and improving livelihoods. FECOFUN advocates for the constitutional and legal recognition of community forest land rights.



UMBRELLA ORGANIZATIONS SUCH AS FECOFUN HELP FOREST-DEPENDENT COMMUNITIES BECOME INVOLVED IN INCOME-GENERATING ACTIVITIES AND CONTRIBUTE SIGNIFICANTLY TO POVERTY REDUCTION.

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Origins

FECOFUN has been successful in channeling the power of local people to influence public policy decisions at the local, national and international levels. Network members have gained a variety of positions concerning forest governance, community-forest-based enterprises and biodiversity conservation. Community federations such as FECOFUN have worked to secure community rights and remove forest land from government control and to establish inclusiveness and participation throughout the country. Despite many challenges, FECOFUN has managed to become stronger and has secured community rights to resources.

The development of community forests started in the 1970s in Nepal (Kanel and Kandel 2004). Community forestry management led to the Master Plan for the Forestry Sector in 1989, which was followed by the *Forest Act* in 1993 and the Forest Regulations in 1995 (Bhattari and Ojha 2001).

Before the 1970s there was a lack of inclusive participation among communities. Only elite groups had influence in decision-making processes at both the local and policy level, although community members were the real forest users who actually managed the forests for their livelihoods. The forests were under government control and were prone to deforestation due to poor management. In contrast, communities were conserving forests in order to regulate ecosystems. FECOFUN was established in July 1995 to involve these communities in the policy-making process and to organize the forest user groups from various provinces of Nepal within an umbrella organization. The group is dedicated to promoting and protecting the rights of forest users.

Membership and function

People who depend on forests to fulfill their basic needs, such as collecting fodder and fuel, are organized into community forest user groups (CFUGs). To date, 18,334 CFUGs have registered their community forests with FECOFUN. These CFUGs are registered with the District Forest Office (DFO) as perpetually self-governing bodies according to the *Forest Act* of 1993 and the Forest Regulations of 1995 (GON and MFSC 1995a and b). They are entitled to manage and utilize parts of accessible national forests as community forests according to their operational plan, which must be approved by the DFO (Ojha et al. 2007).

There are two types of members in FECOFUN; they are categorized according to their involvement in natural resource management and use rights. Forest User Groups (FUGs) organized under the country's *Forest Act* of 1993 are eligible to become general members of FECOFUN. Any other user group based on forest resources at the grassroots level is qualified to become an elementary member. Of the more than 15,000 CFUGs and other community-based forest management groups in Nepal, such as leasehold forestry groups, religious forestry groups, buffer zone and traditional forest management groups, approximately 13,000 — the vast majority — are affiliated with FECOFUN.

The organizational structure of FECOFUN includes one national body, 75 district bodies and 1,101 local bodies. The executive committee's tenure period lasts for four years. Every district committee of FECOFUN has to conduct a meeting of district executive committees in the presence of 60% of other committee members.

In preparation for a general assembly, FECOFUN at the national level provides guidelines to district FECOFUN members on the selection of representatives. It encourages them to select representatives from *dalits* ("untouchables" under the Hindu caste system), indigenous/ethnic communities and other disadvantaged groups (FECOFUN 2001). There have been five general assemblies to date. More than 613 community forestry representatives from all over the country attended the Fifth General Assembly in 2014. FECOFUN's constitution states that 50% of its members must be women or from marginalized communities, which makes the process inclusive and participatory. At every level, including the central level, women must be nominated as either chairperson or general secretary, and vice-chair person or treasurer, in executive committees (FECOFUN 2014).

Initially, FECOFUN bore the costs associated with organizational activities through membership fees. Since then, many national and international donors have funded the activities of FECOFUN; through their support the organization is planning programmes more effectively.

Key actions and achievements

According to the chairperson of the organization, "FECOFUN has made tremendous achievements for community forestry, though we have to continuously struggle to ensure community forestry rights and community land rights" (Ganesh Bahadur Karki, pers. comm.). Another FECOFUN leader said: "Community forestry and the FECOFUN movement have made a great contribution to strengthening grassroots democracy and contributing to biodiversity conservation, inclusive local leadership development and women's empowerment" (Manju Malasi, pers. comm.).

FECOFUN works for the rights of community forest user groups. It advocates for policy formation, amendment and implementation. It creates awareness of enterprises based on community forests. FECOFUN facilitates workshops with producer organization to share experiences, lessons learned, opportunities and challenges. In Nepal, community forestry use groups are the only institutions that ensure women's participation in decision-making processes.

Communities regard the forest as both asset and property, and manage it as if it were their child. They have successfully overcome challenges and converted the forest into a healthy resource where a maximum level of output can be achieved. In the Namdu



community forest of Dolakha, for example, the area had few trees, with bare land and stones when management rights were transferred to the community. The community now manages the forest through their best efforts, which has inspired other communities. During this journey FECOFUN worked hand in hand with the community. It also helped to empower the women who previously were limited to household work. Box 1 describes one of FECOFUN's achievements.

Box 1. Chure Conservation Area

The Government of Nepal declared the Chure Conservation Area in 2014. More than 3,000 community forests, linked to the livelihoods of more than 50,000 people, are located in the area. FECOFUN opposed the government decision and united all its community forestry user groups — from the local to the national level — to lobby the



government to hand over the rights to the area to the community. FECOFUN is making the government realize that denying local communities their ownership and management rights over forests will result in forest degradation, conflicts and increased poverty. The organization submitted letters of protest to the Deputy Prime Minister and the Minister of Forest and Soil Conservation, demanding the withdrawal of the Chure Conservation Area.

FECOFUN has established itself as a strong opposition to, as well as a collaborative partner

with, the Ministry. This has provided a mechanism for checks and balances in the governance of the forest resources, and at the same time has fostered awareness of social issues within the governance process. FECOFUN's awareness-raising activities have helped to enhance the political capital of CFUGs beyond the traditional patron-client relationship with government agencies. The movement and advocacy campaigns organized by FECOFUN have inspired communities in other sectors, such as irrigation, drinking water and community electricity.

FECOFUN also conducted a campaign throughout the country that raised interest in community forest management and provided information about it. It builds capacity at the community level in leadership development, enterprise management, entrepreneurship and marketing. It also supports policy formulation and provides financial incentives through a community/private partnership model. Nepal has strict policies on enterprise establishment. FECOFUN is carrying out discussions and consultations with government authorities to simplify policies for the harvesting and trade of forest products.

Issues and challenges

Recently, the main challenge for FECOFUN has been to secure community property rights in Nepal's new constitution, which is in the drafting phase. Leaders and communities are demanding the transfer of ownership of forest land to local CFUGs. Another issue that needs to be addressed soon is how to enhance sustainable forest management and develop community forestry enterprises through public-private community partnerships, along with access to markets. Although communities have been using and conserving forests for decades, policy-making processes do not include them. The key challenges for FECOFUN are building its capacity in effective policy advocacy, sustainable forest management, access to markets and finance, and urging policy makers to consider pro-poor livelihood improvements.

Conclusions

People's organizations such as FECOFUN help forest-dependent communities become involved in income-generating activities and contribute significantly to poverty reduction. FECOFUN supports sustainable forest management, promotes pro-poor policies and empowers people so they can achieve economic prosperity. The job is not yet done, however. FECOFUN still needs to work to strengthen member organizations who support forest rights holders at the local level, to help them secure the participation of forest rights holders in policy and decision-making processes, and make their voices heard.

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2.5 Sustainable cottage industries and the Rattan Association of Cambodia

KOULANG CHEY, OUSOPHA PRAK, TAM LE VIET and THIBAUT LEDECQ

Introduction

Rattan, a climbing palm, is one of the most valuable non-timber forest products, or NTFPs (Dransfield and Manokaran 1994). In Cambodia, rattan is present in various habitats, from near sea level up to montane evergreen forests (Lic and Khou 2006; Khou 2008; Peters and Henderson 2014). Five species are exploited commercially.

The national rattan industry contributes considerably to GDP in Cambodia, providing an annual income of around US\$1.5 million to local livelihoods. Moreover, it has increasingly been recognized worldwide for its economic and social uses, including food, shelter and furniture products (Davies and Mould 2010; WWF 2010; Hirschberger 2011). In remote areas, many local people are highly dependent on rattan resources to supplement their income; they sell rattan products in villages to traders and for domestic use (Peters and Henderson 2014).

Rattan needs forests to grow. Cambodia is experiencing rapid economic development that to some extent is detrimental to the sustainable management of forest ecosystems. Conversion to agriculture and plantations, infrastructure development and illegal logging have all negatively affected forest quality.

A lack of market information and inappropriate national forest management policies regarding NTFPs have hampered the development of a sustainable rattan industry. Local communities are among the main participants in the rattan supply chain, and sustainability has to start with them. In order to maintain production, though, all participants in the supply chain have to be involved.



PUBLIC-PRIVATE PARTNERSHIPS ARE A WAY TO SAFEGUARD ECOSYSTEM PROCESSES, BIODIVERSITY AND LIVELIHOODS THAT ARE LINKED TO RATTAN.

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Within this context, the World Wide Fund for Nature (WWF) has provided support to help people switch from unsustainable practices to sustainable rattan production. This support addresses the full supply chain, from seed to shelf. The successful establishment of a community-based business model has enabled participants in the rattan supply chain to make stronger links between sustainable harvesting and forest resource management, and identified market opportunities for rattan products with added value.

Community-based forest enterprises can improve responsible resource management and decision-making at the community level to ensure greater benefits and sustainability (Butler et al. 2014). The benefit to communities from sustainably harvesting rattan is long-term livelihood security for local people. This encourages sustainable forest management, and thus makes local people effective stewards and guardians of their forest lands.

In Cambodia, WWF is working with various key stakeholders, such as the private sector, the Rattan Association of Cambodia, civil society and local government agencies, including the Forestry Administration, the Ministry of Environment and the Ministry of Commerce. Their initiative proposes alternatives and tools to improve the long-term development of forest management and ensure that it is addressed in public and private policies. The approach engages everyone, including villagers, small traders, enterprises and the end-users who drive the demand.

The Rattan Association of Cambodia

The Rattan Association of Cambodia (RAC) was established in 2009 as an independent, non-political organization. It has a membership of eight small and medium-sized rattan enterprises. The RAC was established at the request of rattan producers, so they could join forces to improve the supply of raw materials, increase production, and gain access to regional and international markets. It has four aims:

- to encourage rattan producers to work with communities in a way that benefits both parties;
- to apply improved management techniques and reduce rattan waste along the supply chain;
- to strengthen the voice of rattan enterprises in policy discussions; and
- to improve communication and market linkages to gain better access to domestic, regional and international markets.



The association facilitates links between private companies and local communities. RAC staff members contribute their skills at the village level in developing sustainable supply chains and in maximizing benefits to villagers while minimizing impacts on the forest ecosystem.

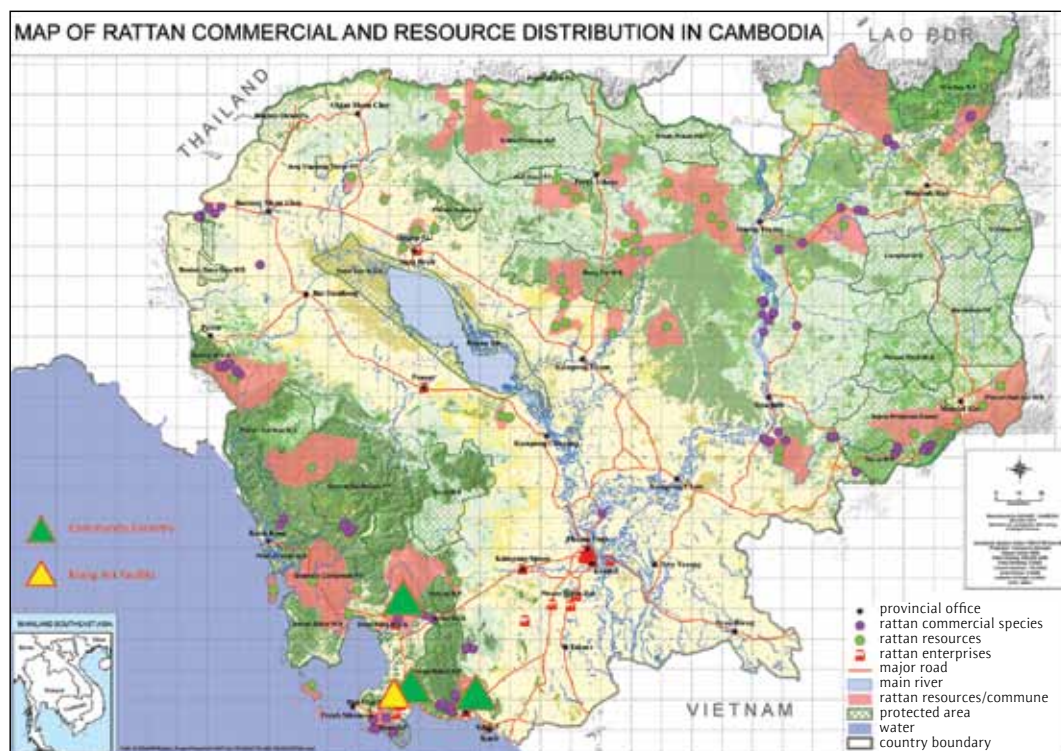
The association includes a chairman, a vice chairman, three council members and a secretary. Currently, it depends mainly on financial support from WWF Cambodia and on membership fees. It holds monthly members' meetings, and the recommendations that arise at these meetings are presented at workshops and government forums.

Members buy raw rattan and semi-processed materials from communities, traders and village producer groups, who harvest rattan from 8,300 hectares (ha) of forest under sustainable management. This has increased employment opportunities for all members of the rattan supply chain and has improved the management of rattan resources.

The Krang Art community

Krang Art village is a part of the Thmar Rong Community Forest, which was established in 2007 (Figure 1). The community forest covers an area of 682 ha and is located in Kampong Seila and O'Bak Roteah communes in Kampong Seila District in Preah Sihanouk province. It was recognized by the Ministry of Agriculture, Forestry and Fisheries in 2012 (Forestry Administration 2013). It has a registered membership of 253 families from Krang Art and Prey Praseith villages, and is an excellent example of what can be achieved when a national umbrella organization supports a community-level initiative.

Figure 1. Rattan distribution in Cambodia



Source: WWF Cambodia

The Krang Art villagers produce rattan products at the family level. In combination with harvesters and small traders they create a village-level supply chain. WWF support has built the capacity of the community to undertake rattan inventories, develop a sustainable harvesting plan, carry out business management, including product design,

and use sustainable harvesting techniques. The communities are responsible for forest management and harvesting rattan in compliance with a harvesting plan that is approved by the authorities. The community also conducts patrols to identify and stop unsustainable harvesting and wildlife poaching in their forest.

Association + community = facility

Association members recognize the importance of doing business with communities in a way that benefits both sides. They provide technical training to communities who sustainably manage their resources, and add value to the same resources by promoting handicrafts and weaving and purchasing the community's rattan products through business contracts. The partnership between Krang Art village and the association led to the formation of the Krang Art Facility.

Previously, community members made only low-quality products; these brought small profits. Most harvested rattan was sold unprocessed to traders for informal export. This led to an inconsistent supply from harvesters to the village producers, which slowed production in the village and reduced the income from rattan processing. The solution suggested by the Rattan Association of Cambodia and the community was to establish a rattan-processing workshop at the community level. This was the foundation of the Krang Art Facility.

The funds to build the facility came from a member of the association, Khmer Rajana Rattan Handicraft. The company had already set up a rattan factory on the outskirts of Phnom Penh and a shop in the city to sell finished products to customers and other traders. The company has a long-term business vision to ensure the sustainability of its supply chain and to improve business partnerships with villages. Its strategy is to broaden its business and increase income generation for the villagers, with an expectation of also reducing transaction costs.

The company initially invested US\$36,200, with a contribution of US\$3,800 by WWF as start-up support to cover development costs. The community provided labour and assisted with legal registration with the local authority. Initially, one of the communes leased a parcel of land to the company for five years to build the workshop on. However, the company considered that the site was not ideally located and thought that five years was too short for such a long-term investment, so it bought a piece of land along the main road. The 225-sq.-metre processing facility now employs 10 community members at the site; an additional 19 people work at home, producing semi-finished rattan products.

The facility is equipped with machines for splitting, bending, nailing and sanding, along with many other processing tools and machines. Improved processing equipment and techniques are now available to villagers and have greatly increased production efficiency and quality. For example, it used to take the villagers a few days to manually sand the rattan canes before splitting; this can be done by machine in a few hours.

Benefits and challenges

Economic community benefits

About 160 families in five communities in Koh Kong and Preah Sihanouk provinces — including harvesters, traders, processors and service providers — work with the facility. They harvest 4,491 ha of sustainable forest management areas.

The facility produces semi-finished and finished rattan products for sale in shops in Phnom Penh and cities in Preah Sihanouk. Villagers are employed to provide weaving and sanding services. The facility buys around 10,500 rattan canes per month from the community, with a value of US\$2,380. According to a member of the community committee, the price offered by the facility is more fair and stable than that paid by external and non regular traders, and “the harvesters can now sell their rattans the whole year round due to stable demand” (Sovanna Rith, pers. comm.).

The facility generates 29 jobs in the community, mainly for women, who earn around US\$52 per month. Salaries will increase as the experience and processing skills of villagers improve. Khmer Rajana Rattan Handicraft expects them to rise to US\$82 by 2016. In addition, the facility is starting to manufacture high-quality products such as rattan sofas, which generate more income at the community level. Currently, the villagers generate a total value of US\$2,380 from selling rattan canes and US\$1,500 per month from employment (Table 1).

Table 1. Income generation for local people who work with the Krang Art facility

Jobs	No. of employees	Income/day (US\$)	Income per month (US\$)*
Sanding (7 days per month)	20	3	420
Peeling string	1	5	150
Weaving	6	3.5	630
Framing	2	5	300
Total	29	—	1,500

*Note: based on 30 days per month

Building capacity

The facility is responsible for building the capacity of local processors in order to increase product quality. After training, community workers are able to use the processing machines. During six months in 2014 and 2015, villagers produced 120 woven chairs. The facility produces mid-range to high-quality products that sell for an average of US\$13.54 per unit; the low-end products previously produced by the villagers sold for US\$7.90 per unit. The difference in price comes from the higher quality of the products and from changes in design. The aim is to train more villagers in these new processing techniques. This would help increase their income and use resources more efficiently.

Table 2. Average monthly production of rattan furniture from the Krang Art Facility

Products	No. of units	Unit cost (US\$)	Total (US\$)
Chairs (small)	50	8.5	425
Chairs (small+)	50	9.5	475
Chairs (medium)	156	11	1,716
Chairs (large)	51	19	969
Sofa	8	85	680
Total	315	13.54*	4,265

*Note: average; also, approximately 20% of semi-finished products are sold to other rattan factories.

The goal of the Rattan Association of Cambodia is to improve people's skills in order to improve product quality and make the products more competitive. This new approach also gives the association more opportunities to work closely with the natural resource base and be responsible in forest management. This model has a strong chance to be replicated if it sustains its success in the long run and reduces exports of unsustainably produced rattan, such as the low-value rattan canes exported from Cambodia to Vietnam reported by Hirschberger (2011).

Implementing sustainable forest management

Krang Art facility is part of a strategic intervention of WWF to integrate the private sector in natural resource management. To ensure its long-term operations, the company requires a stable supply of raw materials, and this can be achieved only when sustainable harvesting practices are broadly applied and standing forests are well protected.

The project also helps to develop a strong business partnership between the villagers and the company. This is a key driver in promoting and strengthening the communities' long-term investments in sustainable forest management, which can also include a rattan nursery, enrichment planting and forest protection.

Challenges

Gap in capacity

The company's management capacity was relatively weak at the outset, with a poor processing and management system, and little engagement with local communities. Changing the ways that the company worked with local communities took more time than expected.

Community engagement, from harvesters to entrepreneurs

At the beginning, most village processors were not willing to upgrade to higher quality production to increase profits. This was due to the extra time required to learn new skills, and because lower quality products were still being ordered by their existing buyers. In

addition, most villagers were required by their loan contract to deposit cash daily to the bank, so they had to keep production stable to ensure a regular income. Therefore, it will take time before new products are adopted.

Poorly adapted legal frameworks and policies

The facility faces challenges regarding the legality of its products. Paperwork, taxes and informal transaction costs make this legal supply chain more complicated than their previous practices. Communities and enterprises have to spend a lot of time filling out forms and so the process is also more costly. In terms of policy, WWF is assisting the association, communities and local government to review gaps and propose ways forward.

Lack of capital investment

Association members and communities cannot obtain capital for investment, due to a lack of collateral, high interest rates and a lack of investment policy on forest products. With support from NGOs, the association is raising this issue in national forums and with development partners.

Financial sustainability

The association is not yet financially sustainable. Revenue from members varies, and membership fees, which are kept low, cannot cover all management costs. With support from WWF, the association is now revising its business plans and developing a marketing strategy.

Conclusions

This project has provided access for communities to five types of livelihood capital — human, social, natural, financial and economic — by implementing a sustainable rattan enterprise. As highlighted in this article, with the leadership of the Rattan Association of Cambodia and support from its members, the Krang Art facility directly contributes an average of US\$2,380 from selling rattan canes and US\$1,500 per month to the local community from employment, and provides additional increases in income through higher production efficiency. Better still, salaries are projected to increase by more than 50% by 2016 due to people gaining more skills.



Some villagers have already adopted the new processing techniques introduced by the facility. Although the community is changing to a higher production standard very slowly, community members are now aware of the higher profits that can be generated from producing higher quality products, and the demand for them is increasing, especially among association members. These factors are expected to encourage other villagers to increase the quality of their production.

Despite the challenges, the production capacity of villagers has improved, and high-quality production at the village level — which is linked directly to enterprises and avoids intermediaries — has helped reduce transaction costs. Association members accept that they must be patient while working with the community, and they now see the community as part of their business. The model is a way to introduce villagers to the manufacture of high-quality finished products for national and international markets, while promoting local responsibility in natural resource management. It is a mutually beneficial strategy that also reduces the transportation and production costs of raw materials from villages to factories to the market. The association has learned from this process, and is now considering scaling up to other communities. Members are more confident in engaging with government, and are proposing changes, even though there is still much to do.

The communities themselves are gaining more confidence, seeing themselves more as stewards in the protection and sustainable use of forests, and in doing so, are also conserving forest ecosystem services.

This business model is a success story with potential for replication. It requires sufficient time, effective collaboration and commitment from relevant stakeholders — such as local communities, the private sector, government agencies and development organizations — to ensure its viability in the long run.

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2.6 Forest farmer groups in Indonesia

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Introduction

In many parts of Indonesia, forest companies manage timber plantations on private land as their secondary business; their main enterprise is plantation development in state forests. These timber plantations are located close to villages on land owned by communities. The local farmers and communities want to manage their land in a way that doesn't require high labour or operational costs, and the companies offer farmers a collaborative partnership with an agreed benefit-sharing mechanism. Recent government policy strongly supports such community–company partnerships as a means of improving rural livelihoods.

Forest farmer groups, or *kelompok tani hutan*, can make a crucial contribution to the development of Indonesian timber plantations. They facilitate company–community partnerships in rural areas, and thus contribute to local and national economic development.

By facilitating such company–community partnerships, they also contribute to the global timber supply. Forest farmer groups are often based on existing local institutions in rural areas, so they have local acceptance.

Under the terms of company–community partnerships, a contractual agreement is formally developed, with strong expectations that both parties will receive equal benefits from the plantation. Several issues threaten the implementation of partnerships, however: lack of communication, lack of transparency and lack of trust.

Forest farmer groups are commonly established in rural areas to provide a forum for people whose livelihoods depend on forest resources, who have access to community forests, or whose land is the target of a government reforestation and land rehabilitation programme. The aim of forest farmer groups is to accommodate members' aspirations,



FOREST FARMER GROUPS
FACILITATE COMPANY-
COMMUNITY PARTNERSHIPS
IN RURAL AREAS AND
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ECONOMIC DEVELOPMENT.

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communicate and share experience among members, increase income generation and improve the lives of its members by working with partners such as private forestry companies, government institutions and NGOs. Forest farmer groups can also help to strengthen the bargaining position of farmers in negotiations such as determining timber prices.

Generally, there is only one forest farmer group in a village. In Central Java (Figure 1), a forest farmer group may consist of around 50 members who represent several hamlets. In South Kalimantan, groups tend to involve around 40 farmers who live in the same village; there are no hamlets. Forest farmer group activities include land-based activities such as farming; forest management for timber and non-timber products; agroforestry; and tree planting, tending and harvesting; as well as non-land-based activities such as household industries, services and trade. The leader of a forest farmer group is usually chosen by the members on a consensus basis.

Figure 1. Central Java province, Indonesia



Source: Trees4Trees

The Hutan Rindang Banua community partnership

PT Hutan Rindang Banua (HRB) is a large forestry company that operates in Jorong, Tanah Laut District, South Kalimantan. It began operations in 1998, and its industrial forest plantation concession covers 268,000 hectares (ha). It extracts wood for its pulp factories and wood chips for its other forest industries. Forest plantations consist mainly of *Acacia mangium*, a fast-growing species from Australia that has proved to be very well adapted to local conditions (Djarmiko 2009).

In 2006, the company developed the *menelola hutan rakyat* (MHR) programme. Under the programme, non-productive forests owned by communities near industrial timber plantations are managed by them, with a benefit-sharing mechanism that both parties agree to. After harvesting, the profits — i.e., the revenues after deducting all operational costs spent by HRB — are divided, with 60% for the company and 40% for the communities. One such programme was carried out under an agreement with a set of forest farmer groups who the company has a relationship with. Working with such groups is much more feasible for the company, with its limited staff and resources, than communicating

directly with the large number of people who owned parts of the area covered by the programme (around 2,700 ha).

Initially, the forest farmer group leaders were responsible for many tasks, such as identifying abandoned land and contacting the owners. They convinced villagers to voluntarily join the programme, as the leaders had been assured that the company would honour its commitments, and that there would be liaison between the two parties. Forest farmer group leaders would also oversee plantation management.

The total land area under the partnership was managed by 13 forest farmer groups spread over several villages. Group leaders signed legal agreements on behalf of the group, which meant that any single individual who owned land was unable to enter into a direct partnership agreement with the company.

The group is very important in managing such a large area of plantation. Since its initiation in 2006, the plantation areas managed under partnership have gradually increased; in 2008, for example, the Tani Jorong Raya forest farmer group managed 716 ha of plantation. This made a significant contribution to local economic development, because farmers obtained substantial cash income after harvesting.

Under the agreement, the company requires the groups to protect forest plantations from illegal logging and forest fires (which often occur in the area). In return, it guarantees farmers' land ownership rights and trains local communities in plantation maintenance. Local groups took on tasks that were similar to those that company staff would otherwise carry out; i.e., in some ways they acted as an extended arm of the company. The company provided incentives to group leaders, so these leaders had dual roles, working on behalf of both the communities and the company.

In 2011, the acacia plantations were around five years old, and the issue of selling land had become a problem. One senior company officer showed his frustration when trees on some 300 ha were cut down and villagers sold the land to a palm oil company. According to local villagers, there were several reasons for their decision: the acacias were not growing well and villagers were worried that the profits from harvesting would be very small; the acacias were severely burned during the dry season; and people needed immediate cash to visit family in Java.

The relationship between the company and local villagers was ruined by a lack of transparency in the original agreement. Furthermore, the communities did not trust their leader. The leader should have been acting on behalf of the community, and not as the representative of the company, which paid him a monthly salary. In addition, local people did not keep a copy of the agreement. When they complained about lack of information and communication, they did not have the evidence needed, as they did not possess any legal documentation.

The PT Emida community partnership

PT Emida, a small forestry and furniture manufacturing company in Surabaya, East Java, formed a partnership with local communities in South Kalimantan to produce mahogany furniture for export. It established a branch in South Kalimantan because it had plantations in the same area. This served a double purpose. It helped the company to better control and monitor the plantations, and to form a more meaningful partnership with local farmers by developing effective communication with them. Mahogany was supplied from several places, including 700 ha Tanah Laut, South Kalimantan, and from local forest farmers who owned their own land.

The company entered into one of two forms of partnerships with local farmers via a forest farmer group. In the first type, the company provided seedlings and covered operational and maintenance costs. At harvest time, the profits (after deducting all costs) were shared 60:40 between the company and the farmers. In the second form of partnership, the company provided only fertilizer and had sole rights to the harvest; the revenue paid to individual farmers was based on the number of trees they planted and the volume of timber produced per tree.

Under the terms of the first form of partnership, those farmers who received seedlings from the company were obliged to enter into a rigid agreement that allowed no flexibility in their mahogany harvesting and marketing arrangements. In contrast, farmers under the second form of partnership, who obtained only fertilizer, were able to negotiate with the company, and did not have to tie themselves to a cooperative planting and harvesting mechanism under a formal legal agreement. This gave them flexibility regarding when, how and where to sell their timber. The main purpose of the partnership was to ensure the supply of good-quality mahogany so the company could sell its furniture at better prices and earn greater profits.

PT Emida had promised forest farmer groups under the first partnership form that it would provide fertilizer regularly, and that farmers would be paid for applying it to mahogany trees on their land. In reality, the company provided fertilizer only once in two years in some areas, and farmers received no compensation for the time they spent applying it.

The views of farmers influenced those of company management. The company's senior manager was initially confident that he could succeed in obtaining a timber supply from local villagers. In contrast, by the time of the second field visit, he was pessimistic about his relationship with local communities, because he experienced little commitment from them. Local group leaders were able to affect timber prices; they would not sell their mahogany to the company unless it paid a higher price for the timber than local markets would.



Pati community forest

In the 1970s, villages in Pati district formed a forest farmer group to support individual farmer's ability to undertake enrichment planting activities on their own land. Timber species were grown from seeds provided by the government under various programmes, such as the re-greening and forest and land rehabilitation movements. With such programmes, community forests were established using agroforestry systems. Sengon (*Paraserianthes falcataria*) was planted by farmers; it can be harvested in five to six years and is used for jointed board and plywood (Irawanti and Suka 2012). Another study defined community forest as private land where 88% of farmland has the potential to be a major source of food, fibre and income for many farm families (Irawanti et al. 2014).

The forest farmer group *Kelompok Pengelolaan Hutan Rakyat (KPHR) Tani Unggul* was established in 2011 in Giling village, Pati district. The group carries out a sengon timber plantation programme developed jointly by the government and the local NGO Trees4Trees that distributes tree seedling grants and training for local farmers.

In receiving seedling grants from companies, the NGO facilitated a meeting between the forest farmer group and wood-processing companies. After the harvest, the companies buy the sengon, process it and sell the products (e.g., jointed board and plywood) to overseas buyers. The relationship between the NGO and the forest farmer group was formalized by signing a memorandum of understanding in 2011. Members agreed to hold meetings four times a year. In accommodating government grants as part of various forest rehabilitation programmes, the forest farmer group organized an array of activities, including a people's nursery garden, village nursery, direct community assistance for rural community-based forestry conservation, a community forest, and a multi-purpose timber species programme.



The forest farmer group takes on a significant task: linking farmers with buyers from processing industries. Group leaders, with the help of the NGO, carry out timber inventories and estimate the total market price of the timber. Farmers will likely obtain a higher price than if they sold their timber to village traders.

Government policies and partnerships

The Indonesian government strongly encourages company-community partnerships under Regulation No. 6/2007. This stipulates that to provide a better living to rural communities from their forests, companies must ensure equitable benefits. The Minister of Forestry also issued Ministerial Regulation No. P.39/Menhut-II/2013, which emphasized the importance of empowering local communities and building partnerships.

Empowering local communities in this context means developing their capacities and providing access to forest resources, including building partnerships with concession holders. Partnerships are primarily intended to enhance community welfare and

independence, so that when companies cease operations, local communities can manage their own forest resources with the skills they have obtained in the process.

In order to be able to develop a partnership, individuals have to form a forest farmer group to act on their behalf. Any partnership — whether initiated by the government, a private company or an NGO — should be developed by means of a forest farmer group. When a forest farmer group is well established, local communities and farmer producer organizations can participate more effectively in the government's efforts to improve sustainable forest management. It is hoped that gradually, such groups can develop to become strong economic participants: independent, responsible and professional.

The government and private companies have made efforts to achieve those expectations by providing training and guidance for group members to build their capacities and improve their knowledge and skill in various areas, including entrepreneurship. This makes groups better able to develop a profitable business at the village level by optimizing the use of available resources. Training is expected to help group members broaden their knowledge, improve decision making, and provide updated information on agricultural and forestry management practices.

The government needs to facilitate meetings between forest farmer groups and private company managers in order to explore the use of new timber products that are competitive and marketable. Furthermore, government extension officers or NGOs can guide the groups so that they can help their members, encourage commitment and strengthen their organization. Shared learning is also encouraged, particularly between forest farmer groups.

Lessons learned

Several lessons can be learned from partnerships in Pati and Tanah Laut.

Legal recognition

The most important lesson is that forest farmer groups need to become legally recognized institutions, as only then can they operate as a company, sign contracts, access credit, etc.

Facilitating the needs of the members

Forest farmer groups in Pati are more likely to become established than in Tanah Laut, since they link farmers directly with timber processing industries. This allows farmers to increase their income by selling timber at a higher price. Forest farmer group leaders in Tanah Laut appear to be primarily focused on income generation from the company or from maintaining partnership plantations. Furthermore, in Tanah Laut, group leaders actively communicate with members only during the initiation stage of the plantation programme, whereas forest farmer groups in Pati hold regular meetings to discuss issues that need to be addressed and have a strong commitment to their partners.

Communication barriers

The lack of communication between forest farmer group leaders and local communities in Tanah Laut weakened the relationship between the communities and the Hutan Rindang Banua (HRB) company. However, HRB and farmers still hope that the partnership can be improved by developing an informal system to regularly share information. PT Emida was required to develop regular communication and interaction with farmers so that a good relationship could be developed. If this relationship had happened naturally, farmers would likely sell to the company voluntarily, even without any contractual partnership agreement.

The work of NGOs

In Pati district, an NGO guides and informs the farmers. The forest farmer group was formed to accommodate farmers' aspirations, help farmers with tree planting, and act as a contact point for interactions with partners such as industry, buyers, government and NGOs. The forest farmer group also succeeded in persuading farmers to move from their traditional passive approach to becoming active managers; this produces better quality timber that provides a higher income by selling for a higher price.

Knowledge sharing

In Pati, a forest farmer group runs a business that sells forest tree seeds; the profits can be saved for future group expenses. In Tanah Laut, however, seeds are more commonly sold by individual businesses. Forest farmer groups in Tanah Laut need to build their capacities to operate as effective institutions at the village level. Bringing them to Pati would be beneficial. It would allow them to learn lessons in organizational management, accommodating members' aspirations, motivating members to develop better forest plantations, developing business collaborations with partners, strengthening their bargaining power, and other skills that help forest farmer groups to be reliable and professional organizations.

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2.7 Pacific Island farmer organizations: supporting rural people and livelihoods

KYLE STICE and AFAMASAGA TOLEAFOA

Introduction

Once a rarity in the Pacific islands, farmer organizations are emerging to make an important contribution. They provide relevant information so farmers can effectively participate in supply chains. Previously, the extensive involvement of governments in the sector stifled the development of effective farmer organizations. This is changing with the realization that the financial constraints that face public-sector agricultural extension services will persist. There is a strong need to extend the reach of important services that support farmers to generate higher incomes.

It is now widely accepted that farmer organizations are critical in empowering rural people to take advantage of livelihood opportunities. Effective farmer organizations can contribute to alleviating the problems caused by small size and isolation that confront many Pacific island smallholders.

This situation led to the development of The Pacific Island Farmers Organisation Network. It serves as an umbrella group for national farmer organizations to coordinate capacity building, share success stories and lessons learned, and support regional exchanges of expertise between farmer organizations, the private sector and donor agencies.

History of farmer organizations in the Pacific

Formal producer cooperatives are the most common form of farmer organization in much of the world, and some of the most substantial agribusinesses are, or started life as, farmer-owned cooperatives. The Pacific islands do not have a tradition of producer cooperatives, with a few significant exceptions: the Nature's Way Cooperative (NWC) in Fiji, the Friendly Islands Marketing Cooperative in Tonga, and the Vanuatu Organic Cocoa Growers Association. This lack of farmer organizations may be explained by historically



PACIFIC ISLAND FARMER ORGANIZATIONS PROVIDE RELEVANT INFORMATION SO FARMERS CAN PARTICIPATE EFFECTIVELY IN SUPPLY CHAINS.

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far-reaching government involvement in extension services and commodity marketing, which limited their development. This is no longer the case, and farmer organizations are now starting to address a range of needs:

- improving linkages between small commercial farmers and produce marketers, e.g., the Vanuatu Farm Support Association (FSA)'s Spices Network;
- facilitating the supply of high-quality planting material, e.g., the Samoa Farmers Association, which supplies Tahitian lime germ plasm;
- training in farm management and business skills, e.g., the Tutu Rural Training Centre in Fiji;
- promotion of sustainable commercial farming systems, e.g., Teitei Taveuni's soil schools and FSA's vetiver grass (*Chrysopogon zizanioides*) programme;
- advocating on behalf of farmers with ministries of agriculture and other agencies, e.g., NWC negotiations on the national airline air freight configuration;
- improving the quality of produce delivered to consumers, e.g., the NWC field crate and papaya seed programme;
- facilitating the supply of appropriate technology to farmers, e.g., the NWC quarantine treatment;
- developing new markets, e.g., exports of organic cocoa by the Vanuatu Organic Cocoa Growers Association, Tonga's Islands Marketing Cooperative for vanilla; Fiji's Foundation for Rural Integrated Enterprise and Development for niche processed products, and Samoa's Women in Business fine mats; and
- assisting informal farmer groups to become formal farmer associations, e.g., the Kastom Gaden Association in the Solomon Islands.

Focusing on smallholder involvement

The vast majority of Pacific Island people live in rural villages, securing a subsistence living and some cash income from traditional land and marine resources. In Papua New Guinea, for example, around 4.5 million people (81% of the population) live in rural areas.



The main responsibility of the smallholder in the Pacific is to secure food for the family. Self-sufficient food production through traditional farming and fishing systems continues to be the basis of food security in the region. This provides resilience against external shocks, either economic (price spikes, global recession) or natural (cyclones, floods, droughts, pests and diseases, etc.). The farming systems of Pacific island countries have generally provided a high level

of food security and have been the hidden strength of these otherwise weak economies. McGregor, Watas and Tora (2009) have highlighted the importance of traditional smallholder farming systems in safeguarding food security and maintaining economic stability.

A key challenge for the region is developing ways to commercialize traditional farming systems. This would increase cash-generating opportunities for rural households and spur economic growth, without sacrificing family and community cohesion, environmental sustainability or ultimately, food security. Such commercialization options are described in a series of agricultural growth case studies undertaken by FAO for Samoa, Tonga, Solomon Islands and Vanuatu (Rogers, Morrison and Bammann 2010). These studies identified a number of benefits to small-holder farmers when a commercial crop is part of, or can be easily integrated into, traditional farming systems. Most of these case studies involved the participation of farmer organizations as a key component.



For most Pacific island countries, agriculture still provides the best opportunity for generating broadly based livelihoods that go beyond mere subsistence. There are particular areas where growth is possible (McGregor 2007): supplying increasing urban, niche and tourism markets; increasing tree crop commodity exports; exporting to Pacific island and Asian community markets; and exporting niche market products based on fair trade and organic certification. To a large measure, the future economic well-being of Pacific islanders will depend on the degree to which smallholder farmers are able to take advantage of these opportunities. Farmer organizations can make a key contribution to these initiatives.

Types of farmer organizations

It is not known exactly how many farmer organizations there are in the Pacific, because many of them are informal village-based groups. In the Solomon Islands, for example, 175 informal groups are registered members of the Planting Material Network that is supported by the Kastom Gaden Association. But on many islands, only one or two leading organizations are recognized nationally and regionally.

The authors surveyed 18 of the leading farmer organizations in the region, representing seven Pacific Island countries. The core business of a farmer organization as defined in the survey was “your main business for the benefit of your members – the main reason you exist.” Although some organizations had a specific answer, most stated that they were still unclear as to their core business, indicating the wide range of their activities. Some recurring themes were improving livelihoods, empowering farmers and improving income.

The authors identified four primary categories of farmer organizations, based on core business or activities. Many organizations fit into more than one category.

Service providers

This is the most common type of organization. It provides a range of services: extension, field services, and applied research; production and marketing training; environmental services (such as soil conservation); management services for implementing publicly

funded projects; advocacy and representation for members; and conservation and diversification of plant genetic resources. The Farm Support Association in Vanuatu is one example. It generates income from its clients, which include local agribusinesses, NGOs, training institutes and aid agency projects.

Direct marketing

There are two distinct types of direct-marketing organizations. One works over the long term and considers its core business to be the marketing of produce. The second engages in start-up marketing, with the view of passing the business on to the private sector when appropriate. The Vanuatu Organic Cocoa Growers Association is an example of a long-term business. It has a strategic partnership with a large agribusiness that sources organic cocoa and acts as a facilitator between the growers and the buyer.



Agro-processing

These organizations assist with the processing of commodities such as coconut oil and coffee or with niche market processed products such as jams, chutneys and dried fruits. The Foundation for Rural Integrated Enterprises and Development in Fiji provides facilities, equipment, packaging materials and expertise to rural women to help them process and market their products. The marketing arm of the foundation also sources raw materials from rural communities and processes them into finished products. Samoa's Women in Business, for example, facilitates the processing, packaging and marketing of virgin coconut oil by organizing and training village groups.

Input supply

Some farmer organizations supply targeted inputs, either as their core business or as a supplementary activity to assist their members and generate income for the organization. The *Syndicat Agricole du Vanuatu* has supplied agricultural inputs for nearly a century, initially importing agricultural machinery, breeding stock and even plantation workers from northern Vietnam, and now selling farm supplies to its members at a low cost.

Structure and support

The organizations surveyed had a range of management structures and used a variety of names for their decision-making roles and bodies; 70% of the groups had paid management, with 30% managed by volunteers. The number of staff members ranged from 1 to 40, with 40% of organizations staffed entirely by volunteers, and the others having at least some paid positions.

All organizations receive some donor funding; for most groups this was their main source of funding. Other income came from the sale of products, service fees, membership fees and contractor fees. Organizations carried out a range of measures to ensure their

sustainability, including developing and following a strategic plan, increasing income-generating activities, good communication with members, and maintaining donor confidence.

Challenges

In the Pacific islands, agricultural research and extension were previously carried out by a government department and provided as a free service. They were not effective. In the face of budgetary constraints, the resources devoted to agricultural research and extension have declined significantly. The research that is undertaken often lacks focus and tends to be out of touch with the requirements of smallholders who seek to intensify and diversify production to enhance household income. The area of domestically marketed food and new crop development (such as spices and horticulture products for export) is weakest in terms of research and extension capability. Farmers require improved planting material. They also need to be able to manage the pests, disease and soil fertility problems associated with more intensive land use and to deal with the impacts of climate change.

Alternative approaches now need to be pursued to facilitate smallholder participation in commercial agriculture activities and adjustment to environmental changes. Emerging farmer organizations are starting to make a key contribution in both these areas.

Future needs

As farming becomes more commercial and market oriented, small-scale farmers struggle to maintain their income and develop new markets. In particular, they are constrained by a lack of access to practical information. Farmer organizations can help with these challenges and can help to overcome the isolation faced by many Pacific island smallholders.

Farmer organizations can be an important part of linking farmers to input suppliers, traders, processors and consumers along the supply chain. This creates opportunities to capture value and distribute benefits to their members. National organizations are particularly well placed to assist local-level organizations and their members to obtain seeds, fertilizer and other inputs, engage in bulk buying of inputs, utilize and manage water for irrigation, facilitate farmer-to-farmer learning, and link farmers to markets. Collective action is fundamental to generating economies of scale, reducing transaction costs, and increasing power through coordinated bargaining. Farmers are given a greater voice through organizations that advocate for their rights and concerns.





For more information

Despite the diversity of the island nations that make up the Pacific, farmer organizations face many common challenges and opportunities. Through the Pacific Island Farmers Organisation Network (PIFON), member organizations are learning from each others' successes and failures.

PIFON provides a platform for sharing information through face-to-face meetings and various uses of technology. The strength of the network, like that of all farmer organizations, comes from the unity of its members and their willingness to work together. See www.pacificfarmers.com.

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2.8 Canadian family forestry: challenges and innovations by owner associations

PETER DEMARSH and JEAN-PIERRE DANSEREAU

Introduction

Nearly 10% of Canada's non-reserved productive forests, about 19 million hectares, is owned by 450,000 families. These forests are an important source of fuel, food, timber, income and environmental benefits for their owners, neighbours and nearby towns and cities. Average annual forest-based revenue per family is relatively small, but in 2003 it was estimated to total CDN\$1.5 billion (US\$1.23 billion, at the current rate of exchange), largely from supplying about 15% of the national forest industry's timber (Dansereau and deMarsh 2003).

A number of initiatives have evolved over the years to support the sustainable management of family forests (the term woodlot is used in Canada for family forests) and help overcome barriers to market access. These include local and provincial owner-controlled associations that provide services that include collective marketing and lobbying for supportive policies, incentive programmes, and extension services from provincial governments. A national federation of provincial associations (most of which are in turn federations of local associations) was formed in 1989 to lobby the federal government for improved national income tax and environmental policies.

Forests in Canada are highly diverse, ranging from temperate rainforests in British Columbia to boreal forests in northern Ontario and Québec. Forest policy under the Canadian constitution is the responsibility of each of the ten provincial governments (there are very few woodlot owners in Canada's three territories). In some provinces, family forest owner associations date from the 1960s; in others they are less than 30 years old. They have a variety of mandates and functions.



TWELVE TOUGH YEARS FOR CANADIAN WOODLOT OWNERS AND THEIR ASSOCIATIONS HAVE ENCOURAGED INNOVATION AND CREATED OPPORTUNITIES FOR DEVELOPMENT.

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The challenges in 2003

In 2003, the issues that influenced Canadian woodlot owners were presented in the form of two scenarios: pessimistic and optimistic (Dansereau and deMarsh 2003).

The pessimistic scenario was as follows:

- more badly designed regulation of forestry practices by municipal, provincial and federal governments to protect biodiversity, water or scenic values, with limited understanding of their practical impacts or the resulting increases in operating costs;
- continued barriers to market access, and timber prices that would not reflect the costs of sustainable management, due to the dominance of timber from public forests and of large enterprises and production units in the Canadian forest industry;
- demographic changes leading to increasing woodlot ownership for purposes other than production of forest products, such as recreation and rural retreat; and
- woodlot owners' identity as a social group becoming less coherent, and their contribution to local economies, environmental services, and industrial timber supply declining.

The optimistic scenario was as follows:

- with a complete set of financial incentives and education services, owners produce a full range of goods and services, including an increasing contribution to industrial wood supply;
- the market provides adequate incentives to encourage timber production, and where market distortions continue, provincial governments establish policies that offset them, and where market incentives for sustainable management are less than adequate, government financial support recognizes the widespread short- and long-term benefits to society as a whole;
- where market incentives that maintain and enhance environmental services (clean water, wildlife habitat, attractive scenery) are difficult to establish, other mechanisms are developed so society shares the costs;
- adequate compensation is made available for natural disasters (wind, fire, ice storms, pests and disease epidemics), based on the principle that where society shares the benefits, it should also contribute to the costs;
- income and property tax policies encourage sustainable practices; and
- education and technology transfer services are widely available to increase the awareness of forest owners of the economic, technical and social/political trends that affect the viability of small-scale production.

Trends since 2003

Regulation of forestry practices

Several provincial associations have experienced an increase in regulations over the past 12 years, in such areas as habitat protection for endangered species, protection of wetlands, invasive species, and the use of pesticides. More and tougher municipal bylaws on felling and other forest operations are also in place in some areas.

Market access and timber prices

Much of the forest industry in Canada went into decline after 2006; this was exacerbated by the global financial crisis of 2008. The result for woodlot owners was a fall in timber sales and a loss of market share, due to more of the market demand being met by public forests. Even with the industry rebound since 2013, timber prices have increased only marginally. Some mills closed permanently, and consolidation of ownership has accelerated. The result: fewer mills, and even fewer buyers. *La Fédération des producteurs forestiers du Québec* reports a 20% decline in prices since 2006 and a drop in sales from 6.2 to 2.9 million m³ between 2006 and 2009, recovering only partially to 4.6 million m³ in 2014. In Alberta, the timber market for woodlot owners almost completely disappeared. This was due to the economic downturn, compounded by a large salvage harvest in public forests following a major pest epidemic. Most other provinces report similar declines and limited recoveries. British Columbia has been somewhat buffered from the worst effects of these trends due to concerted efforts by the provincial and national government to sell to Asian markets. The one bright spot in all provinces is stable or increased firewood sales.

Demographic changes

The average age of woodlot owners is increasing, fewer woodlots are actively producing, and more woodlots are being bought for purposes other than production. Older owners tend to be less interested in producing and are less dependent on income from their woodlots, and the professional logging and silviculture workforce has shrunk drastically. This is a big factor in the decline in the number of active owners (e.g., a decline of 64% since 2001 in Nova Scotia).

Loss in a sense of identity

Fewer owners attend association meetings, and all but one province (Ontario) report a decline of 25–50% since 2003. Some owners get information on markets and programmes from the internet, rather than from association meetings. The most important function of meetings is to ensure the democratic control of organizations by their members. Declining participation makes it more difficult to maintain governance functions such as debates on policy, scrutiny of financial reports, and election of boards of directors.

Diversified production

Non-timber forest products (NTFPs) have been widely promoted, but there are very few significant developments other than some limited niche markets. One exception is maple syrup, especially in Eastern Canada, where sales have tripled since 2003; these sales generate higher revenues per hectare than timber production. Biomass markets have developed in some areas, but are rarely accessible to woodlot owners. In the short term, they do not appear to have the potential to replace the market for lower quality timber, which has decreased due to the decline of the pulp



and paper industry. The technical and economic feasibility of aggregating large volumes of biomass from small woodlots remains elusive, and due to its low value, it cannot be a driver of forest operations.

Incentive programmes

Governments reduced public spending after the global financial crisis of 2008, including some support for sustainable forest management. A few provinces maintained fairly stable financing, but others implemented significant cutbacks.

Payment for environmental services

Despite a major promotion campaign between 2004 and 2006, no programmes have developed anywhere in Canada.

Compensation for natural disasters

Most provinces provide no assistance for natural disasters, while others provide only limited ad hoc assistance. As the frequency and severity of wind and ice storms and pest and disease outbreaks increases, the absence of a long-term commitment to woodlot owners will become even more serious. Programmes support timber salvage and damage assistance in public forests but not in private ones. This worsens provincial governments' conflict of interest as both sellers of timber and regulators of the market.



Tax policy

Property tax policy varies from province to province. A rebate programme for managed woodlots has been strengthened in Québec, but not elsewhere. A six-year effort to improve the taxation of woodlot revenues and expenditures has yet to produce results at the federal level.

Extension services

Budgets have been reduced in New Brunswick and Québec, but levels of service have not changed much elsewhere. The 2006–12 downturn in the forest industry and the financial crisis of 2008 have made the situation of Canadian woodlot owners even worse than that anticipated in the pessimistic scenario. The gradual process to improve policies and increase the number of sustainably managed woodlots has not just stalled, it has gone backwards, and there is no prospect of progress resuming. A significant proportion of the sustainable timber production on family forests is unharvested, and potential employment and revenue is foregone in precisely those communities where the need is greatest.

Association responses in a difficult decade

All but one association survived the challenges of the past 12 years. Another (in Prince Edward Island) closed, but re-emerged in a new form. Most have experienced major declines in revenue, which forced them to cut budgets and staff to reduce operating costs. They have made important efforts to improve communication tools such as websites and newsletters, and have lobbied vigorously to persuade governments to maintain support programmes and market access policies. Associations are also trying new things:

- encouraging new consumers of firewood by linking them to dealers and woodlot owners, and working on a possible NTFP marketing cooperative (Manitoba);
- developing a website to connect buyers and sellers of high-value specialty timber products and other products and equipment (British Columbia);
- promoting a programme to give woodlot owners access to small public forest areas (Alberta, based on the model of a successful 30-year programme in British Columbia);
- developing a software system to reduce trucking costs through the coordination of pick-up and delivery locations (Québec);
- expanding services to members to include wildlife habitat enhancement, road building and boundary line maintenance (New Brunswick); and
- piloting a new extension partnership between local associations, government and industry that focuses on promoting woodlot certification (Nova Scotia).



Some of these initiatives try to find better solutions to old problems; others seek to meet members' changing needs. It is impressive to see the innovation across the country, especially when many associations struggle just to survive. More innovation should be encouraged and the results — failures as well as successes — should be shared.

Possible new and renewed directions

The importance of woodlot owners to local economies

Associations continually face a deep-seated bias in favour of large corporate job creation on the part of many elected officials and government staff at the municipal, provincial and federal level. This is due to a lack of high-quality data on the economic importance of woodlot-based activity and a narrowness of perception. The problem is likely worse today, as governments are increasingly desperate to find new sources of employment and revenue. The appeal of big, simple "fixes" is not hard to understand in such a context. Increased timber sales from public forests are a widely known source of additional revenue, and a well-established tool to foster industrial development. Woodlot owners must find better ways to show that the sustainable management of woodlots also has the potential to have a big impact, even if part-time employment spread over many households is not as simple to measure.

The Québec federation has completed an employment and revenue study of woodlot owner harvesting and silviculture (Rhéaume and Côté 2014). It reveals that both employment, revenue and wealth creation are well below sustainable limits. The Canadian federation is developing a project with the Canadian Forest Service to extend the study to other provinces and broaden it to consider the economic importance of NTFPs and artisanal timber production. In order to make more data available, these efforts and others need to be pursued.



There is more to the problem of bias than incomplete data, however. Challenging the belief that 500 jobs in a new factory are somehow better than 2,000 quarter-time jobs spread over a large area will take new ways of making apparent the interdependence of actors in the forest industry and in local and regional economies.

Better tools to help government officials understand the factors that influence woodlots are needed. The Québec federation has produced an excellent assessment of these factors: a) personal interest/motivation; b) financial incentives; c) conducive tax and regulatory frameworks; and d) technical support for forest management and timber marketing (*Fédération des producteurs forestiers du Québec* 2015b).

Income tax policy

The demand for timber should increase, and available timber from public forests is declining due to environmental constraints, other demands on forest use, consequences of bad management practices, and effects of natural disasters. With falling revenues since 2006, woodlot owners have become less dependent on timber sales and will require stronger financial incentives to produce more in the future. Governments show no sign of abandoning their longstanding policy of pricing public forest timber as a tool for industrial development and employment creation, which greatly distorts the market for timber from woodlots and keeps prices low.

The tool with the most potential to help offset this bleak situation may be an income tax policy that ensures that woodlot owners keep a reasonable share of the revenue from timber sales, and receive some direct financial benefits from their activities, along with the contractors, truckers, mill employees, shareholders and the three levels of government. Tax rates can be adjusted, credits created and exemptions established in policies that currently discourage increased revenue from timber sales. Tax policy must also ensure that the treatment of revenue and expenses fits the pattern of woodlot management, so that large, irregular amounts of revenue can be spread over the decades-long production cycle, and sporadic expenses can be fully deducted from revenues. Associations have lobbied for this in the past and must increase those efforts in the future.

Association governance in an age of social media

Associations are already experimenting with the internet to communicate with active members, inactive woodlot owners, other interest groups and the broader public. For inexperienced woodlot owners, timber markets can be hard to understand. Internet and other technological tools can make markets more accessible. Associations need to determine how to use the internet to carry out their tasks and reinforce members' sense of belonging to the woodlot community.

The Québec federation has added an interactive component to its website, allowing members to vote on their priorities for lobbying efforts (*la Fédération des producteurs forestiers du Québec* 2015a). This may help with the association governance issues mentioned above. Younger members may be able to make a particularly strong contribution in helping their associations learn ways to use the internet.

International exchanges

Exchanges are a way to learn new ideas and new ways of thinking about old problems. They can also help associations better learn from their own experience. Trying to explain to someone in different circumstances how a policy or programme works can lead to a new perspective on its strengths and weaknesses. International exchanges include the one between the Federation of British Columbia Woodlot Associations and the Scottish Woodlot Association. Canadian associations need new ideas and have a wealth of experience to share with others, but they need to find the resources to identify and pursue these opportunities.

Conclusions

Canada has vast and diverse forests that are generally not threatened by deforestation or conversion to other uses. Access to timber from public forests has been an industrial development tool for a long succession of governments, often curtailing production from private woodlots. The forest industry, which has played a key role in the country's development, has gone through some very tough times and is in the process of reinventing itself. Evolving public pressure for the sustainable and diversified management of public forests is increasing constraints on their use as a source of timber for the industry, at a time when access to timber is becoming more important than ever.

Not surprisingly, some governments and companies are now reconsidering private woodlots as a source of raw material. Many woodlot owners are pursuing other interests, however, and will require increased incentives before they consider coming back into the market. New relationships will have to be developed and new tools implemented to energize the woodlot sector and develop more of its significant potential. Owner associations will make a key contribution to this process.



In the next decade some of the optimistic scenario may come to pass. If it does, it will be due in large part to the efforts of the associations. The dedication and perseverance of woodlot owners across the country, association staff and elected board members during recent difficult years is deeply inspiring.

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Section 3

Cross-cutting issues

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3.1 Building blocks for viable community forestry enterprises

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and SOPHIE R. LEWIS

Introduction

Research shows that community forestry enterprises (CFEs) are limited by a number of factors (Greijmans, Triraganon and Gritten 2014). A lack of support by governments is compounded by policies that undermine the viability of CFEs (Gilmour, O'Brien and Nurse 2005), a misconception by governments that communities are unable to manage forests in a sustainable manner (Macqueen 2008), and a regulatory framework that favours private-sector and state forest enterprises (Gritten et al. 2013).

These limitations prevent community forestry members from developing and commercializing forest products, which means that they benefit from their forests only through a subsistence approach (Macqueen, Buss and Sarroca 2012). This seems to be counterintuitive, considering the apparent commitment of governments to developing community forestry to combat deforestation and rural poverty and enhance livelihoods.

The Center for People and Forests (RECOFTC) strives for more locally controlled forests (Box 1), asserting that this will lead to sustainable and equitable management that is better than that achieved by the state (RECOFTC 2013).

Community forest enterprises can add value to local forest economies and help to reduce poverty (Molnar et al. 2007), and this in turn will encourage local people to invest time and money in their forests. This article uses a set of community forestry principles to assess the success of three community forest enterprises in Lao PDR, Thailand and Vietnam, and makes recommendations to facilitate their increased success.



COMMUNITY FORESTRY CANNOT
DELIVER ON ITS POTENTIAL
UNLESS ITS FOCUS MOVES
BEYOND SUBSISTENCE TO
COMMERCIALIZATION.

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Box 1. Definitions of community forestry and community forest enterprises

RECOFTC embraces a broad definition of community forestry. It includes all aspects, initiatives, science, policies, institutions and processes that increase the role of all local peoples — including women, youth and disadvantaged groups — in governing and managing forest resources. Community forestry consists of informal, customary and indigenous, and formal or government-led initiatives.

A community forestry enterprise is an entity that undertakes a commercial business based on forest or trees. It is overseen by a credible representative body that acts as a certificate holder. The enterprise can claim legitimacy within a self-defining community in terms of people and area, and it generates and redistributes profits within that community (Macqueen 2008).

Community forestry principles

To ensure the success of community forestry and its associated livelihood strategies — including community forest enterprises — a set of community forestry principles should be considered. These principles are the building blocks of successful community forests, including the commercialization of forest products by community enterprises.

Accommodating multiple stakeholder interests

The sustainable use and management of forest resources requires collaboration among various stakeholders. Collaboration does not develop merely through people agreeing with one another; there are often considerable differences in power, interests and values among those who use or deal with natural resources. This aspect of participatory resource management is often poorly managed by government departments, local institutions and development agencies, due in part to a lack of tools to assess stakeholders' roles, and a lack of capacity to manage changing roles.

Adaptive management and learning

Participatory resource management is a social process that involves various actors. There is no one-size-fits-all approach in participatory resource management; much depends on who manages the resource, for what purpose, and on what basis. Participatory resource management allows stakeholders to identify common interests and problems, design what they want to do with their resources, identify what management is required, and take collective action to achieve their aims.

Availability of natural resources

Natural resources are defined as natural assets or raw materials, whether mineral, energy, soil, water or biological. Sufficient high-quality natural resources are vital in order to support effective community forest enterprises.

Capacity of the community and other key stakeholders

Since local people will be the resource managers, they need sufficient capacity to meet the requirements of these tasks. One of the basic principles of participatory resource management is that knowledge, confidence and skills on the part of resource managers are developed through a range of learning interventions. This ensures that local people have adequate skills to develop and implement their resource management plans effectively and in a participatory manner, including monitoring and evaluation.

Clear rights and tenure among resource users

All resource stakeholders should have their rights to land and natural resources recognized. Statutory and customary laws create rights that provide the foundation for forest institutions and processes; these establish basic principles for how people interact with each other and with their resources. This includes rights to access, manage and include or exclude other users, and the ability to pass these rights on to future generations. These rights also define how various stakeholders, particularly the community, interact with their resources.

Effective participation and governance

Effective participation is needed to ensure community involvement, especially on the part of marginalized groups, including women and indigenous peoples. Participation must also be a continuous process. Effective participation is an important characteristic of effective governance, and involves identifying multiple stakeholders and incorporating them in decision-making processes. Once that is achieved, stakeholders can start interacting with each other through formal and informal rules, institutions and processes, through which a society makes and implements decisions pertinent to natural resource management.

Effective policy and regulatory support

Community members need an enabling regulatory context in order to manage their resources. This allows them to support their livelihoods, increase environmental stability, and on a larger scale, increase the economic development of the country.

Meeting local needs

Local needs should be considered as a driving force or incentive for communities to actively participate in sustainable resource management. A framework needs to be in place to ensure that differing and sometimes conflicting resource needs are identified, considered and targeted in an equitable and sustainable manner.

Examples of community forestry enterprises

Doi Chang Coffee Farm, Thailand

High-quality arabica coffee is produced in government watershed protection forests by the people of the indigenous Akha hill tribe in the village of Ban Doi Chang, Chiang Rai Province, northern Thailand. Doi Chang Coffee Farm (DCCF) is a family-led enterprise that sells arabica coffee as green beans for domestic consumption and export. Although

the use of land and forest resources is restricted, DCCF has become a profitable business for most of the Doi Chang community and neighbouring community forest enterprises in Thailand.

Keoset coffee association, Lao PDR

In the mountains of northern Lao PDR, in Xiengkhouang Province, a coffee-producing community forest enterprise developed under existing forest cover is managed by Hmong hill tribe people. The Keoset coffee association demonstrates how livelihoods can improve when natural resources are managed in a sustainable manner. Once on the verge of abandoning coffee production, the association regained interest after learning about effective coffee management from farmers in the southern part of the country. The Smallholder Agricultural-Market Development in the Uplands (SADU) Project, the local government and the private sector developed the capacity of coffee farmers and linked them to various market options.



The Ben Hai Forestry Company and local people, Vietnam

This pioneer tree plantation is a partnership between the Ben Hai Forestry Company and local people in Quang Tri Province, central Vietnam. It is considered successful not only for the company but also for local and ethnic people in terms of capacity building and enhancing livelihoods. There are two types of partnership involved. In the first, local people provide capital and the company provides land, sells seedlings at a reasonable price, and gives free technical support for planting activities. Currently, around 400 households are involved, covering an area of around 800 hectares. Alternatively, local people contribute land and labour while the company provides seedlings, technical support and capital.

Assessing common principles

Accommodating multiple stakeholder interests

All community forest enterprise models attempt to achieve two goals: to support enterprise development, and to enhance community livelihoods. The products of the business model (e.g., coffee beans and timber) are intrinsically connected to the community-company based partnership. DCCF and Keoset share the idea of selling to a receptive market a product that is organic, indigenous community-based, or pro-poor. The Ben Hai Forestry Company developed a benefit-sharing mechanism to respond to the new trend of social business in the timber market. This partnership resulted in a change of roles for the actors, as community members became contractual business partners with the company, based on mutual agreements.

Adaptive management and learning

Generally, the three enterprises are proving to be resilient. All of them have faced difficulties, but have managed to adapt their business practices to address these challenges. In Vietnam, for example, poor plantation techniques meant that trees planted by local people were of low quality, which led to forest degradation and lower revenues. In response, the company introduced a partnership proposal that was strongly supported by local people. The community received high-quality seedlings and technical guidance, and the company made use of available local social capital and improved the condition of the degraded forest. This generated benefits for both sides. In Lao PDR, Hmong farmers obtained technical knowledge after cutting down trees that previously provided shade and protection for the coffee plants, leaving them exposed and more vulnerable to frost damage. The community realized the need for forest shade and stopped felling trees, which greatly improved the quantity and quality of their yield.

Availability of natural resources

A major factor in the growth and well-being of these three community forest enterprises was the availability of and access to land, mostly comprised of plantations and production forests. Access to this land and its resources, and to efficient management, is aided by help from local governments and supporting agencies, such as the management and support provided by the Ben Hai Company in Vietnam, and SADU in Lao PDR. Access to clean water and suitable land above 1,200 m for growing high-quality coffee also contributes to a productive enterprise.

Capacity of the community and other key stakeholders

With support from the Lao District Forestry Office (DAFO) and the Provincial Agricultural and Forestry Office (PAFO), the people of Keoset developed regulations on pesticide use, water protection and logging. They are also progressing in developing networks and business skills. Despite challenges, including those related to financial and legalized tenure arrangements, both DCCF and Keoset continue to invest in the businesses. In Vietnam, the Ben Hai Company is building the capacities of local people by training them in planting techniques, tending, harvesting and forest conservation, and by implementing public awareness programmes on environmental conservation.

Clear rights and tenure among resource users

Despite not having legal land tenure, the Akha and Hmong communities have an informal method of distributing land that has not so far resulted in any serious problems. The Lao DAFO and PAFO and the Thai Royal Forest Department recognize and do not get involved in local practices, issuing village leadership certificates or demarcating lands. Similarly, there are no tenure-related conflicts between the Ben Hai Company and local people, since clear tenure rights motivated the establishment of the partnership. People living near the forest that is managed by the company are not excluded from management operations. The contract gave local people rights of access to and use of the plantation forest.

Effective participation and governance

In Lao PDR, DCCF and Keoset maintain a high level of participation and solidarity among community members. Through a recent partnership between DCCF and the trading company KPB International Marketing, 15% of the profits are distributed to the coffee farmers. In Keoset, a village fund lends to members who need work capital, e.g., hiring additional labour or buying inputs. The high level of participation in Keoset resulted in equal responsibilities among members. If a member does not follow coffee quality standards, the association discusses ways to address the issue. In Vietnam, contracts require the participation and accountability of stakeholders throughout the seven to ten years from tree planting to harvesting.

Effective policy and regulatory support

Achieving support for effective policies and regulations is challenging for community forest enterprises. In Vietnam, the increased participation of non-state stakeholders, particularly local communities, resulted from the reform of state forestry enterprises during the 2000s. The state decreed that forests that had not been effectively managed would be returned to the state or allocated to local communities (Decree No. 200/2004/ND-CP and Decree No. 25/2010/ND-CP). For coffee-producing community forest enterprises, support from local governments is unambiguous since the enterprises manage the resources within appropriate legal frameworks. A lack of additional regulatory support and limited access to smallholder loans and investment, however, remains a barrier to the development of community forest enterprises.

Meeting local needs

In Vietnam, local people initially lacked the skills to manage plantations and procure high-quality seedlings. The partnership met local needs by providing technical guidance and high-quality seedlings. In Lao PDR, the need for an administrative body to manage coffee operations and to help reap the benefits resulted in the establishment of organized groups and a village fund that provides small loans to community members. Lao and Thai leaders have expressed a need to obtain technical knowledge to increase coffee productivity and yield, and the groups are attempting to meet these needs by participating in coffee-growing study tours and workshops.

Key findings for building successful community forestry enterprises

Regulatory context

Establishing an enabling regulatory context is fundamental to facilitating the operations of community forestry enterprises, including partnerships with the private sector. Within the political and socio-economic context where community forestry business partners operate, incentives must sufficiently outweigh potential barriers in order for partners to invest. Too much uncertainty and high costs deter investment in any type of enterprise.

Capacity

Developing the capacity of community forestry members in leadership and business skills mobilizes community members and facilitates partnerships with the private sector. A level of trust and a demonstrated ability to implement business agreements is required in order for other community members and potential business partners to invest their resources, either time or capital. Mutually developed enterprises with business partners have the benefit of enabling products to become more competitive in domestic and international markets.

Building partnerships

Partnerships with local government facilitate the development of community forestry enterprises, and demonstrate to local governments that good forest management practices in community forestry are achievable. All stakeholders have their own vision of how to manage, use and benefit from forest resources, but when there is an open attitude on the part of all parties to listen, discuss and respect each other, a more closely aligned community forestry concept is much more likely to emerge.

Training

External facilitators can build skills and confidence in community members to reach markets. An outsider with a professional perspective is usually required to introduce new concepts such as community forestry enterprises development. More important, however, is the need to coach prospective entrepreneurs in how to start their businesses. This helps to ensure community involvement and a willingness to invest in their operations.

Conclusions

Although not every community forestry principle has been met in the three case studies — e.g., secure land tenure remains an issue — community forest enterprises are operational and are making plans for investments. Despite the lack of official land certificates, which hinders future development, communities have a positive outlook. This is thanks mostly to the trusting relationships developed with governments and local partners whose agendas are also served by these initiatives. Private-sector and government partners are looking to communities to provide strong leadership, social capital, and productive capacity, in terms of both quantity and quality. These factors assure them that they are dealing with a reliable partner who they can work with to develop agreements or value propositions while meeting their own needs. The trust that comes from such partnerships provides the basis for developing the needed capacities for a successful and sustainable enterprise, particularly in financial and business skills.



Nevertheless, to ensure viable community forest enterprises — including their expansion and scaling up — a supportive regulatory environment is required. This includes enabling policies related to secure land tenure and access to legal, technical and financial assistance. In addition, supporters of community forest enterprises need to shift their approach away from being technical advisers and instead begin to facilitate greater access to markets and finance without sacrificing forest–community connections.

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3.2 Producer organizations and certification in Southeast Asia

BRIAN COHEN

Introduction

Voluntary forest certification schemes have existed for two decades, but have been slow to catch on. This is the case for four forest producer organizations in three Southeast Asian countries: Indonesia, Lao PDR and Vietnam. The perceived and actual costs and benefits of sustainable forest management to producer organizations depend on the size and type of the organization, the political economy of a country, and the presence of supplemental financing and technical training.

Research framework and methods

A range of global voluntary certification schemes emerged from the Rio Earth Summit in 1992. They were based on the assumption that wood products shown to have been harvested and processed in a socially and environmentally responsible way would fetch a price premium at market. Except in the temperate and boreal forests of North America and Europe, however, most of these schemes have failed to demonstrate proof of concept. After 20 years, certification schemes cover only 6% of the forests in key tropical timber countries (Blaser et al. 2011), and even less area in some parts of Southeast Asia (Table 1).

The clearest reason for the slow uptake of forest certification has been the lack of assurance that additional costs will be offset by additional financial returns. The costs of certification are considerable, including additional labour, delayed returns on investment, transaction costs and opportunity costs. It is not surprising, then, that producer organizations have been slow in adopting sustainable forest management standards. Moreover, external trends in trade and national policies can be further disincentives for a producer organization to adopt certification.



THE COSTS AND BENEFITS OF SUSTAINABLE FOREST MANAGEMENT TO PRODUCER ORGANIZATIONS DEPEND ON THE SIZE AND TYPE OF THE ORGANIZATION, THE COUNTRY'S POLITICAL ECONOMY, AND SUPPLEMENTAL SUPPORT.

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On the other hand, there are a number of non-monetary benefits to upgrading forestry operations to achieve a certification standard. One study points out, for example, that building human capital and improving a company's reputation can be strong incentives for opting for certification (Hartsfield and Ostermeier 2003).

Table 1. Forest Stewardship Council-certified forest, by country

Country	Total certified forest area (ha)	% of all production forest in the country	No. of certificates
Indonesia	1,581,512	5%	25
Lao PDR	105,239	3%	4
Vietnam	87,733	1%	9

Source: FSC 2013

In late 2013 and early 2014, under the auspices of the Responsible Asia Forestry and Trade (RAFT) partnership, semi-structured interviews were conducted by the author with producer organizations in Lao PDR, Vietnam and Indonesia. The goal was to better understand the forces that influenced their decision about whether to adopt forest certification.

Kokutiew

Launched in 2009, Kokutiew is a teak farmer's cooperative in Luang Prabang, Lao PDR. It comprises 54 households who chose to adopt group Forest Stewardship Council (FSC) certification, and each farmer manages between 0.2 ha and 15 ha. The teak is sold on site to the domestic market, and the companies who purchase Kokutiew teak process it. The Burapha Agroforestry Company, based in Lao PDR, purchases most of the teak for processing into products to fill international orders, but Vietnamese traders are also buying an increasing amount.

Buyers typically approach the farmers directly. After they negotiate an initial price, the farmer conducts a pre-harvest inventory and sends it to the buyer. After a selection of the inventory is made by the buyer, the farmer receives 30% of the payment for harvesting and preparing the documents. The payment is adjusted after harvesting, based on actual volumes. Although there is no lack of demand, it is not uncommon for a farmer to settle for a lower price (often from Vietnamese traders) to save the time that he or she would otherwise spend searching for buyers interested in certified timber.

Kokutiew members claimed that it was too early to tell whether certification would yield measurable financial gains. Although a log export ban in Lao PDR prohibits farmers from selling FSC-certified teak directly to foreign buyers, it is estimated that as much as 95% of the teak harvested in Luang Prabang Province is exported (Sugimoto 2009). Farmers' inability to transport timber to distant markets means that they must look to the nearby wood industries of Lao PDR, Vietnam and Thailand for buyers who are interested in certified timber. This challenge of finding local buyers who are interested in certified teak, combined with recognition of the vital yet impermanent role that organizations like TFT,

TFF, and WWF have played in covering certification start-up (administrative, technical) costs, suggest an uncertain future for Kokutiew.

Even if certification costs are kept to a minimum and price premiums do materialize, the survival of certification schemes with smallholder farmers could depend on cash flow constraints and the inability to find markets. A key question is whether farmers are willing or able to wait 10 to 15 years to receive a return on investment. Two households in the Kokutiew cooperative have already backed out and sold their land. Farmers also seem unwilling or unable to spend the time seeking out prospective buyers of certified timber. In some cases, farmers have accepted a lower price from traders, but what they lose in price they gain in the time that they would otherwise spend searching for buyers.

Support from international stakeholders has been essential to the farmers' cooperative. If certification costs were not covered by such stakeholders, it is likely that certified smallholder cooperatives would not be viable. In addition to covering certification costs, international donors have provided considerable administrative and organizational support to the farmers' cooperative, which is especially needed where illiteracy is a constraint.

The success of this certified smallholder cooperative fundamentally hinges on whether farmers who endure periodic cash-flow problems think that the benefits of cultivating tree crops outweigh the costs (Table 2).

Table 2. Summary benefits and costs of FSC certification, Kokutiew

Summary benefits of FSC	Summary costs of FSC
<ul style="list-style-type: none"> ▪ improvements in silvicultural practices (e.g., pruning, thinning) ▪ price premiums (perceived) 	<ul style="list-style-type: none"> ▪ labour: inventories and silvicultural applications. ▪ delayed return on the investment of time and labour — the 15-year teak rotation cycle means that farmers must forgo frequent returns ▪ transaction costs: time spent searching for buyers interested in certified timber — also, the market may demand large volumes that the farmers are unable to provide ▪ opportunity costs: the financial and sustenance benefits from what could have been planted instead of teak

Polytech

Established in 1993, Polytech is a family business with 50 employees that operates a flooring mill outside Ho Chi Minh City, Vietnam. It produces plywood and veneer as well as solid, engineered and finger-joint laminated flooring. It purchases its rubber and acacia timber from national sources, walnut and oak from the U.S., and Burma ironwood (*Xylocarpus xylocarpa*) and padauk (*Pterocarpus* sp.) from a Laotian trader who processes logs into boards, though the legality of this timber is highly questionable. Most of Polytech's sales are international: to the UK, Australia and Japan.

Polytech does not have FSC certification, and does not wish to obtain it. The company's central concern is quality control; Japanese clients in particular set high standards. To Polytech, market signals suggest that producing high-quality products is more important than concerns about social and environmental sustainability. In a few instances, however, UK buyers did ask about FSC certification. Polytech does not have a chain of custody system for tracking timber, and is not familiar with the Vietnamese government's negotiation of a Voluntary Partnership Agreement (VPA) with the EU or with legislation such as the U.S. *Lacey Act*, and the EU and Australian timber regulations.

Apeheral

Apeheral is an FSC-certified association of 20 farmers' groups in central Java, Indonesia (Table 3), supported by The Forest Trust (TFT). Established in 2011, its objectives are to strengthen farmers' bargaining position when negotiating timber prices, find markets through networking, and provide silviculture training to farmers. TFT was instrumental in helping farmers launch Apeheral, and provides administrative assistance and support for audits; it also conducts training and makes buyer-seller connections.

Apeheral collectively manages 200 hectares, the size of individual farmer's forest plots ranging from 0.1 to 1 hectare. The farmers grow mostly teak, mahogany and *jabon*. The peak season for selling logs is August–September and coincides with the beginning of the school season. The farmers take turns selling to buyers. So far, there have been no disputes between the farmers in deciding who will sell at a particular time. They sell to four nearby mills, all of which produce furniture for export.

Table 3. Summary benefits and costs of FSC certification, Apeheral

Summary benefits of FSC	Summary costs of FSC
<ul style="list-style-type: none"> ▪ price premiums (perceived but too early to tell) ▪ market access ▪ attracts support for financial and technical needs 	<ul style="list-style-type: none"> ▪ raising awareness of sustainable forest management among farmers; e.g., not cutting prematurely and how to carry out an inventory ▪ forest inventory costs are high, because the forest is scattered across a large area ▪ transport costs ▪ audits, although these costs are covered by TFT

Dipantara

Established in 2006 with support from The Forest Trust (TFT), Dipantara is a private trading enterprise with 15 staff operating in central Java, Indonesia. It manages more than 100 farmers' groups and a total of 620 ha. Dipantara's objectives are to provide technical assistance on silvicultural practices, maintain a nursery (from which it distributes up to 30,000 seedlings per year), and act as a trader with the farmer's groups. Dipantara sells logs to seven nearby sawmills that produce wood products for export. The company attained FSC certification in 2012: 40% of its sales are FSC certified, and 60% meet the less rigorous TFT standard (see Table 4).

Table 4. Summary benefits and costs of FSC certification, Dipantara

Summary benefits of FSC	Summary costs of FSC
<ul style="list-style-type: none"> ▪ price premiums: 20-25% ▪ new markets: not known ▪ benefit to reputation: yes, although to date only perceived 	<ul style="list-style-type: none"> ▪ administration and documentation systems ▪ physical activities, such as planning for buffer zones ▪ high cost of first-time audit (\$13,000, subsidized by TFT) ▪ high cost of annual audit (\$8,000) ▪ training

Discussion

Apeheral members noted that price premiums were perceived, not actual. Dipantara was the only group to benefit from a price premium, receiving 20–25% more for their certified teak. Improved company reputation after certification was noted as a significant benefit by two of the four companies interviewed. For the two that did not register benefits to their reputation, this might be due to the involvement and support of external organizations. For example, since Apeheral was launched with administrative and technical assistance from TFT, and because of the limitations of Apeheral's marketing and TFT's assistance to cover marketing and related costs, the cooperative may not regard increased reputation as a significant benefit of certification.

Apeheral did, however, consider TFT's involvement itself as a benefit of certification. The cooperative members believe that being FSC-certified is a means of attracting international organizations such as TFT and others to support and invest in it. TFT covers a range of costs, including administration, document preparation, technical forestry training, marketing and audits. It is safe to say that without this support, Apeheral would not exist. Only Apeheral does not regard initial investment costs as significant, because these costs were covered by TFT. Dipantara was the only company that regarded the costs of audits as high. TFT covered the first audit cost of US\$13,000, but the annual audit fee of US\$8,000 is high for a small company like Dipantara.

The smaller enterprises tended to regard the status of being certified as a means of attracting financial and technical support from the international community. They see this support as vital for covering a range of costs, from initial investment to ongoing audits.

Conclusions

Costs

Initial investment costs and ongoing auditing costs are considered to be too high by small to medium-sized companies.

Benefits

Producer organizations regard increased revenue from price premiums and volume sales as the chief benefit of adopting certification practices. However, actual financial returns have generally been small, and have been realized only for some products and some markets.

Increased operational efficiencies are another benefit of abiding by a sustainable forest management standard. For the mill, this typically means improving administrative and documentation systems and establishing a chain-of-custody system or enhancing an existing system. Increased efficiencies at the mill might also translate into less wood waste and better recovery rates. All of the small and medium-sized forest management enterprises that were interviewed managed teak plantations where increased operational efficiencies meant improvements in silvicultural techniques, which resulted in less wood waste, faster growth rates, and higher-quality logs.

Support from international stakeholders has been important for small to medium-sized companies, and is essential for certified smallholder cooperatives. If certification costs were not covered, it is likely that the model of certified smallholder cooperatives would not be viable. In addition to covering certification costs, international donors provide considerable administrative and organizational support to producer organizations and cooperatives.

Net costs and benefits

Ongoing auditing costs affect the profit margins of small- to medium-sized enterprises significantly more than those of large companies. In light of the unrealized financial benefits from premium prices and market access, the auditing costs may compel some producer organizations to relinquish their certification status. They may reason that they can return to certification if financial benefits begin to materialize, or if auditing costs are lowered.

Support from international stakeholders is important for producer organizations, and is especially important for certified smallholder cooperatives. In some cases, international organizations cover not only the start-up and ongoing costs associated with certification, but support the group in other significant ways, such as submitting applications for small business status, document drafting and organizing, and marketing. It is probable that if this support were not offered, the model of certified smallholder cooperatives would not be viable.



Fundamentally, however, the success of this model depends on whether farmers continue to perceive the potential return of planting trees as worth the risk of forgoing land-use activities that yield more immediate cash returns. Uncertainties about the economy and the environment will always affect those with lower incomes more than other

people, and this should be considered when designing ways to facilitate the uptake of sustainable forest management through certification.

It is worth noting that Polytech, the one small enterprise interviewed in Vietnam, neither had FSC chain of custody certification nor desired it. Polytech placed greater emphasis on legality verification than it did on sustainable forest management through certification, because that is what its market demands. It may well be that unless the demand for certified products increases, most of the small to medium-sized private companies in Vietnam — comprising 95% of the sector — will remain uninterested in certification.

Difference in costs between legality and certification

Lao PDR, Vietnam and Indonesia have all embarked on establishing a legality standard. Indonesia is the most advanced, having developed its own system, the *Sistem Verifikasi Legalitas Kayu* (SVLK), and in September 2013 it ratified a Voluntary Partnership Agreement with the EU. Compliance with the SVLK commenced in 2014. Vietnam fast-tracked the negotiation of a VPA that was signed in 2014. Lao PDR has only recently begun the initial phase of VPA negotiation with the EU.

On the evidence of the legality systems in other countries that have signed a VPA, it is likely that the laws of Lao PDR, Vietnam and Indonesia will closely align with certification standards. One recent study (IDH and PWC 2012) claims that in Cameroon, companies that invest in upgrading their operations to comply with all of the country's laws will have already paid for 60% of the costs of meeting FSC standards. The study acknowledged, however, that companies who comply with Indonesia's SVLK will have met only 15% of the costs of FSC certification.

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3.3 FSC certification: a solution for smallholders and community managed forests

JOACHIM MEIER-DÖRNBERG
and MARION KARMANN

Introduction

With 20 years experience in the certification of forests and forest products, the Forest Stewardship Council (FSC) has built a solid base for reflecting on its achievements and lessons learned, and considering the challenges still to be tackled.

The FSC system and certification standards aim to achieve the highest level of performance for responsible forest management that is also economically viable, environmentally appropriate and socially beneficial. The ever-growing number of certificates and certified products on the global market underlines the credibility of the system and the message it sends.

Nevertheless, some areas — for geographic reasons or due to forest size or type of business — need a new approach to achieve their intended outcomes. For community forests in tropical developing countries in particular, the issues related to supply-chain development and market access are so challenging that communities are not always able to gain any economic benefits.



FOREST PRODUCER ORGANIZATIONS
ARE FINDING SUPPORT IN NEW
TOOLS AND PROCESSES FROM FSC
THAT BETTER MEET THEIR SPECIFIC
NEEDS.

Until now, processes for developing solutions have not always been able to deliver suitable alternatives to deforestation or forest degradation on a large scale. However, new approaches such as FSC's ecosystem services (ForCES), for example, can increase the impact of certification initiatives and provide a greater share of all kinds of benefits to small forest owners and community producers.

About one-quarter of all forests globally are managed by people who make their living in and from them, including small forest producers and communities are organized in groups (associations or cooperatives) or individual small enterprises. Smallholders (Box 1) can gain a lot from FSC certification.

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Box 1. Smallholders

Worldwide, 285 forest management certificates are held by smallholders: 60% are organized in group certificates; and 40% are individual certificate holders. More than one-third of certified smallholders are in developing countries, most of them in the tropics. The total certified area is almost 7.5 million hectares (ha), more than 1.5 million ha of which are in the Global South, mostly the tropics; 78% is community forest.

Source: FSC database (January 2015)

The organization

Founded in 1993, the Forest Stewardship Council (FSC) is an international association that is governed by its members. At present, 800 individual and organizational members are organized into three chambers. In the Social Chamber are representatives of indigenous peoples' organizations and labour unions; in the environmental chamber are international and local NGOs, and community forestry groups. Industry representatives such as retailers and manufacturers or individual entrepreneurs usually belong to the economic chamber.

Embedded in FSC's vision and mission is caring for the world forests for future generations, including those forests which are managed by smallholders and community owners (together referred to here as smallholders). Today, FSC is the world's strongest certification system in terms of global reach, robustness of certification criteria, and number of businesses involved.

FSC certification promotes best practices in forest management and sets a global benchmark. The Chain of Custody (COC) certification scheme was created to guarantee the transparency of the supply chain and the traceability of a product from origin to the end consumer. It ensures the legality of a product and its responsible production.

The core standard for forest stewardship, FSC's Principle and Criteria, requires a commitment to best social and environmental practices. FSC has 1,300 forest management certificate holders and 27,000 Chain of Custody (COC) certificate holders in 81 countries worldwide. Some certificates are held by groups with many members. For example, there are more than 145,000 smallholder members of forest management group certificates, and FSC's aim is to increase these numbers.

To achieve FSC certification, forest management operations have to improve their business practices. They must comply with FSC's requirements related to workers' rights to organize, fair compensation and contracts, and to occupational health and safety regulations. Environmental improvements are often related to issues such as the identification and protection of high conservation values in forests, water management, set-aside areas and pesticide handling. Stakeholder consultations are key to identifying the negative impacts of forest management interventions and developing solutions that

respect the environment and strike a balance between the various interests in forests and forest management.

To ensure that it considers a range of situations and contexts, FSC maintains a proactive dialogue, such as the process to set national standards by multi-stakeholder working groups. FSC certification also encourages transparency and accountability, and helps forest owners clarify issues of land tenure and property rights. In working towards certification, producer organizations and companies need to enhance their professional skills to meet the requirements of the standard. Local processing and a stronger local participation in the value chain are highly encouraged by FSC.

Supporting smallholder access to certification

To help small forest businesses become certified, FSC introduced the Small and/or Low Intensity Managed Forest (SLIMF) standard and the group certification scheme. Both these arrangements enable small forest owners or communities to obtain certification at a lower cost and with simpler requirements. As additional support, FSC provides the Train-the-Trainers Program and the Smallholder Fund. To facilitate market access for communities and smallholders who manage forests, FSC introduced the Small and Community Label Option in 2013.

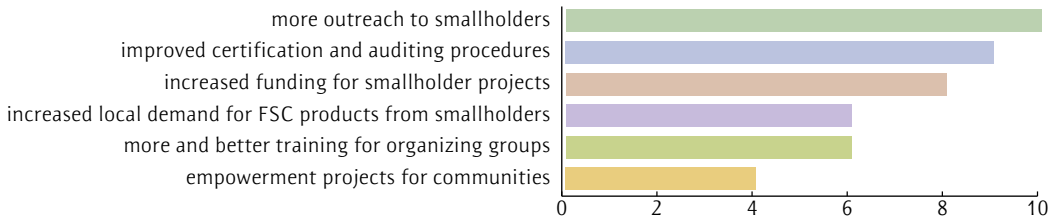
To date, FSC's experience shows the limits of the system for smallholders in building long-term business relationships, enhancing market access and constructing a robust and intact supply chain. Such a supply chain provides a stable income for small or community-managed forest organizations and family households, particularly in developing countries and in the tropics. In 2014 the FSC General Assembly highlighted the need to address these issues. The membership voted in several motions to strengthen FSC's engagement with small forest businesses and communities in the tropics; strengthen work on non-timber forest products (NTFPs) from natural forests and new ways to market these products; facilitate access to certification; and enhance supply chains.

Building a platform

In 2008, as a result of a conference on smallholders organized by FSC and the World Wide Fund for Nature in Lisbon, the FSC Social Policy Program was created. The Social Policy Program is the branch of FSC International that sets standards and policy. Arising from this, the FSC Smallholder Support Program was established in 2011, providing support to smallholders and helping them to become certified and maintain certification.

As one of its first activities, the Smallholder Support Program implemented two surveys. One researched the FSC network in 35 countries worldwide (Gough 2011), and the other surveyed group managers, including managers of FSC-certified smallholder groups, cooperatives, associations and communities (Gough 2012). The results showed the challenges that smallholders face while obtaining or maintaining FSC certification (Figures 1 and 2), and these were used to develop the high-priority actions to be taken by FSC.

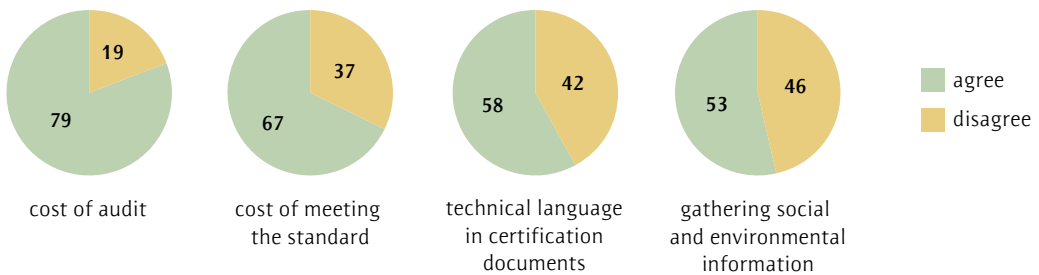
Figure 1. Priorities for action: what more should be done for smallholders?



Source: Gough 2011

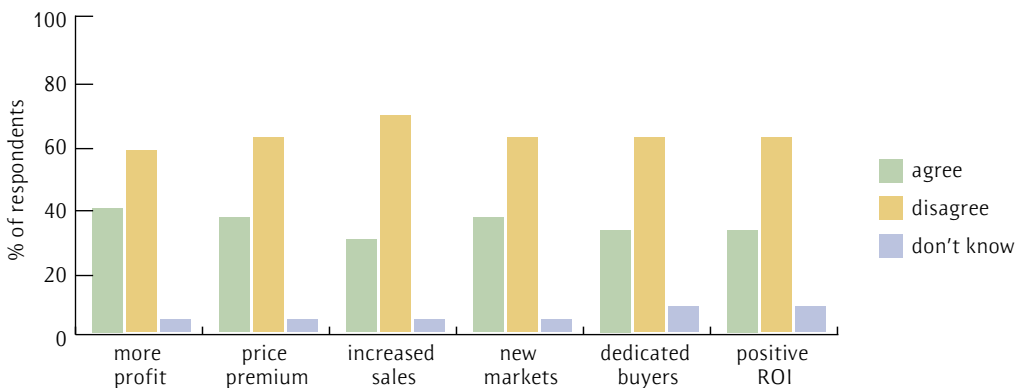
Certification can bring financial benefits and other positive impacts (Figures 3 and 4). Despite the challenges faced by smallholders, most of the replies to the surveys were positive. Smallholders saw FSC certification as more as benefit than burden; consequently, most of them indicated their intention to stay FSC certified (Table 1). However, differences between forest producer organizations in tropical and non-tropical countries were not considered.

Figure 2. What are smallholders main challenges in becoming FSC certified?



Source: Gough 2012

Figure 3. Financial benefits of FSC certification for smallholders



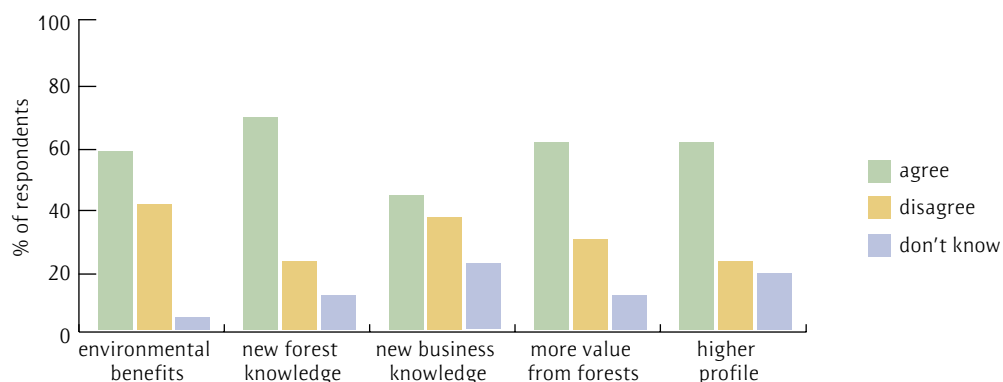
Source: Gough 2012; ROI = Return on investment

What the smallholders said

The survey (Gough 2012) asked the following questions:

- What are your main challenges in getting FSC certified?
- What kind of benefits do you get from FSC certification?
- Do you think that the benefits of certification outweigh the costs?

Figure 4. Other benefits of FSC certification for smallholders



Source: Gough 2012

In addition to the benefits shown in Figures 3 and 4, other benefits noted by survey respondents included assurances regarding land titles or land-use rights as part of the certification process, better visibility and access to public services such as those related to health, education or infrastructure, and better market access in general through road construction or better maintenance of transport infrastructure. In response to the survey results and a mandate from the membership, the Social Policy and Smallholder Support programs created tools to tackle the main challenges and create better conditions for smallholders regarding FSC certification.

Table 1. Do smallholders think that the benefits of certification outweigh the costs?

Response	Percentage	Number
Yes	51	42
No	33	27
Don't know	16	13
Total	100	82

Source: Gough 2012

FSC's response

Small and/or Low Intensity Managed Forests (SLIMF) standard

The SLIMF standard was created to meet the needs of small and/or low intensity operations, which are different than those of larger commercial operations. The standard reduces the burdens related to the certification process in order to make certification more feasible for smallholders. To achieve certification under the streamlined procedures for SLIMFs, a forest management unit has to be either “small” or “low intensity” according to FSC's definition. In most countries, this means less than 100 ha (in some countries, up to 1,000 ha), with either a harvesting rate of less than 20% of the mean annual growth in timber and an annual harvest of no more than 5,000 m³; or alternatively, that the forest is managed exclusively for NTFPs.

FSC group certification procedures

These were developed to decrease the costs of certification, unify and streamline processes, and so make FSC certification more accessible to smallholders. Smallholders benefit particularly from this since individual small forest owners can now participate as a group, united under one management.

Capacity development

Often, a lack of capacity in areas such as documentation, financial accounting, silviculture and marketing skills can be met through FSC. Product marketing is influenced by volume and quality, increasing the chance to add value to raw materials, gain market access and secure a larger share in the value chain. Requirements for investment are more easily satisfied by a group than by a small or individual business, and the financial sector responds better to larger forest operations.

Train-the-Trainers Program

Specific capacity development in value chain analysis, business development, marketing skills and access to finance is key to making small forest operations ready for FSC certification. FSC is implementing a train-the-trainers program, together with The Centre for People and Forests in Asia and the Pacific (RECOFTC) and the *Fundación para el Desarrollo de la Cordillera Volcánica Central* (FUNDECOR) in Latin America. A concept has been developed to identify new qualified trainers from high-priority countries. They in turn will deliver local-level training to smallholders. Target groups from which to recruit trainers are NGOs and FSC network partners, including national offices or national representatives, individual consultants and local service providers. Six training modules have been developed to cover the most urgent training needs, including livelihoods and value-chain approaches, FSC certification, business models and enterprise development, responsible forest management, access to finance and business administration, and adult learning methodology. Now in its third year of operation, the program has organized three regional-level training courses with 24 trainers, and eight local-level training courses in six countries have trained 170 people. There is ongoing monitoring and evaluation of these training activities.

FSC Smallholder Fund

Access to financing for smallholders is partly addressed by this FSC initiative. It is a small grant scheme that funds projects for one to three years, supporting small and community producer organizations to either become certified or to maintain their certification. So far, the fund has supported 29 projects. It supports a range of activities, including acquisition of safety equipment, fulfilling health and safety requirements, developing monitoring schemes for high conservation value areas, investment in equipment to enhance the supply chain, and marketing activities. Capacity development at all organizational levels to ensure the long-term success of businesses was a key issue in deciding which proposals to fund. Support from the FSC network or local service providers to create partnerships strengthened the proposals' value. Initial results show a positive impact. In the Eastern Ontario Model Forest programme in Canada, for example, a new group has recently become certified.

Small and Community Label Option

Another tool for smallholders focuses on market access. The Small and Community Label Option (SCLO) is a specific label for products from small and community forest operations that distinguishes them in the marketplace. It includes new label text, a marketing campaign ("*Made with Heart*"), and support for producers, such as creating new supply chain linkages. The programme is open to all forest management certificate holders who qualify for the small and low intensity managed forest (SLIMF) standard, or are indigenous or traditional community producers.

Conclusions and recommendations

The challenges of engaging effectively with small forest producers and communities have been discussed for many years. Guillery, Haslett-Marroquin and Hampton (2007), for example, note that one of the four key findings of an external evaluation of FSC's impact is that FSC staff and key stakeholders have high expectations of FSC in terms of social issues, and that throughout the evaluation many stakeholders consistently expressed specific "hopes and dreams" that they wanted FSC to address. Stakeholders want more achieved in community forestry in the Global South, more emphasis on indigenous peoples' rights, and a strengthening of the social chamber.

Few economies of scale, remote locations, lack of experience and expertise, and limited starting capital are common challenges. The political and social context are often beyond the scope of communities and their governance to deal with effectively, and corruption, perverse market incentives and competition from illegal economic activities all tend to inhibit progress in the conservation of natural resources. Researchers with a focus on tropical forests highlight the slow growth of FSC in the Global South, and those who focus on social forestry raise concerns about the small proportion of certified community-managed forests. Fraser (2015) reports the low number of incentives for small forest owners or communities to become certified, due to lack of participation in the value chain. Hodgdon et al. (2015), however, see a strong relationship between FSC certification and avoided deforestation.

In response, FSC members have taken steps to tackle these ongoing challenges and find new solutions. A community standard is among the new tools, as are enhancing market access and the integration of NTFPs. A general revision of the FSC approach to small and community producers is helping to meet the mandate of the FSC secretary to address motions by the membership.

In addition, ecosystem services approaches are being tried in several forms, including the assessment of forest value without the harvest and sale of forest products. Carbon offsets, water management, biodiversity and high conservation value projects are being field-tested to assess their feasibility and potential, focusing strongly on community management and benefits.

The programs for smallholder support at FSC are relatively new, and outcomes from the diverse supporting tools have had only a short period of time to become apparent at a larger scale. The need to engage small forest producers and communities is being expressed more frequently by a range of stakeholders, including donors, FSC actors and founders, and government aid agencies, as well as the communities themselves.

FSC certification cannot solve all the problems and find all the solutions alone. But FSC can, and will, play a greater role as a partner for larger development alliances, with its specific expertise and in adopting activities related to FSC's core assets.

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SIDEBAR

The impacts of eco-labelling schemes

Eco-labels provide self regulation or “soft” regulation, and tend to be less strict than certification schemes. Because of their lower requirements, they are easier to obtain by producers, including small-scale groups, or through new management approaches. Many eco-labelling schemes aim to validate “green” claims, guide appropriate purchasing and improve the environmental sustainability of producers. However, there has been concern that some eco-labels fall short in providing transparent mechanisms that enhance the positive impacts of producer organizations, due to their voluntary nature and generally lower requirements.

Forest and farm producer organizations can contribute to increased food security and rural livelihoods through management choices that promote positive social impacts such as reducing poverty. They can also contribute to environmental impacts, both positive e.g., incentives for sustainable forest management) and negative (e.g., forest degradation).

Participating in an eco-label scheme can give individual producer organizations better access to certain markets and a stronger position when negotiating with buyers. Although labelling schemes can influence the delivery of social, cultural and environmental benefits, their impact depends strongly on the type of certification scheme chosen.

There appears to be a lack of robust methodology in assessing the transparency, democracy, impartiality and sustainability impacts of eco-labels. A study by the European Forest Institute suggested a practical standardized rating scale to empirically assess the effectiveness of eco-labelling schemes. The rating scale has five categories: 1) transparency and democracy; 2) comprehensiveness of social and environmental criteria; 3) strict and effective assessment; 4) level of corrective actions based on performance discrepancies; and 5) regular measurable impact monitoring.



Despite possible limitations regarding available data, such a rating offers producer organizations better information on which to base their decisions. Initial results from the rating of 91 eco-labels relevant to forest products showed that they scored between 2 and 25 out of a possible maximum score of 30.

Such a rating scale could be used to assess the suitability of an eco-label scheme for certain purposes and its potential impacts on the economic, environmental and social viability of the forest sector and the management of forests. The rating scale could also serve as a guideline for developing or adjusting new certification schemes.

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3.4 Public forest agencies and producer organizations in Kenya

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Introduction

The role of forest and farm producer organizations is increasingly recognized as being critical to improving food security, promoting the sustainability of natural resource use, reducing poverty, advancing democratic principles, and addressing the needs and aspirations of groups such as women and youth. Evidence indicates that locally controlled forestry — through diverse family, community or indigenous resource right initiatives — is better than state or private-sector alternatives in terms of livelihoods, forest conservation and climate change mitigation (Molnar et al. 2007; Bowler et al. 2010; Porter-Boland et al. 2012; Stevens et al. 2014).

A number of development initiatives aim to strengthen forest and farm producer organizations. Examples include developing capacity to improve access to markets, improving business and financial management skills, and strengthening leadership. Initiatives such as FAO's Coopequity and the work of We Effect and the Forest and Farm Facility also work to strengthen internal governance and gender equity. Other initiatives focus on creating or strengthening cross-sector and multi-stakeholder platforms for dialogue. Still other initiatives aim to improve the enabling environment; for example, by improving clarity of resource tenure.

An often-neglected area is strengthening public forest institutions as a key element of the enabling environment (e.g., de Marsh et al. 2014). The mandate of these institutions often includes livelihood improvement for the rural poor or support to small forestry producers and community forestry. This is part of a general trend since the 1980s of devolving forest rights to local levels (RRI 2014), and the accompanying changes in forest authorities from enforcement agencies to technical



THE SELF-ASSESSMENT
TOOL COULD BE USED
TO SUPPORT CAPACITY
DEVELOPMENT IN COUNTY
GOVERNMENTS AND
OTHER PUBLIC AGENCIES THAT SUPPORT
PRODUCER ORGANIZATIONS.

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extension agencies (Falconer 1987). This support is provided in a variety of ways and includes providing extension services and technical assistance, facilitating payments for ecosystem services, administering incentives and other financing programmes, and maintaining tree nurseries.

The impact of this support is not consistent. In some cases, support is perceived as hindering development; in other cases, it is critical to success. Anecdotally, countries that have made more progress in supporting small and medium sized forest enterprises (SMFEs) and producer organizations have taken an approach that is focused on results. They have worked to correct tenure insecurity, but have also allocated human and financial resources for support to producer organizations, embedded them in their programming, established monitoring and evaluation systems to track progress and results, and set up mechanisms of consultation and dialogue with beneficiary groups to facilitate communication, decision making and adaptation.

The self-assessment tool

A self-assessment tool was developed by FAO to evaluate the effectiveness of public forest agencies in supporting producer organizations. It draws on the experience of “aid effectiveness” and “development effectiveness” in international processes (see OECD 2006), and is complemented by input from results-based management literature. The tool was designed to facilitate identification and discussion of the main strengths and weaknesses of an organization or group of organizations that pursue a shared goal; in this case, supporting producer organizations.

Implementation of the tool requires the direct involvement of staff of the organization being assessed. Participants score ten aspects of organizational capacity (Table 1). Replicating the assessment exercise periodically allows participants to track changes and capacity improvements over time. And by highlighting capacity strengths, gaps and the needs of the organization, organizations can set priorities for how to proceed.

Four officers from the Kenya Forest Service participated in an assessment of the agency: two from the regular KFS programme and two from *Miti Mingi Maisha Bora* (“Many trees, better lives”), a Finnish-funded programme that supports the forest sector. A representative from a producer group (FF-SPAK) also took part. During the self-assessment workshop, participants rated their degree of agreement with statements (between one and five statements per capacity aspect), assigning a score from 1 to 5 (Table 2).

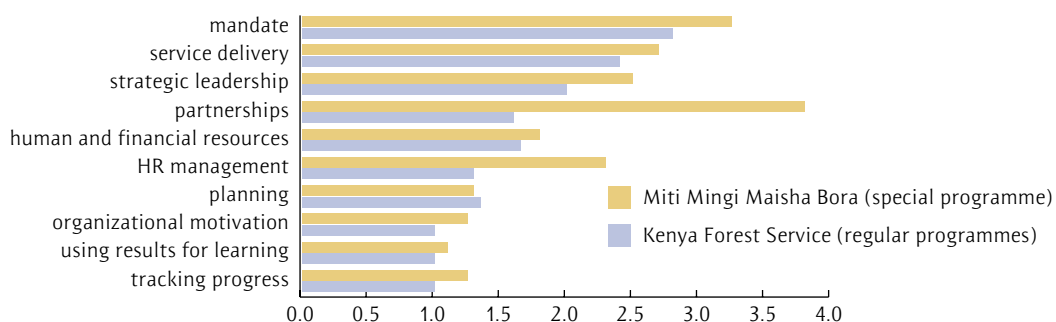
Table 1. Organizational capacity

Capacity aspect	Examples
Mandate	Forest policies and strategies explicitly contain objectives that support producer organizations.
Strategic leadership	The agency has a strategy/action plan with specific activities, objectives and expected results regarding producer organizations, with indicators and scheduled targets.
Planning processes	Programme priorities and service delivery are defined in an inclusive and collaborative way with producer organizations.
Human and financial resources	Adequate human and financial resources are allocated to support SMFEs and producer organizations.
Service delivery	The agency has adequate capacity to deliver services to producer organizations in various ways.
Human resources competency	There is funding as well as opportunities and guidance material to support staff in their work with producer organizations.
Monitoring (tracking progress)	Progress in plans related to SMFEs and producer organizations is regularly monitored and the results are communicated.
Using results for learning and decision making	Monitoring and evaluation findings are systematically used to support decision making that enhances the agency's support to SMFEs and producer organizations. Mechanisms also exist to discuss performance and feedback with stakeholders.
Partnerships	The agency works with other public and private partners to pursue producer organizations' goals and support and promote networks.
Individual and organizational motivation	Individual and organizational rewards exist, and are linked to results/achievements/performance regarding SMFE and producer organizations (e.g., staff are recognized and rewarded if they meet targets).

Table 2. Rating scale, indicator statements

Score	Description
NA	Not applicable, or information is not available to assess the element
1	Strongly disagree; capacity is almost nonexistent
2	Mostly disagree; capacity needs strengthening
3	Neutral; little capacity strengthening is required
4	Mostly agree; capacity is acceptable, with no immediate need for improvement
5	Strongly agree; capacity can be a model for others

The rating scores that each member of the assessment team assigned to statements were then consolidated to provide an overall assessment score for each capacity dimension (Figure 1).

Figure 1. Organizational capacities within KFS to support producer organizations

The Kenya Forest Service

The Kenya Forest Service (KFS) is a semi-autonomous state agency created under the *Forests Act, 2005*; it has been in operation since 2007. KFS is mandated to conserve, develop and sustainably manage all forestry and related resources for environmental and socio-economic development in the country. This mandate includes protecting, maintaining and expanding Kenyan forests to ensure the productivity, sustainability and profitability of the natural resource base for the benefit of all Kenyans. KFS operates under a broad national forest policy that aims to enhance the contribution of the forest sector to the provision of economic, social and environmental goods and services. KFS has offices in each of the country's 47 counties, and its 245 sub-county forest officers provide extension services to farmers.

The distribution of sectoral functions between the national government and the county governments are set out in the fourth schedule of the Constitution of Kenya, 2010. In the forestry sector, county governments have the duty to implement specific national government policies on natural resources and environmental conservation. For the purposes of programme implementation, this broad policy framework requires specific interventions to be identified for implementation by county governments, with technical support from KFS. Under the same schedule, the national government is obliged to provide capacity building and technical assistance for county governments.

The national constitution, Kenya Vision 2030 and other development blueprints have established the need for the country to work to attain 10% forest cover. This requires county and national governments to work together closely to realize this goal through programme and policy implementation. The effort builds on three core programmes that have been implemented by the national government over many years:

- forest conservation and management, with a focus on the management of natural forests on public land;
- forest plantations and enterprises, with a focus on the development of industrial forest plantations on public land; and
- farm and dryland forestry development, with a focus on the provision of forest extension services for the development of private forests, agroforestry and technical assistance to tree growers.

An expansion in forest cover must come from increasing tree planting on farms, and it is the third programme that must work to meet the goal of 10% forest cover. Under the farm forestry and dryland forestry programme, KFS has invested resources to support forest and farm producer organizations, with a view to enhancing their leadership capabilities and entrepreneurial skills.

A large responsibility of county governments is the implementation of farm and dryland forestry interventions, with governments receiving technical support from KFS. The KFS board identifies those functions to be devolved under farm and dryland forestry development. The orderly transfer of these functions is very important.

The Devolved Forestry Functions per Gazette Supplement No. 116 (9 August 2014) states that the following functions would be devolved: "forestry including farm forestry extension services, forests and game reserves formerly managed by Local Authorities, excluding forests managed by Kenya Forest Service, National Water Towers Agency and private forests." The KFS director, under instructions from the KFS board, identified the following functions for devolution to county governments:

- implementation of national policies that apply to county forests;
- formulation of specific county-level bylaws and legislation;
- development and implementation of county forest management plans;
- identification and establishment of forest reservations and county forests;
- development of nature-based enterprises within county forests;
- restoration of fragile and degraded ecosystems on community lands;
- liaison with lead agencies/stakeholders in the forest sector at the county level;
- issuance of operations licences to private farms and county forests on community lands;
- management of conflicts between counties that are related to county forest resources and farm forestry;
- promotion of public-private partnerships in county forests;
- maintenance of county forest and farm forestry records, databases and information;
- collection and management of revenues from county forests and farm forestry;
- community awareness raising;
- promotion of tree planting on community, private and county lands;
- increase of tree cover on private, community and county lands;
- provision of forestry extension services in each county;
- development and maintenance of county forest infrastructure;
- development of the charcoal industry within county forests and on private farms;
- development of urban forestry programmes in each county;
- enforcement of forest legislation in county forests and on private farms; and
- management of county forests.

These forestry functions have been devolved and county governments are in the process of developing transition implementation plans to smoothly take them over. KFS has not undertaken any assessment to determine its capacity to support producer organizations,

despite implementing robust programmes and projects across the country aimed at capacity development for these groups. Support to producer organizations is indirectly implied in some of the devolved functions listed above. However, the capacity of KFS field officers is still inadequate to support producer organizations in market analysis and development, developing group leadership, and entrepreneurial skills.

Key observations

Within KFS, the capacities, approaches and attention to producer organizations in project activities score consistently higher than those in regular KFS programmes (Figure 1). Such projects are perceived as being more inclusive and participatory, with better capacity in planning, staff training, monitoring and evaluation, working with partners, and financing. Overall, policies and strategies do support small producers and producer organizations, even if these groups are not explicitly mentioned in legal and strategic documents. There is a difference, however, between officers at KFS headquarters and field staff. Field staff still struggle with the idea of small enterprises, having limited capacities to support small enterprises and producer organizations. The clarity and adequacy of policies and plans scored consistently higher than implementation capacities, with weaknesses in the implementation of policies that support producer organizations.

In terms of service delivery, KFS supports producer organizations in four areas:

- Capacity development, including training for community forest associations (which are comprised of various forest user groups), the development of participatory forest management plans, the signing of forest management agreements with associations to facilitate co-management, ongoing training for farm forestry field schools, establishing farm forestry networks, financial support to producer organizations, financial literacy, understanding group dynamics, developing group leadership, entrepreneurial skills, business skills development, and exchange visits that involve successful producer organizations.
- Technical assistance, including the provision of forest extension services in tree nursery management and silvicultural practices at the farm level.
- Financial services — KFS has piloted a loan scheme through a financial institution to support forest and farm producer organizations in Kitui, Embu, Meru, Kwale, Kericho and Tharaka Nithi counties with considerable success. Over US\$1 million has been invested and the lessons learned have led to the establishment of a larger fund by KFS, the Forest Management and Conservation Fund.
- Formation of associations and farmer networks, including community forest associations and farm-forestry field schools.

There are examples of successful service delivery and KFS feels proud of the support it provides. One complaint is that support has remained at a pilot level. Upscaling successful pilot experiences is perceived less as a matter of knowing how to do it and more about having additional resources, especially people on the ground. KFS staff members also recognize the need to improve their support to producer organizations in terms of marketing, facilitating market linkages, and providing market information.

KFS participants defined partnerships as critical to the successful support of producer organizations. Yet, among public agencies, the perception was that producer organizations remain largely ad-hoc and dependent on personal relationships. A mechanism is required to facilitate coordination, complementarity and greater collaboration between public agencies. This would have positive effects on many capacity areas:

- planning — multiple agencies could coordinate work plans and create or strengthen synergies;
- service delivery — capacity development interventions could be coordinated;
- monitoring and evaluation — a core set of indicators could be developed and used by various agencies;
- use of information, especially cross-sector information, for decision making; and
- information management.

Conclusions

This self-assessment provided an excellent opportunity for people to discuss existing capacities and issues and identify and prioritize key areas for improvement. The following five recommendations emerged from these discussions.

- Strengthening partnerships among public agencies is needed at the county and national level. A proposal was tabled to invite other public agencies to form a multi-sector, multi-agency platform to coordinate activities that support producer organizations. One of the first activities of the platform could be the development of a multi-agency strategy. Currently, neither the KFS nor other public agencies have a strategy to support, inform, and coordinate engagement with producer organizations.
- Successful pilots could be upscaled through the use of the Forest Management and Conservation Fund, in particular by establishing a programme within the fund that explicitly supports producer organizations.
- Explicitly including producer organizations in policy and strategic documents is vital. The self-assessment revealed that they are not included in the planning process and that the activities that affect producer organizations are rarely monitored.
- Now that the forest extension service has been devolved, county governments are expected to provide services to support producer organizations. The self-assessment tool could be used to identify capacity gaps to be addressed so that counties can deliver on their new mandate, including how they can work with NGOs or private-sector service providers.
- Training was advocated for field staff across sectors to more effectively support producer organizations.



In summary, the self-assessment proved effective in four ways:

- assessing the perceived capacity levels of KFS to support small and medium-sized forest enterprises and producer organizations;
- prioritizing the identified capacity needs and discussing how they could be addressed;
- developing a capacity development strategy and work plan to address the prioritized capacity needs;
- establishing a baseline of current organizational capacities in order to track improvements over time.

With adaptation, the self-assessment tool could be used to monitor capacities and prioritize capacity development interventions in county governments and other public agencies that support producer organizations.

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3.5 Extension and advisory services for producer organizations

BRENT M. SIMPSON and R. JAMES BINGEN

Introduction

Collective action underlies most development success stories, but the multifaceted role of farmer organizations in extension efforts is not well understood. Improving our understanding of farmer organizations in development outcomes is critical for identifying strategies that promote successful rural advisory services. Various types of investment in rural advisory services influence the types of services available, and consequently, affect groups' collective capacity to make use of those services.

Regulatory and organizational conditions

Constitutional conditions

Constitutional rights and regulatory processes that protect the freedom to organize and speak must be present if producer groups are to make legitimate public contributions. Producers must have the legal right to assemble and take actions, including the right to contradict and to make demands on government.

Government regulations concerning producer groups' legal status can significantly influence their development and function in society.

Origins

Groups established as part of government programmes or through external development efforts frequently find it difficult to gain smallholder confidence. Groups that emerge from producers' shared interests may find it easier to gain the trust of smallholders. Both types of groups must often adhere to sometimes onerous governmental regulations.



THE SUCCESS OF
DEMAND-DRIVEN,
MARKET-ORIENTED RURAL
ADVISORY SERVICES RESTS
LARGELY ON THE EXISTENCE AND
CAPACITIES OF FARMER GROUPS.

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Levels of organization

A group's membership influences the work that it does. National or sub-national commodity-based farmer groups have membership units throughout a country or in specific regions. Their organizational decision-making is usually centralized. Federated farmers' groups have a different structure. This type of group operates both through and with its constituent units through a defined division of responsibility for shared and separate operational and policy decisions. In local-level farmer groups, the most common and diverse type of farmer organization, members have multiple face-to-face relationships with each other, often through a range of religious, kinship, community trade, and other economic and social ties.

Decentralized government

Decentralized governmental programmes may offer farmer groups better access to services and, possibly, involvement in decision-making. This does not, however, automatically increase opportunities for small-scale farmer groups. They may continue to be limited by their perceived dependency on government services, or by a lack of government recognition of the value and services they provide.

Decentralized public agencies may also be more responsive to demands from groups that represent larger farm enterprises or those more aligned with centrally determined policies. Decentralized programmes that claim to serve smallholder producers may, in fact, be unable to help farmer groups who seek to influence programmes and resource allocation. Unless deliberately structured otherwise, governmental agencies often prefer to establish "safe" relationships with like-minded farmers, who tend to be more educated, politically connected and better resourced.



Organizational concerns

Problem identification

Viable farmer groups find ways to regularly discuss issues of concern. Such groups develop the capacity for continuing self-reflection and adaptation. Federated and national farmer organizations may be better able than smaller village-level groups to maintain their identity and defend their interests with outsiders.

Organization and membership

Traditions and experiences of working together often influence the ways in which producers develop the essential trust and relationships required to build and sustain their collective activities. Membership homogeneity; i.e., similar people with similar issues, can contribute to an organization's success. Other important aspects include appropriate organizational structure, administrative and management procedures; processes for reviewing, revising and adapting procedures to fit

changing needs; membership conditions, including expected benefits and clear leader responsibilities and accountability; and access to capital from member contributions, share capital, service fees and joint credit.

Education and literacy

Literacy and numeracy skills are essential to viable farmer groups. A lack of these basic skills affects all aspects of group functioning, including administrative procedures, financial management, and the capacity for political lobbying.

Leadership and management

The initiative and enthusiasm of key individuals is critical to the success of any group. Transparent decision-making is also essential. Viable organizations depend on some form of collective leadership and participatory management. As groups grow and develop, their structure and leadership forms will also need to evolve.



Business and financial management

The lack of internal financial management and record keeping may be the most acute threat to the long-term viability of market-oriented groups. Acquiring accounting and financial management skills requires continuous effort and attention. The accumulation of trust in managing financial transactions is critical to sustaining members' commitment to group activities. Through specific procedures or the selection of trusted individuals to manage accounts, groups have found effective ways of managing common funds.

Farm types

In assessing the motivations of producer groups to meet their advisory service needs, it is useful to consider three types of groups: commercial groups, mixed-farming groups, and subsistence-oriented farmer groups. Commercial groups involve enterprises requiring high capital investment that sell into markets demanding quality standards and delivery compliance. They often seek ways to be involved in market development or in access to new technology. These groups make demands and take actions to protect their interests, and so tend to attract greater attention by government leaders in policy formulation and programmatic decisions.

As the level of capitalization and commercialization of the farming system declines, producer groups tend to take on more limited tasks in marketing and technology exchange, mostly in areas where members see the most immediate benefits. The benefits of collective action among small-scale farmers are highest where delivery volumes and timing are a concern, and where established quality standards exist.

Types of capital investment

Investments in large-scale farms and plantations that generate foreign exchange earnings generally offer fewer benefits for small-scale or marginalized farmers, except possibly for off-farm employment or out-grower or marketing opportunities. To address this imbalance, governments may promote three types of investments:

- contract/financial interventions — with investments that are designed to make a profit for a firm or earnings for groups such as cooperatives, including commodity-based out-grower or cash crop programmes. Usually financed by private-sector buyers of high-value agricultural products, they are often organized around a processing facility, and support smallholders who supply the raw materials.
- project/technology-based activities — focusing on new or improved technologies, and are the most common type of agricultural intervention. They are usually mediated by governmental initiatives, donor-funded projects or NGOs. These efforts focus less on organizational governance, enterprise management and advocacy skills, and more on the development of formal market relationships.
- process/social capital investments — concentrating on developing social capital, including collective self-help capacity building. In some countries, organizations that take this approach may also complement contract/financial interventions by private firms or other groups.

In each of these investment types, when rural advisory services are provided to a group the costs of service delivery are commonly built into obligatory membership fees. When spread across all members in relation to derived benefits, these costs have proven acceptable, but all those involved must pay, if the services are to be maintained. Less commonly, groups pay directly for specific types of training or services. User fee-for-service approaches have generally failed once external matching funds ceased or costs shift to producer groups (veterinary services being an exception).



All of these investment types require some form of collective action or organization by farmers in order for individuals to benefit. The type, source, terms and conditions of the investment have direct impacts on the viability and sustainability of farmer groups. Different investments affect farmer organization assets, membership dynamics and farmers' capacity to generate, accumulate and reinvest capital collectively.

The type of capital investment and the organizational culture it generates affects the capacity of farmer groups to obtain agricultural goods and services. It also creates opportunities for these groups to wield political and negotiating power. Smallholder farmers who depend on private firms or NGOs for access to goods and services are more vulnerable than those who develop their own relationships and problem-solving capabilities. Care must be taken by external actors, especially when they take on critical responsibilities in group functioning or in the relationship between the group and others.

The ability of farmers to hold private firms, nonprofit organizations and government agencies accountable for delivering agreed-upon services is also influenced by the type of investment made in group development. Interestingly, contract/financial types of investment may offer small-scale farmers the best prospects for influence in agricultural and rural development policy. In these cases, the profit-driven nature of the investment and the inherent dependency on smallholder productivity provide the conditions for farmers to recognize and act in their collective interests.

Implications

Farmers respond to different types of investment opportunities in different ways, based on their perceptions of the benefits offered. Large-scale farmers with greater access to capital are attracted to projects that protect and enhance their assets. This type of farmer has the capacity to act in his or her own self-interest, and may see socio-cultural institutions as liabilities that limit the accumulation of market-related capital.

On the other hand, small-scale farmers who depend on family labour and may not always meet their household food needs have livelihood strategies that are built on family and community and are grounded in principles of trust and reciprocity. These farmers tend to rely on such relationships more than on market-type arrangements. Long-established behaviour often makes the shift from community/familial relations to contractual measures a difficult and emotionally charged experience for these farmers.

Given the high level of risk in production operations, farmers with scarce financial and physical assets commonly welcome the opportunity to participate in market-oriented group activities that are structured around the social capital of their community institutions. But as this type of farmer is also most likely to confront difficulties in meeting credit obligations, their membership can jeopardize the long-term viability of groups and weaken the local capacity to collectively accumulate capital.

Over time, different types of farmers may seek different benefits from collective action. Their interests may differ significantly from those of the donors or NGOs who promote these opportunities, including extension and advisory services. For some farmers, the socio-cultural importance of participating in collective activities may be as important as any economic motivation. And as the socio-economic conditions of individuals and households change, both poorer and wealthier farmers may decide to move into or out of collective efforts. Not only is group membership fluid, but the distribution of benefits from collective action may vary over time, and with it, the group's ability to deliver services to members.

The success of agricultural and rural development interventions that create or work through farmer organizations will depend on how well they respond to these groups' diversity of form and function. Private firms, government and development agencies



rarely adapt their interventions to this socio-economic diversity, leading to failed efforts. This can exacerbate rural poverty through wasted energy and capital and can have a longer-term negative effect by sapping confidence in the value of collective action.

Smallholder farmers tend to have little political identity, and little time or inclination to become involved with institutions beyond the village, including extension services. Their political marginalization and experiences with governmental, nonprofit and private-sector projects reinforce this lack of interest. External actors must determine how to help these small-scale farmers become full partners in the development process.

Participatory development rhetoric aside, there is a distinct absence of mainstream development efforts in which smallholder farmers control the agenda. The small number of farmer representatives serving in decision-making bodies or platforms means that these bodies may have little knowledge of or contact with the farmers groups they represent. This can result in priorities that are not shared by the groups and their members. Programmes require group autonomy in decentralized decision-making and accountability structures that are backed by real sanctions, conditions that few development organizations and governments are willing to accept, however.

Administrative and regulatory reforms

Historically, three overlapping reform processes have influenced work with producer groups: agricultural sector policy reforms, various types of decentralization initiatives, and the emergence of extension strategies designed around client and market demands.

Various models of decentralization potentially offer new opportunities for rural people to participate in local economic and social development planning, including decisions over the structure and content of extension and advisory services. However, decentralization rarely addresses ways to improve accountability mechanisms and enabling conditions. Without these changes, decentralized government may simply provide another opportunity for local elites to reinforce their power, particularly if smallholder farmer organizations lack countervailing power.

Other administrative and procedural elements can further compromise local development efforts involving farmer organizations. Overlapping or competing responsibilities among government ministries at the local level often make it difficult to formulate coherent, responsive local development programmes. This can be worsened by the presence of multiple donor-funded initiatives.

Local governmental and administrative offices also face serious budgetary and technical constraints. These limit contact with local people. The absence of even the most basic infrastructure (electricity, roads, etc.) creates a tremendous barrier to undertaking the simplest activities. Government officers in rural areas often have a wealth of knowledge of local conditions, but virtually no influence within their services. Their geographic, budgetary and technical isolation compromises their ability to help farmers break out of poverty.

Centralized financial control seriously impedes local government efforts to mobilize capital and increase autonomous decision-making. Similar restrictions on credit and banking discourage local and private investment in development. Thus, all too often public and private rural financial institutions and governmental financial regulations hinder the creative and productive use of local capital. In the absence of legal registration and enforcement of contracts, the economic environment for investment continues to be as risky for investors and farmers as it was before structural adjustment reforms. Rural investors can face as much uncertainty today as they did when they feared that their assets would be nationalized.

For farmer organizations to realize the full potential of market opportunities requires changes in legal and regulatory frameworks that directly affect the right to organize and to advocate; the creation of new financial, banking and credit opportunities; and local governmental authority for investment.

Lessons for farmer organization development

Functional barriers include the lack of broad-based literacy skills, legal registration hurdles, and limited access to capital, among many others. Failure to correctly identify and address these problems will limit the success of any efforts to organize farmers, or more likely result in outright failure.

Groups and their needs evolve over time. External actors must consider how to replenish basic skills, meet more advanced future needs, and address the needs of new groups. Evidence does not support the assumption that once groups are formed and functioning, they will independently meet all of their future requirements.

Market-oriented extension services must understand the market for which farmers are producing, and offer a viable business model that takes into account the group's relation to others in the value chain. It cannot be assumed that producer groups understand the market or the form and function of their value chains. In niche markets, more consideration also needs to be given to market scale in order to prevent an initial success from leading to overproduction and price collapse.

Understanding the nature and history of existing groups is important in working with them to develop new activities. Farmer groups are not uniform, one-dimensional entities. Treating them as such trivializes their integrity and invariably results in mismatches between outsiders' expectations and group members' needs.

Establishing and maintaining group autonomy to determine and pursue development goals is critical. Group survival depends on a clear understanding of why the group formed and how it meets the individual and joint needs of its members. A preference for short-



term project targets may create situations where groups serve the interests of outsiders; and as such will likely fail to fill operational gaps when external assistance is removed.

When groups must ensure their own rural advisory services to achieve their market-oriented goals and remain viable, experience shows that this is best achieved with visibly profitable activities in which extension costs are blended with other essential group services and cost sharing is based on the level of individual use.

The growing trend of merging farmer organization development efforts with farmer-to-farmer service provision requires careful consideration. To date, this approach has been used mostly in technology promotion, where external entities determine what is promoted, rather than responding to local demands. Identifying and designing efforts that respond to the motivations of volunteer farmer trainers — as well as establishing enduring links with receptive external partners who are capable of providing new information and materials — must be addressed by sponsoring organizations to ensure sustainability.

Except for development efforts that target individual farmers, group action is essential. In working with groups, extension initiatives must prepare for the time and skills needed for group-based approaches to take hold and prosper. Although this rule seems obvious, it is frequently violated.

And a final cautionary note from Ugandan activist, Sean A. Patrick: “The successes of the coordinated action of farmer organizations are overwhelming.... However, I wonder if national governments provide enough institutional and political space for farmer organizations.... Strong grass-roots organizations and mobilization processes pose a formidable political risk for most governments; it is therefore not surprising that many organizations of small farmers have remained weak. Market cooperatives often only fit with well-to-do farmers; I don’t really think that the success of marketing cooperatives really means that farmers are empowered. In most cases these cooperatives keep small-scale farms in the background, forced to work under oppressive market relationships.” (Letters page, *Farming Matters*, December 2012).

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Farmer Organizations and Modernizing Extension and Advisory Services: A Framework and Reflection on Cases from Sub-Saharan Africa. MEAS Discussion Paper No. 5. U.S. Agency for International Development project, Modernizing Extension and Advisory Services (MEAS) <https://agrilinks.org/sites/default/files/resource/files/MEAS%20Discussion%20Paper%205%20-%20Farmer%20Organizations%20-%20March%202015.pdf>.

Reducing the costs of data collection and analysis

Collecting reliable data on forest carbon is an essential requirement of carbon certification schemes, which demand continuous geo-referenced inventories in order to assess carbon stocks. Board members and investors require transparent financial tracking, project managers need timely project information, and buyers and donors want quantified information on social and environmental co-benefits.

Forest and farm producer organizations are at a major cost disadvantage when collecting and analyzing the data required for performance-based payments. Most forestry projects manage large areas with only a handful of land-owners; producer organizations consist of hundreds or thousands of dispersed operations. In addition, small-scale operators do not have the required skills in data collection. And until recently, the costs of collecting, managing and analyzing large quantities of high-quality data made such projects prohibitively expensive.

Taking Root, an organization that develops forest carbon projects in Nicaragua, designed the Smallholder Carbon Project Information Management System to find, track, organize, monitor and communicate technical and financial information. The system does not require specialized staff, and it allows producer organizations to benefit from using professional forest carbon information at a fraction of the cost.



Community technicians are trained and equipped with cameras and GPS-enabled tablets with special software. New farmers are added to the database with profiles that include proof of land tenure, etc. The software geo-references areas to be reforested and marks randomly generated and statistically unbiased monitoring points. A personalized

agreement between the farmer and the project clearly states payment milestones and criteria. Technicians return to each farm periodically to take measurements from the monitoring points. The system assesses results against agreed milestones and creates a payment receipt, which farmers sign when they receive the money and which is also uploaded into the system.

Information is automatically compiled and analyzed, allowing managers to produce reports tailored to specific stakeholders in a matter of minutes, a process that used to take months. This allows managers to see the impacts of their decisions and ensures continuous improvement. Buyers can share social and environmental impact indicators through Google Earth, allowing them to find new sources of value within projects. One client said that seeing how information was tracked was a major factor in the decision to continue providing support.

Development organizations are using the system to make forest carbon payments to thousands of farmers in Nicaragua and Guatemala, and it can now enable more smallholders to benefit from forest carbon markets.

Kahlil Baker, Taking Root, Canada



SIDEBAR



3.6 Increasing investors' interest in sustainable forestry

FRANCESCA NUGNES

Introduction

The Finance Alliance for Sustainable Trade (FAST) is exploring how the measurement of the social, environmental and financial impacts of investments can help to increase investors' interest in sustainable forestry, augment the flow of capital, and facilitate access to financing for small and medium forest enterprises. This initiative is based on the Shared Impact and Assessment Measurement Toolbox developed by FAST to measure the impact of investments in sustainable agriculture.

A series of interviews were conducted¹ to assess the challenges faced by forest producer organizations and the potential role of impact measurement in promoting investments in sustainable forestry. The main finding was that impact measurement could be a way to provide more information to investors and complement their risk assessments. This measurement process must capture positive impacts and identify good business cases that might otherwise be overlooked, in order to engage investors over the long term. Investors can also have positive impacts in the short-term — for example, providing nutritious meals for workers may instantly increase productivity — but it takes time to train enterprise staff to collect and store impact data and for positive impacts to become apparent.



A CHANGE IN MINDSET IS NEEDED, FROM INVESTORS AS WELL AS PRODUCER ORGANIZATIONS. AND MORE PRECISE DATA COULD HELP.

Another finding is that investments generate a positive impact only if the enterprise has been able to market its products. Informing buyers about the positive impacts of buying from forest producer organizations may increase their interest in these organizations and strengthen customer relationships. Furthermore, positive impacts may encourage buyers to support producers and hence increase producers' access to finance.

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Coatlahl cooperative, Honduras

According to Sergio Herrera of the Coatlahl forest management cooperative in Honduras, there is little land available in the country for forest producer organizations. Much of the land has been occupied by migrant farmers, bought by private investors, or classified as a protected area. Communities that want to manage natural forests can establish a cooperative or a community enterprise, although there is strong competition from plantations, since wood from plantations is cheaper to produce than wood from natural forests.

Natural forests tend to be located in more remote areas than plantations, which are located in accessible areas with more employment opportunities. Creating jobs within natural forests can therefore have a greater socio-economic impact, and socially oriented investors should be aware of these differences. When the demand for wood falls, "the challenge is to prove that trees still have a value. People lose interest in natural forests and the temptation to turn the land into other uses is strong" (Sergio Herrera, pers. comm.).²



To obtain higher prices, adding value to raw wood is essential. Producing furniture has proved to be profitable because the market demands high quality. Joining forces allows producer organizations to satisfy requests for large quantities of wood and to lower the risk of noncompliance with a contract. When measuring the impact of an investment, special attention should be paid to the stability of supply and demand, in order to assess the ability of the producer organization to comply with buyers' requests.

Collecting impact data encourages investment in sustainable forestry because it provides more information for investors, but enterprises need to be trained to collect this data. Producer organizations could make a significant contribution to this process. Certified enterprises are better able to provide impact data, but other small and medium forest enterprises also need to understand the reason for collecting it.

Data such as indicators of carbon stocks may not be easy to collect, but this information would help attract investors. Collecting it would be costly for small enterprises, and staff would need to be trained in the technical aspects. Two essential factors for the effectiveness of producer organizations are the *mercadeo apadrinado*³ and market research to identify developing sectors and niche markets. Impact data would increase transparency and attract buyers who are interested in knowing how revenues are used.

The Sicirec Group, Bolivia

According to Popko van der Molen of the Sicirec Group, measuring impacts will certainly help to attract investors to the sustainable forestry sector. Working with the Sicirec Group, FAST has been addressing investors' perspectives on impact measurement in Bolivia. The Sicirec Group includes Sicirec Investment Management BV, an asset manager that specializes in reforestation and afforestation projects. The company has been

discussing two potential approaches to impact measurement: incorporating the social and environmental dimension of impacts into economic impacts; or measuring the social and environmental dimensions as discrete components, separate from economic impacts. They decided that for the sake of transparency, the three dimensions should be kept separate, so that the costs and benefits of each impact dimension are clearly visible.

Transparency is essential, and a composite index that incorporates the net effects of the three dimensions would be a good communication tool to circulate among investors. A catalogue of impact indicators, broken down by dimension, would also be useful. Sicirec's project in Bolivia followed an interesting trajectory: it started as a social and ecological project funded by FAO and developed into a partnership after finding enough smallholders to join. Investors were interested in the project because of the existence of records of past work with NGOs and smallholders, and especially because of its transparency, which helps investors assess and manage risks. Sicirec has no specific investment preference in terms of equity or debt, but the company wants investors to know that if they want social and environmental as well as economic benefits, they need to work on a long-term basis.

The need for transparency and information to attract investors also supports impact measurement, which can fill the information gap that deters investors from the forestry sector. In previous work, Sicirec developed a rating system that focused on only two dimensions: financial and environmental. The social dimension was not included because national legislation guarantees social impacts that greatly exceed any effects that projects could achieve on their own.

Social and environmental laws and regulations would simplify data collection by small and medium forest enterprises if they required compliance with social and environmental indicators. In defining impact indicators, one of the main criteria is not to increase staff workload, but as far as possible use data that is already being collected for other purposes, such as compliance with national laws, certification purposes, etc. One condition for success of the plantation project is the expansion of plantations to 10,000 or 20,000 hectares (ha) to reach economies of scale; this would increase financial, social and environmental benefits.

The Cochabamba cooperative, Bolivia

The main difficulty in establishing this new forestry enterprise was overcoming the reluctance of investors to adopt a long-term view. Standing forests contain mature trees that are ready for harvesting, whereas new plantations take decades to mature before they produce useable timber. In the intervening years, many potential hazards are encountered, so investors also need to have an appetite for risk.

In the Bolivian Amazon, as elsewhere, conventional concession owners face mounting costs as forest resources are depleted. They have to go farther afield to find mature trees of commercial species, using ever more resources to recover their timber. The world is finally waking up to the fact that it is dangerously close to a tipping point in the treatment of natural resources, with severe implications for the climate and ultimately for human survival as a species.

Trees grown in plantations are grouped in accessible locations and so can be managed, harvested and transported far more efficiently in the long term. The forestry industry is thus keen to invest in new plantations for its own long-term commercial interests; this fact should be explicitly addressed when measuring impacts. The indicators should assess the time required for dividends to be generated and the overall payback period.

The Cochabamba Project is a nonprofit cooperative society based in the UK that was established to act as a catalyst for such investment. Although it offers the prospect of a financial return, including a modest amount of interest, its members are primarily focused on social and environmental impacts rather than financial results, and on establishing proof of concept for more conventional investors to follow in due course.

The society has a controlling interest in Sicirec Bolivia Limitada, the project manager, which is responsible for certifying and selling the carbon credits generated by project activities. It is attempting to bring 12 new plantation-grown Amazon species to market, but needs to keep increasing in scale. Quality will come only with time as the trees mature. In a depressed market, trees would be allowed to grow and would not be harvested.

There is a need to educate national and regional authorities about this approach. They are unfamiliar with the model, which aggregates its timber from hundreds of individual smallholders rather than dealing with a single concession owner. Regulations and procedures have to be simplified to encourage this model.

Although this type of forestry is commercially attractive in its own right, the main benefits are its social and environmental impacts. However, it is very hard to establish reliable, quantitative data, particularly on household income, and it also takes a long time for any emerging trends to become apparent. Impact indicators should be based on data collected for certification purposes or data required by law; this would reduce data collection work by the enterprises and also enhance data reliability.

The company is frustrated by the shortcomings of the carbon market, which they see as too focused on carbon accounting methodology while losing sight of the much greater value of sustainable land use. A typical smallholding in the Bolivian Amazon is about 30 ha, all of which would benefit from improved carbon stocks and biodiversity, not to mention avoided deforestation. Despite this, the ArBolivia project is able to sell credits only for its commercial tree lots, which account for about 1.5 ha. More capital would make all the difference for the producer organization, but a longer-term mentality among investors is also needed.

Governance and decision-making

"When dealing with many smallholders, governance and decision-making are key efficiency factors for producer organizations," says Anko Stilma of Sicirec Bolivia. Decisions must



reflect the will of most smallholders to ensure a solid social base. The smallholders of the ArBolivia project have signed shared investment contracts with Sicirec Bolivia Limitada. They are organized in forestry committees that also include ArBolivia staff members.



Regular meetings are organized to exchange information about each other's work.

Impact indicators must address governance and decision-making, involve all parties, and measure the level of stakeholder dialogue, conflict resolution and inclusion of small producers in the project. Sicirec Bolivia's focus is on plantations, but it also has agreements with indigenous communities who have rights

to large areas of primary forest. Access to land is not a problem for these communities, but lack of access to capital and to knowledge to manage their resources and add value sustainably certainly are. This puts them at the mercy of intermediary companies who exploit indigenous-owned forests and generate very little added value for the communities.

Sicirec Bolivia's model involves co-administration of the forestry enterprise with the community. The community supplies labour, timber and non-timber materials, and Sicirec provides machinery, capital and marketing. Full transparency helps ensure a well-balanced distribution of revenues.

International cooperation in the form of grant funding is an approach that needs to be reconsidered. There seems to be a connection between the impacts and the role of a grant. "During the early stage of high impact producer organizations," states Issam Chleul of the Africa Impact Group, "there is a period of uncertainty around the right business model. Uncertainty about which business model to use increases risks. Only grants can support producer organizations during that stage, so they can prove their feasibility and then seek loans and investments."

There is a possibility that Sicirec could act as an intermediary to provide smallholders with access to the forestry market in the future. Certification may also help provide access to niche markets, but these exist mainly at the international, not the domestic, level.

The continuity and durability of relationships and interventions is important. Often, government representatives change, and the project and processes have to be re-explained to new staff members. Similarly, Sicirec conducts training activities at the smallholder level, but if workers leave, the training process needs to be repeated for new workers.

Idepro – from producers to entrepreneurs

In Bolivia, an important part of the process to obtain land is the development of a General Forest Management Plan and subsequent annual forest operating plans. The problem of overproduction, which depresses prices, is not always under the control of producer

organizations. There are certain periods in a year when timber can be harvested from the forest, and in these periods, timber prices decrease because of the wide range of wood available.

Only those companies that are capable of mobilizing capital can control the production of timber. These companies, unlike most producer organizations, can store logs until market prices rise. Generally, producer organizations do not have start-up capital or any mechanisms to capitalize their economic assets, so they must use intermediaries to reach the market. This triggers strong competition between producer organizations and those forestry companies with the logistical and financial capabilities to stockpile wood.

A producer organization is not a private company; it is established for territorial and cultural reasons. Producer organizations focus primarily on social issues such as education and health. These organizations choose their directors, who are not specialists. The leaders need to delegate to others the functions of providing transparency, control and accountability.

It is essential to strengthen the entrepreneurial capacity of producer organizations in all functions: human resources, financing, tree harvesting, organizational relationships and — last but not least — access to financing. This will help to liberate producer organizations from having to compromise with intermediaries in order to sell their products.

Conclusions

There is a strong interest in impact measurement as a way to provide information for investors and to encourage the flow of capital to sustainable forestry. Impact measurement data collected over time can track investment performance, and also help to identify good (social and environmental) business cases. The survey findings suggest that impact measurement data collected over time could not only track investment performance but also help identify good (social and environmental) business cases. Small and medium-sized forest enterprises should be encouraged to collect impact data. FAST will continue to support and develop impact measurement in order to facilitate efficiency and transparency in financial markets, and to promote investments in sustainable forest producer organizations.

Acknowledgement

The opinions of the author do not necessarily reflect those of the Finance Alliance for Sustainable Trade.

Endnotes

1. Interviews were held on line in March–April 2015, with the participation of Sergio Herrera, Coatlhal; David Vincent, Cochabamba Cooperative; Popko van der Mol, Sicirec Ltd; and Gary Montano, Idepro.
2. This is a translation from the original, which was recorded in Spanish.
3. In this market NGOs would facilitate a connection between producers and potential buyers.



SIDEBAR

A new financing model

Planting Empowerment forms partnerships with groups of small-scale landholders and indigenous communities to establish agroforestry plantations on deforested or degraded land. What distinguishes this model from conventional timber plantations are its leasing agreements. These agreements maintain local land ownership while the partners also share in the profits from the plantations.

Originally a tropical forestry enterprise that focused on native mixed hardwood plantations, Planting Empowerment evolved into an agroforestry company. It was apparent that raising capital for its novel model would be difficult, as investors wanted revenue early in the life of the project. To overcome this, Planting Empowerment began experimenting in Panama with an agricultural crop that would fit both economically and biologically in native forests. Plantain, a staple and familiar crop with a stable market, was selected.

Benefits from intercropping with plantain included cost efficiencies in weed control, increased return on labour for local partners — and, most importantly — early revenues. The company provides information about innovative field management practices to its employees. Planting plantain between trees, along with tending and harvesting, requires 40 days of labour per hectare in the first year in addition to time taken to tend the trees, and 20 days in the second and third years. The wages earned from this work are valued by the community, and the intercropping benefits the growth of the trees.

After testing pilot agroforestry plots of plantain and hardwoods that produced early revenue, Planting Empowerment negotiated short-term financing through Kiva Microfunds. Based on an understanding of the economics associated with this novel model, Kiva approved a credit

limit 50% higher than what it allocates for financing hardwood plantations. Planting Empowerment currently facilitates more than US\$50,000 in short-term loans from Kiva for this innovative plantain-hardwood agroforestry system.



Challenges include the expansion from pilot to large scale, managing disease, maintaining ongoing tending of trees, and establishing a consistent market for the goods. To address these challenges, Planting Empowerment contracted an agronomist to train staff in identifying and treating crop diseases, and balancing the time spent managing the crops and

the trees. The lack of adequate transport for getting produce to market is another challenge that currently limits the available markets, since partners must depend on intermediaries. This results in smaller-than-expected profits.

Learning is continuous and two-way. Planting Empowerment and its partners continue to learn about the process as they establish more plantain-hardwood agroforestry projects. Importantly, this initiative has led to a new type of financing that is helping to scale up the partnership.

Chris Meyer and Mateo Johnson, Planting Empowerment, Panama



3.7 Forest and farm producers and forest landscape restoration

PAULINE BUFFLE and CHRIS BUSS

Introduction

Forest landscape restoration (FLR) aims to regain ecological integrity and enhance human well-being in deforested and degraded forest areas. It has the potential to provide multiple benefits, from increasing crop yields and improving water quality and availability at the local level, to mitigating climate change at the global level, while also contributing to local and national economies.

It involves people coming together to restore the functionality and productivity of degraded forest land. Depending on the specific geographical, biophysical, social and economic contexts, it can include a wide range of interventions. There is no one-size-fits-all solution.

Even though forest landscape restoration is sometimes perceived as a large-scale intervention, this is not necessarily the case. Most restoration opportunities are on, or adjacent to, agricultural or pastoral land, and an estimated 1.5 billion hectares (ha) of land offer the potential to combine forests with other land uses. This mosaic restoration (Figure 1) involves incorporating trees, including agroforestry, smallholder agriculture and buffer planting around settlements (Minnemeyer et al. 2011).

Many of the world's 450–500 million smallholder farmers and their communities can be both primary beneficiaries of and key contributors to these mosaic restorations. Making up 85% of all the world's farms (Nagayet 2005), smallholder farms would derive benefits from enhanced food production and the generation of multiple ecosystem goods and services, such as reduced erosion and increased availability of forest products. However, there are challenges to smallholder participation in landscape restoration, including insecure land tenure and rights; inadequate business development and market access; and lack of knowledge of suitable restoration techniques to implement it at scale.



PRODUCER ORGANIZATIONS ARE CRITICAL TO HELPING SMALLHOLDER FARMERS OVERCOME OBSTACLES TO AND SECURING BENEFITS FROM FOREST LANDSCAPE RESTORATION.

Pauline Buffle and **Chris Buss** work for the International Union for the Conservation of Nature (IUCN) in Gland, Switzerland.

Figure 1. Wide-scale and mosaic opportunities

Source: IUCN and WRI

These challenges are often exacerbated by fragmentation or by smallholders' isolation. Farmers are isolated from policy makers whose decisions could help address security of tenure and rights as a precondition for restoration. They are isolated from markets and capital that create market incentives to invest in restoration. Farmers are also isolated from each other and from service providers who can provide technical support to deliver solutions at scale (adapted from Elson 2012).

Forest and farm producer organizations provide a logical entry point for positive, on-the-ground actions toward forest landscape restoration. These groups can provide a platform to demonstrate and lobby for improved tenure systems and access rights (to motivate implementation), facilitate access to markets and capital, and offer a structure for providing capacity-building services for their members. Macqueen, Buss and Sarocca (2012) identify a framework for action to invest in locally controlled forestry, applying to the various tasks that producer organizations can carry out to encourage smallholder participation in forest landscape restoration. Described as a cycle of investment for locally controlled forestry, it is based on the concept that "stronger commercial rights foster business capacity, which provides the foundation for enterprise-oriented organizations, which helps to attract asset investors, which further strengthens claims to commercial forest rights" (Macqueen, Buss and Sarocca 2012: 50). A critical need in this cycle is the organization of smallholders, which helps to create a favourable environment; in this case, for private or public investment in restoration activities.

Specific examples from Kenya (Box 1), Vietnam (Box 2) and Guatemala (Box 3) illustrate how producer organizations are well positioned to help smallholder farmers overcome the challenges of restoring forested landscapes. These three countries are committed to forest landscape restoration and are participants in the Forest and Farm Facility (FFF), a joint partnership of the Food and Agriculture Organization, International Institute for Environment and Development and International Union for the Conservation of Nature (IUCN). This initiative works to strengthen service delivery to forest and farm producer organizations and raise their voice in policy debates.

Box 1. Community forest associations in Kenya

To increase access to forests and be more involved in their management, local community forest associations (CFAs) are provided for in the Kenya *Forests Act, 2005*. They represent communities at the local and national level and can facilitate the process of landscape restoration. Associations help their members select the areas they want to co-manage, undertake a forest resource inventory, and identify areas to be rehabilitated through enrichment planting.

The largest of the country's 304 CFAs has 6,000 members and is made up of more than 100 community-based organizations. Even though CFAs face several organizational and capacity difficulties (KEFRI 2009), they contributed to the rehabilitation of 186,655 ha of forests between 2010 and 2011 (KFS 2011). Many CFA members are also part of the Farm Forestry Smallholders Producer Association and extend their tree growing to private farms and their own lands. Given the 2014 Forest Policy target to prepare a national strategy to increase and maintain forest and tree cover to at least 10 percent of the total land area, and for the rehabilitation and restoration of degraded forest ecosystems by 2030 (Ministry Of Environment, Water and Natural Resources 2014: ii), working with and supporting community forest associations to support forest landscape restoration should be strongly considered.

Community forest associations also advocate for and support the rights of communities in natural resource management and benefit sharing. They have formed the National Alliance of Community Forest Associations, which was active in the national government's work on new forest legislation. The alliance actively lobbies local and national bodies, including the KFS, and they influenced the elaboration of the *Natural Resource (Benefit Sharing) Bill (2014)*, which allots 60 percent of forest revenues to the national government and 40 percent to the counties.

Secure tenure and rights

Experience has shown that granting clear rights to smallholders, communities and indigenous peoples favours sustainable forest management (Macqueen 2011). These rights include local decision making on forest management and broader land use, including freedom of association; secure land tenure; respect for customary use and traditional knowledge; and commercial use of forest resources.

For local stakeholders to commit to restoration interventions, they first must have guaranteed access to forest products or ownership of land and trees. If access to forest and tree products is guaranteed, individuals are more likely to be interested in restoring the landscape. Unfortunately, tenure insecurity and insufficient rights are still a reality for millions of forest producers.

Integrating well-organized producer organizations into local and national planning structures provides political strength due to the number of members they represent. An organization amplifies the credibility of individual voices in policy forums. In addition, representation of multiple stakeholders facilitates the development of stronger policy positions and the exchange of good practices and successful businesses with decision makers. Lamb and Chapman (2014: 234) observe: “A well-known risk of large-scale interventions is that the rights of local land users are overridden by central planning agencies for the sake of a supposed national benefit. Suitable institutional arrangements are needed to ensure appropriate policies are developed and implemented and that the rights of local communities are respected. Institutions are important to ensure policies are implemented and to allow coordination amongst landholders across a landscape.” Producer organizations are a logical choice to assist in lobbying local authorities and national policy makers to commit to landscape restoration, to change tenure systems, and to improve the recognition of the rights necessary to make that possible.

Access to markets and capital

Many benefits derive from forest restoration, and smallholders have a range of motives for practising it. Some people seek food or water security and improved livelihoods; others may be more interested in increasing their supply of fuelwood or non-timber forest products for home consumption, or earning more revenue from timber and non-timber products from their farms.



Many farmers are isolated from markets and capital, which limits their business opportunities for forest products. Access to capital is necessary to undertake restoration and develop businesses based on the products that come from restored areas. However, obtaining financial support, especially from the private sector, is difficult for forest and farm producers. Investments are limited due to weak governance structures related to small forest businesses, insecure tenure, nonexistent collateral, weak business plans, and the high costs of sourcing from fragmented production sites such as individual farms.

When small producers organize themselves into cooperatives, associations or federations to aggregate production and make their supply more consistent, they increase their profile among buyers and their negotiating power in business deals. By grouping production, producer organizations can also increase access, processing capacity, and economies of scale in storage and distribution. Producer organizations can also help their members understand

the kind of markets and returns that result from planting specific trees for timber or non-timber products.

Smallholders also become more attractive to investors by organizing themselves. Scattered smallholdings are a disincentive for investors because of the transaction cost of finding and reaching individual producers to negotiate deals (Macqueen, Buss and Sarocca 2012). Producer associations may engage in direct business-to-business investment, develop their own internal savings and loans processes, or create their own internal investment funds. By helping create realistic opportunities to generate revenue from tree products, producer organizations can motivate smallholders to plant trees as another cash crop.

Box 2. The Viet Nam Farmers' Union

In 1998, the Government of Vietnam launched the Five Million Hectare Reforestation Program, which aimed to increase national forest cover to 43% by 2010. To stimulate tree planting by smallholders, one of the initiative's key measures was to allocate land directly to households. By 2013, 3.4 million ha of forest had been allocated to more than 1.4 million smallholders. However, these efforts to secure tenure have not been sufficient to deliver the expected number of newly planted trees, in part because there are many other potential disincentives.

Smallholders face low prices and have low processing capacities for timber and timber products, and international market access has been limited because smallholders cannot afford to meet certification requirements. Collective management through a producer organization could be structured to build capacity to meet quality and certification requirements, and give smallholder the strategies to earn higher prices for their products. The Viet Nam Farmers' Union (VNFU) has helped ten million farmers in the country to overcome similar challenges in the agriculture sector (FFF 2014). It is now working to organize smallholders who produce timber into producer organizations, and has begun work to support smallholder efforts to earn certification for their forest products.

With support from FFF, the farmers' union initiated a process of Market Analysis and Development in January 2015 to assist smallholders in assessing new business opportunities. In helping them become more organized, the VNFU also increases access to processing facilities for smallholders who plant trees and strengthens their position in the market. If farmers' prospects for increasing revenues improve, they are likely to have renewed motivation to plant trees.



Small-scale actions for a big impact

With smallholder farmers constituting a significant portion of the world's population, and 1.5 billion ha available for mosaic restoration, work must be done at scale to guarantee the necessary impacts at the landscape level. Supporting a few individuals through one-off projects to develop agroforestry systems or small plantations will not be enough.



Smallholders often need extension services and capacity building for diverse activities, such as species selection, seedling handling, planting techniques, and effective and sustainable forest management, especially to participate in initiatives that extend beyond their own farms.

Interventions at a local level, such as tree planting, agroforestry or natural regeneration, require at least some technical skills, and producer organizations are well placed to build the necessary capacity of millions of smallholders.

They can leverage their private- and public-sector networks and provide various types of support, from assistance in tree planting with forestry research institutes to training in processing with commodity-specific associations.

In addition, when producer organizations engage in forest landscape restoration, their members will be able to monitor and potentially coordinate various actions at the landscape level. This will give restoration efforts a more integrated approach, instead of repeating single, small-scale and often inadequate interventions. For example, producer organizations can help farmers select tree species with a good market value, or those that produce edible products. This would be particularly useful in areas that are isolated or lack food security. In this way, they can transform individual interventions into broader landscape initiatives.

Box 3. Building scale in Guatemala

Guatemala has pledged to restore parts of its degraded land under the Bonn Challenge, an international initiative that calls for the restoration of 150 million ha of deforested and degraded lands by 2020. In its forest landscape restoration strategy, the government is working with partners on a national plan to promote restoration through developing cocoa agro-chains in the South Petén and the Northern Transversal Strip, and along the southern coast of the country. It based this decision in part on experience in Lachua, where an alliance of community forestry groups called FUNDALACHUA has helped local cocoa farmers gain access to buyers in the lucrative markets of the United States and Europe.

FUNDALACHUA provided training in seedling production, plantation management, and drying and fermentation techniques to meet the high quality standards required by international markets. This helped stimulate groups to restore 379 ha of degraded lands with cocoa agroforestry systems. As a result, the government committed US\$1.2 million to provide technical assistance to restore an additional 560 ha.

Conclusions

Smallholders could clearly implement and benefit from forest landscape restoration around the world. However, to unlock this potential they need enabling conditions such as secure tenure, incentives in the form of increased revenue or improved food security, and the capacity to implement restoration on their farms and on a wider scale.

Forest and farm producer organizations can support a policy environment that ensures that smallholders benefit from landscape restoration. When smallholders are organized, they can amplify their political voice and power and work toward more secure rights. Working through organizations also gives them access to markets, helps them to obtain better deals, and attracts investments. The wide array of services that producer organizations can offer, the diversity of their constituencies, and their public and private networks can together build capacity and trigger impacts at a landscape level.

Producer organizations are a key part of supporting forest landscape restoration interventions where local control is at the centre, while increasing their profile at the national level and in regional and international initiatives. Producer organizations can provide their members with a link to targeted technical and business services that can help them overcome obstacles to effective restoration. At the national level, associations can provide services and lobby policy makers to improve the legal and economic measures that affect their members. At regional and international levels, they can lobby for the recognition of the rights of smallholders and for investment in local interventions by the public and private sectors. International and regional producer organizations influence global policy and provide opportunities to encourage learning among regions and groups. International aid agencies, national governments and the private sector should consider producer organizations as a means to support, implement and invest in forest landscape restoration.

The Forest and Farm Facility believes in the strength of producer organizations, and supports building their service delivery and increasing their policy voice. It has created a policy brief that outlines ways to boost this support (FFF 2014). Governments and development partners working to achieve locally-controlled forestry should create enabling policy environments for producer organizations and include specific measures to increase access to financing and markets for groups and their members.



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SIDEBAR

Income generation and biodiversity conservation

Forest-dependent indigenous communities of the Chittagong Hill Tracts (CHT) of Bangladesh are gradually adopting new livelihood options to conserve community conserved areas. These alternative income-generating activities were carried out through producer groups called *somitee*. Each group has 25 to 30 members. In the past three years, more than 250 indigenous group members have earned income from agriculture, fruit

production, rearing cattle, goats and pigs, and other small businesses. With project support, these indigenous people are now organized into ten groups: five women's groups and five male groups, managed by a forest management executive committee.

The Chittagong Hill Tracts occupy one tenth of Bangladesh in the southeast part of the country. The area is broadly classified as tropical evergreen and semi-evergreen forest, and has traditionally been exploited by 12 indigenous communities. The natural forests are gradually being lost or degraded due to increasing demand for forest resources, expansion of plantation forests, ignorance of traditional forest management practices, and lack of awareness of alternative income sources for forest-dependent people. Indigenous communities usually conserve a patch of natural forest around their villages, knowing that this ensures the continual flow of streams and provides housing materials, medicinal plants and wild food. People do not practise any agricultural activity or collect any materials for individual use in these centuries-old "village common" forests.



Since 2011, the national NGO PROSHIKA has supported indigenous communities through the project, "Conservation and restoration of biodiversity of village common forests," with financial assistance from the Arannayk Foundation. The project supports local capacity for organizational development, financial management, and technical capacity building for alternative income-generating

activities. These skills help local people earn income from their homesteads through producing vegetables, raising livestock, growing fruit trees and operating small businesses, while also improving the management of community conserved forests that increase biodiversity. The dependence of indigenous communities on forests is gradually decreasing, and they realize the necessity of biodiversity conservation. Water levels in the streams have increased, which is essential for community drinking water and household use. The presence of more birds and other animals indicate that better natural conservation of the forest and good management practices are in place. This shows that these communities have established a model for forest conservation through the development of alternative income-generating activities.

Montosh Kumar Das, PROSHIKA, Bangladesh



3. 8 How Indonesia's best known forest cooperative lost its way

DOMINIC ELSON and SILVERIUS UNGGUL

Introduction

In order to restore soil fertility, protect landscapes and improve food security, the developing world faces the challenge of restoring over one billion hectares (ha) of degraded land. Much of it has been despoiled by the poorly regulated industrial forestry and plantation sector, and most could benefit from reforestation or being converted to farming landscapes with trees. Evidence shows that reforestation at scale is best carried out through encouraging locally controlled forestry, with landscape mosaics of forests and farms in various forms of individual and communal ownership and management (Elson 2013). This not only leads to more resilient landscapes, but also creates diverse and productive rural economies — the backbone of any development policy.

For locally controlled forestry to succeed, organizations that represent communities need to become successful enterprises, or form partnerships with local enterprises while ensuring that accountability remains in the hands of the people who are the “owners” of the landscape (Elson 2012). Indeed, in the absence of successful enterprises that are linked to networks of related businesses, the goals of locally controlled forestry are very unlikely to be achieved.

Evidence suggests that successful enterprises do not emerge fully formed from the well-intended efforts of donors and NGOs (Mbile et al. 2010). Like any enterprise, community organizations need to acquire a range of technical and social skills while also coping with the external conditions that can threaten or upset their plans. To complicate matters further, such organizations are trying to balance social and environmental missions with the harsh reality of becoming financially viable and sustainable. In the experience of the authors, many organizations run into difficulty just when the business is looking most promising. How they and their partners respond to this situation will determine if the enterprise will ever succeed.



THE DONORS FOR THIS SUCCESSFUL FOREST COOPERATIVE PROVIDED ESSENTIAL CAPITAL, BUT AT THE COST OF BLURRED VISION.

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This article describes a successful forest cooperative that hit hard times, and is now learning from failure and making itself more resilient. The story has lessons for similar producer organizations on how to overcome adversity, and for investors, donors, philanthropists, intermediaries and consultants. The authors have been involved with this cooperative for many years, and perhaps have contributed to both its highs and lows. The recommendations in Table 1 are based on this experience.

Table 1. Recommendations for forest cooperatives

For the organization	For the donor/investor/ philanthropist	For the intermediary
Maintain a market focus at all times. Without customers, there is no business.	Keep “enabling” grants separate from “asset” investment.	Don’t turn a business into a project.
Understand and develop the value proposition of the business.	Allow the organization to lead the process.	Approach grassroots organizations with humility.
Evaluate certification schemes (e.g., FSC) in the context of the organization’s goals.	Let the business set its own production standards, based on local contexts and market demands.	Continually adapt as the business develops.

The picture of a healthy rural business

Koperasi Hutan Jaya Lestari (KHJL) is located in Sulawesi Tenggara Province, Indonesia. It started in 2003 as part of a government social forestry programme. There was a good deal of illegal logging in the area, and the founders of KHJL had the insight that forming a timber business by means of a cooperative would enable local farmers to legally and sustainably market the teak growing on their land. The founders organized 46 villages into a productive group in order to support a community forest cooperative. The organization has now grown to 756 households, with an additional 1,352 households prepared to work in the newly expanded area.

KHJL aims to improve the economic security of local communities through increasing incomes and by contributing to the regional economy through taxes and fees. It does this through sustainable forest management, building capacity for management, and the production and marketing of high-quality FSC-certified teak (*Tectona grandis*), gmelina (*Gmelina arborea*), albizia (*Albizia falcata*) and mahogany (*Swietenia macrophylla*). By 2029, KHJL aims to be a strong, independent organization, with over 2,000 households enjoying a decent livelihood managing 7,000 ha of tropical hardwood plantations. KHJL obtained FSC certification in May 2005, the first community plantation in Asia to do so.



There are three components of its business:

- buying timber from cooperative members, who manage timber lots on their own private land;
- restoring and planting a 4,640-ha mixed-species plantation under a 60-year government lease, in partnership with the local community (the *Hutan Tanaman Rakyat*, or HTR scheme); and
- processing teak logs into flooring and dimensional timber to order, in a small sawmill where the cooperative owns a majority (60%) share.

Until 2012, KHJL operated in a way that embodied many of the principles of an effective forest producer organization. It was one of the first organizations in the country to take advantage of a government scheme to allocate leases of degraded land to cooperatives for replanting as a means of increasing production and expanding membership. It implemented FSC management principles and systems that ensured systematic production planning and avoided overproduction that would depress prices and degrade the landscape. During the first five years of FSC membership, the prices KHJL received for raw teak increased tenfold, removing any incentive for members to side-sell to intermediaries. KHJL also advocated to ensure that local government continued to support the cooperative. Since it was established, KHJL has been supported by a local NGO, *Jaringan Untuk Hutan* (JAUH), national NGOs (e.g., Telapak) and international organizations such as The Forest Trust and the Skoll Foundation.



For many years, KHJL was often cited in articles and presentations as a good example of a community-led forest producer organization. Academics and researchers praised its strength, its clear market focus for selling high-quality FSC teak, and its bold ambitions to expand the planted area using the *Hutan Tanaman Rakyat* scheme. KHJL has an international profile that belies its small scale and the model has been successfully replicated by other groups in Java and Sumatra.

Growing pains

In order to expand into the 4,640 ha granted by the government (the HTR scheme), KHJL needed access to financial capital. In 2011, they designed a financial model to support the business case for investing in the expanded plantation. This demonstrated that a capital investment of approximately US\$1.5 million would cover the cost of planting the new area, assuming that each household co-invested through their labour. However, no bank in Indonesia would lend money to a venture with such a long payback period. The government scheme set up to finance the HTR scheme was designed on the assumption that farmers would plant fast-growing species to feed the pulp mills. Since this was not appropriate to the KHJL situation, this type of financing was not available to them.

Eventually, a donor was willing to support KHJL as part of its sustainable forestry programme. However, for various reasons connected to the way the programme was

designed — which perhaps in hindsight could have been overcome — the donor eventually chose not to invest in KHJL through a loan, but instead allocated the money as a grant. Furthermore, the donor selected a technical forestry consultancy company to manage the grant and the technical assistance to be provided, with the support of an Indonesian environmental NGO from another province.

Be careful what you wish for

For six years, the cooperative made a profit selling timber and paid dividends to its members. The members gained in three tangible ways: from much higher prices for their timber; from participation in annual profits; and from a better managed environment with improved hydrology and fertility. They also shared in the sense of empowerment felt by all members of KHJL; farmers with only an elementary education could, through their own dedication, build a successful business. The fact that KHJL was able to meet the exacting standards of FSC — while many large companies in Indonesia were unable to do so — was a particular source of pride.



Over the past couple of years, however, the business has been unable to sell timber at the price it expected. As a result, KHJL has sold no timber at all since 2012. With no sales income, the organization could not afford the cost of renewing the FSC certificate. It was allowed to lapse in 2014, which means KHJL can no longer sell FSC-certified timber. After a number of years of profitability, the business now operates at a loss, surviving only because of the grant received from the donor. During this period, the sawmill ceased operations, and the factory and machinery fell into disrepair. The expansion of the HTR plantation business fared better, including the development of a 20-ha demonstration plot, and the allocation of one hectare each to 720 local families. Outside the demonstration plot, however, no other trees have been planted. There is also evidence that some members are beginning to sell their timber to local traders. It seems as if the business is in a state of hibernation: still breathing, but not moving.

The atmosphere within the cooperative is tense. Many members are disappointed, and what used to be an impressive solidarity among the governance board and management team has started to crack. Jealousies have emerged over differences in salary. The foreign consultants made staff changes and fired some managers who they deemed to be underperforming, creating problems between KHJL and its long-term partner, *Jaringan Untuk Hutan*. The NGO brought in as a facilitator had a good reputation in its own province, but did not seem to be accepted by local management, causing further resentment.

So despite KHJL receiving the funds that it needed to grow the business, and having access to technical expertise from an international firm, the net effect of the initiative was to greatly diminish the effectiveness, solidarity and viability of the organization. KHJL is caught up in a situation that superficially appears more viable, but under the surface it has been weakened by the experience of the past two years.

The organization has taken steps to get back on its feet, however. The original sawmill manager has been reinstated, and the mill is once again processing teak flooring. A meeting will soon be held with all members to discuss strategic options for the business. Plans are afoot to develop new ways to generate investment capital for the business; e.g., through crowdfunding. The organization's founders have not given up hope. On the contrary: they see the recent problems as a good opportunity to learn new ways of working.

Lessons learned

This summary of the lessons from this experience may help others avoid similar pitfalls.

A debt is obligation to repay; a grant is an obligation to report

This is an example of what happens when the purpose of the investment is not clearly defined. Since it was paid as a grant, it compelled the management to shift the focus from the needs of the business and its stakeholders to the needs of the project and the donor. The initiative failed to succeed as either an investment or a grant, however, as it was trying to be both.

It is important that donors find a way to channel funds to innovative enterprises in a way that mimics conventional investment; for instance, through debt and equity financing. This avoids moral hazards, keeps management focused on commercial goals, and enhances opportunities for learning. Enabling investments can be channelled to NGOs that support social enterprises; asset investments can be made directly in the company itself.

Good enough is better than best

Just because foreign experts can do one thing well, it does not mean they can do everything well. The real experts in the complex and finely balanced social situation inside the cooperative are the local people, especially *Jaringan Untuk Hutan*, the NGO that has worked with KHJL for the past 12 years. A deep understanding of technical forestry is less relevant when planning an intervention that needs to be operated by local people.



In response to their terms of reference, the consultants focused on technical forestry, instead of advising KHJL on how to run a business. Their advice seemed to be based on making every hectare as productive as possible, to high standards of silviculture, but such standards are not applied

in most industrial plantations in Indonesia. It would have been better to set more appropriate standards, and aim for steady improvements over time.

Play to strengths

KHJL has a successful history of social engagement, and was able to turn illegal loggers into tree farmers. Rehabilitating 30 million ha of degraded forest land in Indonesia — with complicated vegetation and land-use history and contested claims — is a task for a social

organization, rather than a scientific or business challenge. Companies and consultants can bring in technical knowledge. A producer organization with local legitimacy has the strengths most suited to the main task: managing the people, not the trees.

Don't turn a business into a project

Before the donor became involved, the managers worked as a team, and their salaries depended on how much timber they sold. The management approach was entrepreneurial, and was effective enough to successfully run the FSC system and make a profit. The consultant advised that a general manager be appointed and be paid a higher salary than the management team, which was possible only because of the grant. This created a schism between the manager and the governing board. Because of the new funding structure, the manager answered to the donor and the consultant instead of being accountable to the members. The hard work of selling timber was abandoned, and the focus shifted to delivering project results as defined by the donor. This approach insulated the management from risk, and thus from learning.

The paradox of certification

Some of KHJL's problems predate the recent donor intervention, however. It seemed to be a good idea to introduce KHJL to the FSC process in 2005, and the steep increase in timber prices that the members enjoyed appeared to be evidence of success. It is possible, though, that KHJL was given a false prospectus, or at least overlooked or misunderstood some important aspects of FSC. KHJL seemed to assume that FSC inherently supports locally controlled forestry, and members were disappointed when an FSC certificate was granted to Perum Perhutani, the huge state-owned company that dominates teak sales in the country and thus dictates prices. Perhutani's FSC label enabled them to undercut the prices that KHJL was charging for timber by at least 30%.



It would have been better had KHJL understood that FSC rewards verifiable sustainable forestry practices. It does not directly reward hard work or authenticity, or have much effect on colonial injustice and a rent-seeking state. KHJL would have had a more resilient relationship with FSC if it had understood that at the heart of any certification scheme lies a paradox. FSC is driven by the need to certify as many companies as possible, while each individual company wants a unique market advantage. As FSC gets closer to meeting its goal, then the premium paid for certified wood must fall, until prices return to a natural equilibrium. The lesson here is that organizations such as KHJL should see certification schemes as a means to gain a market foothold and to improve management, not as a long-term guarantor of privileged market access.

Keep an eye on the market at all times

The only way a business can survive without customers is to find an indulgent donor. One would hope that any donor would wish to help a business become better at sales and

marketing. In this case, the donor overestimated its market access and, having promised to introduce KHJL to foreign buyers, failed to do so. A better strategy would have been to tie funding allocations to sales targets, as a venture capitalist would do. By being forced to get on the road and talk to buyers, KHJL would have found out that all contact with customers is instructive. For instance, they would have had much better intelligence about

the real market perception of FSC. When intermediaries get stuck between the producer and the buyer, even with the very best of intentions, they fail to see important signals, such as quality, price, delivery, market intelligence and trends.

Conclusions

Like many forest producer organizations, KHJL is a social enterprise. When it was first set up, it had a clear mission: to encourage local farmers to stop illegal logging and invest in a legitimate, sustainable business. For years, this was a successful, if small, model. But in trying to scale up, the organization became reliant on donors and consultants, a situation that provided essential capital, but at the cost of blurred vision. It forgot that its success had been due to a blend of business acumen and generating income to fulfill social goals. As the business focus was lost, the social goals seemed

unreachable. This is why investors, donors and intermediaries should treat any social enterprise as a business first, and not a project. It is better to invest real money and face losses, rather than to finance yet another project that delivers reports but no transformational change.

Several key lessons were learned:

- Even a social enterprise must still maintain market focus at all times. Without customers, there is no business.
- Donors must keep “enabling” grants separate from “asset” investment, or they risk suppressing the entrepreneurial spirit.
- The business should set its own targets and production standards, based on local context and market demand.
- Intermediaries must continually adapt their support so it fits the changing needs of the business, and must know when to withdraw.

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