

**Small and Medium Enterprise
Development for Poverty Reduction
Opportunities and Challenges in Globalizing Markets**

**Desarrollo de Pequeñas y Medianas Empresas
Forestales para la Reducción de la Pobreza
Oportunidades y Desafíos en Mercados Globalizantes**



**Conference proceedings
Memorias de conferencia**

Jason Donovan (ed.)

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Tropical Agricultural Research and Higher Education Center (CATIE)
Centro Agronómico Tropical de Investigación y Enseñanza (CATIE)

Turrialba, Costa Rica, 2007

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An International Conference on Forest Enterprise Development at CATIE, Costa Rica

In May 2006, nearly 200 participants representing forest communities, businesses, development agencies, governmental organizations and research centers in 35 countries gathered in Turrialba, Costa Rica, to discuss critical issues facing the development of small and medium forest enterprises (SMFEs) in the tropics and how to best overcome them. The conference, titled “Development of Small and Medium Forest Enterprises for Poverty Reduction: Opportunities and Challenges in Globalizing Markets,” held at CATIE (Tropical Agricultural Research and Higher Education Center), addressed three main themes: 1) promotion of enabling political and institutional frameworks, 2) integration of SMFEs into value chains, and 3) enhancement of external support services for SMFE growth and development.

The conference provided a forum for presenting critical thinking and practical experiences on some of the most important issues facing SMFE development, especially the reconciliation of poverty reduction and sustainable resource management goals. The following key questions guided our discussions:

- What is the actual and potential role of SMFEs in poverty reduction strategies and sustainable forest management?
- What have we learned about promoting SMFE development in Asia, Africa and Latin America and their successful integration into value chains of forest products?
- How can political, legal and institutional frameworks be adjusted for more successful SMFE development and increased poverty reduction?

In the conference keynote address, David Kaimowitz, program officer for Environment and Development at the Ford Foundation, pointed out several favorable market trends for SMFE over the coming decades. For example, urban domestic markets for furniture, construction wood, medicinal plants, charcoal and other

forest products are growing rapidly in many developing countries. Cultural and ecotourism generates new markets for forest services and stimulates demand for complementary products, such as handicrafts. Certification and fair trade have opened new opportunities in international markets. On the technical side, relatively minor investments in drying, storing, grading, processing, packaging, branding and negotiating can greatly improve profitability. In addition, the political–legal framework for SMFE development in several tropical countries has improved in recent decades. Global movement toward greater democracy and the dismantling of parastatal agencies and monopolies has opened new spaces for small-scale, commercial, forest-based activities. Local, provincial, national and regional associations of small-scale forestry producers have emerged in various countries. Development agencies’ focus on the Millennium Development Goals has encouraged conservation organizations to pay more attention to poverty in forested areas.

The conference included 46 invited presentations,¹ of which 12 focused on macro-level analysis by researchers and industry experts and 34 focused on specific experiences in the development of SMFEs, promotion of enabling frameworks, or design and delivery of technical, business and financial services, delivered by representatives from SMFEs, government agencies and nongovernmental organizations (NGOs). These presentations highlighted that significant challenges remain for the development of viable SMFEs and that government and nongovernmental agencies, as well as SMFEs and their business partners, have important roles to play. Governments are urged to play a more productive role in strengthening SMFEs, including the granting and enforcing of legal access to forest resources, curbing illegal logging and unsustainable harvesting of nontimber forest products (NTFPs) to reduce unfair competition, and simplifying bureaucratic procedures for SMFE registration.

¹ These presentations are available on the conference Web site. See www.catie.ac.cr/econegociosforestales/conference.

Financial incentives, including tax breaks for start-up SMFEs and local and/or green purchasing policies represent positive steps in this direction. Discussions emphasized the need for SMFEs to improve their own competitiveness by upgrading their technical, business and financial capacities and establishing linkages with other SMFEs and service providers. For some SMFEs, their organization into second-level associations is considered effective for facilitating the upgrading process. Regarding the external-service environment, increased emphasis must be placed on training a critical mass of providers of technical, business development and financial services. Incentive-based mechanisms for service design and delivery are essential to ensure increased impact and sustainability of these services. Specific credit lines and related services need to be developed according to the unique needs of SMFEs. Increased quality and coverage of technical and business development services are required for SMFEs to increase value adding to their timber and NTFPs through quality, processing, certification if indicated, and improved marketing skills. This stresses the need for clear labor division among NGOs, development agencies and commercial business development service providers, as well as greater linkages between service providers and policy-makers through information services and/or support networks. NGOs, industry and social organizations, and development agencies can accelerate the SMFE development process by facilitating multi-stakeholder negotiations for better policies, improved business environments and conflict management to address context-specific challenges.

Among the 34 case studies presented at the conference, we selected 10 for inclusion in these proceedings. Our selection aimed to capture as much variation as possible in terms of location (Asia, Africa and Latin America), product/service (timber, NTFPs, tourism) and perspective (government, SMFE and service provider). Together, the selected case studies provide the state of the art with regard to the practices

and the limitations and opportunities for SMFE development. We begin with the keynote address by David Kaimowitz outlining the critical issues facing the development of SMFEs in the tropical world. This is followed by the 10 selected case studies. We conclude with a policy brief that translates the main conclusions of the conference into policy recommendations for SMFEs, government agencies, NGOs and donors.

The planning and organization of this conference was a joint effort. Our special thanks go to FAO's Forest Policy and Institutions Service, with whom we conceived the idea for this conference and who played a critical role in its organization and in securing financial support. The Inter-American Development Bank (IDB), through its Multilateral Investment Fund (MIF); the CATIE project Strengthening the Competitiveness and Environmental Performance of Small and Medium Forest Enterprise in Central America; and the Interchurch Organisation for Development Co-operation (ICCO) contributed significantly to financing the conference. The Netherlands Development Organisation (SNV)–Latin America, the Center for International Forest Research (CIFOR) and Rainforest Alliance provided valuable logistic support and facilitated the participation of various persons. Special thanks are due to Stacy Sesnie, whose excellent organizational skills kept the conference on track over many months. We would be remiss without thanking CATIE support staff, too many to name here, who played a critical role in managing financial accounts, transporting and lodging participants, and securing foreign travel visas, among other tasks. Finally, we thank the CATIE Communications Unit for putting these proceedings together.

On behalf of the conference organizing committee,

Jason Donovan
CATIE
Turrialba, Costa Rica

Critical Issues for Small-Scale Commercial Forestry

David Kaimowitz¹

It has been nearly 30 years since the Eighth World Forestry Congress in Jakarta, Indonesia, which gave birth to modern community forestry. For most of that period, global community forestry efforts have focused largely on subsistence-type activities and improving the forests' condition. People have only recently begun to see small-scale commercial forest-based activities as a potentially important source of economic dynamism and regional development. That is partly because new opportunities have opened up for this type of activity that simply didn't exist before.

Small farmers, indigenous people and people in other communities have greatly increased the share of developing country forests that they own or over which they have long-term rights. These groups currently control at least a quarter of those forests, which is a major asset they could potentially use to obtain income. In Latin America this largely takes the form of indigenous territories, *ejidos*, community forestry concessions, extractive reserves and small-scale agroforests. South Asia has village schemes designed to rehabilitate degraded forests. China has distributed large areas to individual small farmers. Africa and Indonesia have slowly recognized communities' traditional rights.

Some market trends favor small-scale forest-based enterprises. Urban domestic markets for furniture, construction wood, medicinal plants, charcoal and other forest products are growing rapidly in many developing countries. In Brazil, China, India, Indonesia, South Africa and Thailand, large companies want to buy more pulpwood from small farmers. Tourism generates new markets for handicrafts. Certification and fair trade may also open opportunities.

Small improvements in drying, storing, grading, processing, packaging, branding and negotiating can greatly improve profitability. Often it will be better for small farmers and communities to partner with people with experience in these areas rather than taking them on themselves.

Global movement toward greater democracy and the dismantling of government parastatals and monopolies has opened new spaces for small-scale commercial forest-based activities. Local, provincial, national and regional associations of small-scale forestry producers have emerged in various countries. Development agencies' focus on the United Nations Millennium Development Goals has encouraged conservation organizations to pay more attention to poverty.

Despite all these positive trends, however, significant constraints to small-scale forestry enterprises remain. Despite substantial progress with regards to forest tenure, much remains to be done. Government regulatory, financial, trade and fiscal policies all tend to favor wealthier groups. There are significant economies of scale in many forestry activities, and low-income households often lack the necessary skills, resources and information to compete.

Small-scale enterprises need a level playing field. Government regulations often discriminate against small-scale enterprises. Regulations require paperwork that these smaller businesses cannot afford, favor products and practices more suited to larger operations, and insist producers hire professional foresters. This forces many small enterprises to operate illegally, even when they manage their forests better than larger "legal" operations. Small producers have less money to pay for bribes than big companies do and the bribes they do pay cut into their profits.

¹ Former director general of the Center for International Forestry Research (CIFOR), currently program officer, Environment and Development, Ford Foundation, Mexico City.

Government trade and fiscal policies also frequently support larger producers. Opening the Chinese and Indian markets to pulp imports is a major threat to small-scale plantation growers, as is the opening of Mexico's markets to the United States and Chile. Many governments have explicit incentives for large-scale plantation development and indirectly subsidize large producers through various mechanisms, which make it harder for small producers to compete.

Few financial services, sources of technical and market information, and training opportunities are available for small-scale forest-based enterprises. Most programs and projects designed to support micro-enterprises have little experience with or interest in these activities.

The technical assistance and training programs that do exist tend to take a top-down and technocratic approach. It is important to find ways to help provide small farmers, indigenous peoples and communities with the skills and information they need without being paternalistic and detracting from their control over the process.

To build a dynamic competitive sector of small-scaled forest-based enterprises requires major policy reforms as well as better public and private support services. Research and exchanges of information and experiences can help identify the bottlenecks, make the case for policy reforms and provide small-scale commercial producers with information they need to succeed.

Organization of Community-Based NTFP Enterprises for Poverty Reduction: Lessons from the West African Sahel

Yacouba Ouedraogo, Ludovic Conditamde and Tony Hill

1 NTFP-based enterprises in Burkina Faso and Mali

Burkina Faso and Mali are among the poorest countries in the world. More than 85% of the population survives on an income of less than \$2 a day. The majority of the population lives in rural areas and is heavily dependent on agriculture and highly vulnerable to seasonal food shortages and crop failure due to an increasingly erratic climate, with few opportunities to diversify the rural economy. Rural communities suffer from their geographical isolation from markets and poor transport and communications infrastructure, and as a result, market chains are poorly coordinated and producers are not well-organized to negotiate a better deal in the marketplace.

Though there are still significant forest resources in Burkina Faso and Mali, they are under pressure from unsustainable land uses that threaten environmental security. With population increases and agricultural intensification, forest resources are becoming increasingly depleted. To reverse this trend, rural communities need clear incentives to invest in sustainable forest management. They also need to establish the right to manage the forest resources upon which they depend.

Rural households tend to be inexperienced in business management and have limited access to market information. Low education often mean a lack of business planning skills and organization among the producers, plus very limited access to financial capital. Only one in 20 villagers in the project working

area has received a loan to support marketing of non-timber forest products (NTFPs). In addition there are shortcomings in the legal, policy and institutional framework, including the provision of technical, business and financial services. Rural communities often lack both the technical capacity and basic materials to invest in NTFP enterprises and the management of forest resources upon which these depend. They need support to identify and develop viable enterprises, build entrepreneurial competency, facilitate strategic alliances and forward market linkages.

To address these issues TREE AID² joined forces with various government departments and local NGOs together with the United Nations Food and Agricultural Organization (FAO) to launch a pilot for promotion of community microenterprises based on NTFPs. This pilot project adopted a Market Analysis and Development (MA&D) approach for organizing small producers into enterprises that extract and process NTFPs. The MA&D approach,³ especially developed for application in areas with high illiteracy and limited access to markets, enables poor rural households to assess potential returns and risks associated with different strategies for the development of NTFP-based enterprises. The MA&D approach is the underlying strategy for the Village Tree Enterprise (VTE) project.

2 Implementation of MA&D in Burkina Faso and Mali

Launched in January 2005, the 18-month pilot project aims to strengthen capacities in Burkina Faso and

¹ Respectively, program coordinator, projects officer and program support director for Tree Aid West Africa. Contact: yacouba.ouedraogo@treeaid.org.uk.

² TREE AID is a UK-based NGO focused on empowering poor families, and especially women, to unlock the potential from trees to meet their basic needs and generate income and by raising awareness of the power of trees improve forest-based livelihoods, www.treeaid.org.uk.

³ The approach comprises three phases: Phase 1: Assessing the Existing Situation—inventories existing resources and products, identifies those already providing income for local people, determines their financial objectives and eliminates nonviable products. Phase 2: Identifying Products, Markets and Means of Marketing—studies the feasibility of developing the most promising products, identifies potential markets and discusses means of marketing. Phase 3: Planning Enterprises for Sustainable Development—choice of products for development is further refined; enterprise strategies and business plans are prepared; future entrepreneurs are guided through a pilot phase and training, learning to monitor progress and to adapt when change is needed.

Mali, both at national and local levels, on the development of small-scale, community-based tree and forest products enterprises using the MA&D approach developed by FAO. VTE expands the scope in of the MA&D methodology in terms of coverage, partnership, producer organizational development and NTFP policy development. The project is supported by United Kingdom (UK) charitable donations, notably through the Big Lottery Fund. The MA&D pilot is now integral to the VTE initiative, which is a subprogram of the Tree Aid 15-year Community Forestry and Livelihood Programme.

The VTE objective is to enable poor rural households to derive reliable income from community enterprises based on forest products and services. Expected results over the five-year implementation are 1) households are able to plan, coordinate and finance small enterprises based on forests and NTFPs; 2) rural communities develop the skills, knowledge and incentives to sustainably manage their forest and tree resources to support forest-based enterprises; 3) government action is taken to create the right environment so that community-based forest enterprises have the greatest chance of success; 4) capacity is enhanced in both public and nongovernmental organization (NGO) sectors to support income generation from tree- and forest-based enterprises.

Strategies for facilitation at village levels included theoretical training, followed immediately by field application in pilot sites. Staff from government departments worked alongside NGO staff. Village entrepreneurs carried out local market surveys, while consultants did national market surveys to fill information gaps. Household surveys were conducted to establish project baselines.

Local partners are responsible for all field activities. TREE AID maintains regular contact with our partners to provide support in the field. FAO expertise is contributing to the monitoring and evaluation process, which involves six monthly activity monitorings by local partners with support and oversight by TREE AID; self-evaluation through annual reviews at the village level; annual progress reviews led by local partners with participation of TREE AID staff; and baseline household surveys with repeat sampling of key indicators. Full follow-up surveys are planned for years three and five, with partial surveys for selected

indicators in years two and four, with a mid-term project review (looking at evidence of broader impacts of the project on livelihoods, disaggregating these by gender; examining links between results to date and both specific and overall project objectives; reevaluating the project design; and refining and reformulating plans accordingly for years four and five).

Selection of beneficiary groups through the MA&D methodology involved participatory and iterative processes and tools to ensure equal opportunities for the participation of all sections of the project target group. Target group identification started at a wider scale (village level) with the participation of all villagers interested in NTFP enterprise development. Phase 1 of the MA&D approach involved 2,452 participants in 23 project villages in the first round. With the support of the project facilitators, potential entrepreneurs carried out further analysis through MA&D during Phase 2, including an assessment of their own interest, capacity and skills for NTFP business development. From this, process 230 potential interest groups of entrepreneurs totaling 1,032 members in the 23 villages have been formed at Phase 3.

The project baseline was acquired through a household survey undertaken in March 2006. The survey was undertaken within the framework of the monitoring and evaluation (M&E) system of the VTE project to provide TREE AID and project partners with data to permit the evaluation and documentation of change experienced by project participants over the duration of the project. The survey covered participants from 19 villages at four different project sites in Burkina Faso. The MA&D process started in these villages in February 2005, with completion set for July 2006. In total 200 participants were interviewed, 50 at each project site. The sample was stratified by product interest group and within each stratum participants were selected at random. The questionnaire was designed to collect information on each of the indicators cited in the Outcomes Tracking Form and to gather background socioeconomic data. The questionnaire was administered by partner NGOs.

3 Local resources for NTFP-based enterprise development

The majority of project participants have some prior experience of marketing NTFPs, and in about one-third of cases this experience spanned more than

five years. Most respondents perceived an increasing demand for NTFPs: rapidly increasing, 16.5%; increasing, 58%; decreasing, 11%; rapidly decreasing, 0.5%; no response, 14%.

Key factors cited as creating opportunities relative to marketing of NTFPs at the local level included:

- strong demand for specific products
- availability of specific products
- skills in production
- possibility of bulk production
- long shelf life of specific product
- local manufacturer of equipment
- improved organization of small producers and communities

Factors at the provincial, regional and national levels included:

- strong demand, known buyer
- support by NGOs with communication and coordination with small producers and communities
- improved road and communication connections to national markets

At the international level, factors were

- strong demand
- visiting buyers for specific products

References to positive expectations (regarding demand, price, development of market systems, levels of investment and returns) heavily outweighed those to negative expectations (competition and resource availability). Strategies suggested by respondents for a better positioning of their products in the market included more efficient production and storage (10 references), improving product quality (8), organization of producers (6), market research (5), product promotion (3), and better management of natural resources (2).

The MA&D process is beginning to sensitize villagers to issues about market structure and the potential for producers/vendors to organize themselves to reach new markets and more successfully negotiate with buyers. Most baseline survey respondents perceived an increasing demand for NTFPs. This suggests growing opportunities for increased income, but first, village producers must overcome various constraints:

- lack of financial capital, limiting investment, notably in improving product quality (43%)

- declining tree and forest resources, leading to declining supplies of NTFPs (42%)
- a shortage of outlets and wholesale buyers (30%)
- problems in storing products, resulting in gluts on the market, depressing prices (16%)
- lack of skills in processing (9%)
- large price fluctuations, with limited access to useful market information (7%)
- transport problems, as much from the place of harvest to the village as for transport from village to major markets (6%)
- limited experience in enterprise organization among small producers and community members (2%)

Local resource surveys were carried out through MA&D field implementation. Information collected includes data on access to resources and the legal and cultural constraints affecting this, though for the time being estimations of quantity of resource are limited and do not allow for assessment of possible extraction rates. In Mali, market surveys were conducted by a team of potential village entrepreneurs, assisted by the NGO facilitators, covering markets in the district and regional centers in the vicinity of the project site.

A preliminary national market survey was carried out in Burkina Faso to analyze the market for NTFPs preselected in the project sites at the end of MA&D Phase I to help in selection of products for which community enterprises are to be developed (Table 1). In January 2006, local consultants produced a report of their initial survey and this study has provided useful data, including details on NTFP supply chains.

Data gathered through the baseline survey indicated the majority of producers and community members participating in the project consider their links with service providers to be limited to TREE AID's NGO partner, through which this project is being implemented, and to the government's Forestry Service. In many cases these relationships predate this project, as both NGOs and the Forest Service have been engaged in raising awareness in these communities. Despite the expressed intentions of the government, no structured approach exists for delivering support at the grass-roots level, and government "policy" on NTFP development needs a means of expression. There is lack of coordination between agencies responsible for supporting NTFP development and between different

actors in product chains. There is a void in national forest policy on NTFP (and small and medium enterprise) development and ineffective regulatory frameworks for NTFP trade. Technical issues include lack of access to appropriate labor-saving technology, ineffective dissemination of output from biological research to improve productivity of relevant tree species, limited capacity for testing product quality, problems in storing products, lack of skills in product processing, and transport problems.

TREE AID does not implement projects. Its role is to facilitate effective service delivery to rural NTFP-based enterprises through building capacity of our local partners, strategic alliances and networking with local service providers both from private and government sectors. FAO plays a key role in coordinating international networking, documentation of best practices and support to monitoring and evaluation processes.

Over the next five years, services to be delivered via the VTE project will include support for coordination and financing small forest enterprises and other services that will be delivered, including the development of forest management capacity, policy development to address issues of access to resources and markets, and capacity building for public and NGO sectors to support income generation from tree- and forest-based enterprises. Skills and capacity of poor households will be strengthened through selective support for business plan implementation, establishment of linkages with public and private services supporting small business development and facilitation of cooperation

and information exchange. TREE AID will provide selective seed funding to most promising enterprises with no cost recovery and, where appropriate, will facilitate access to microcredit from established service providers at affordable terms.

4 Impacts of MA&D implementation

Gender and diversity: The MA&D approach incorporates participatory processes and tools in selecting the target group to ensure equal opportunities for participation of all sections of the project target group. At the beginning of Phase 3, 65% of project participants were female. This proportion is expected to rise as the project progresses. Project facilitators have been trained to support the development of an environment in which both male and female project participants have a voice in decisions with product interest groups.

Participation: The nature of the MA&D approach ensures that the project participants themselves are shaping the process of enterprise development. Village-level product interest groups are emerging as the key structure for local management; facilitators organize and manage activities in the field.

Local-level capacity building: Skills and knowledge of 1,032 potential entrepreneurs from 23 villages have been strengthened through their participation in MA&D Phases 1, 2 and 3. In particular, potential entrepreneurs have become practiced in keeping an inventory of existing resources and products; identifying potential enterprises; screening, ranking and shortlisting these; determining financial objectives for their future

Table 1. Tree and forest resources and selected NTFPs in Burkina Faso

| Tree and forest resources | Products selected for marketing |
|--|---------------------------------|
| <i>Vitellaria paradoxa</i> (Karité) | Shea nuts, shea butter |
| <i>Parkia biglobosa</i> (Néré) | Pods, processed pods |
| <i>Tamarindus indica</i> (Tamarin) | Fruits, leaves |
| <i>Adansonia digitata</i> (Baobab) | Pulp, dried leaves |
| Flowers—bees | Honey, processed honey (drinks) |
| <i>Acacia macrostachya</i> (Zamané) | Pods |
| <i>Saba senegalensis</i> | Dried fruits |
| <i>Ziziphus Mauritania</i> (Jujube) | Dried fruits |
| <i>Acacia senegal</i> (gomme arabique) | Gum |
| <i>Balanites aegyptiaca</i> | Nuts, soap |

enterprises; analysis of market chains; and analysis of problems and opportunities for NTFP enterprise development and business plan development.

Capacity building for service providers: Training of 17 government and 11 NGO field staff in all three phases of the MA&D approach facilitates using this approach in the field to promote NTFP enterprise development for the benefit of disadvantaged families. Three MA&D co-facilitators, including two TREE AID project officers and one senior staff member from the Burkina Forest Service, have been trained in facilitating a training session on the MA&D approach. With the support of the consultant trainer, they successfully carried out MA&D Phase I and Phase 2 training for the second intake of nine project facilitators.

Alliances, collaboration and networking: MA&D implementation is fostering cooperation and information exchange within communities as well as within group members. Bringing Forest Service staff into the MA&D training and fieldwork alongside partner staff



is improving the quality of field implementation. At the international level, FAO has provided contacts and opportunities to share experiences of the MA&D approach. Lessons from the project to date were presented and discussed at national and international conferences on NTFPs.

Influencing opinion at local level: Marginalized women and men have been brought into dialogue with local forest department staff facilitating the MA&D process alongside the partner NGO. This process has created regular opportunities for contact between staff and villagers. Outside such contact there is, at present, generally no framework for formal exchange between the potential entrepreneurs and government services. The MA&D process is beginning to make villagers aware of market structure and the potential for producers/vendors to organize themselves to reach new markets and negotiate more successfully with buyers.

Influencing opinion at the national level: Participation of government agencies in project implementation is building working relationships between these agencies and producer groups that can influence local decisions. Some project participants are now interested in trying to overcome restrictive access to nontimber forest products in national forest reserves/parks by negotiating modifications to forest policy that will allow them to secure access to forest products through formal contracts.

Community-based NTFPs business plans: At the end of the pilot project, 186 business plans involving 1,800 village entrepreneurs from 180 NTFP interest groups were developed. Sixteen products from 10 tree and forest resources were selected by villages for income generation. Total value for potential income of the 16 products amounts to a sum of about £800,000. However some of the businesses required further refinement, with strong input from the project supervisors, facilitators and co-facilitators.

5 Limitations of the project

An external evaluation of the MA&D pilot was carried out in July 2006, with the following results:

- Initially it proved difficult for our NGO partners to recruit project facilitators with both the right level of baseline skills and extensive experience in fieldwork in the project area. Though many of

the first field facilitators had substantial experience in working with rural communities, they were less well-equipped with the baseline skills necessary to easily absorb the new concepts and tools of the MA&D approach. As a result, business plans developed by village entrepreneurs with the support of project facilitators required further refinement.

- On the technical side, main constraints were difficulties faced by partner NGOs and villagers in assessing the harvesting rates for NTFPs that could be sustained without degrading the resource base, and project participants tended to assume that project support for enterprise development would translate to material or financial assistance from donors, as had been the case in previous projects in their area. Participants have had to adjust their expectations accordingly.
- In many instances, project participants tended to consider the social value of NTFPs as an element of enterprise development, whereas the emphasis of the MA&D approach is on enterprise viability as a basis for enterprise development. As a result, the initial selection of NTFPs in some project areas had to be revisited and further analysis conducted.
- There was difficulty in targeting poorest households and maintaining a higher percentage of women participants, and insecure land tenure

was found to be a challenge for women wishing to invest in tree management.

- On the organizational side, the failure to establish a formal project management committee was a key shortfall. As a result, communication and information flow between project stakeholders has sometimes been limited and subject to misinterpretation.

6 Toward enhanced services for forest SMEs

Local level: Villagers have screened and identified NTFPs with the greatest potential for sustainable business development. Detailed information has been collected on market chains and prices for a range of locally traded NTFPs. Marginalized women and men have been brought into dialogue with local forestry department staff, and villagers participating in the pilot have started seeing forestry department staff as potential key agents of change with regard to NTFP development and sustainable natural resource management. A village-level NTFP interest group emerged that focuses on opportunities for individual business development. The participation of government agencies is building relationships between them and producer groups through which local decisions on service provision can be influenced.



National level: New avenues have opened up through which TREE AID and its partner NGOs can engage at a high level with government service providers and policymakers and advocate on behalf of small producers. The pilot project is providing a foundation for national and subregional networking on NTFPs, and lessons and experience from this project are directly informing government decision making.

NGO–government collaboration: Bringing government agencies into the process has been a big investment in time and effort for TREE AID but is essential for long-term sustainability. The government has the power to reinforce or undermine efforts of small rural producers, but with no external stimulus there is a tendency to procrastinate. Also government services often face challenges in establishing effective two-way communication with rural people. The MA&D pilot/VTE project is proving a useful forum for shared learning and a practical focus for national and international networking.

Importance of process issues: We have seen the importance of putting the right facilitators in the field to deliver the MA&D approach, those with appropriate baseline skills and field training and support.

Baseline studies: Establishing the status quo of the project in the early stages of the process is important. Baseline studies permit the evaluation and documentation of change experienced by village entrepreneurs and households over the duration of the project.

7 Conclusions

Post business-plan-development support will be key in the success of many enterprises. However, critical

issues will be how to provide the right level of incentives and support without encouraging dependence. What type/what level of support is appropriate to entrepreneurs faced with financial capital constraints? What is the most effective way to facilitate effective communication within and between producer groups and networks? How can conflicting domestic interests be resolved? Allocation of labor and other resources within households to support growing NTFP enterprises and gender-related issues need to be addressed.

In terms of the poverty reduction potential of small and medium forest enterprise development through improved services, among critical issues is how to work within traditional social structures that have a strongly established hierarchy while fostering representative producer groups and ensuring that elites do not capture all benefits. Another key element is seeing that an appropriate portion of returns is reinvested in forest resource management to ensure sustainability. Also, support to rural producers in advocating at the national policy level for development of NTFPs is essential to maximize benefits to poor rural households rather than simply maximizing export earnings.

Impressive barriers exist to NTFP development in the context of the West African Sahel. MA&D's participatory and iterative nature is particularly relevant to support villagers in addressing these barriers. Implementation of the project is providing new avenues for small and medium forest enterprise development for both poverty reduction in rural areas and sustainable forest resource management. Villagers are seeing the potential for increasing the impact of community enterprise development on rural livelihoods.

Business Development Support in Cameroon for Commercialization of Community Forest Timber

Leonard Sprik, Rolf Schinkel and Maurice Schill¹

1 Introduction

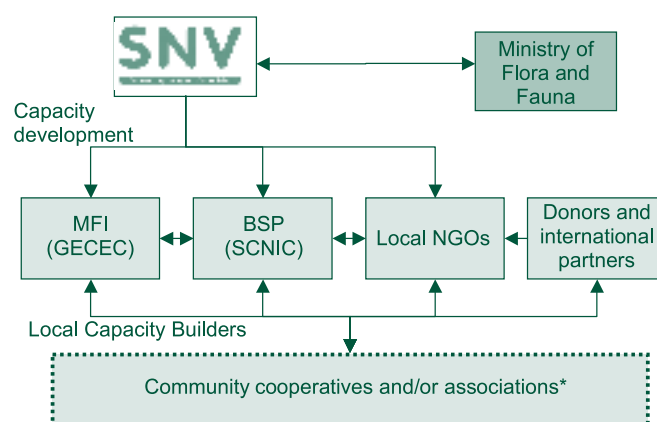
The development of small and medium enterprises (SMEs) is becoming an increasingly important strategy in the fight against poverty in Cameroon. The Netherlands Development Cooperation in Cameroon/Democratic Republic of the Congo (SNV Cameroon/DRC) supports clients who promote private sector activities that boost economic development such as providing access to market information, capital and business support services.² SNV Cameroon/DRC's work in this field is mainly done in capacity-building areas such as supply chain development, business development, enabling environments and access to finance. In East Cameroon, most clients who work in business development act on meso and macro levels. Fig. 1 presents the relationships between these actors/entities such as local NGOs, microfinance institutes

(MFI), local business service providers (BSP), cooperatives (and associations) and government agencies.

2 Activities with clients in East Cameroon

Conditions for access by an organization (client) to SNV services are based on the following:

- efficiency of the organization
- coherence with other clients in SNV's portfolio in the geographical region concerned
- capacity of absorbing the advice given by SNV
- attitude of the leadership toward change
- potential effects of the values propagated by SNV (gender, good governance, sustainable use of natural resources)
- indication of potential contribution toward impact and the fight against poverty



*Not installed yet, direct link of CF possible with other actors

Fig. 1. Constellation of clients in the region of Lomie, Cameroon

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² SNV is a Netherlands-based international development organization that provides advisory services to nearly 1,800 local organizations in 33 developing countries to support their fight against poverty. SNV provides advisory services (usually not funds) to local intermediary organizations—governmental and nongovernmental—to strengthen their capacity to act as effective agents of change. This enables organizations to reach grass-roots groups and contribute in a lasting manner to improved governance and wealth creation. In Cameroon, 41 advisors in five teams are working in three areas: access to basic services (water, health and education), natural resources and market access.

If these requirements are met by the potential clients, a capacity-building program with the local organization is developed, based on needs. SNV distinguishes four so-called delivery channels through which each organization receives assistance.

Table 1 gives a brief overview of activities related to clients involved in this case study.

3 Demand for services

SNV Cameroon/DRC has been formally involved in community forestry since 1996, when it started the implementation of the Community Forestry Development Project in Lomie, Cameroon, called *Projet Soutien au Développement Durable dans la région Lomie/Dja (SDDL)*. The SDDL project (Fig. 2), funded by the Directorate General for

Table 1. Client description and related SNV services

| CLIENT | Description of the organization's activities | SNV services | | | |
|--|--|---|--|--|--|
| | | 1. Advisory services (60%) | 2. Knowledge brokering (15%) | 3. Local capacity development funds (15%) | 4. Advocacy (10%) |
| GECEC | A microfinance institute based in Lomie, in East Cameroon, provides simple banking activities in the region. It gives business support to community forests and SMEs. | Organizational advice, business development | Market studies, technical advice | Approaching donors and co-investors for credit funds | |
| Local NGOs | NGOs work to support community forests in the region with their commercial activities for timber and NTFPs. | Strengthening organizational and institutional capacities | Access to information and market studies | FGF,* approaching donors | Advocacy toward local government |
| Cooperatives (and associations) | Community forests** work together to enhance their scale of economies. We identify two cooperatives: CAFT and Lomie–Messok–Mindourou. | Organizational capacity building, business development | Market study | Approaching donors | Advocacy actions toward local government |
| SCNIC | This is a business service provider (BSP) to be based in Lomie to assist community forests with their commercial ambitions and develop new business and products for timber and NTFPs. | Business development, organizational strengthening | Specific business expertise, market research | Approaching donors, co-investors for funds | |
| Ministry of Flora & Fauna (MINFOF)* | Cameroon ministry and field offices are very important in this process because they determine the rules of engagement. | Organizational capacity building | Research | FGF | |

* Cooperation with and from the local government (MINFOF) is very important to attack overregulation and improve existing rules. The recently initiated Forest Governance Facility (FGF) helps reinforce lobbying actions and forestry regulations. This SNV capacity-building activity exceeds the East Cameroon regional level. The purpose of the program is to build up the public domain related to the Cameroon Forest and Environment Sector Policy (FESP) and to facilitate engagement and participation by nonstate actors with policy development and implementation. The FGF goal is an enhanced environment for good governance and equitable, sustainable management practices in the Cameroon forest and environment sector, with a specific objective to develop an autonomous and neutral facility to serve as a mechanism to build up and serve the FESP public domain.

** Community forests form part of the nonpermanent forest estate, which is covered by a management agreement between a village community and the Forestry Administration. Management of such forests—which should not exceed 5,000 hectares—is the responsibility of the village community with help or technical assistance from the Forestry Administration.

International Cooperation (DGIS) of the Netherlands Ministry of Foreign Affairs, sought to capitalize on the opportunities created by the new and innovative 1994 forest law of Cameroon that, among other things, created the legal framework to establish community forests. The SDDL project, which ended in 2003, invested in the creation of five community forests and closely accompanied the process of communal organization around the management of these forests. In the meantime, SNV in 2002 started, together with the UK Department for International Development (DFID), the Capacity Building Programme (CBP) to support civil society interested in contributing to sustainable forest management (Box 1). This program, which ended in 2005, became one of the drivers behind the large-scale promotion of community-based forestry activities in Cameroon. Today, SNV continues to provide advisory services to selected CBP beneficiaries, either through contract-based capacity-building activities or as a partner.

4 SNV and its partners: who is in the driver's seat?

As project manager of SDDL, SNV had a large say in the organization of both the participating communities and management of the forests. This led to

Box 1. Capacity building for NGOs in sustainable forest management

The Capacity Building Programme (CBP) 2002–2005, co-financed by DFID and SNV, aimed at involving civil organizations in the sustainable management of forests in order to fight poverty in Cameroon.

Its objectives were 1) to strengthen the technical and professional capacities of civil organizations through the financing of microprojects, 2) to build their organizational capacities and promote institutional links between them, and 3) to make data relating to the forestry sector accessible to these organizations (information center specialized in forestry).

Fifty-six NGOs embarked on the process of promoting the co-management of forests and operated microprojects worth US\$1.6 million. They worked with 221 communities in five provinces of Cameroon, resulting in the establishment of 82 community forests.

situations of confusion and conflicts between SNV and some communities, especially internal community conflicts when SNV had to take a stand to ensure continuation of SDDL project activities. During the past three years of the project, SNV distanced itself more from decisions to be taken by the communities.

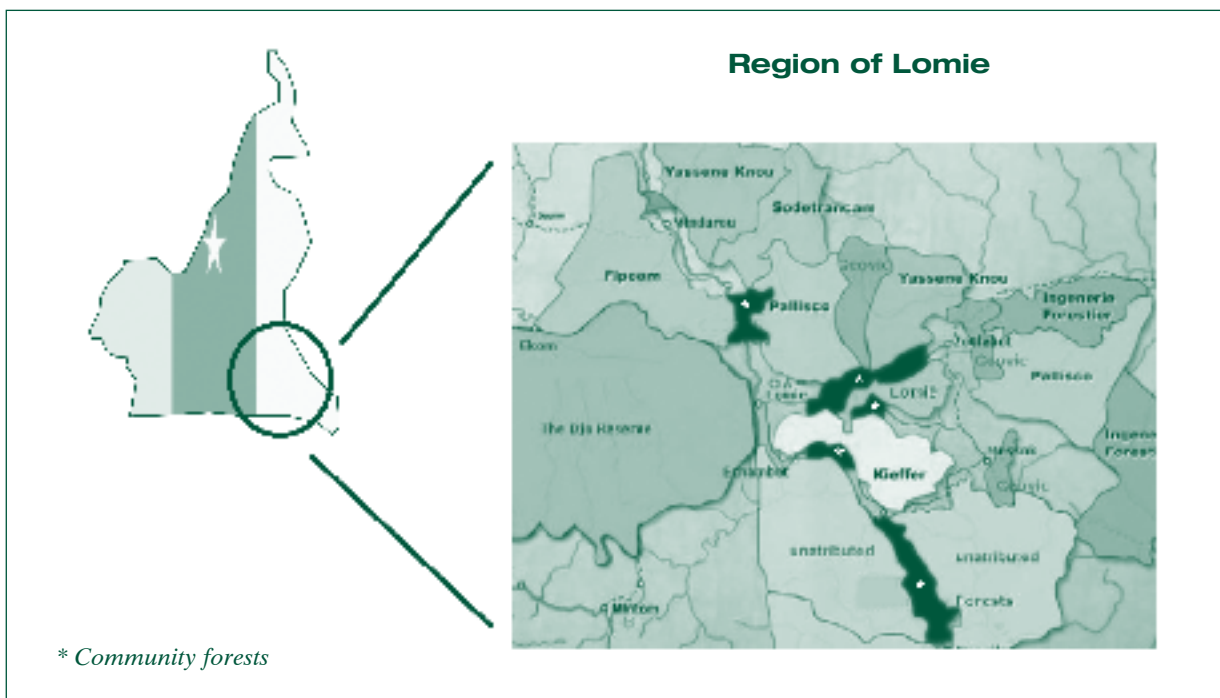


Fig. 2. Geographic positioning of community forests in the region around Lomie

The participation of local NGOs was intensified so that they could develop as local service providers, and SDDL could move toward being a partner with local organizations. Also, through the local NGOs, a larger number of villages could be accompanied in community forestry activities. However access to community forestry was restricted mainly to communities that had access to support from SDDL and similar projects. The CBP program was a logic continuation of this process of “keeping a distance” and leaving the driver’s seat to local organizations. CBP offered a second delivery channel for SNV services: along with advisory services, funding was offered to local organizations that developed initiatives to promote community forestry activities. Now SNV advises its clients on technical and organizational issues and in their search for funding with external partners, like the Interchurch Organisation for Development Co-operation (ICCO), which can lead to triparty or multiparty contracts.

5 Communities: technical skills versus management capacities

While assisting forest communities, much focus is put on technical aspects of forest management: inventories, socioeconomic surveys, management plans and tree felling. It is clear that much has been done, both by SNV and the local NGOs, in training and instructing community members in these skills. However, the real limitation is not weak technical skills or lack of knowledge but the way communities organize themselves and make decisions, and, above all, identifying how to help them improve their capacities through increased cooperation and coordination.

Once they assume responsibility for the management of the forests, communities are also held responsible for their exploitation and the reinvestment of revenues in the community. To achieve the transparency necessary in management processes, these responsibilities (related to sustainable management versus commercial activities) should be separate. Community forest management should be aimed at stable revenues that serve lasting socioeconomic development in the community. On the other hand, the operator exploiting the community forest seeks maximum profit at minimum investment. These two objectives can come in conflict, so when the manager and the operator are one and the same, either the sustainable management objective or the exploitation objective may come under pressure, or both.

SNV did not fully recognize this potential for conflict at the beginning of the project. Moreover, in many villages the demand for transparency was (and is) not always that strong. Once a community started to exploit its forest and money started to flow in, possible organizational weaknesses became obvious, jeopardizing the development objectives of community forestry itself. Moreover, the commercial results of community forests were not as good as could be expected from the market. It appeared that communities received prices for their products far below real value. It can be concluded that the main focus in providing services to community forestry should be on community organization and secondly on the aspect of commercialization.



6 Chain thinking: new focus in offering services

As we concluded, the main focus in community forestry was on creation of forests and the production of timber, supported by transferring the skills necessary to manage and exploit them. But not enough thought was given as to how the communities should deal with the different responsibilities (forest management, exploitation, commercialization and investment of revenues) and the consequences for internal organization, relating to third parties and access to markets. Especially lacking was attention to the role and interaction of forest communities with the market. This chain thinking, or supply chain development, was not yet common within SNV. Well-thought-out models that took the whole

process into consideration had not yet been developed, either by SNV or any of its development partners involved elsewhere in Cameroon or in community forestry.

A first step in that direction was made early in 2003; SNV, together with ICCO and the Cameroonian MFI GECEC, from Lomie, developed the first initiative to better structure the exploitation of community forests in the Lomie region and the commercialization of its timber. The objective was to create a local structure that should contain all elements for transparent and sustainable community forest exploitation. Only one village in the Lomie region was sincerely interested, possibly because the initiative was still too top-down. The conclusion was that SNV and its partner organizations were not well-equipped to develop properly working chains and that expertise in that field should be developed and hired. For Cameroon this was the start of the development of a market-access practice area with a special focus on small and communal forestry enterprises. In 2005 a value chain study presented by GECEC concluded that the international timber market puts up so many barriers to forest communities that they will have great difficulties in successfully entering this market.

These experiences led to the following lessons:

- SNV left its role as project manager to avoid conflict of interest and to hand over ownership to local communities; local NGOs obtained a larger role in local development.
- SNV took its role as an advisor and shifted its target group from a micro to a meso level to increase its impact.
- Sustainable forest management is a different issue from exploiting forests; separating responsibilities and organizations are necessary.
- Value chain approach highlights the division of responsibilities along the chain.
- Communities suffer from weak business and negotiation skills in commercialization.

7 Innovations in the value chain: two business approaches

From the lessons learned and specific definitions of the barriers, SNV and its partners are currently in the process of identifying and supporting different business approaches that exist in the Lomie region for further experimentation. These business approaches

are best described by how the commercial activities of the communities are organized. The differences in the two approaches are 1) the community runs its business directly and sells its products straight to the market—NGOs support the community with its business activity or 2) the community works together with an intermediary organization to sell its products; another actor is added to the supply chain to improve revenues for those on the bottom of the chain. The first approach is based on real experience; the second approach is in an experimental phase.

Approach 1: full community ownership of businesses

In this approach the community alone manages the exploitation of the community forest: it contracts several timber companies to log and market timber: the production method is mainly through artisan and light-industrial exploitation. Extraction of logs is not allowed. The first transformation is done at the felling site with simple chainsaws or portable sawing machines like the Gruminette or the Lucas Mill. The community fully manages the sales of its own timber. Local NGOs, supported by SNV, provide services to the community forests to assist them with the commercialization.

One practical case involving the community called Kongo, in East Cameroon, shows some experiences (Box 2). Research indicated that the prices the community obtained for the timber were low related to the market value (based on prices FOB/Douala). Also, private companies or private local businesses profited from the weak business capacities of the community-forest representatives. The management of the revenues was poor—it was unclear where the revenues went and how they were used for development.

Approach 2: business services for forest communities

This approach is based on the analysis of market barriers that make it difficult for the community forests to successfully enter the timber market. Out of this research came the idea to install a business service provider (BSP) that could assist the forest community with the exploitation of its timber on a commercial basis, recognizing that the timber market is complex and that the business and production skills of the forest communities are limited.

Box 2. Practical experiences in Cameroon

In the past five years Kongo exploited about 1,000 m³ of timber. Revenues from the timber averaged CFA31,500/m³ (based on exploitation of seven types of timber), generating a total revenue of CFA31.5 million. What happened with the revenues is not clear because of bad financial management. What did appear in the village were improvements in individual housing, an oil press, a grain mill and individual financial assistance.

Calculations based on the prices FOB/Douala show the value at the port of Douala is an average of about CFA132,000/m³ FOB for unsawn timber; with the added value of sawn wood, the price in Douala averages of CFA222,000/m³.

A BSP in the region will assist the community forests with the commercialization of its timber. The BSP would work on at least a cost-recovery base for itself and work with people from the communities to enhance their well-being. Together with NGOs, the BSP will organize training to improve community business skills. The BSP has to start as an intermediary organization and eventually phase out to hand over activities to the communities themselves, though it can continue to provide its services to actors in forest chains based on a cost-recovery fee.

Enhancing approach 1: cooperatives

SNV organized a series of workshops in May 2006 to look at these two business approaches. All the actors involved were consulted: the forest communities, local governments, international development organizations and local NGOs. The workshops asked: What would be a practical and feasible approach to support community forests in order to commercialize and exploit the timber in a sustainable way? An important step taken by the community forests was to join forces: a certain economy of scale is necessary to become an interesting player in the market. Also, together they can exert more force on (local) governments. The cooperative organization ensures community ownership of the commercial activities. The workshops led to the development of two cooperatives, both of which, due to their lack of commercial experience, indicated the need for support from an external source to assist them in setting up their business.

Enhancing approach 2: business service providers

The BSP, which should be independent in its activities, has two clear advantages: it can be operational at short notice, and it has a very good knowledge of local business and culture. Each community can make an individual contract with the BSP, which functions as an intermediary between buyers and communities. International companies in particular do not wish to work directly with communities because it is too time consuming and they may lack essential knowledge about the local culture.

However, there are also constraints. Since the BSP is an independent organization not directly part of the communities, conflicts of interest can arise. Also, how can communities ensure that part of the money flowing in gets back to them? One avenue to ensure that the BSP is based on a system that takes into account both the interests of the communities and sustainable forest management is FSC group certification. The required regular audits ensure transparency and the costs of this certification are flexible enough to make it affordable for communities.

8 Conclusions

SNV heavily invested in the process of developing community forestry in the past 10 years, and continuing to do so is in line with its objectives. However, the road is long and many challenges remain. Findings are integrated in the current capacity-strengthening strategy of SNV Cameroon/DRC for 2006–2007.

We see the following main strategic directions in this approach:

1. Support the development of locally owned business structures to support the commercialization of community forests (cooperatives/associations).
2. Support and improve the development of business development services that can assist community forests in developing their commercial activities.
3. Lobby for better rules and attack overregulation: bureaucracy and corruption are perhaps key bottlenecks to moving communities out of poverty. Since government sets the rules, it should be more integrated into this process. Strengthening civil society's support is critical.

Through the two approaches described, SNV expects to reach a synergism that will improve the supply chain for community forest timber. Effects expected from the first approach are an increased performance of cooperatives in producing and commercializing forest products, better prices obtained for products, more funds available for community development and improved community business skills. As for the

second approach, results should include an equal balance between social and economic performance of the BSP in rendering its services in the value chain for forest products, contribution to increased income for communities, and creation of employment, leading to improved living conditions and more resources for improved community development, especially in basic areas such as access to water and health care.

Community Ecotourism Enterprises for Poverty Reduction: Lessons from The Gambia

Kanimang Camara¹

1 Ecotourism: an alternative for community enterprise development

In 2000, the forest community of Tumani Tenda in the Republic of Gambia obtained tree and land tenure over its forest resources, which allows the community to commercialize the forest resource base production services. Subsistence farming is the main productive activity in Tumani Tenda, which has a population of about 450 people. Men tend to concentrate on the production of groundnuts (cash crop) and cereals such as maize, millet and sorghum (for domestic use), while women are more involved in the production of rice and horticulture, both for domestic use and to generate income. Overall literacy level is low due to cultural norms and the great distance to the nearest school.

In recent years, community-based forest enterprises have been developed for such products as honey, firewood, logs, handicrafts, salt collection and collection of fruits and nuts. However, these enterprises have had limited success in adding value to primary production, largely due to their limited technical skills for processing and for business administration and marketing.

The compilation of the five-year management and business development plan certified by the Forestry Department (FD) enables the community to use the forest resources for commercial purposes based on the management plan, which was developed through participatory processes with the support of the FD and partners. It was subjected to a series of reviews by the entire community before being forwarded to the FD for approval and implementation.

In early 2000, Market Analysis and Development, or MA&D, a FAO methodology for community-based

forest enterprise development, was introduced to this community for the planning process. Field facilitators of FD and the National Consultancy on Forestry Extension Services and Training (NACO) guided the community through the methodology's three consecutive phases. The objective was for community members to identify viable opportunities for business development based on local resources and capacities. Training sessions focused on enterprise organization and planning, access to market information and forging links with supply chains. Through the application of MA&D, community representatives identified economically, socially, technically and environmentally viable opportunities for adding increased value to their forest-based products and services (Box 1). Ecotourism was assessed to be the most promising opportunity for community enterprise development in Tumani Tenda.

Prior to the introduction of MA&D in Tumani Tenda, the community was in the process of establishing a community-based ecotourism camp, but ideas and strategies for a possible ecotourism enterprise were inadequate. Since MA&D builds on what exists, the process began by addressing the main challenges for the project: inadequate ideas on the product (ecotourism), identifying possibilities of establishing enterprises based on natural resources located outside the forest (sector and sector-related products) and linking income generation and conservation of the community forest.

2 Community ecotourism enterprise Tumani Tenda

Construction on the community ecotourism enterprise in Tumani Tenda started in 1999 after winning US\$2,333 in a national competition organized by

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Gambia's National Environmental Agency for good environmental protection practices and community organization. (The community had been involved in the protection of its forest for eight years before being contacted by the FD about joining the participatory forestry program.) The award was based on the community's capabilities, competency and interest in sustainable community forestry: the community had demonstrated its capacity to sustainably manage its forest resources, which contain an abundance of bird and tree species.

By establishing an enterprise named Tumani Tenda Ecotourism Camp (TTEC) within the reserve, community members hope to provide an additional source of income and employment for young people in the community and as well as to reduce pressure on forest resources. Currently, the enterprise employs 16 staff from the community (eight men and eight women). The objectives of the camp are to promote community development, improve communication within and outside the community and reduce rural-urban migration.

The administration of TTEC is entrusted to a certified Village Development Committee (VDC), selected by general consensus. In addition to overseeing business operations, members serve as the main administrative body responsible for community development activities in accordance with the local government decentralization processes. The VDC is responsible for overall planning and implementation of the community's enterprise development plan. The administration of TTEC is under a subcommittee referred to as the Camp Management Committee. This committee is responsible for daily operation of the enterprise and provides regular feedback to the VDC. The committee is registered as a legal entity with the FD through the attorney general's chambers. It is also registered with the Gambia Tourism Authority (GTA) through the Association of Small-Scale Enterprises in Tourism (ASSET) as a community-based tourism initiative.

TTEC employees are entirely responsible for carrying out the services, which include conference hosting, lodging and catering, birdwatching and cultural entertainment. According to data collected by the community over the past three years, the number of registered guests per year has increased nearly 20%, from 312 in 2003 to 380 in 2005. Total annual revenue

Box 1. The MA&D methodology for organization of community-based forest enterprises

The methodology Market Analysis and Demand (MA&D) is carried out in three phases:

Phase 1: Assess the existing situation

This phase identifies potential enterprises, inventories existing resources and products, identifies products that are already providing for local people and prioritizes viable products or services. Outcome: short list of products or services; identification of local people interested in developing enterprises; understanding of the social, environmental, technical and institutional contexts of a range of products or services; formation of an interest group to undertake the next phase.

Phase 2: Identify products/ services, markets and means of marketing

This phase includes selecting promising products/ services, identifying potential markets and discussing the means of marketing. Outcome: list of possible products/services based on detailed feasibility studies; data collected to design a business plan; formation of interest groups around promising products/services; formation of a team to undertake the final phase.

Phase 3: Plan enterprise for enterprise development

The enterprise strategy and business plans are prepared. Entrepreneurs are guided through a pilot phase and training, learn to monitor progress and to adapt when change is needed. Outcome: an enterprise strategy comprising the selected products/services; marketing and management plans; action plan to ensure proper implementation; financing obtained as specified in the capital needs statement.

grew from US\$6,666 in 2003 to US\$7,407 in 2005. The 16 permanent employees, who receive a monthly salary, include room boys, cooks, barkeepers and a camp manager. Other income-generating activities include the sales of handicrafts, honey and services provided by individuals within the community.

Located about 50 kilometers from the tourism development area (TDA) where most of the government organizations, nongovernmental organizations (NGOs) and consultancy companies are located, the ecotourism site is frequently visited by these entities and individual tourists, international organizations,

researchers and people from other villages in the community forestry program. The rise in overall demand for ecotourism services in The Gambia makes TTEC profitable and provides for future growth opportunities. According to national figures, roughly 80,000 visitors were registered during the 2004–2005 tourist season; 90,000, in the 2005–2006 season. The projection for 2006–2007 is about 110,000 visitors. Of these, about 80% participate in ecotourism-related activities.

3 Growth and development of TTEC

In the initial phase of operation, pit latrines, locally sourced showers and mattresses, thatched kitchens, carved wooden spoons and kerosene lamps were used. With time, the camp board, in consultation with the community, managed to improve the facilities to add value to the services and better satisfy clients. Information dissemination from the partners in the hotel industry was going through a second party, who travels in a bush taxi to deliver messages to the camp board. Investments by the community have included the construction of infrastructure, and it successfully organized labor for the protection of the forest reserve against fire, including establishing firebreaks and protection against illegal activities, continuously patrolling the forest area. It also mobilized local resources for clearing the footpaths to provide easy accessibility for birdwatchers and other visitors. During construction of the camp, skilled labor for carpentry, masonry work, painting and cleaning of the site were required; these services were provided by the community as its contribution toward the establishment of the camp.

Through regular monitoring and training coupled with the growing experience of the management committee, the services offered have improved significantly. The number of visitors has also increased as the tourism authorities and camp management committee embarked on a vigorous promotional campaign, including preparation of brochures, leaflets and posters and the construction of billboards and a Web site (www.tumanitenda.co.uk/index.html). In 2004, TTEC representatives were among delegates who represented the country in the International Tourism Fair in Berlin, Germany, which resulted in an increase in the annual revenue generated by TTEC: during the peak season US\$4,600 to \$6,000 was realized, with an annual increment of 10%.

To further increase sales, TTEC has consulted more experienced tourism businesses and organizations, including ground tour operators, the Gambia Hotel Association, the West African Bird Study Association and the Department for Arts and Culture. This has played an important role in increasing the number of visitors, in addition to developing links with some of the key players in the tourism industry.

Given the greater number of visitors, in 2004 TTEC management identified an opportunity to increase the value added in their tourism services through introduction of cultural activities that showcase the traditional and cultural richness of the ethnic group found in the Tumaní Tenda community. Activities such as drumming and dancing entertain the resident guests on a weekly basis.

The reinvestment of earnings is critical for TTEC growth and development. Currently, the management, in consultation with the VDC, has the policy of reinvesting at least 40% of the revenue for forest development since it is a sector-related enterprise. The remaining 60% goes for camp maintenance and funding village development activities in accordance with the management plan certified by the FD. Some of the activities funded so far include provision of



standpipes, electrification of the camp and mosque, payment of school fees for needy children and payment of compound rates and taxes for the entire community.

Reserve land exists for expanding the camp, which would allow additional structures for lodging and conference services. Fishing and boat trips can be expanded by procurement of a bigger boat with an installation of an outboard engine, which is safer and can go for a longer distance. Salt and batik making are limited to domestic use, but there is a great potential for increasing the productivity in order to generate more income. Birdwatching is another attraction for visitors, however the poor quality and obsolete nature of the equipment used needs to be improved. Although, there is an existing borehole, the quality of water produced has deteriorated due to salt intrusion, affecting some of the toilet facilities.

To determine the type of services needed, thorough stakeholder identification and analysis was conducted, followed by an intensive market survey that collected helpful information used in analysis. Based on the results obtained on types of clients, quantity and quality of service seemed to be in accordance with the price charged. Periodic market surveys are conducted for all the most promising products and services identified by community forest managers. Participatory reviews are conducted on findings from the survey, and the final results are used in the development of the enterprise development plans. Objective guest questionnaires administered at the end of every guest visit are evaluated weekly to identify needed improvements in services and products. Constant monitoring is done by the Gambia Tourism Authority to ensure that standards are maintained according to the 2002 Tourism Act.

4 TTEC's relations with other businesses

As a member of the Gambia Tourism Authority, TTEC is in regular communication with all registered members, facilitating cooperation. Within the community, there are enterprises ranging from a bakery to a poultry business, commercial transportation and a grocery store. For each of these enterprises, there also exists a subgroup represented on the camp board, facilitating coordination without friction and creating a strong bond of intracommunity business cooperation.

A high level of trust exists between TTEC and some of the above-mentioned organizations. The roles and responsibilities of the tour operators include, among others, marketing and promotion, ground handling of camp visitors and collection and sharing of information among partners. Government organizations, NGOs and individual private clients provide links and promotion between the camp management and other sectors as well as providing patronage to the various services rendered by the camp.

However, there is some degree of mistrust between some of ground tour operators and the community (Table 1). The camp board always sticks to the terms of agreement regarding 10% per visitor for ground tour operators, but upon arrival, the operators normally ask for a 50% share. These tour operators lose credibility by not fulfilling commitments made with the camp board, often failing to bring the number of guests promised.

5 TTEC's demand for technical, business and financial services

Generally the organizations that are partners with TTEC have rendered services ranging from technical to business and financial services. Some of these

Table 1. Opportunities and limitations for community ecotourism in The Gambia

| Opportunities | Limitations |
|--|--|
| <ul style="list-style-type: none"> Community ownership of the land and resources Natural and cultural experiences offered by locals Increasing international and local demand for experiencing nature and culture in its origin Community self-reliance High demand for ecotourism facilities | <ul style="list-style-type: none"> Poor marketing strategies as hotel owners still encourages all-inclusive tourism High cost of services offered by some tour operators Negative intervention by the tour operators Political instability |

partners play dual roles: either technical and financial services combined or business and financial services. The Gambia Tourism Authority, FD, NACO and the St. Joseph's Family Farms Project (SJFFP) provide technical services in the form of capacity building and rendering of technical advice. The Education Through Culture and Communication Organisation (ECCO), ASSET and SJFFP have provided financial support in the form of soft loans. Tour operators and ECCO assist in business transactions as well as in preparation of brochures. These arrangements enable the community to reinvest in horticultural activities, tie-dye and trading. Proceeds from the sales of these products are used to improve community livelihoods; garden products are sold to the camp management, with the surplus consumed locally, which improves the community nutritional level. The disadvantage from some of these arrangements include high-interest rates on soft loans and a very limited recovery time frame.

For services provided by the FD, cost recovery is based on the 15% contribution made by the community to the National Forestry Fund (NFF). In turn the FD provides technical and capacity-building services and supports communities in the provision of initial planting materials for forest enrichment activities. The Central Revenue Department and the Treasury control the fund. The FD directorate determines how the fund should be reinvested; however, many constraints by the central government hamper access to the fund.

The tour operators are more involved during the peak of the tourist season, with cost recovery based on the terms of agreement. The services of the Gambia Tourism Authority, ECCO and SJFFP are used as needed or according to agreed-upon consultancies. Cost recovery is based on either the collection of taxes, registration fees or payment of interest on loans.

These services have helped in poverty reduction: the livelihood of the community has improved through the provision of basic family needs, commercial transportation services, communication facilities, employment opportunities and transfer of appropriate technology. The number of children going to school has increased due to improved teaching and learning materials. Access to and recovery of loans within the community is better. The establishment of the vegetable garden has improved nutrition of the people, especially

women and children. There are, of course, possibilities for improving services through frequent training and monitoring activities.

6 Lessons learned in development of the Ecotourism Camp

Networking with the various institutions involved in TTEC yielded considerable socioeconomic development, for example village electrification, construction of a school, employment opportunities, learning materials for the school and payment of annual compound rates and taxes. These benefits were achieved in large part due to the high levels of cooperation and coordination that exist between the development partners on the board, avoiding duplications of efforts and overlapping of activities among the organizations. From the enterprise development plan, all activities that were highlighted are assigned to responsible sub-committees supported and advised by the respective institutions. TTEC directly benefits from technical and financial support from institutions that are interested in development enterprises such as poultry farming, a bakery, commercial transportation and a grocery—soft loans are obtained and directed specifically for the development of these enterprises.

For government organizations, the operational cost involved is the cost of vehicles and salaries of staff involved in the rural development program. The entire community carries out the labor of implementation, while NGOs and other institutions provide the cost of training materials and in some instances the hiring of experts to transfer appropriate technology to the community.



The importance of community forest enterprises cannot be overemphasized, as it contributes immensely to the socioeconomic well-being of community members. The underutilization of forest resources was one of the bottlenecks that faced both FD and the participating communities. The introduction of the forest small- and medium-enterprise (SME) program has built the capacity of the communities to optimally and sustainably use forest resources.

Through this learning and capacity-building program, self-employment opportunities have been provided for rural people, which has gone a long way in improving their standard of living. The linkage, coordination and cooperation between partners and among community members have been enhanced. The networking and information flow between stakeholders has improved significantly and resources have been utilized in the most appropriate way. Community forest-enterprise development has also contributed to the reduction of illegal harvesting of forest products.

- **Achievements in community enterprise development:** The major integration achievement clearly is the diversification and coordination of all the other SMEs under one main body, which is the ecotourism camp board. The establishment of TTEC attracted organizations that support community-based enterprises in the form of technical advice and financial support. As a result, the camp board's financial status ranges from US\$4,600 to \$6,000.
- **Remaining challenges for TTEC development:** There are enormous challenges that the camp board needs to address in order to improve service delivery. Concrete agreements need to be in place with some of the tour operation. Expansion of TTEC's capacity to accommodate more guests during the peak of the tourist season must be considered, as the camp now accommodates only 28 guests per night. The camp board must ensure adequate and safe drinking water since the main borehole that supplies fresh water is now salinized.
- **Role of service providers:** The service providers played a significant role in the overall successes of TTEC by building the capacity of the local communities. They have also contributed enormously to market surveys and data collection and analysis. They have also improved information sharing among stakeholders.
- **Role of ecotourism enterprises for poverty reduction:** SME is one of the adaptation options for poverty alleviation that calls for concerted efforts from all stakeholders. The integration of all community-based enterprises in Tumani Tenda under a central body (the camp board) contributed to the enhancement of the livelihood of the entire population of Tumani Tenda. A dramatic change has been witnessed in a very short period in terms of infrastructure development, availability of basic social services and community self-reliance.

A Paradigm of Forestry Enterprise Development in Nepal: Creating a Powerhouse to Reduce Rural Poverty and Promote Conservation

Surya Binayee¹ and Sushil Gyawali¹

1 Context

Nepal, a land-locked mountainous country with a total area of 14.7 million hectares is situated between India and China, two giant and growing economies. Population of Nepal is 25 million, of which 38% live below the poverty line of US\$78 (HMGN, 2003). Per capital gross domestic production is estimated at US\$315. Forests cover about 40%, whereas agriculture is 19%. Agriculture and forestry play a pivotal role, employing 80% of the population and contributing 38% of the national gross domestic product.

This remote, underdeveloped region is endowed with valuable forest resources that provide timber, fuelwood and nontimber forest products (NTFPs): grass, fodder, thatching grasses and herbs. Local communities use these resources for subsistence purposes and cash incomes. Many species are also used for medicinal and cultural purposes.

NTFPs are among the few sources of livelihoods for mountain people, especially for poor families who are mostly without agriculture land and other income opportunities. According to Subedi (2006), about 161 NTFPs equivalent to \$35 million are traded in Nepal and they contribute up to 50% of cash incomes of local communities. If managed properly and transformed into marketable products, these resources can produce greater job opportunities and incomes. However, unsystematic harvesting and unorganized trading of these products are causing a threat both to the livelihoods of resource-dependent communities and to biodiversity—Nepal is within the Himalaya hotspot for biodiversity (Subedi, 2006).

2 Policy: legal and institutional settings

Nepal has been successfully promoting community-based forest management with more than 14,337 community-forest user groups (CFUGs), about one-third of the total population. These groups manage more than 20.5% of the country's forests (CPFD, 2006). Nepal's 10th Five-Year Plan (2002–2007) recognizes the potential of sustainable use of forest resources for poverty alleviation through promotion of forest-based micro and small enterprises. Some 500 forest-based enterprises involving very poor and socially excluded families of community forests (CFs) have been targeted, and income generation programs are planned for 253,000 households in CFs and 25,680 households in leasehold forests (HMGN, 2002).

The laudable community forestry policy, achievements in CFs and the quantitative targets set for enterprise development by the government all indicate a



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favorable policy scenario for community-based forest management and enterprise development. However, government mechanisms and other development initiatives are tuned only to promote community-based conservation and fulfillment of the communities' subsistence needs. Moreover, government institutions have cumbersome bureaucratic procedures. For example, the forest-based enterprise registration requires a three-party consensus (District Forest Office, Cottage and Small Industry Development Board and Land Survey Office) on feasibility and environmental impacts of proposed enterprises.

Although the policy empowers CFUGs to independently manage, use and trade forest resources of their CFs, in practice trade on forest products is constrained by traditional authoritative and conservative forest officials who have significant say in forest enterprise development, sourcing of raw materials from government-controlled forests and transportation of forest products. Furthermore, multiple taxation on forest-based products by various entities makes it difficult for many entrepreneurs of forest-based enterprises to operate profitably. This situation favors influential traders who can control the trade on forest products through their capacity and ties with authorities.

Banks and financial institutions are almost non-existent in most places. District cottage and small industries development offices, which are mandated to provide business development services, provide skill-development training courses to only a few individuals. Although there are some NGOs in the districts, their understanding and capacity related to enterprises is weak. In addition to CFUGs, there are some grass-roots savings and credit groups and local clubs that sometimes try to promote income-generating activities, though their focus is still on social issues rather than enterprise development. So, despite great potential, enterprise-oriented forest management and promotion of forest-based enterprises remain confined to few cases.

Fig. 1 shows main actors involved in forest products, especially NTFPs, and also indicates functions carried out in the value chain, and by whom, and what kind of policy and institutional mechanisms exist to assist the value chain actors.

About 90% of NTFPs are exported from Nepal without much processing other than cleaning, drying, grading and simple packaging. These products generally pass through layers of traders who often absorb good margins for their market linkage functions. Even though what collectors receive may at times not even cover the cost of their labor, they continue due to lack of better alternatives. The NTFPs processed in Nepal are mostly handmade paper, essential oils and handicraft products. Community-based enterprises are involved in local processing of these products, which are sold in national and international markets by regional- or national-level processing and manufacturing companies. Because of supply issues and policy risks involved in forest-related products, there is little private-sector investment. Only a few institutions and programs promote community-based enterprise development, offering limited support services. Access to financial services by community groups and potential entrepreneurs is limited.

Due to the information gaps and inefficient supply chains, there are mismatches in the value chain of most NTFPs. Collectors complain of low prices and a supply of raw material that sometimes exceeds demand. Traders and processors complain of poor quality of raw materials (unclean, not dried, mixed quality, etc.), difficulty in sourcing inputs and high costs of marketing transactions (lack of economies of scale).

3 Needs, priorities and approaches

Nepal's greatest priority is to alleviate poverty. It is clear that the forestry sector has huge potential for income generation and livelihoods improvement. Unfortunately, the haphazard collection of natural resources to meet subsistence needs and demands from outsiders are depleting the resource base and negatively impacting livelihoods of the rural poor.

The current situation was even worse when ANSAB initiated its enterprise-based program for livelihoods improvement and conservation. Building on local institutions and assets, ANSAB developed the enterprise-development program in order to achieve economic growth with equity, reduce poverty and balance economic development and conservation needs. The following priorities were set:

- transform forest management into enterprise-oriented community forest management
- develop marketing and value-adding local enterprises

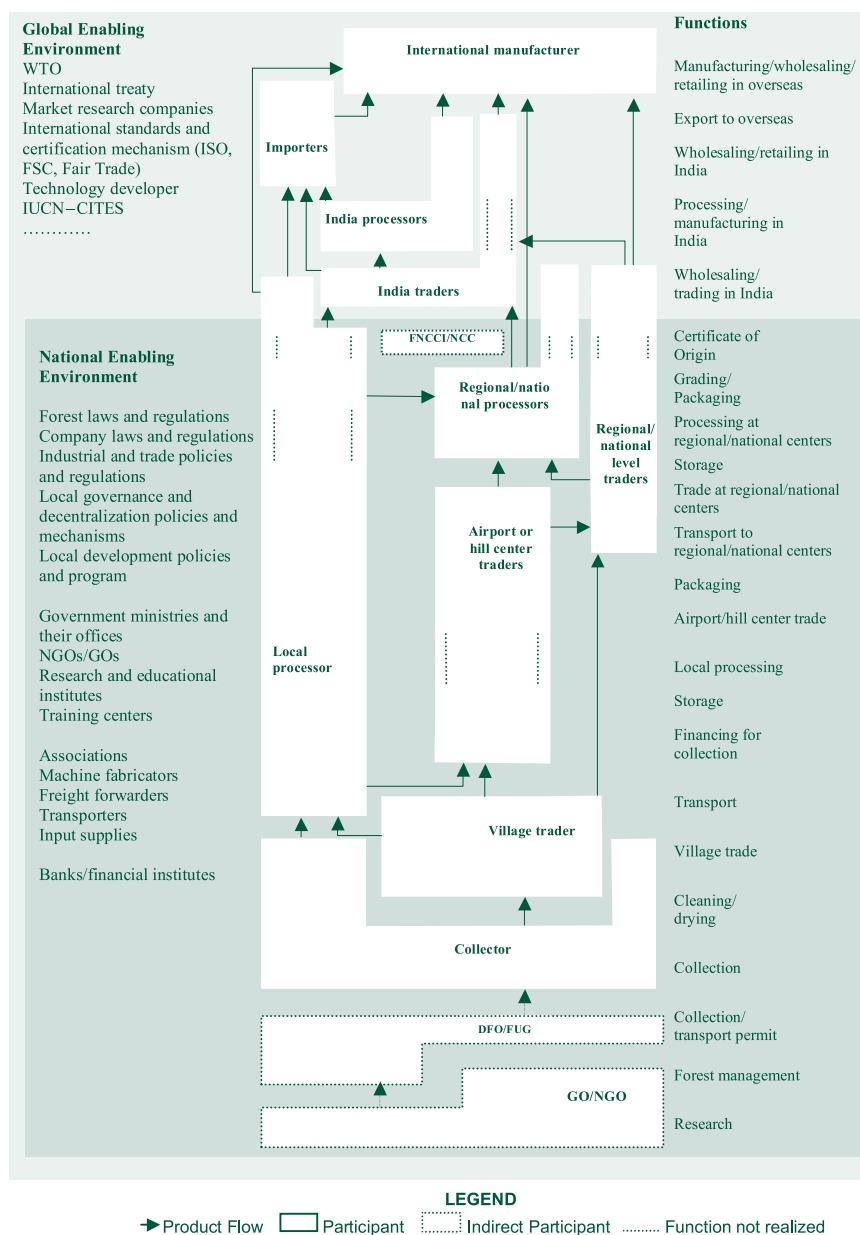


Fig. 1. Value chain map for Nepali NTFPs

- promote market linkages and integration of local enterprises into value chains
- improve access of enterprises to business development and financial services
- create a favorable policy environment

The program has been underway since 2000 in 15 districts of Nepal (Fig. 2). The area selection included the following criteria:

- abundance of commercially valuable forest resources or potential area for cultivation of NTFPs and high value crops (scope for enterprise development)
- high need for economic development assistance (poverty index and qualitative assessment using local stakeholders' knowledge)
- local interest and potential to develop enterprise management capacity (local stakeholders interactions and skills assessment)



Fig. 2. Geographic location of 15 participating districts

The program adopted value chain and subsector analysis to identify opportunities for enterprise development and integration into upstream markets. A cluster development approach was implemented to produce economies of scale in enterprise outputs, facilitate an environment for improved coordination and collaboration, and achieve efficiency in program implementation. Market Analysis and Development (MA&D), a methodology developed by FAO, was the tool used to systematically look into markets, resources, social and policy elements and technology while identifying local enterprise opportunities and facilitating enterprise planning and development. Efforts to build local capacity focused on promoting business development services through private entities and local institutions as much as possible. The program had networking, alliance building and learning mechanisms to promote collaboration among key stakeholders and scale up enterprise development initiatives. Local partnership and multilevel bottom-up participatory planning processes were key elements.

4 Interventions

The program strived to demonstrate and facilitate commercially viable options for enterprise development and expansion. It promoted vertical and horizontal collaboration to make the enterprises and

subsectors competitive and remunerative for the target population. Opportunities and constraints facing each actor, mainly producers and primary processors, in the subsectors were addressed through business development service from viable community institutional mechanisms. Horizontal linkages allowed entrepreneurs to achieve economies of scale and better coordination in purchasing/acquiring services and inputs and selling their products. Different types of enterprises in multiple subsectors allowed potential entrepreneurs options to match their interest, capability and skills, risk profile, and vision and aspirations.

FUGs were the focal point for sustainable production of forest resources, with a goal of achieving both poverty alleviation and sustainable natural resources management. To transform forest management into an business mode and develop forest-based enterprises, the program created an enterprise development framework for natural products (Fig. 3). The framework focuses on appropriate components and institutional capacity and processes in the marketing system to achieve the following: 1) increased incomes for a large number of poor women and men; 2) improved capacity and business practices that lead to upgrades in technology, increasing productivity and efficiency; 3) sustainable supply of demand-based services for

enterprises and other actors to improve capacity and practices; 4) sustainability of the resource supply; and 5) competitiveness of the value chain/industry.

As Fig. 3 shows, the framework has two major aspects: 1) adoption of a management process that helps identify most promising products/value chains, analyze specific opportunities and constraints, and design and implement interventions; and 2) development of critical business components and an appropriate marketing system.

The idea is to develop micro and small enterprises that are parts of a larger value chain. The framework promotes integration into value chains to make businesses sustainable. Selection of value chains is based primarily on the market prospects and growth, increasing incomes to a large number of target groups, ease with which target groups can engage in the business, and opportunities for growth and upgrading in value chains.

As shown in Fig. 3, the four critical components need to be further strengthened by three enabling conditions or supporting mechanisms. The critical components are 1) sustainable resource management and production system, 2) enterprises/marketing groups, 3) business development services and service providers and 4) financing and financial mechanisms.

These components are conditioned by policy provisions and implementation, research and marketing information, and collaboration, linkages and learning mechanisms. A natural-products-based enterprise and marketing system is embedded into a broad environment (social/political, economic/market, science/technology, resource/natural environment) whose components mutually influence each other.

Consistent with the framework, the program implemented the following major activities to achieve its objectives.

Market-oriented resource management and production:

- worked with farmers and FUGs to help develop and implement market-oriented production and resource management plans with a focus on commercial forest products and high-value crops
- focused on institutional development to ensure farmer participation in development and implementation of all enterprise group activities

Local enterprise development and its integration in marketing systems:

- assisted entrepreneurs and groups in selection of enterprise options, feasibility studies and planning to promote enterprises in promising subsectors

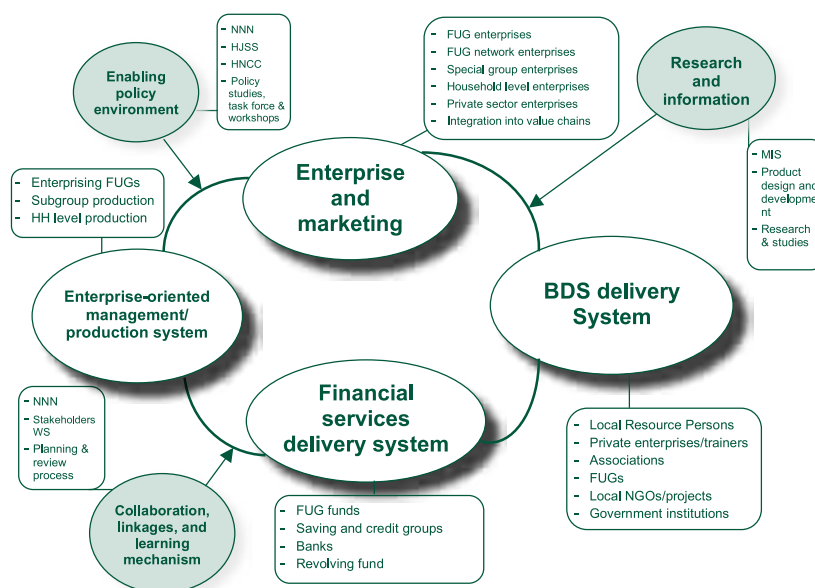


Fig. 3. Conceptual framework for developing natural-product-based enterprises



- adopted the MA&D framework (FAO, 2000), in enterprise planning in the field with communities, especially in the selection process
- strengthened the capacity of enterprises in raw material production or sourcing, enterprise management, operations and marketing aspects
- promoted various ownership modalities, such as individual entrepreneurs, their groups, CFUGs, and CFUG networks, to meet the demand for different enterprise structures to match business and social needs
- developed entrepreneurship and business skills as well as operational skills of target groups through capacity-building programs that included training and counseling
- built capacities of targeted micro and small enterprises to understand business dynamics in order to be able to adapt to changing situations in markets
- facilitated development of local-level market information systems (for more information, see Binayee, 2005)
- helped existing and potential service providers develop and deliver business development services that were sector specific (operational skills training) as well as crosscutting (accounting, leadership development, organization management)
- assisted in linking service providers with the enterprises

Strengthening business linkages:

- supported linkages between forest-based enterprises and farming groups, CFUGs or CFUG networks as sources for raw materials
- linked community enterprises to national-level enterprises

Enhanced access to financial services:

- facilitated development of CFUG-level enterprise revolving-fund mechanisms
- promoted linkages of entrepreneurs to savings and credit groups
- developed linkages between enterprises and banks for enterprise loans with silent guarantees and enterprise business analysis, planning and capacity-building mechanisms

Promoting access to business development services:

- generated marketing information and disseminated it to farmers, CFUGs and entrepreneurs through various institutions



- helped national-level enterprises access international markets and develop business links
- promoted economies of scale and coordination among micro and small enterprises via development of networks among enterprises and farmers groups/CFUGs at cluster and district levels
- assisted district and national enterprises with product development, communication materials, marketing strategies and product exhibition at trade fairs and buyers' locations

Value chain integration:

- strongly promoted value chain linkages and integration: horizontal and vertical coordination and linkages among actors in each value chain
- promoted private sector investment in agribusiness and forestry sectors and its linkages down the chain through workshops and meetings, feasibility studies, market surveys, and business planning support (based on private sector being best able to manage higher-order enterprise functions)

Balancing economic development and conservation needs:

- integrated various market-based tools and incentives mechanisms
- organized forest management operational plans and forest management groups around sustainable production and harvesting
- helped base business plans of forest-based enterprises on sustainable harvest rates defined by CFUGs' forest management
- developed and strengthened links between enterprises and CFUGs to match the demand and supply of resources

- promoted forest certification and chain of custody and fair trade practices

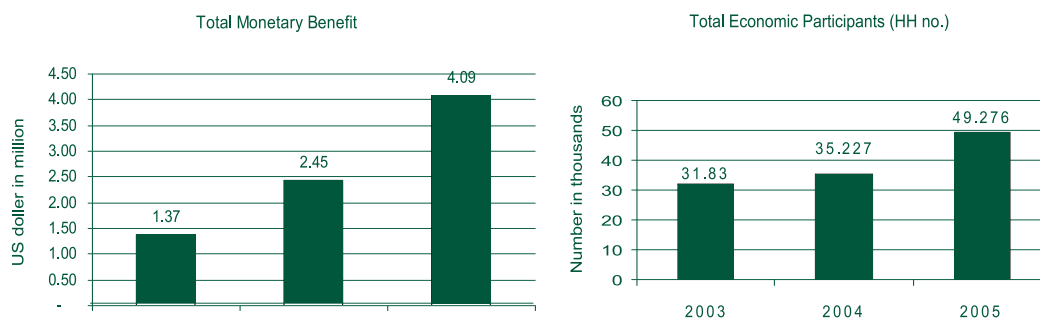
Facilitation of enabling policies:

- helped formulate policy-enabling provisions and implementation mechanisms by undertaking policy studies, establishing community- and enterprise-level examples and cases, organizing workshops and task forces and making recommendations to policy-makers
- incorporated NTFPs in CFUG operational plans, establishing a practice of collecting royalties by CFUGs, clarifying NTFP enterprise registration issues, revising royalty rates and releasing bans on collection and crude export of some NTFPs
- raised profile of the NTFP sector
- helped institutionalize the coordination mechanism between government agencies and development organizations for policy and development issues related to NTFPs

5 Results and prospects

The program achieved tangible results in institutional strengthening, economic development and biodiversity conservation, directly benefiting local communities and primarily the poor involved in the forestry sector. As shown in Fig. 4, the economic benefit increased to US\$4 million in 2005, assisting more than 49,000 households. Of the 41,916 participants, 40% were women. The economic return to the target population was more than nine times the amount invested in the program.

It is important to note that the increased economic benefits were achieved while also promoting sustainable



Source: ANSAB, 2005

Fig. 4. Economic impacts of enterprise program by year

Table 1. Economic benefits, enterprises and participants in 2005

| Data | Production/marketing | | Local value addition | National company | Grand total |
|---------------------------|----------------------|--------------|----------------------|------------------|---------------------------------------|
| | Cultivated | Wild crafted | | | |
| Economic benefit (US\$) | 2,205,106 | 1,153,991 | 245,065 | 483,064 | 4,087,226 |
| No. of enterprises/groups | 303 | 129 | 24 | 3 | 459 |
| Client—individuals | 6,687 | 20,011 | 14,248 | 770 | 41,916 (66,847 including indirect) |

Source: ANSAB, 2005

management of natural resources and during a period of intense political conflict. The individual enterprises have been able to create incomes and employment for many local people, added value at local levels and contributed to making the related value chain more efficient and market responsive.

Table 1 shows 459 types of enterprises developed and strengthened in 2005, all but three based in rural areas. The types of products included essential oils, paper and paper products, dried herbs, spices, natural fibers, wild mushrooms, herbal teas, Ayurvedic products and personal care products. More than 80% of the US\$4 million was generated by such activities as production and marketing of NTFPs/high-value crops and by local value-adding activities in the villages.

Individual-level microenterprises were developed to promote production of NTFPs and high-value crops on private and community land. Subgroup enterprises mostly dealt with production of NTFPs on CF land. FUG-level enterprises were involved in functions from forest-product production and marketing to value-adding operations to generate higher returns for their members. For larger operations, emphasis was on a network of FUGs and community groups. Marketing of NTFPs and high-value crops was found most effective through local traders and producer marketing associations. National marketing enterprises and other private companies were assisted in establishing higher-order processing and manufacturing functions and marketing of community products in national and international markets.

Besides economic benefits, community-based forest enterprise development has brought positive

results in natural resource management. The program helped bring 80,525 hectares of forest under enterprise-oriented resource management, with 14,086 hectares brought under Forest Stewardship Council (FSC) certification; 21 CFUGs have forest management certification and eight enterprises have chain of custody certification. As the enterprises generated economic incentives to local communities through employment and incomes, those that could manage to do so chose to adopt wise natural resource management practices.

During the process, 459 enterprises, 112 CFUGs and their federations, 15 District Forest Offices and 20 local NGOs gained knowledge and skills on enterprise development and enterprise-oriented resource management aspects. Appropriate enterprise technologies and market information were given to a large number of entrepreneurs and stakeholders.

The program created a mechanism of sharing and collaboration through the Nepal NTFP Network, lessening duplication of efforts, identifying intervention nodes for NTFP promotion and promoting NTFP agenda and policy debates. The enterprise program also helped create a favorable policy environment via policy studies, discussions and workshops, recommendations and strengthening of policy forums. Specific contributions were made to develop the Herbs and NTFP Development Policy 2004 (first of its kind) and rationalize NTFP royalty rates and trade regulations.

6 Challenges and lessons

Entrepreneurship development, viewed as extremely important to rural areas, was difficult for a variety of reasons, primarily because farmers and village groups

lacked education and enterprise-related skills, were poor and had less risk-taking capacity. The security situation also influenced the business climate: communities and entrepreneurs felt it was risky to invest in enterprises. Groups were often constrained by limited access to financial resources to initiate enterprises and could not benefit from the limited financial resources available because of their inability to take investment risks. Other challenges included an inadequate supply of business support services, capacity of locals to understand market dynamics and enterprise intricacies and policies that hampered forest-based enterprise development and free and fair trade for NTFPs. To address these challenges, the program adopted the following strategies.

Development of local resource persons

The program developed local resource persons (LRP) to work closely with CFUGs, farmer groups and individual entrepreneurs. These LRPs received training on CFUG resource assessment and planning as well as identification of enterprise options and enterprise development planning processes. A field team worked with LRPs to facilitate program activities. The LRP strategy was chosen to achieve efficiency in program facilitation, sustainability of services at the local level, and program implementation in the field when the security situation restricted the movement of outsiders in villages (ANSAB, 2006). The approach was effective and efficient. Furthermore, some LRPs were expected to graduate as BDS providers in the future.

Financing enterprises

CFUGs in the district with money in a group fund had little idea how to use it. Considering the need for financial services, the program built CFUG capacity in enterprise planning and fund management, facilitating development of a CFUG enterprise promotion fund, which then facilitated support to poor members through extending credit, enterprise planning and development support. It was clear that commercial banks and other financial institutions should be encouraged to develop new approaches and products for extending financial services to rural forest-based enterprises.

Market promotion and networking

Local capacity to manage quality and quantity as well as marketing logistics was critical to stronger business relations. To build this capacity, various tools

were used: marketing information service provisions, actively linking small enterprises to private companies and appropriate technical expertise, and developing networks among CFUGs and with enterprises, both to consolidate products and improve value chain management. For market promotion and linkages, the program worked with national-level enterprises on business links to district enterprises and international buyers. Forest management and organic certification were introduced as effective tools to promote natural products in international markets (ANSAB, 2005a).

Participatory planning for ownership and sustainability

Participatory planning allowed communities to understand the issues and set priorities, share ideas, solicit inputs and create greater understanding and ownership. Local stakeholders from settlements, CFUG clusters and district stakeholders participated in formulating activity plans. Partnership with local NGOs, LRP development and mobilization, and development and strengthening of community-based organizations was central to program implementation and played a significant role in its success.

Collaboration to promote success

Sustainable resource management and enterprise promotion require interventions from field to national levels. Leverage was created by working with other organizations and programs: government institutions and programs, projects, the private sector and development organizations. Working at a grass-roots level to innovate and demonstrate desired results and bringing issues and lessons to national authorities through networks and forums was found effective.

7 Conclusions

The community-based enterprise development approach and framework for natural products is replicable for most of the FUGs in Nepal and elsewhere where participatory resources management can be promoted. Resource availability and market demand can, of course, place limits on poverty reduction through forest-based enterprise development. It is evident from this case study that there is high potential to reduce poverty through community-based resources management and linked forestry enterprises. This approach brings together local resources—building local assets and institutions—and provides employment and incomes to

a large number of women and men. However, a paradigm shift is required to transform forest resources management from a subsistence orientation to enterprise-oriented management supported by innovative enterprise/business models that balance growth, equity and conservation.

Since policies define the boundaries, support systems, roles of stakeholders, rules of participation and climate for interventions, they have profound implications in community-based enterprise development. Favorable policy provisions and implementation mechanisms and practices that encourage a long-term investment in forest management, community-based enterprise development and free and fair trade of forest products have tremendous impact.

A right mix of activities is required in resource management, enterprise development, business development and financial services to facilitate community-based enterprise development focused on poverty reduction. In addition, local ownership and the building of local capacity and service providers are crucial for larger impacts and sustainability. A strategic alliance among development partners as well as market actors must be developed to promote market development, value chain integration and favorable policies.

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Organization of Community-Based Biocommerce Enterprises: Lessons from the Implementation of MA&D Methodology in Colombia

Paola Andrea Lozada Perdomo¹ and José Antonio Gómez Díaz²

1 Introduction

Sustainable biocommerce refers to the production, processing and commercialization of goods and services derived from biodiversity under environmental, social and economic sustainability criteria.³ Goods and services include those coming from sustainable farming systems or those that contribute to forest conservation, such as ecotourism and timber and non-timber forest products. According to an analysis of 100 sustainable biocommerce enterprises in Colombia, 40% are community-based biocommerce enterprises (SCBEs), comprised of indigenous, Afro-Colombian or farmer communities.

The trend in Colombia in recent years toward an increase in biocommerce stems from the preference by an important segment of consumers for natural products derived from a sustainable use of natural resources. In 2003, 530 enterprises were identified; for 2006, 1,300 were identified as having products and services in the four categories, distributed throughout the nation. In the past four years, five of the 11 existing supermarkets have opened stands exclusively for organic products, encountering a small but attractive market segment.

A study on value chains for biocommerce products (Cardozo, 2004) shows that in Colombia 7% of the potential market for these products would be willing to pay 6% to 10% more to obtain certified fruits, mushrooms, dry condiments, marmalades, brown sugar cakes, honey and coffee. In the international market these niches have been consolidated through certifications such as organic and fair trade, with price premiums paid by consumers ranging from 20% to 40% (Stoian, 2006).

The figures for Colombia are still preliminary but they reflect a dynamic and growing market. Understanding this trend, and as part of fulfilling the objectives of the Convention on Biological Diversity, six value chains have been given priority at the national level, taking into account their environmental, social and economic potential. These chains include medicinal plants and natural ingredients, Amazonian fruit trees, tropical flowers and foliage, honeys, handicrafts made with fibers and seeds, and ecotourism. By becoming part of a prioritized value chain, biocommerce entrepreneurs can access updated market information and be part of the trade agreements for export and training made with supermarket chains and programs.

Despite market growth in Colombia and promotion, challenges still exist for improving competitiveness of biocommerce enterprises, principally SCBEs. The experience and qualifications of SCBE leaders, in large measure, do not allow them to know about and effectively apply best practices related to marketing, trade, logistics, business administration and finance, which limits optimization of their operations and creates disadvantages when they negotiate terms for their partners. The informality of the business organization and the low added value of the products, plus limited managerial capacity, are obstacles for accessing credit under favorable terms. To increase their competitiveness, it is indispensable that the businesses be able to rely on service providers for advice and technical assistance to strengthen their business capacities.

Since 1998, the Alexander von Humboldt Research Institute for Biological Resources (IAvH) has been working on the design and development of mechanisms that stimulate investment and trade in

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³ Definition agreed upon by the programs of Biocommerce, Corporación Andina de Naciones (CAN), the United Nations Conference on Trade and Development (UNCTAD) and the Corporación Andina de Fomento (CAF) in 2004; the term *biocommerce* was adopted during the VI conference of the parties to the CBD in 1996..

biodiversity products and services to achieve the objectives of the Convention on Biological Diversity and sustainable development in Colombia. In 2001, IAvH and the Food and Agriculture Organization of the United Nations (FAO) partnered to implement a project on Strengthening and Training for Sustainable Development Using Biodiversity Products. The objective was twofold: 1) to implement and validate the Market Analysis and Development (MA&D) and 2) to strengthen the business capacity of selected rural communities working with biodiversity products that are sustainably managed in economic, social and environmental aspects. The methodology orients business service providers and SCBE leaders in business organization (Table 1). This article analyzes the experience of forming two SCBEs in Colombia dedicated to the cultivation and marketing of organic tropical foliage using MA&D methodology.

2 Case studies

The case study involves two communities made up of 40 people located in the districts of Canaán and La Palmera in the municipality of Salento, department of Quindío, in Colombia's central region (Fig. 1). The two communities, consisting of small family units, have a tradition of coffee production, and because of the fall in coffee prices in early 2000, they were motivated to find economic alternatives.

The region is characterized by small parcels, most of them privately owned, cultivated in accord with conventional production systems that include coffee, cattle and subsistence crops (cassava, corn, cacao, grasslands, etc.) in steep, undulating mountain terrain (Lozada et al., 2006). This area forms part of the high Andes forest corridor that unites natural ecosystems such as Ucumarí Park, Otún-Quimbaya Park and

Table 1. Market Analysis and Development (MA&D) methodology

MA&D is a field-tested methodology used for the selection, planning and initial development of biodiversity-product businesses. It has been promoted by FAO and other organizations to help rural populations increase household and community assets and promote more sound resource management. Critical factors related to the market, regulatory and cultural environments are taken into account when identifying and planning viable business ventures. This methodology is developed in three phases. In Phase 1, the current situation for business development is evaluated; products, markets and marketing means are identified in Phase 2; and Phase 3 focuses on business planning for sustainable business development. In tropical America, implementation of MA&D has involved a number of different actors, among them:

- **International coordination:** FAO trains the national coordination entity in MA&D methodology, facilitates support materials and follows up on the results obtained in each phase. It also negotiates resources for the implementation of the methodology and together with the IAvH oversees the project and seeks seed capital.
- **National coordination:** The main functions are facilitating the development of activities for SCBE formation in each pilot project, coordinating training activities for counterparts, integrating results, orienting work plans and methodologies in accord with the MA&D framework, coordinating experts, interacting with support institutions, overseeing regional activities and supporting regional coordination, facilitators and communities in technical and methodological aspects.
- **Regional coordination (counterparts):** Counterparts are in charge of executing activities in each zone. This includes holding workshops with communities, reaching agreements with facilitators about the development of field activities, coordinating workshops with consultants, compiling and analyzing results, facilitating local communication with other actors and institutions, partnering with the communities in each phase of the methodology and overseeing results at the local level.
- **Support institutions (service providers):** These institutions have the capacity to provide direct support to the communities in development of the products identified. They include private enterprise, state organizations, local entrepreneurial development services, private sector associations and universities.
- **Specialists and consultants:** These specialized consultants contribute technical information (ecological, agronomical, market and entrepreneurial) in the three phases.
- **Community facilitators:** These are in charge of communication among the communities and other people involved in the project and lead the gathering of information at the local level.
- **Communities:** These are the community groups that participate during each of the phases.

In Latin America, FAO has collaborated with IAvH (2003–2004) and CATIE, through its IDB/MIF project (2004–2006), to implement and validate MA&D with rural communities. Through these projects, lessons learned were generated in the application of MA&D in Colombia (Lozada et al., 2006), Nicaragua (Donovan, 2006a) and Guatemala (Donovan, 2006b).

forests with high densities of wax palm (*Ceroxylon quindiuense*) in the La Ceja and Toche (Tolima) zones. These ecosystems have great biological diversity, including endemic and endangered species. Management of the production systems compatible with biodiversity and the maintenance and possible recovery of forest zones is essential.



Fig. 1. Location of Quindío communities

The following criteria were established for the identification of the rural communities:

- located in fragmented ecosystems and use local natural resources in their economy
- experience in group work and a positive attitude toward dialogue, participation, organization and improving their conditions
- support from at least one local entity
- sensitive to sound natural resource management

3 MA&D implementation

At the beginning of the preparatory phase required by MA&D methodology, a training workshop was held on the application of the methodology to define the work objectives for each area, the functions of the coordination entities, the qualifications of the facilitators and mechanisms for their identification, plans for

gathering existing information in each one of the areas and work timetables. As a result, the counterparts acquired a series of responsibilities at the local level focused on preparing communities for the beginning of the project, discussing activities with other local actors and compiling biological, socioeconomic and market information. The preparatory phase lasted three months.

In Phase 1, which lasted seven months, the communities identified forest resources and applied analysis matrices of market, environmental, social/institutional and technological factors. The list of products included medicinal plants, tropical flowers and foliage, bio-inputs, nontimber products like seeds, and timber products. With assistance from experts, the communities gathered basic information for analysis and selection in the second phase.

With market studies carried out over 10 months in Phase 2, it was possible to explore in greater depth the viability of the products identified. Market studies were conducted for flowers and foliage and a technical viability study was done for products made from medicinal plants. The community was trained in the technical aspects of marketing and it gathered information at the local level to use in product selection.

When Phase 3 began, to plan the SCBE, foliage was selected as the product. The final result was the formation of two SCBEs (Table 2). A business plan and a use and extraction plan were prepared and pilot parcels were established. This six-month phase was the most intensive for workshops, with an average of one workshop per month and a maximum of two. Between workshops, the facilitators motivated the communities to gather the required information and to complete designated tasks; this time was crucial for following up on the agreed goals for each phase.

MA&D implementation required technical, administrative and managerial instruction for the communities. The formulation of a business plan was essential to orient the business to the market and to define the business roles of its members, which began with the installation of the first experimental foliage parcels. The business plan in this phase became a tool for the negotiation and definition of the investments required for the launch stage (production and sales). The communities asked for resources from the township and

Table 2. SCBEs constituted with MA&D implementation in Colombia

| Name | No. of SCBE members | No. of indirect beneficiaries* | Product offered | End market |
|---|---------------------|--------------------------------|-----------------|--|
| La Palmera Association for Life, Water and Oxygen (IVIAO) | 6 | 35 | Foliage | Regional market of Armenia and Calarcá |
| Canaán Tropical Paradise Association | 5 | 25 | Foliage | Regional market of Armenia and Calarcá |

a private forest business in the zone in order to buy materials, pay for training and prepare the land for the foliage parcels. FAO's Livelihoods Diversification and Enterprise Development (LDED) program also donated resources as seed capital.

To manage the funds, a purchasing committee was formed with the participation of the legal representatives and treasurers of the SCBEs, a representative from the counterpart organization that supported MA&D implementation—in this case, the Quindío Autonomous Environmental Corporation (CRO)—and IAvH. For each purchase, the committee had to analyze three price quotes and verify that the expenses were in line with the objectives of the business plan. In addition to ensuring sound management of financial resources, the committee aimed to create analytical procedures for investments and delegate the management of the resources to the community entrepreneurs. The presidents of the enterprises now understand the importance of having a planned process for projecting purchases that responds to management strategies outlined in the business plan.

Following the implementation of MA&D, the two communities recognized the advantage of having a logical way to facilitate the identification of market opportunities. The two SCBEs, IVIAO and Paraíso Tropical de Canaán, are gathering the first foliage crops and have regional buyers. Their decision has been to corner the regional market, which shows interesting sales potential at a lower cost than for the national market, due to the difficulties of placing an employee in Bogotá. The advantage of the regional market is its proximity and the possibility of delivering the product directly. The businesses currently have short-, medium- and long-term plans that projects getting into the national market once there are stable cash flows for planning new investments,

such as expansion of the planting area and diversifying the product to include native foliage species. At the beginning the communities wanted to access the international market; today, following a detailed analysis process, they understand the implications of each market in terms of costs, quality and logistics and the projected response capacity of the associations over a five-year period.

A linkage was created between the SCBEs and various support entities (service providers), such as the National Learning Service (SENA) and the Colombian Agriculture and Livestock Institute (ICA), which offer training sessions on phytosanitary management, business organization and administration and increased value adding for primary production.

One of the goals of the businesses is to expand their portfolio of products to include native species that can be collected directly from the forest. This has required market research, trials with florist shops and technological packages for production arrangements. This research is being carried out by IAvH with the community of La Palmera, which was the first to identify foliage in the field as a result of its knowledge of the forest. Subsequently, they carried



out trials for durability and market acceptance. The SCBEs conducted trials in the local market, taking the native foliage to florist shops in Armenia.

The inclusion of native foliage represents a promising marketing opportunity since this product is not currently offered in the local market. Given that the SCBEs are the only suppliers, they can obtain higher prices than what they receive for traditional foliage. Additional value-adding opportunities are related to transformation processes, such as the preparation of floral arrangements. This activity is being considered as a future endeavor for the enterprises and they are receiving training from SENA on the design and preparation of floral arrangements.

Participating in a value chain that is prioritized at the national level has allowed the SCBEs to obtain market and technical information for their product and to strengthen their weaknesses through training and the financial services placed at their disposal. The decision for the sequential growth of the businesses is the result of greater knowledge about the market from information circulated nationally that is not usually accessible to rural communities. Furthermore, the SCBEs' interest and capacity for understanding the local and regional markets strengthens their negotiation skills with other actors in the chain.

The precedents in Quindío for community work were an advantage at the beginning of the collective process. The communities were prepared to take on planning processes and commit themselves to providing part of their time and resources, such as land and labor.

Of the 40 people who participated initially, today 11 are members of one of the two SCBEs. At the end of Phase 2 when it was necessary to define the contribution of each member (in work or in activities such as land preparation), some withdrew. In Phase 3 the time needed for planning meant long work shifts and specific commitments from the community: registering the business with the chamber of commerce, collecting papers and completing bureaucratic procedures. However, several members were able to make the required investments. In Phase 2, species of flowers and foliage were collected from the forest to analyze preferences in the local markets. These species were analyzed by IAvH in floral vase trials (for durability) and in market tests in national trade channels.

In Phase 3, the labor for the installation of the crop arrangements and some materials, such as guadua bamboo, were contributed by each member. The funds obtained from FAO's donation were used to acquire seeds, materials to cover the crop, wire, hoses and transport of organic fertilizers.

The impacts of MA&D implementation began to be tangible during the initial phase of SCBE development. The establishment of the infrastructure for foliage cultivation was carried out in an orderly fashion meeting the necessary technical requirements. Knowledge of the market has allowed the businesses to make timely and effective decisions that do not exceed their capacities and also to make planned growth projections for the future penetration of other markets. Access to support services is more efficient to the extent that the communities know what their needs are. The two new businesses have obtained training in phytosanitary and technical subjects for their crop, assistance with the social component, transport for the seeds, chicken manure to fertilize their crops, and more. The community points out that the support offered to them by various entities is not always convenient and they now have the capacity to discern whether or not to accept things that they should obtain directly.



4 Lessons learned

In facilitating the implementation of MA&D, IAvH identified several lessons learned about SCBE organization that could be replicable in other rural communities:

- **Make agreements regarding responsibilities:** The definition of responsibilities among the counterparts and the identification of roles for future actors is a clear need in the preparatory phase. If responsibilities are not clear and the actors are not

in agreement, there is a risk that too many responsibilities will be assumed by too few members, who then will not be able to work efficiently in carrying out their own responsibilities. The preparatory phase should last at least two months and produce a detailed work plan for each actor.

- **Form networks for increased SCBE sustainability:** The development of national and local networks is important for ensuring the sustainability of the SCBEs once the implementation of the methodology is finalized. The counterparts that serve as regional coordinators should be active in Phase 1 in the identification of local partners that would be able to support future initiatives. In Quindío this work was given more effort in the last phase and allowed support for the initiative when the project terminated.
- **Address implementation difficulties head-on:** The counterpart organizations, facilitators in the field, communities and project consultants were trained and they contributed specific inputs for adjustments to the methodology, when necessary, while working with the community. It is important to provide periodic spaces for feedback to adjust the methodology to the conditions of the zone and the community. These spaces can be formal or they can arise informally when problems that can block the process are identified in the group.
- **Allocate more time for implementation than projected:** For processes with new products, such as the case in Quindío, an average of 23 months should be allocated, which is eight months longer than the time recommended by the FAO methodology.
- **Define early victories:** Long planning processes are difficult for communities to assimilate; the uncertainty regarding possible results demands a planning process that involves early, tangible victories. For this reason, pilot trials should be conducted in Phase 2.
- **Use simple language:** Enterprise development topics are difficult for the communities to understand and appropriate. Making projections to measure profitability, internal rates of return and other indicators needed in the business plan must be explained simply, using nontraditional methods, so that they are understood and can be used as planning tools.

- **Use practical examples:** Workshops aimed at the community should start with real examples, such as going to the chamber of commerce and registering the business, sales clinics, production days, and others. Sometimes the communities felt that the workshops were too theoretical and they only understood the relationship between the concepts and the practices at the end.
- **Implement oversight systems:** The definition of impact indicators for activities from the initiation of the project permits real knowledge of the benefits generated for the communities in terms of learning and ownership of the enterprise. In this process the indicators were determined at the end, which made it difficult to gather information in some cases.
- **Analyze information relevant to different areas of enterprise development:** Discussions surrounding the products identified help open opportunities for dialogue and group growth that consolidate the participatory process, achieving levels of trust in the processes developed jointly by community members. The search for information and the exchange of local experiences shows the rural entrepreneurs how to negotiate and establish alliances that allow development of the business idea.

5 Recommendations

- **Work with a short list of products (fewer than five) after Phase 1:** Working with an extensive list of products makes selection difficult and requires a more intensive information search; specific criteria for the selection based on project objectives must be defined.
- **Strengthen the productive capacities of the entrepreneurial initiatives:** Producing new products requires intensive training in production that should be carried out from the moment when the group sets priorities for the products. MA&D methodology should adjust the order of the steps to follow.
- **Incorporate a use and extraction plan in Phase 3:** Such a plan helps analyze the problems and opportunities of the production system in greater depth and emphasizes the importance of implementing best agricultural practices for collection and conservation toward the sustainability of the enterprise. It can be added as an additional step in Phase 3.

6 Conclusions

- Through the exercise for validation and adaptation of the methodology, two SCBEs were formed that seek to create employment, increase the economic income of the members, make sustainable use of biodiversity products, implement practices for managing quality, add value to their products and achieve financial sustainability.
- One challenge for the communities that comprise part of the first links of the chain is improving their capacity to manage support services and discerning which ones address their strategic needs. This allows the communities to seek directly those entities identified and prioritized in their work plan.
- Long planning processes can be outside the scope of some rural communities if no tangible results are perceived in the short term. Specific actions must be developed in the middle of the planning process, such as the implementation of the pilot test in Phase 2 of the methodology. It is equally important to divide the planning process into short, medium and long terms and to begin with products that allow an early cash flow, then expanding the activities to more complex markets or products.
- For IAvH's line of sustainable biocommerce, MA&D implementation was a new exercise that broadened the understanding of activities necessary for partnering with community-based enterprise initiatives from the beginning, as well as their role in interinstitutional work with entities in charge of stimulating development of such initiatives at the local level. The methodology offers an opportunity for validating existing and complementary tools of sustainable biocommerce, particularly with respect to support to the communities and the selection of products with commercial potential.
- Support entities fulfill a valuable role in the consolidation of the value chains; their challenge is to offer services adjusted to the needs of all the actors of the chain, especially the small producers who are more removed from information sources. For this there needs to be a partnering and exchange of knowledge between technicians and communities.

- International organizations such as FAO have the role of facilitating the replication of the creation of SCBEs through a search for resources in partnership with national entities. For this it is important to cultivate long-term alliances that endure beyond the project execution term and that are based on the recognition of the strengths of the national entities.

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From Project to Independent Organization: Providing Forest Management Services in the South-Central Ecuadorian Amazon

Marco Romero R.¹

1 The setting

The Republic of Ecuador has a surface area of 256,370 km². While small in size relative to other South American nations, Ecuador has a rich variety of ecological conditions due to the Andes mountains that cross the country from north to south and to the presence of the cold Humboldt and warm El Niño currents in coastal waters.

Total wood production from native forests is approximately 500,000 m³/year (legal extraction); about 200,000 m³/year come from the Ecuadorian Amazon region. The south-central zone of the Ecuadorian Amazon contains the provinces of Morona Santiago and Pastaza, encompassing nearly 4.3 million hectares of humid tropical forest (about 48% of the national total). Morona Santiago has a population of approximately 115,000 inhabitants, of which 33% are concentrated in urban areas and 67% live in rural areas (INEC, 2002). The rural population is mainly indigenous people of the Shuar ethnic group (about 60%) and the rest are settlers who have come from the Sierra region.

Forest management in the Ecuadorian Amazon is carried out by settlers and indigenous smallholders with farms of 40 to 70 hectares. Trees are cut with chainsaws—which have become the main tool for sawmilling—to make products such as boards, planks and other pieces of variable size; wood hauling is done with animals.

2 Creation of the Amazon Forestry Service Foundation

The Amazon Forest Service Foundation (SFA), based in the city of Macas (Morona Santiago), is a nonprofit, nongovernmental organization created to provide technical advice in small-scale forestry. It originated in the final phase of a technical assistance project,² evolving from the project to become an independent business, establishing itself as a technical assistance service provider for forest management with a policy of payment for services. It had support from the German Agency for Technical Cooperation (GTZ) for its initial development and began activities in July 2000, obtaining legal status in October 2001. Its objectives include: 1) promoting sustainable forestry management, 2) promoting scientific research in the field of forestry, 3) participating in social aspects of community development, and 4) promoting and supporting the valuation of goods and services from the forest.

SFA has 14 employees at present and works independently; it has established two new offices—in Gualaquiza and in Puyo (Fig. 1). SFA's highest authority is the general assembly. The board of directors, made up of people who work outside the organization, carry out inspections and oversee the work of the director, who is charged with overall management of the organization. The fact that the director must answer to an independent board is considered key for the effective management of the organization.

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² The CREA Macas Forestry Project (CREA-GTZ-DED) began in 1992 and ended in 2003. The forestry component became independent in the last phase of the project, prior to its completion.



Fig. 1. Work zone

SFA's focus is to provide technical services and develop products related to forest management, including preparation of plans and programs for forest extraction, forest reGENCY, advising and training (for example GIS-GPS, sawmilling with a frame guide attachment, marketing of timber products, nurseries), reforestation and the dissemination of forestry information. Another important component is project execution and development of specific products for public and private actors via studies and consultancies. Among outstanding products are forestry statistics (software IKIAM), manuals, maps and frame guides for sawmilling.

SFA addresses the lack of information in this field by conducting research involving students and in cooperation with national and foreign universities. Applied research on specific themes is geared to provide answers to questions related to smallholder forestry management practices and the milled-wood chain. One new approach is the application of action-research, which is carried out as part of the small-farmers forest management project (ForLive), cofinanced by the European Union.

3 Demand for services

Demand for services and products comes from 1) colonizers involved in forestry, indigenous people and those working in the milled-wood value chain, and 2) regional and national organizations and projects. Demand by forestry producers and those in the wood chain began with changes to national forestry policy and reforms to the Forestry Regimen, which led to the

emission of Forestry Norms for Logging and Forest Management (2000). Reforms to the legal framework established the participation of forestry professionals (reGENCY) in carrying out supervision and control during extraction of wood in the forest as well as controlling wood transport on the highways.

The demand for services for legal wood extraction is not only from forestry producers but also from wood dealers and other participants in the value chain who make agreements with farmers to buy their wood and facilitate loans to cover the initial costs of legal extraction. One characteristic of the demand is the need for a permanent presence in the zone to provide personalized services.

The willingness and capacity of small farmers to pay for the services provided is low mainly because of the lack of economic resources to cover the initial costs of legal wood extraction (costs of program preparation, reGENCY services, payment of duties/taxes to the forestry authority). On the other hand, the market does not make a big distinction in prices for wood of legal origin versus products of illegal origin. The fact that legal wood products compete in the market with those of illegal origin has become one of the main disincentives for advancing good forest management.

4 The supply of services

In Ecuador, enforcement of forest management norms began in 2000. The SFA helps producers and dealers comply with the new Forestry Regimen and also sells services for the preparation of forest extraction programs. The initial strategy in providing services to forest owners consisted of working with relatively low rates, which have been progressively readjusted toward reaching their true value. The geographic coverage for the supply of products and services is principally national in scope, focusing on regulation and small-farmer forest management, forestry training and development of products via consultancies.

The SFA works with small farmers and stakeholders involved in legal wood extraction (technical assistance and training services), largely in the first links of the value chain—including formulation of logging plans and programs, approval by the forestry authority (institutional management) and providing the forest owner with the permit to transport the wood (transport on highways). During the process, reports on the

case are given to the forestry authority, prior to verifications in the forest (forest reGENCY). According to demand, training about sawmilling, using a chainsaw frame guide, is also provided to chainsaw operators, as well training in the transport of wood by cable. In these cases there are two basic conditions for providing services: 1) that forest extraction and management comply with established forest norms, and 2) that the client, the forest owner or wood trader, pays for the services provided.

The main strategy used for marketing and selling services and products has been promotion and exhibition, making use of fairs, meetings, radio spots and personalized approaches to institutions and organizations that work in the zone and nationally. There is also an informative brochure and a Web site. Another important detail is that the people who work in the institution live in the zone and were already known in the local organizations and communities.

Forestry management services in the Ecuadorian Amazon are also offered by other professionals operating independently. The SFA is the only corporate service provider and to date it has advised 557 families for the extraction of about 64,000 m³ of standing wood, of which nearly 44% comes from native forests and the remaining 56% from trees in agroforestry systems (average volume per program in native forest is 110 m³). SFA coordinated the process of formulating local norms for wood extraction and forest management for a Shuar indigenous association (CGSHA²); currently it is working on the implementation of those norms.

SFA's business volume has increased annually: in 2002, 2004 and 2005 volumes were approximately US \$77,000, \$146,000 and \$208,000, respectively. One important aspect is the change in relative weight of services in relation to total business volume. Extraction and forestry reGENCY programs were 19% of the total business volume for 2003; for 2005, this value was about 4%. The causes of this change are related to a lack of efficiency in forestry control (greater illegality is assumed) and the presence of other professionals offering services.

Information shows that involvement of the forest owner in the legal wood chain creates jobs and contributes to the improvement of socioeconomic conditions through higher prices for their products and earnings for time invested. Involvement among rural households varies, for example: 66% participate in some of the extraction activities; in 34% of cases, logging is carried out without the participation of the forest owner—standing trees are sold. On the other hand, nonparticipation is due to a lack of financial resources for covering the costs of legalization (program formulation, payment of duties), lack of means (chainsaw, sawmills, draft animals for hauling wood) and lack of information about the requirements and procedures that must be completed with the forestry authority.



The lack of incentives for legal wood extraction makes forest management more difficult; legal wood must compete with products of illegal origin. Taking the considerations described into account, the risks for SFA service provision are 1) the paternalism of institutions and support projects executed in the region, as these constitute disloyal competition that are difficult to compete with, and 2) political instability and the institutional weakness of the forestry authority to apply measures that favor local sustainable forestry management initiatives.

³ The CGSHA is the Shuar Arutam Government Council; it is made up of six Shuar associations that have 190,000 hectares of natural forest. With support from Fundación Natura and under the coordination of the Servicio Forestal Amazónico, it has prepared Local Forestry Regulations for Wood Extraction that respect the national forestry norms set by Ecuador's Ministry of Environment.

5 Innovations in the delivery of forest services

The demand for services and products for forest management and for improvement of socioeconomic conditions of the rural population is growing. The opportunity to provide services for payment leads to a better appropriation of the practices by producers. However, for the small farmer, the economic benefits of the activity must be demonstrated. If he must pay, when will he earn or recover his investment?

On the other hand, the policy of work for services for payment is fundamental for institutional sustainability, and there are certain principles essential to its application:

- avoid institutional paternalism since the free provision of material, economic and technical resources negatively affects the target group by creating dependence, and it does not generate proprietorship
- orient training to formation of specialists, working exclusively with people who have an interest and aptitude for developing an activity instead of aiming it at the entire community
- generate economic benefits from forestry activity

These principles originated from the analysis of results and impacts that the partners carried out based on project experiences and development organizations prior to the formation of SFA.



Under these considerations, SFA's permanent challenge is to offer quality services accessible to low-income farmers and generate economic benefits, creating in them a culture of paying for services and of complying with forestry management norms. Being able to respond opportunely to demands, including expanding the range of available products and services, is considered important for the organization's sustainability. To provide better service, offices were established closer to the clients, and professionals from the Shuar ethnic group have been incorporated into the work of the organization.

Since one of the limitations for forest management and legal wood extraction is the small farmers' lack of economic resources for covering the initial costs of the activity, SFA seeks alternatives to improve this situation. One specific case is the work with Fundación CODEAMA⁴ in the province of Pastaza in implementing a small forestry microloan mechanism for covering initial costs of legal forest extraction. There are permanent linkages with different actors in the wood value chain, recognizing and taking advantage of the capacities of each one and seeking better benefits for forestry producers.

6 Toward better services for small-scale forestry enterprises

Progress on forest management processes with small farmers also depends on the existence of incentive mechanisms for good forest management practices. The state's strategy should focus on approaching the greatest possible number of farmers to promote legal wood extraction, followed by sustainable forest management and incentive mechanisms for good management (control of illegal logging, reduced taxes/duties, simplified bureaucracy, forestry microloans, dissemination of norms, among others). At present, strategies for efficient control of wood transport over the highways favorably affect the sale of services to forestry producers; when forestry control is deficient, the demand for services drops immediately.

SFA's institutional focus is on specializing in an area without getting involved in topics unrelated to forest management. Professionalization brings with it the need to interact with specialists from other areas.

⁴ The Foundation for Conservation and Development in the Amazon (CODEAMA) offers professional services for strengthening agricultural production and promoting natural resource conservation in the Ecuadorian Amazon region, www.codeama.org.

This is part of the institutional strategy for improving the sawn-wood value chain and obtaining greater economic benefits for the farmer, incorporating and cooperating with wood intermediaries and other market actors (the private sector), seeking better prices for products of legal origin as well as quality sawmill products (using the chainsaw frame guide).

7 Conclusions

After five years of experience, it can be said that SFA is positioning itself locally, achieving the recognition of development organizations in the province as well as of national and international entities. The nation's environmental authority recognizes SFA's institutional action and its contribution to forestry management and biodiversity conservation. Given its expertise in the practical application of forestry norms and forest management with small farmers of the region, SFA participates actively in national processes to review and analyze those norms, contributing important inputs and having an impact on the improvement of technical concepts for forestry management, especially on their technical and socio-economic viability. There were several factors and lessons for attaining this positioning and recognition.

- With the services-for-payment work policy, traditional project beneficiaries are converted into clients. This service is personalized and it is carried out in an individual way, not at community or association levels. The sale of training services is not focused on all forest owners but rather on key actors who are continually in the forest (in extraction, sawmilling, trade activities) in order to create in-community specialists and achieve greater impacts on management.
- SFA works mainly at the beginning of the value chain for sawn wood. An important factor in the success of these initiatives and in contributing to poverty reduction is the development of several

actions focused on resolving specific problems in those links and creating added value at the local level. At the same time, it should work on establishing specific markets at the national level for products that come from well-managed forests (legal) that are not necessarily certified.

- A smallholder's main productive capital is the land and the forests and valuable commercial tree species it contains. To the extent that service provision initiatives like those offered by SFA are accessible to these producers in terms of low cost and opportunities to use them (located nearby), they are key factors for poverty reduction. They tend to generate greater economic benefits from the activity, build capacity in forest owners and obtain better wood sale negotiation opportunities (selling sawn wood and discontinuing practices of selling standing trees).
- The local organization factor as well as the provision of services with personalized and permanent partnering is a comparative advantage that opens opportunities against other external competitors that abandon the zone after completing their work.
- The lessons of the first five years show that the organization cannot sustain itself through service provision to forest owners and actors in the value chain only. This lesson has led SFA to modify its portfolio of services and work on consultancies to include the development of products for development projects that are related to its institutional objectives, without losing sight of its specialization.
- SFA was created during an active project. This change from project to independent organization during the project period allowed it to benefit from partnering. Furthermore, the stepwise development strategy of the organization has been important for making progress and enhancing sustainability.

Community Forest Enterprise Development in Guatemala: A Case Study of Cooperativa Carmelita R.L.

Dietmar Stoian,¹ Aldo Rodas² and Jason Donovan³

1 Overview of case study

In Guatemala, the development of community forest enterprises (CFEs) has been most prominent in the Petén region, where successful lobbying by social organizations, supported by nongovernmental organizations (NGOs) and donor agencies, led to the granting of community forest concessions in the multiple-use zone (MUZ) of the Maya Biosphere Reserve. Access to the resource base implies usufruct rights for 25 years⁴ with the condition that the concessions become certified under the scheme of the Forest Stewardship Council (FSC) within three years after the concession is granted (Carrera et al., 2006). As of 2006, 16 CFEs have obtained legal access to more than 420,000 hectares of tropical forest, including 12 community concessions and four cooperatives or municipal *ejidos* (Fig. 1).

With ample support from donors⁵ and NGOs, the Petén-based CFEs have acquired the necessary technical skills to manage their forests and become certified under the scheme of the FSC. Since 2003, 11 CFEs have been organized under the umbrella of the second-tier enterprise FORESCOM (Empresa Forestal Comunitaria de Servicios del Bosque S.A.) that provides technical (e.g., resource manager function, nursery production, road construction) and business services (e.g., commercialization of lesser-known species, group certification).

The emergence of the CFE Cooperativa Carmelita R.L., hereafter referred to as Carmelita, is directly tied to the creation of the Maya Biosphere Reserve and the subsequent forest concession processes.

In 1996, the community of Carmelita established the Committee for the Development of Carmelita (Comité Pro Mejoramiento de la Aldea Carmelita). By the mid-1990s, the forest concession process had gained momentum, and in response to changes in the political and legal frameworks for forest use in Petén, the committee applied for a concession area. On Aug. 6, 1996, Carmelita was granted a community concession of 53,798 hectares for a period of 25 years. Legally recognized forest use started in 1997 on an area of 100 hectares, based on a pilot management plan (SmartWood 2005). On Sept. 14, 1998, the community became formally organized as Cooperativa Carmelita R.L., which succeeded the committee as concessionaire. In 1999, Carmelita obtained FSC certification through Rainforest Alliance's SmartWood Program—just in time to comply with the requirement of obtaining certification within three years after receiving the forest concession. In 2001, Carmelita began to hire local processing facilities to process the wood from its concession and to offer milling services to adjacent community concessions. In 2003, Carmelita became one of the nine founding members of FORESCOM. In the same year, another 10,000 hectares were opened up for timber extraction in connection with the management plans for the periods 2003–2007 and 2008–2012. In 2004, Carmelita acquired machinery and equipment (sawmill) for primary wood transformation.

2 Enterprise organization, management and governance

Carmelita is legally constituted as a cooperative with 127 members (56% male and 44% female in

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⁴ Communities must pay a one-time fee (US\$1/acre) over a 10-year period, post a performance bond of 1% of the total bid and pay taxes on the forest products extracted. In addition, they must prepare management plans, species inventories and environmental impact assessments. Concession agreements may be revoked if a community does not follow the management plan, lacks operating capacity or declares bankruptcy.

⁵ Most instrumental in these processes was the U.S. Agency for International Development (USAID), which to date has spent some US\$135 million in different projects in the Petén.

mid-2006). The principal objective is to promote conservation of natural resources through sustainable forest management and community participation in an economically viable fashion that respects biodiversity. Specific objectives are as follows:

- strengthen sustainable and integrated management of diverse forest resources
- offer an economic alternative to the community by participating in forest management that permits income generation and higher value added to the raw materials it produces
- conserve sites of archeological and ecological interest through integrated ecotourism

Key productive activities include:

- production of sawn wood from precious woods (mahogany, tropical cedar)
- roundwood production of lesser-known species (LKS)
- NTFP extraction, in particular *Chamaedorea* palm or xate (*Chamaedorea* spp.), allspice (*Pimenta dioica*) and chicle gum (*Manilkara zapota*)
- ecotourism in connection with the Mayan archeological site El Mirador–Río Azul National Park

Production of sawn wood from precious species is the key activity in terms of employment and income

generation. Mahogany represents nearly 65% of the total volume of timber and wood products sold between 1997 and 2006. Given Carmelita's position at the beginning of the value chain and its relatively few years of operation, value-adding opportunities to date have been confined to primary wood transformation. It is anticipated that installation of a community-based carpentry business envisioned for the future will generate increased value added through secondary wood transformation.

In addition to timber, NTFP extraction has been a major source of income. The extraction of *Chamaedorea* palm (xate) has become increasingly important—about US\$12/day can be earned in xate extraction, equivalent to more than 1.5 days' wages. About 400 bundles⁶ of xate are exported each week directly to the United States, with potential for up to 500 bundles a week. Several NGOs are currently supporting the communities of Carmelita through a program that seeks to export 800 bundles a week. Production of chicle gum fluctuates between 15,000 and 20,000 quintals per season (SmartWood 2005) and hence is below its potential of the 35,000 quintals that could be produced sustainably (Trujillo, pers. comm.). An ecological hotel has been constructed for tourists on their way to El Mirador–Río Azul National Park,

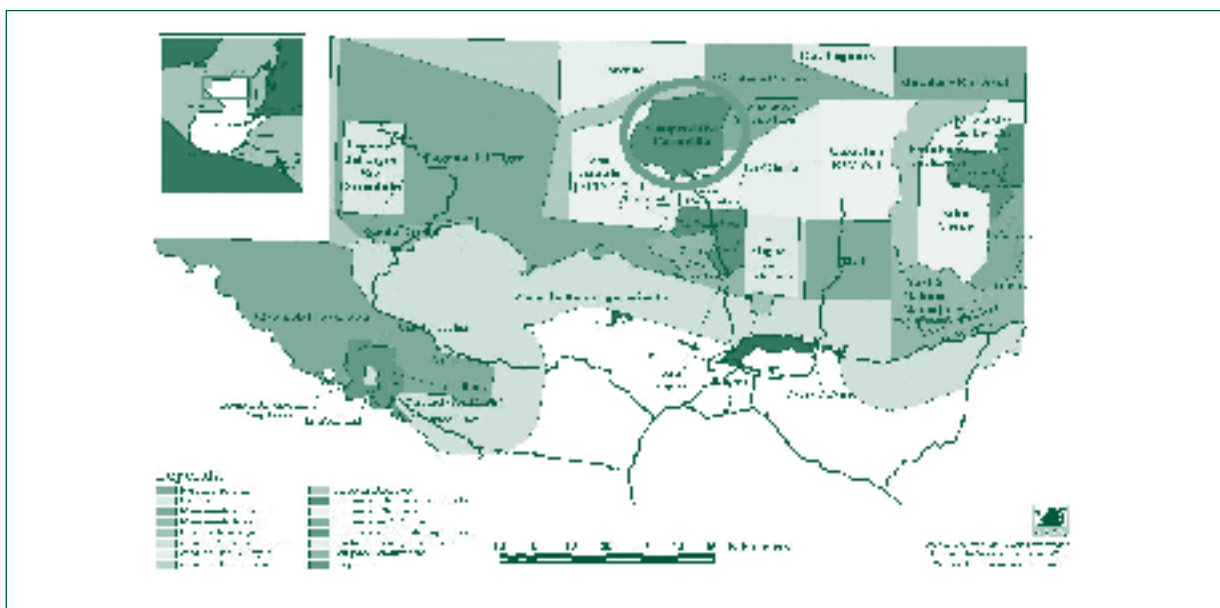


Fig. 1. Map of forest conservation and management units in Petén, Guatemala

⁶ Bundles contain 80 palms each and are classified into four grades (Super, Jade-24, Jade-18, Jade-16).

and there is an incipient program of guided tours through the forest, both by foot and on horseback. Some recently discovered archeological sites within the concession are yet to be fully uncovered but have potential to expand Carmelita’s low-impact tourism program.

As a cooperative, Carmelita is governed by a board of directors composed of a president, a vice president, a treasurer and a spokesperson (Fig. 2). The board reports on a quarterly basis to the general assembly, which is the highest decision-making body and in which all cooperative members have an equal voice. The assembly meets at least once a year during which most major issues are discussed and decided, including approval of financial and operational plans. Board members are typically elected for two years. While this ensures the participation of a broader group of members in CFE operations, it hampers continuity at the management level and the overall strategic orientation of the enterprise. Day-to-day management decisions are taken by the operations manager. However, it is common practice that he makes major decisions, including those related to timber sales, only in consultation with board members. The manager oversees four commissions: marketing, forest protection, credit and education. The marketing commission comprises timber, xate, chicle gum and tourism as major business areas. Timber-related activities include timber extraction and primary wood processing.

One of the most important benefits perceived by Carmelita community members is the opportunity for employment in timber and NTFP extraction as well as sawmilling. Relatively few community members practice agriculture, mostly to meet subsistence needs. Though both NTFP and timber extraction are seasonal activities, they constitute an important, if not principal, source of income for the majority of community members. Forest-based income is derived directly through temporary employment in timber and NTFP extraction and/or wood processing and, in addition, cooperative members receive dividends at the end of each year. Tourism-related employment and income opportunities have increased over the past years, both through construction of an ecotourism lodge in Carmelita and work as guides for tourists on their way to the archeological sites in El Mirador–Río Azul National Park.

Carmelita’s relationship with FORESCOM has yet to fully mature, as clear rules regarding respective rights and duties have yet to be established. FORESCOM commercializes certified sawn wood of mahogany and lesser-known species such as *pucté* (*Bucida buseras*), *manchiche* (*Lonchocarpus castilloi*) and *santa maría* (*Calophyllum brasiliense*). Carmelita, like many FORESCOM-affiliated CFEs, produces sawn wood of certified mahogany and tropical cedar in its own processing facilities and sells it either directly and/or through FORESCOM. FORESCOM hires out

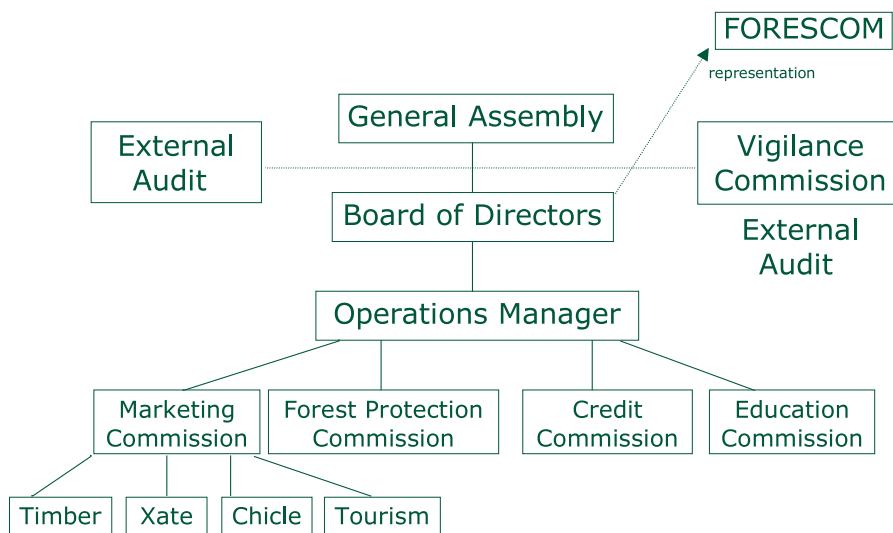


Fig. 2. Organizational chart of Cooperativa Carmelita R.L.

the sawmilling of LKS logs purchased from its member CFEs to two local private companies and seeks out marketing opportunities for LKS sawn wood. However, no clear mechanisms have been established between the first-tier CFEs and FORESCOM that would ensure commercialization of minimum wood volumes by the latter. Rather, member CFEs prefer to receive alternative offers from local intermediaries and external buyers and only sell through FORESCOM if they perceive tangible benefits. Several CFEs even see FORESCOM as “just another intermediary.” This perception ignores the important role FORESCOM plays in identifying new market outlets for LKS, along with the provision of other important services such as group certification, resource manager scheme and road construction with its own heavy machinery.

The continued development of FORESCOM should provide an opportunity for a more concerted approach toward organizational effectiveness, with a clear labor and service division between FORESCOM as second-tier CFE and its first-tier member CFEs. Both at first- and second-tier levels, capacities and skills need to be developed to address diverse goals and to mediate actual and potential internal conflicts. The fact that community members rather than professional managers govern the CFEs at both levels stimulates a sense of ownership and community participation; however, this also implies the need for long-term capacity building and skills development with the help

from NGOs, development projects, state agencies and for-profit service providers.

3 Economics of the enterprise

Production, harvesting and processing

Out of 20,400 hectares earmarked for timber extraction, 3,795 hectares have been harvested from 1997 to 2006 (Table 1). The extracted volume of 9,800 m³ corresponds to an extraction density of 2.58 m³/hectare. Taking into account a rotational cycle of 40 years, this is equivalent to an extraction density of a mere .06 m³/hectare/year. The main reason for the low density is the limited availability of precious woods such as mahogany and, to an even lesser extent, tropical cedar, which combined make up less than 5% of the harvestable timber volume.

The five most important species contributed 97.5% of the overall volume of 9,800 m³ extracted over the period 1997–2006. Despite its overall low availability, mahogany (*Swietenia macrophylla*) has been by far the most important species, both in terms of volume (6,186 m³ or 63.1%) and value, followed by *manchiche* (*Lonchocarpus castilloi*, 1,690 m³ or 17.2%), tropical cedar (*Cedrela odorata*, 1,017 m³ or 10.4%), *pucté* (*Bucida buceras*, 456 m³ or 4.7%) and *amapola* (*Pseudobombax ellipticum*, 209 m³ or 2.1%). The remainder of 242 m³ was derived from another six species, in particular *santa maría* (*Calophyllum brasiliense*, 207 m³ or 2.1%).

Table 1. Extraction area, volume and density in the community concession of Carmelita, 1997-2006

| Year | Extraction area (ha) | Extraction volume (m ³) | | Extraction density (m ³ /ha) | |
|-------|----------------------|-------------------------------------|-----------|---|-----------|
| | | Allowed | Extracted | Allowed | Extracted |
| 1997 | 100 | 427.01 | 434.11 | 4.27 | 4.34 |
| 1998 | 400 | 363.57 | 449.52 | .91 | 1.12 |
| 1999 | 432 | 1,091.65 | 848.99 | 2.53 | 1.97 |
| 2000 | 423 | 962.40 | 1,201.27 | 2.28 | 2.84 |
| 2001 | 450 | 1,463.31 | 969.67 | 3.25 | 2.15 |
| 2002 | 402 | 1,646.00 | 1,478.29 | 4.09 | 3.70 |
| 2003 | 500 | 1,367.67 | 1,324.50 | 2.74 | 2.65 |
| 2004 | 500 | 1,364.94 | 1,522.46 | 2.73 | 3.04 |
| 2005 | 272 | 989.90 | 790.69 | 3.64 | 2.91 |
| 2006* | 316 | 1,270.23 | 771.55 | 4.02 | 2.44 |
| Total | 3,795 | 10,946.68 | 9,800.05 | 2.88 | 2.58 |

* Preliminary data

Source: CONAP, Forest Department

Precious woods such as mahogany and tropical cedar have been processed in Carmelita's sawmill since 2004. The installed capacity of 10,000–12,000 board feet a day has been underutilized, as the sawmill operates only for two to three months a year. Recently, initiatives have been undertaken to offer milling services to adjacent community concessions that lack processing facilities. Wood originating from the concession La Colorada has been milled by Carmelita, and the hope is to extend this service to Cruce a la Colorada, San Andrés and La Pasadita. Two local private companies contracted through FORESCOM process lesser-known species, such as *manchiche*, *pucté*, *amapola*, and *santa maría*.

Marketing

When forest exploitation started in 1997–1998, timber was sold on the stump to the local industry. In 1999–2000, “flitch” (logs sliced with chainsaw) was sold to the local industry. During 2001–2003, machinery was rented for local processing and the first exports were sent to the United States and the United Kingdom. On-site sawmilling capacity became a reality in 2004 and has allowed Carmelita to offer expanded services to international buyers of certified mahogany and tropical cedar, as well as lesser-known species. Commercialization of certified wood and primary wood products is carried out by the operations manager, who typically consults with the board members before final decisions are made. Marketing as such hardly takes place, as the type of products (simple sawn wood) and the number of buyers is limited and a strategic marketing strategy is yet to be developed.

Current buyers are from the United States and, to a lesser extent, Europe, Mexico and Guatemala. A particular trust relationship has been established with a US-based buyer, resulting in price premiums of US\$.10-to \$.15 per board foot of certified mahogany as compared to other certified community concessions. In 2004, the buyer provided a loan equivalent to 60% of the funds needed for purchasing sawmilling machinery and equipment, which was paid off the same year through the sale of certified mahogany. Contacts with alternative buyers of mahogany and lesser-known species such as *pucté* have been facilitated by FORESCOM with support from a USAID-funded project executed by Rainforest Alliance and an IDB/MIF-funded project executed by CATIE, the Tropical Agricultural Research and Higher Education Center.

Profitability

In 2003, Carmelita sold timber for roughly US\$430,000, resulting in a net income of more than US\$270,000 (Table 2). In 2005, timber sales of about US\$140,000 translated into a net income of roughly US\$100,000 (reduction due to drop in available volumes of precious woods from 1,115 m³ to 472 m³). These estimates likely overstate net earnings somewhat, as depreciation of buildings, machinery, equipment and vehicles is not fully taken into account. Future challenges for the enterprise include the development and consolidation of financial planning and monitoring.

Table 2. Production costs, gross and net income of Carmelita in 2003

| Currency | Production costs | Income from timber sales | Net income |
|----------|------------------|--------------------------|------------|
| Quetzals | 1,234,305 | 3,358,462 | 2,124,157 |
| US\$ | 158,244 | 430,572 | 272,328 |

Source: Adapted from BIOFOR project

Competitive advantage

The competitive advantage of Carmelita rests principally in forest certification. Over the past years, because more than half a million hectares have been certified according to the FSC scheme, the Petén region has attracted the attention of international buyers. With an area of 53,797 hectares, Carmelita was granted the third-largest forest concession in Petén, surpassed only by the community concessions of Uaxactún (83,558 hectares) and Árbol Verde (64,973 hectares). As mentioned below, the FSC label has helped market precious woods and, to a lesser extent, lesser-known species. Certified mahogany is clearly the flagship among the commercial species available, both in terms of volumes and prices. In fact, demand for certified mahogany far outweighs the available supply. In the period 1997–2006, Carmelita's supply of certified mahogany varied between 223 and 1,093 m³ per year, equivalent roughly to 6% to 27% of the overall supply of certified mahogany in Petén.

Technical support and outside financial/donor support

The Association of Forest Communities of Petén (ACOFOP) has been instrumental in community

organization and advancing the concession and certification process. Several donor-funded projects were facilitated by ACOFOP, providing training and technical assistance. Initially, Carmelita received technical assistance from various NGOs and development projects in the field of forest management and certification. More recently, Carmelita received training and technical assistance in wood processing, business administration and marketing. A xate export program has been supported by a number of NGOs along with the University of Minnesota and CATIE. Currently, one person undergoes training in processing technology in a local private company. In addition, Carmelita receives services (e.g., forest resource manager scheme, road construction) through its membership in FORESCOM.

Employment and income generation

As mentioned previously, employment opportunities provided through Carmelita rank high among the benefits perceived by its members, though temporary employment far outweighs permanent employment. Out of a total of 7,000 daily wages generated in 2005, equivalent to about 31.5 person-years, members and nonmembers accounted for 81% and 19%, respectively (Table 3). Based on a daily wage of US\$7.60 (56 quetzals), this translated into a value of US\$43,320 and US\$9,880, respectively. Some 25 to 30 persons find temporary employment in timber extraction from January to March and 30 to 35 persons in sawmilling from March to May. Depending on the harvest season, another 50 to 60 persons are temporarily employed in NTFP extraction.

Table 3 reveals that out of a total of 7,000 daily wages paid by Carmelita in 2005, roughly 90% related to wood processing (57.1%) and timber extraction (32.1%). The remainder was paid in connection with NTFP activities (extraction of xate and chicle) and, to a lesser extent, tourism. Interestingly, the number of daily wages in wood processing (3,736) has risen by 7% from 2003 to 2005, though timber extraction diminished over the same period by 40%, from 1,325 m³ to 791 m³. This increase in the number of daily wages reflects the increasing importance of milling services offered to adjacent community concessions.

Table 3. Number of daily wages in Carmelita in 2005

| Activity | Nonmembers | Members | Total |
|-------------------|------------|---------|-------|
| Timber extraction | 250 | 2,000 | 2,250 |
| Wood processing | 1,000 | 3,000 | 4,000 |
| Xate | --- | 400 | 400 |
| Chicle | --- | 200 | 200 |
| Tourism | 50 | 100 | 150 |
| Total | 1,300 | 5,700 | 7,000 |

Source: Carmelita (unpublished data)

4 Environmental and social benefits

In several community concessions, including Carmelita, there have been fewer incidences of forest fires. Satellite images and ground observations indicate that unlike the adjacent national park where “social fencing” is not at play, the number of forest fires has been greatly reduced in the concession area over past years. In the multiple-use zone of the Maya Biosphere Reserve, each management unit requires a plan for the prevention and control of forest fires, including monitoring and patrol programs, a system of fines for those responsible for fires, the organization of brigades, fire-fighting strategies, training of personnel and acquisition of fire extinguishing equipment (Carrera et al., 2006).

The constitution of Carmelita stipulates that 30% of the utilities be reinvested in social projects. Though this stipulation has not always been fully accomplished—the general assembly can set other priorities—investments have been made in a potable water system, wages paid to noncommunity members for repairs or other work at the local school and educational stipends for primary and secondary schools (about six to eight stipends a year).⁷ In general terms, CFE development has had positive effects on community organization, women participation (mainly related to xate), education, human resource development, local infrastructure and service development, health and income generation. In addition to the employment opportunities in timber and NTFP extraction, wood processing and tourism, dividends have been paid at the end of each year. Dividends typically vary between 1,000 and 1,500 quetzals (roughly US\$140 to \$210) per member.⁸ For 2006,

⁷ In 2006, stipends worth 50,000 quetzals (US\$6,750) have been budgeted.

⁸ No dividends were paid in 2004 when sawmill machinery and equipment were purchased.

125,000 quetzals (US\$16,900) have been earmarked for dividend payments, equivalent to about 1,000 quetzals (US\$135) per member.

Most members of Carmelita base their livelihoods on forestry-related activities. Only about 10% of households are fully dedicated to agriculture, while the vast majority makes a living on timber and NTFP extraction and, to a lesser extent, wood processing or tourism. Remittances received from family members who migrated to the United States or elsewhere complement household income in some cases. Despite their seasonal character, forest activities are still the backbone of the household economy. The concession and related certification process have reinforced the local forest culture that had been built up over many years in Carmelita.

5 Conclusions

The experiences of the community concessions in Petén, in general, and Carmelita, in particular, provide a variety of lessons that maybe useful in different countries and contexts:

- An enabling institutional environment is essential for the development of the organizational and technical capacities for sustainable forest management. Long-term use rights (here through community concessions) provided the base for CFE development. However, as community forestry and CFE development advance, conversion of community concessions into community forests should be considered to ensure long-term interest in forest management and conservation. Fruitful collaboration between government agencies; local, national and international NGOs; and development projects have played a critical role in developing the technical and business capacities required for community forest management in a relatively short period of time (since the early 1990s).
- Forest certification has facilitated marketing for tropical timber and, in some cases, provided for price premiums. Application of sustainable forest management practices has advanced considerably in Petén and current government oversight seems sufficient to ensure sound forest management; however, the decision in favor or against forest certification should be in the hands of CFEs such as Carmelita based on a thorough cost-benefit analysis.



- Technical services related to forest management and wood processing are necessary—but not sufficient—for long-term CFE development. Production of high-quality wood products is hampered by limited technical skills and insufficient and/or inappropriate technology.
- Long-term access to business development services is critical to upgrade management capacities and other business skills and increase returns from community forest management. The CFE is administered by community members rather than professional managers, with limited experience in business administration or timber marketing. Skill development is critical for continued success of the CFE, which will require a long-term and

tailor-made approach beyond short project cycles. The ability to better market LKS is especially important for the long-term development of CFEs. Without high returns from mahogany, timber extraction and wood processing would not be economically viable; diversification into other products and services is required to ensure long-term viability of the enterprise.

- Strengthened intercommunity collaboration will increase milling efficiency and allow for more effective marketing of LKS. Carmelita's sawmill operates effectively only two or three months a year. The fact that most CFEs in Petén have, or would like to have, on-site processing facilities impedes the realization of economies of scale and a more rational use of the installed capacities. A productive relationship between first-tier CFEs, such as Carmelita and FORESCOM, requires the clear definition of communication policies, mechanisms for labor division related to processing and marketing of wood products, and increased awareness of managers and members of the opportunities and challenges regarding relationships between first-tier and second-tier CFEs.

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Wild Mushroom Processing and Trading by Indigenous Community-Based Forest Enterprises in Oaxaca, Mexico¹

Fabrice Edouard²

1 Background

Wild mushrooms are consumed around the world thanks to their recognized food characteristics, their medicinal properties and their flavors, which take many people back to their rural origins. In Mexico, extensive knowledge about their culinary use and medicinal properties are embedded in the rich culture of indigenous and rural populations. According to experts, of the 140,000 species present in the country, 200 are consumed as food and 50 are considered medicinal. According to official statistics, mushrooms traded in the national and international markets represent US\$450,000 to \$850,000 per year and benefit 3,000 rural households.

In the state of Oaxaca, wild mushrooms represent a nontimber forest product (NTFP) widely known to the indigenous people who live in the temperate forests, especially in the Sierra Norte range, and they are collected in the common-use sectors of core farming areas.³ In different parts of this state, several species of edible mushrooms are consumed and traded, such as the porcini mushroom (*Boletus edulis*), the chanterelle (*Cantharellus cibarius*), Caesar's mushroom (*Amanita caesarea*) and a mushroom prized by the Japanese: the *matsutake* (*Tricholoma magnivelare*). These and most of the wild edible and commercial species are mycorrhizal types, which are organisms that live in symbiosis with trees via the union of their mycelia with tree roots (Fig. 1).

The second-tier community organization Pueblos Mancomunados constitute a single agrarian territory of 30,000 hectares in the northern mountains of Oaxaca (Fig. 2), between 2100 and 3300 masl. There are eight small communities with an indigenous population of 3,500 people of Zapotec origin. At the end of the 1970s, members of the Pueblos Mancomunados began their struggle to obtain legal access to manage and carry out commercial extraction in pine and oak pine forests in an area of 13,000 hectares. In the 1980s, they succeeded in obtaining a forest concession to exploit their forest resources; the community then formed its own forest enterprise. Since that time the Pueblos Mancomunados began to sell wood and diversified their businesses by creating other community-based enterprises: a sawmill, wood-dryer oven, mining operation, ecotourism agency, spring-water bottling company and a unit for selling fresh and dehydrated wild fruits and mushrooms.

These businesses are owned by the community members and are managed by a staff under the control of the Commissariat of Communal Goods.⁴ The Pueblos Mancomunados Packing and Bottling Plant is one of these businesses; in 1998 it began bottling and selling spring water in the capital city of Oaxaca. (Capital of the state of Oaxaca, the city is some 70 km from Pueblos Mancomunados). In 2002, with support from the NGO Methodus, it diversified its business with the creation of a unit for dehydrating, packaging and selling fruits and various species of wild mushrooms.

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³ The core farming areas, such as *ejidos* (communal areas) and lands of indigenous communities, are territories managed by the population; their creation dates back to the passage of the Agrarian Reform Law following the Mexican Revolution.

⁴ The Commissariat of Communal Goods is the administrative structure for the core farming areas: members are elected by the assembly of owners (those who have land-use rights).

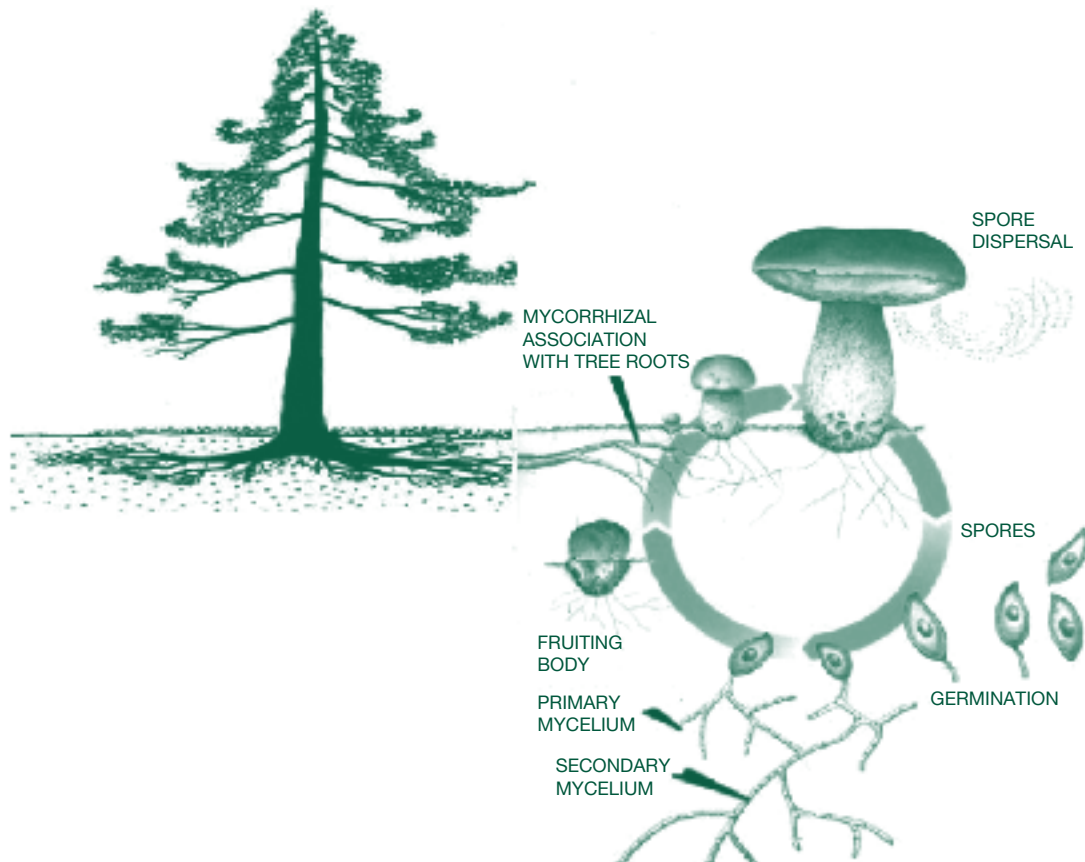


Fig. 1. Mycorrhizal association of mushrooms and pine trees

The trade in fresh *matsutake* mushrooms to Japan began in the mid-1990s with the arrival of the first Japanese buyers in the region. The supply of these mushrooms has persisted, despite a reduction in the number of buyers, because of the high prices paid to the collectors (US\$8 to \$30/kg). With the creation of the mushroom dehydration unit, a new income opportunity opened up for collectors, who could extract some of the more abundant species found in the forest such as the porcini, Caesar's and chanterelle. These species are dehydrated, packaged and distributed directly by the community enterprises to gourmet product shops in several cities around the country (Fig. 3).

Considering that the demand for wild mushrooms in internal and external markets is not yet satisfied and that business operations require the processing of certain volumes to guarantee profitability, the Pueblos Mancomunados processing company has four main challenges:

1. attain the maximum market price for mushrooms in order to offer attractive recompense to collectors for their work
2. expand extraction areas by associating with other communities of the region and the state
3. promote sound management and conservation of the production areas
4. establish marketing schemes that help add value based on the quality and origin of the product

2 Political-legal framework for the development of NTFP-based forest enterprises

Ten years ago, the Mexican government proposed the development of a regulatory framework for NTFP extraction and the protection of endangered species. At present, the Secretariat of the Environment and Natural Resources (SEMARNAT) regulates the extraction of NTFP and other forest species through three laws and several norms.

1. **General Law for Ecological Equilibrium and Environmental Protection and its regulations:** regulate land use changes and the creation of protected natural areas and parks, establish obligations for conducting Environmental Impact Assessments (EIA) and create a legal framework for the enforcement of more specific environmental norms (NOM RECNAT).
2. **General Law for Wildlife and its regulations:** regulates the extraction of wild animals and all timber and nontimber species included on the list of protected species (NOM 059 2001) through the creation of Environmental Management Units (EMU).
3. **General Law for Sustainable Forest Development:** regulates the extraction of timber and nontimber forest species through management plans, forest plantations and extraction notices.
4. **Diverse norms (NOM RECNAT):** regulate groups of nontimber forest species, including one specifically for the extraction, storage and selling of wild mushrooms.

Although the creation of these different laws was accompanied by support mechanisms for the development of the forest sector—through national and international financing programs for the preparation

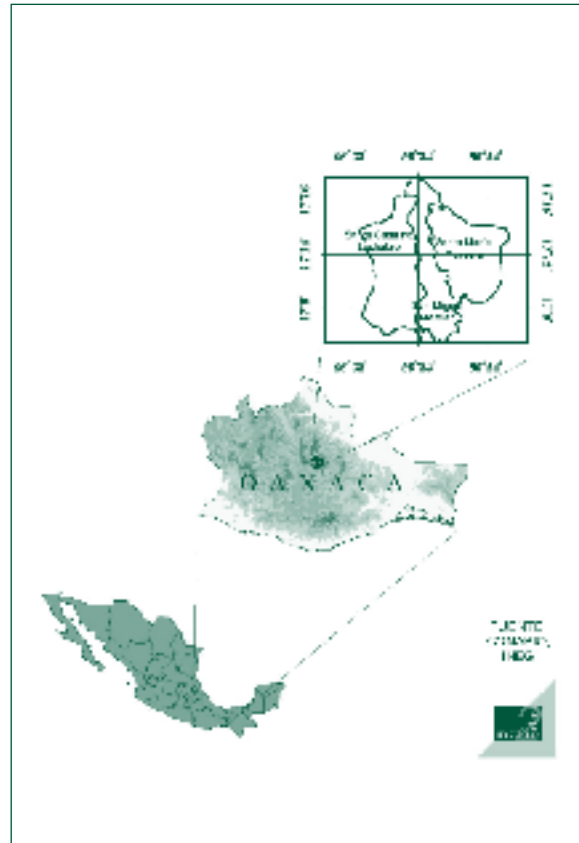


Fig. 2. Location of Mancomunados Pueblos

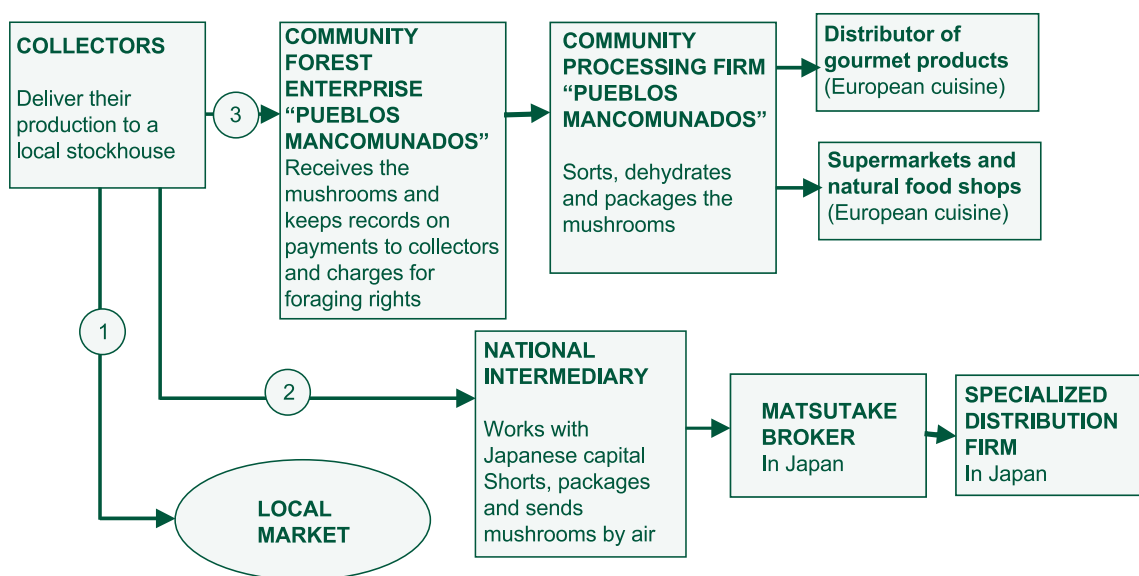


Fig. 3. Mushroom trade chain in Pueblos Mancomunados

of justification studies⁵ for mushroom harvest and commercialization—the existing regulations require different bureaucratic procedures according to species and for the different requirements stipulated in each of the environmental laws and norms.

For certain species, such as *Amanita caesarea* and other mushrooms with lower market value, presentation of an extraction notice to SEMARNAT state delegations is sufficient. For others, usually more prized species such as *Tricholoma magnivelare*, *Morchella* spp. and *Boletus edulis*, which are included on the list of protected species, an EMU must be established and an EIA prepared, both of which must be presented and approved by different governmental entities (at state and federal levels).

These studies and procedures, which have not proved to be effective instruments for regulating sound management,⁶ signify major transaction costs and require subsequent follow-up, creating serious obstacles for the communities. In the case of Pueblos Mancomunados the management studies carried out over a three-year period and the processing of the permits were accomplished through collaboration among the NGO Methodus, the community-based forest services and guides from the community ecotourism agency. In rural communities that do not market wood, income generated by the mushroom harvest does not justify the costs of complying with regulations. The fact is that a large number of the nation's communities sell fresh mushrooms in the regional market without authorization from SEMARNAT.

To resolve this situation, various forest researchers in Mexico are calling for reforms to the laws and regulations that would help avoid overregulation of the sector and favor self-regulation through establishment of local norms. The following measures are proposed:

- carry out regional studies to establish a scientific reference framework for determining the general parameters linked to extraction rates and modalities
- involve promoters and rural technicians in conducting this research to guarantee social participation and the formation of human capital

- provide promotion and advisory services for the creation of local norms for self-regulation and an oversight system
- establish a promotion system such as payments for environmental services for communities that develop and respect sustainable management systems for forest areas



3 Local institutional context for development of community forest enterprises

The Pueblos Mancomunados have developed strong local institutions based on their traditions and the legal entities derived from the Mexican Agrarian Reform. Given that this territory has eight population centers and a large number of community members, the General Assembly and the Commissariat of Communal Goods created a Council of Distinguished Members made up of local authorities and elected leaders for each locality. This social organization is in charge of territorial administration with respect to land use, natural resource extraction and stewardship of the boundaries with neighboring communities. It also has authority over the administration of the community-based businesses that extract natural resources from the territory (wood, water, ores, wild mushrooms); managerial teams were created as new technical-administrative entities under the control of the commissariat. Each one of these businesses has its own operational and administrative structure and offers useful services to the others: transport, available working capital, technical forest services and trade channels (Fig. 4).

⁵ Studies that should be carried out in order to conduct ecological research, resource inventories and management plans.

⁶ In general the studies are carried out by forest technicians who are not experts in the ecology of nontimber forest species and do not involve the population in education; in the case of the mushrooms, these studies should be carried out for several years in order to have reliable data.

The group prepared its own statutes that, in certain ways, establish the competency and social representation of the decision-making entities, as well as different regulations for land use, natural resource extraction and the heritage of communal lands, among others. In the case of wild mushroom extraction, the community established a routine for collectors, validated by the authorities of each locality, in order to have greater control over access to the resource. Each year, the collectors must attend a training session provided by the forest services of the community and their advisors in order to update local permits.

This organizational structure establishes a local regulatory framework that facilitates the resolution of conflicts that often occur when administering collective resources. Thanks to the structure, the community has managed to make agreements despite differing opinions on the use of profits generated by the community-based enterprises. Some prefer a more direct distribution to families, while others believe that it is preferable to invest the resources in social infrastructure (roads, schools, medical services). For their part, managers must convince different community entities of the need to capitalize the enterprises (technology, working capital, training) to guarantee profitability, competitiveness and creation of new jobs.

Nevertheless, there is an age-old conflict that the Pueblos Mancomunados have not been able to resolve. It deals with the separatist desire of one of the eight localities that seeks its territorial autonomy rather than community unification. This dispute, in part linked to access to the territory's resources, is one of the factors that has strongly limited social cohesion

and full access of the enterprises to the raw materials they require (principally wood).

One instrument that would allow better regulation of extraction and access to collective resources would be the participatory preparation of a management plan for the entire territory, not just the regulation of forest timber exploitation as is the case at present. Such a plan would make it possible to better delimit farm and ranchlands, improve watershed management, protect highly productive wild mushroom sites and establish communal reserves in areas of conflict.

4 Forest management with an entrepreneurial and social vision

After self-employment generated by crops such as potatoes, oats, flowers and temperate fruits, the communal enterprises for natural resource extraction are those that generate permanent jobs for community members and their children. At present more than 10% of the population works in the forest enterprise, water bottling company, fruit and mushroom processing business, mining or the ecotourism agency.

The mushroom and fruit dehydrator business is closely linked to the water bottling company; they share the same managerial staff and administrative system and together they employ 40 people. The dehydrator employs 10 people year-round for processing seasonal products, since wild mushrooms are collected only from June to September. The employees of the processing plant are mainly young women who take advantage of their stay in the city of Oaxaca to continue their studies. Some study in the university, and at present one of the women is the manager for the business.

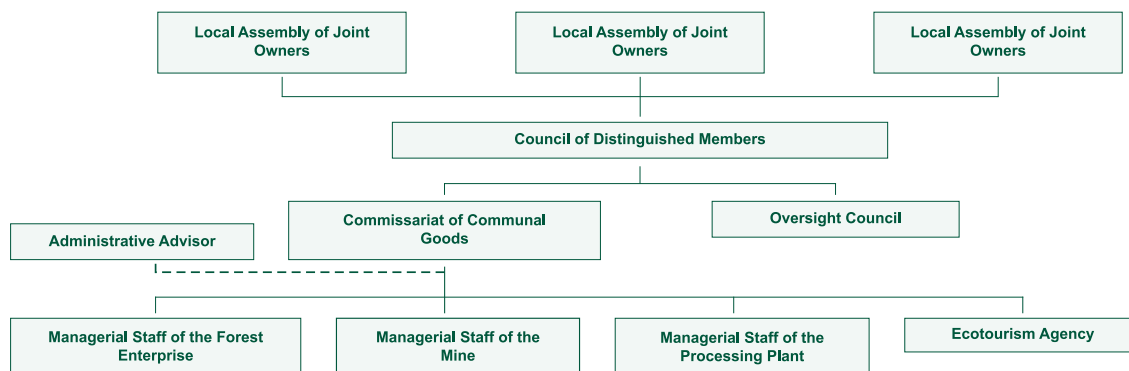


Fig. 4. Organizational diagram of Pueblos Mancomunados

There are approximately 80 families of mushroom collectors distributed in four of the eight localities that make up the Pueblos Mancomunados; some specialize in finding *matsutake* mushrooms while others collect the species that are dehydrated. A study of the population involved in this activity has shown that most of the collectors are the poorest women from these communities, who together can earn US\$15,000 to \$25,000 per season. However, this figure can fall in years with lower production.⁷ Family income is highly variable and depends on the time dedicated to collection (hours per day and days per week) as well as knowledge of the forest and in particular, of the sites with greatest productivity.

Families that devote more time to this activity can obtain incomes higher than US\$500 per season; however the average is approximately US\$150. They use the resources from the sale of mushrooms to complement their income during the rainy season, when forestry activity and the income generated by agriculture are reduced. The most successful collecting families have leftover income to invest in housing repairs or schooling for their children.

Another important aspect for the families is the increasing household consumption of wild mushrooms—the project has fostered knowledge of other edible species that were not used previously. Finally, two years ago a group of women from one community began a small business for canning wild mushrooms in brine, a product that is now sold in region.

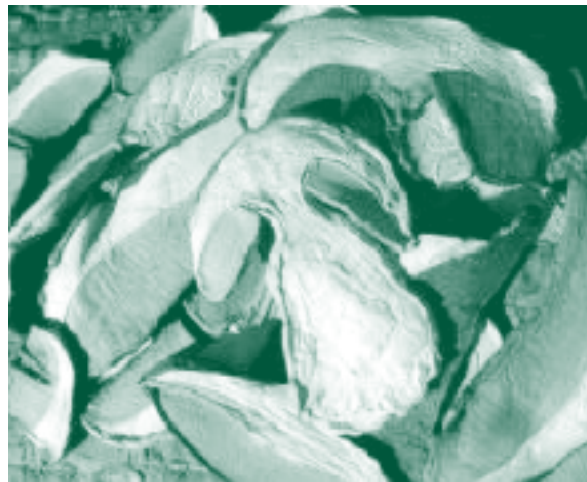
Despite community efforts to create jobs for younger people, emigration of that population, and now even elders, is substantial. This is mainly due to reduced areas for farming, proximity to the capital of the state of Oaxaca (center of economic attraction and jumping-off point for emigration), and salaries available in the United States, which far exceed those available for unskilled employees in the regional market.

5 Community forest enterprises and poverty reduction

To confront the challenges represented by the development of a small business that trades in nontimber forest products and aims to benefit the poorest families,

the social organization of the Pueblos Mancomunados, with support from its managers and advisors, are developing the following parallel initiatives.

- **Annual wild mushroom fair:** Each year, a regional event is held to exhibit the variety of mushrooms that exists in the Pueblos Mancomunados forests: organized collections are made for groups of visitors, different products from the communal businesses are promoted and culinary samples are prepared. Thus, mushrooms have become a new ecotourism attraction in the territory and constitute an interesting link with the communal ecotourism agency.



- **Monitoring of production:** With advice from the NGO Methodus and the communal forest services, annual monitoring of total production and some parcels is conducted to detect variations in productivity. These figures are compared to volumes obtained by other communities in the region (for *matsutake* mushrooms in particular).
- **Establishment of policy for mushroom prices:** One of the main challenges for the business is to ensure the greatest volume of products possible in order to meet amounts required for each shift of the dehydrator (at least 100 kg) and for the exportation of fresh *matsutake* to Japanese buyers (at least 80 kg to cover the costs of air transport). Each year, negotiations are made with the collectors in an attempt to offer an attractive price for the harvests while maintaining a competitive price in the market.

⁷ Fluctuations in wild mushroom production volumes are relatively important from one year to another due to climatic phenomena and the biological cycles of the species.

- **Commercial strategy:** To maximize benefits to collectors, the communal business developed sales schemes to avoid intermediaries, distributing production directly to shops and restaurants in different Mexican cities. Major efforts were made to establish an efficient distribution and payment collection system and to increase consumption in the city of Oaxaca, where demand for dehydrated mushrooms was practically nonexistent at the beginning of 2000. This has helped reduce business costs.

This business is not in itself a remedy for poverty, but it does form an essential part of a community strategy that seeks integrated use of the territory's potential, stewardship of its landscapes and its image and marketing of transformed products as an option for those who choose to continue living in the community or for some young people interested in learning new occupations.

6 Conclusions

The community-based forest enterprises and linkages to private initiatives have helped create jobs and foster the preparation of human resources within the Pueblos Mancomunados.

In order to be competitive, these small community businesses must develop democratic territorial

management schemes and entrepreneurial management for the economic sectors, which require external advice as well as construction of a strong community institutional structure.

International cooperation programs in the region have helped strengthen initiatives for integration of forest production chains; however, the centralized federal regulatory framework has not favored the development of self-regulation mechanisms for territorial management. The Mexican government continues to invest more effort and fiscal resources in the pseudo-legalization of resource use than in strengthening local capacities.

In Oaxaca, the phenomenon of migration has not been halted by the development of forest enterprises; however, the processes begun at the end of the 1980s in several indigenous communities are helping create more attractive jobs for young people who choose to remain in the communities. To keep them in the region, the communities will have to improve social infrastructure and develop several kinds of initiatives (cultural, educational or sports) that allow them to compete with the income generated by migration to the United States. Keeping skilled young people in the community will undoubtedly depend on the future of these small forest enterprises that have cost prior generations so much effort.

Promoting Forestry-Product Value Chains in the Peruvian Amazon: the Case of Camu Camu

Rafael Meza Castro,¹ Marly Cristina López Rengifo de Sarmiento² and John Belt³

1 Introduction

The camu camu (*Myrciaria dubia*) shrub grows on riverbanks and lake shores in the Amazon basin, forming natural stands. It is a nontimber forest resource whose fruit contains the highest concentration of natural vitamin C in the world (ProExpansión, 2006). Peru is the world's largest producer of camu camu, followed by Brazil, Colombia, Venezuela and Bolivia. The supply comes mainly from collection (extraction)⁴ in natural stands (87%) and a small part (13%) comes from plantations (Pro Expansión, 2006).

Site of the study was in the Loreto region of the Peruvian Amazon—the Sahuá-Supay lakes, Jenaro Herrera district. The lakes have a surface area of approximately 256 hectares, of which 60 hectares are natural camu camu stands. These lakes have been used for years by the rural people of Jenaro Herrera and adjacent villages as a source of hydrobiological, timber and nontimber forest products. The lakes are within the buffer zone of the Pacaya Samiria Protected Natural Area (PNA). This means that all activities developed within this region must be compatible with PNA objectives, regulations and instruments.

The main points of interest in the case of the camu camu chain for enterprise development include:

- the comparative advantages of the product: highest vitamin C content in the world (ascorbic acid content: 877 to 3,133 mg in 100 grams of pulp); it grows in only one place—the Amazon
- sustainable economic activity compatible with the forest: an alternative to uncontrolled logging
- participation of excluded populations (rural communities)

The case also highlights the context, the actors and the major bottlenecks for small forestry enterprises in the camu camu chain. It provides insight into how to promote economic activities compatible with PNA buffer zones, helping to reduce population pressure on them. The camu camu chain has problems similar to those of other nontimber products chains, generating lessons that are inputs for addressing policy for the promotion of these products in the Amazon.

2 Initial segment of the camu camu chain

In the initial segments of the camu camu chain, small forest enterprises based in the Loreto region conduct the following activities:

- collection (natural stands) and production (plantations) in the communities
- local stocking and commercialization in Jenaro Herrera and Requena rural villages



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⁴ In the document the terms *extractor* and *collector* (*extraction* and *collection*) are used indiscriminately, referring to people who do not have plantations but manage wild camu camu. The term *producer* refers to those with camu camu plantations.

- primary transformation in the city of Iquitos, capital of Loreto

The collection, production and intermediary businesses are family enterprises characterized as microbusinesses, usually made up of members from a single family. There are also committees, associations (including Román Sánchez Lozano of Jenaro Herrera, an organization of producers and extractors) and a community enterprise (Ecomusa). Most of these small enterprises are not formalized because of the high costs this implies for them. Enterprises engaged in primary transformation operate as individual limited-liability businesses and closed corporations, characterized as small businesses based in Iquitos, Peru. Secondary transformation and export businesses are medium-size enterprises that operate as closed corporations, mostly located in Lima, Peru.

Most of these businesses have been in existence for about 10 years. They do not have specialized divisions of labor: the owner is worker, seller and manager. The organizational structures and managerial styles are traditional—vertical and hierarchical. Men, women, children and seniors participate, so that everyone has access to the resource and the disposition of benefits.

The collecting and producing enterprises are the only ones that have direct contact with the forest. Legal access to forest resources is through permits for local forests (villages)—a total of 500 hectares in the first case, and in the second, the community's titled area—and communal forests (communities). There are also concessions for camu camu shrub plantations granted by the Regional Agrarian Directorate in the case of lands zoned for agriculture, and for natural stands, granted by the Ministry of Agriculture (MINAG) and the National Institute for National Resources (INRENA) on lands zoned for forests.

The collection (in natural stands), production (in plantations) and intermediary businesses offer camu camu as fresh fruit. Primary transformers are in the frozen pulp business. For the collection and intermediary businesses, the final market is regional; for primary transformers, the market is Lima; and the final markets of the secondary transformers and exporters are Japan, Europe and the United States. The international market is first in importance and the regional market is second, with an incipient national market.

Camu camu offers potential for penetrating niche markets due to its high vitamin C content and organic production. Demand for the product is growing and is now greater than the supply. These factors constitute an opportunity for small forest enterprise growth and development. In the context of local economic development and poverty reduction, it is important to point out that for the collection, production and intermediary enterprises, this is a complementary activity that does not compete with the principal activities of fishing, agriculture, timber extraction and trade.

The growth of these small forest enterprises has been developing as a function of demand in the external market. However, they still need business-capacity strengthening to provide stronger negotiation skills that will facilitate their strategic and long-term positioning in the chain.

3 Relationships along the chain

The first link of the camu camu chain consists of collectors and producers, focusing on fresh fruit. Their relationship with the intermediaries and traders is generally direct and via verbal agreements, which means that the collectors receive an advance and these exchanges ensure future production or a transaction upon delivery.

The second link consists of the local intermediaries and traders in fresh fruit selected and packaged by the transformer. These actors are located in the capitals of the rural districts. Their relationship is direct and generally the transaction is carried out upon delivery via contracts with the third link.

The third link has two levels: the first consists of the primary transformers that process the fresh fruit into frozen pulp. This level is found in urban zones, mainly in Iquitos. The second level is the secondary transformation of frozen pulp into concentrated pulp and, in some cases, powdered pulp for export. This level is concentrated in Lima. The first level often forms part of the next link or its relationship is through contractual agreements. At the second level, the relationship is via alliances with foreign importers or as part of foreign importing businesses.

The camu camu chain is in the initial phase of development because of slow recognition of the interdependency of the actors and because organization is still in a

preliminary stage. Most of the family businesses are not consolidated into second-tier organizations. Recently, members have been formalizing their relationships, and state institutions are beginning to play a more active role in improving the economic setting; however, chain actors and providers still need support.

One of the problems in the chain is that collectors and producers do not trust the intermediaries because of mutual deceptions and failure to fill commitments. Despite this lack of trust, the long-standing relationship is maintained because of the intermediaries' contacts in the communities and because the transformers have not been interested in intervening directly in the forest.

Another problem is a national policy that imposes a formal, bureaucratic structure with too many requirements, complicated paperwork and centralized decision making that occurs in a place far from the activity. Moreover, its actions are based on weak economic analysis—bureaucrats are unaware of the costs that their actions generate in the chain or of their economic effects. So the official instruments for managing the natural resource are more directed to scientists or professionals than the users of the chain. There is too much regulation, which makes it difficult for many of the actors in the chain to comply. Those who do manage to obtain legal access to forests complain about the absence and inaction on the part of state forestry agents to halt illegal and indiscriminant logging.

In the management of natural stands, compliance and applicability of the regulations have the following specific traits:

- requirements are numerous and costly (affidavits, declarations of land availability, management plans, opinions from diverse state offices, etc.)
- bureaucrats are exceedingly slow (exaggerated delays in addressing requests)
- actions for controlling compliance and implementing regulations are weak, which create a disincentive for managing natural resources

There are conflicts in the Román Sánchez Lozano association, an organization of collectors and producers, related to members who do not respect the rules established for harvesting. There are also conflicts among the associations that manage the stands and the people from other places who come to harvest

camu camu. Conflict also exists between the intermediaries/businesses and the association that involves prices, payments, harvest dates and compliance with agreements and regulations.

It should also be pointed out that the secondary transformation businesses have begun investing in research since there hasn't been proper management of knowledge about the chain. Existing knowledge is scattered and diffuse, and it often does not reach private actors.

There are alliances among primary transformers and intermediaries, among exporters and secondary transformers with primary transformers, and among extractors and producers with state organizations (Instituto de Investigación de la Amazonía Peruana–IIAP) and NGO projects (Centro de Desarrollo para la Competitividad de la Amazonía–CEDECAM). Organic certification of camu camu by SKAL International was obtained through alliances with the communities, NGOs, governmental organizations, universities and private enterprise.

Nationally, a public-private alliance has been formed through a camu camu chain roundtable to lift the threat of its regulation as a novel food by the European community and to promote export—under the leadership of PROMPEX (Comisión de Promoción del Perú para la Exportación).

MINAG is trying to connect chain actors through enhanced dialogue and coordination. The regional government, in its efforts for economic development, promotes camu camu management through projects with public investment. Its COREMYPE (Consejo Regional de la Micro y Pequeña Empresa) organization identifies the formal obstacles, and the directorate for the promotion of employment supports the formalization efforts.

4 Services for development of the camu camu chain

Until now business development services (BDS) have been provided almost exclusively by state entities (IIAP, Instituto Nacional de Investigación y Extensión Agraria, MINAG and the regional government), NGOs (CEDECAM, Convención Nacional del Agro Peruano–CONVEAGRO) and projects to promote management and cultivation. There are few BDS provided by private businesses along the chain.

The current supply of services is concentrated on the first link, with no BDS offered for the other links. Most BDS offer generic services intended for large- and medium-size enterprises in the timber sector, not services directed to small rural nontimber businesses. The BDS market could be energized with a policy guideline that organizes functions and indicates the places where they can be used (with respect to state-provided BDS). These services can also be promoted through incentives for and development of capacities in private businesses, with a focus on user satisfaction and results, to provide specific services:

- phytosanitary services and conditions
- expansion of areas in strategic zones and improvements to productivity in plantations
- how to reduce the degree of volatility of vitamin content and oxidation of the fruit
- training services for the informal lenders (*habilitadores*) of camu camu to help them be more efficient and effective in their loans

In general, BDS providers work under a traditional paradigm of transferring knowledge to users even though the greatest need is to develop attitudes and abilities. Thus, the transference is limited to a number of training workshops without any follow-up, monitoring or evaluation. Even when services that are of interest to the users are offered, the paternalistic approach and traditional methodologies used hamper success. Another disincentive stems from the economic characteristics of the users, the high cost of the service (production costs) and the minimum prices that the users are willing to pay for the services in the first and second links. The lack of positive impacts in

the short term for the development of the enterprise must also be taken into account—often the expected impact is not achieved.

Many BDS providers offer services that are not adapted to needs of the user—they are unrelated to demand. Existing providers do not want to work with intermediaries or *habilitadores* due to their biased view of the *habilitadores*; they consider them an unnecessary evil. Finally, BDS interventions by the state and NGOs (which completely subsidize the service) have led to a custom of small forest enterprises not paying for the services, endangering the sustainability of the system. This does not mean that the state and NGOs should not offer the services but that they should do so in a subsidiary fashion and provide services in areas where private providers do not. Furthermore, they should set a symbolic price that, while accessible, would require a commitment from the user.

With respect to financial services, only the *habilitadores* loan money to collectors, producers and intermediaries, with the condition that they sell the product. State officials and NGOs see them as actors that should disappear because they are viewed as profiteers and not as small financial businesses. However, who would fill this role sustainably once the *habilitadores* were eliminated remains a question.

5 Toward increased integration of the camu camu chain

Small future contracts have been made between producers, secondary transformers and exporters, with MINAG's help, in an attempt to institutionalize



them. At the same time, some primary transformation businesses are supporting community people in the management of natural stands, giving money to the association as well as the producers to care for and manage the resource and providing tools for proper harvesting. There is also an alliance among producers and state research institutions for providing technical assistance in camu camu management. And there is a public–private alliance regarding novel food.

The existence of producers and extractors in the organization that promotes management of the stands helps the population maintain control of its own resource rather than have it controlled by third parties from outside the community. It also offers margins for negotiation with the buyers on prices, payments, tools and investment in the forest. There is also vertical connection of the three links (producers, intermediaries and primary transformers) with the exporter or importer.

Ecological certification has improved the price paid to producers and has created an alliance among communities, ensuring production. The NGO facilitates and provides organizational assistance, the university offers technical assistance and MINAG promotes plantations and management by offering extension, identifying problems and trying to connect with public institutions to achieve an organized participation.

The challenges for actors in the camu camu chain for better integration include:

- adequately manage existing knowledge: sharing and disseminating knowledge that exists in the support entities about the camu camu crop and its extraction
- improve the capacities of the different actors: technical, entrepreneurial and financial capacities
- strengthen cooperation and communication in the chain: inter-enterprise relationships
- develop a favorable environment through the political–legal framework, lowering the costs of legalization, eliminating legal obstacles and simplifying administrative requirements
- improve the transport system to lower costs, increase reliability of service and phytosanitary conditions and be competitive with similar products like acerola (*Malpighia glabra*)
- obtain greater knowledge about the process of changing from stands to plantations, the potential and future projections related to chain development

- aid the expansion of areas to strategic zones and improve productivity in plantations
- create services for reducing uncertainty in the chain through mechanisms that help predict production volumes and mechanisms that give legal security to the actors (contracts)
- incorporate services to help businesses align with the trade policies of importing countries (HACCP, BPA, etc.)
- identify services that promote the national market to balance risks of the external market
- convert small businesses from survival enterprises into more stable businesses
- assess the role of the intermediaries (stockers and *habilitadores*) in the operation and development of the chain
- create services to promote the territory’s competitiveness, linking this isolated zone with centers of consumption (infrastructure, commercial information, BDS, etc.)
- collaborate, articulate, coordinate and work jointly with supporting institutions

6 Conclusions

Achievements in the integration of the camu camu chain:

- Arrangements exist between different actors that are appearing gradually in the chain (organization, negotiation, future contracts, vertical integration), but they need to be promoted.
- The population has gained experience in the management of camu camu in natural stands (wild fruit) and in plantations (domesticated fruit) for mass production. The *habilitador* fills the role of financial service provider, which is not recognized by the support institutions, and the intermediary is not perceived by the service providers and support institutions as a local small business.
- Organic certification has generated a price increase for the communities.

Challenges for successful integration of the chain:

- Greater connections for the camu camu chain must be achieved between national, regional and local levels, involving MINAG, the regional government and state export promotion institutions.
- The creation a favorable environment for camu camu businesses and a strategy that encompasses production, productivity and integration is a priority: improve the zone’s competitiveness,

knowledge about camu camu and the focus of the actors in the chain; acquire instruments to govern the chain.

- Local and regional government policies for small businesses involved with natural resources must be developed.
- A reduction in the costs, procedural paperwork and time required is necessary to simplify administration and formalize activities in the chain; transaction costs, which act as disincentives, should be eliminated.

The role of service providers in development of the chain:

- There are several biases to overcome in the promotion of the chain: 1) a focus that seeks to eliminate some members of the chain and does not take the needs of the user into account; 2) the bias in the strategy for intervention in the chain by BDS providers and support institutions that only concentrates on the first link, does not include promotion services in financing, offers only generic, unspecialized services for specific products, excludes the private sector as BDS providers and does not share existing knowledge with stakeholders.

- The state should have an energizing role in the BDS market not only with the users but also providers to overcome old, paternalistic state practices of paying for the entire service and the irresponsibility of the user in not assuming costs.

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Toward an Enabling Environment for Small and Medium Forest Enterprise Development¹

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1 Introduction

The Millennium Development Goals commit most countries to reducing global poverty by half by 2015. The stakes for meeting this goal are perhaps highest in forest-dependent communities in tropical countries, where poverty tends to be more pervasive and deeper than in urban and more favored rural areas. According to the World Bank, approximately 90 percent of the poorest people rely on forests for subsistence and income. The development of small and medium forest enterprises (SMFEs) represents an opportunity for strengthening the livelihoods of these people and conserving the natural resource base through sustainable forest management and processing of timber and nontimber forest products (NTFPs). Local benefits from SMFE development may include wages and employment, profit sharing, capital accumulation, cultural and political empowerment, investment in public goods and increased conservation of forest ecosystems through long-term sustainable management.

This discussion focuses on SMFEs that extract, process and market timber products (logs or sawnwood) and/or NTFPs. These SMFEs are located at or near the resource base and typically pursue multiple objectives, including employment and income generation, distribution of dividends among stakeholders, community development, greater participation in political dialogue and improved local safety nets. Access to forest-based resources may be collective or private. Enterprise governance is usually influenced strongly by local rules, practices and customs. Owners of SMFEs may include anything from a handful of founding members to hundreds of small-scale producers or community members.

Most forest enterprises fall into the category of small and medium on the basis of their sales volumes, numbers of employees and capital investments.

Several market trends favor the development of SMFEs. These include:

- growing scarcity and consequent price increases of a number of tropical hardwoods from natural forests
- increased tourism, providing expanding markets for handicrafts and ecotourism
- specialized export markets, for example certified wood products, fair trade NTFPs and bioingredients
- growing domestic markets for furniture, construction wood and certain NTFPs, such as bamboo, rattan and palm hearts
- greater awareness of forest certification and ecosystem services and the need to pay for them

However, most SMFEs are not able to capture full benefits from these opportunities. They struggle to advance beyond the start-up stage of business development, exhibiting low levels of output, productivity, value adding and profit. Overcoming these challenges requires concerted action and long-term investments among stakeholders, including the SMFEs, their business partners (processors and buyers) and service providers, and government agencies and nongovernmental organizations (NGOs).

2 Community forestry goes business

During the 1960s and 1970s, government policies for forest sector development concentrated on inducing growth through large-scale forest exploitation,

¹ Based on the experiences captured during the international conference “Small and Medium Enterprise Development for Poverty Reduction: Opportunities and Challenges in Globalizing Markets” (Costa Rica, May 23–25, 2006).

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coupled with increased investment in large-scale timber industries and plantations (Table 1). Few incentives existed for local development, and little consideration, if any, was given to institutional aspects or the building of local capacity for resource management or business development, resulting in failure in most cases.

Criticism in the 1980s led donors and NGOs to promote greater involvement of local communities in the management of forest resources. Development interventions targeted technical approaches to reforestation and management of natural forests. Following the 1992 Rio conference, conservation, along with economic and social development, began to feature prominently on donor and NGO agendas. Interventions focused on securing resource access and land tenure, decentralizing decision-making in the forest sector and improving local capacities for sustainable forest management.

In recent years, a new approach has begun that focuses on SMFE development. In countries where communities and small producers have secure land tenure, including rights to harvest and sell forest products, SMFEs have emerged and developed. Mexico now counts hundreds of timber-based SMFEs, many of which have vertically integrated into milling activities. Guatemala's Peten region has an active SMFE sector, with 11 of a total of 14 community concessions organized under a second-tier community forest enterprise. Case studies also highlight the emergence of SMFEs in Bolivia, Peru, Ecuador, Nicaragua, Honduras, Burkina Faso, The Gambia, Nepal and Papua New Guinea. The success of this approach will be determined by the ability and willingness of stakeholders to create an enabling political-legal framework; strengthen the technical, business and financial capacities of SMFEs; and orientate technical, business development and financial services toward the needs of actors along supply chains.

3 Leveling the playing field

Despite the progress achieved in land tenure for communities and small producers, the overall political-legal framework in tropical countries does not favor the development of SMFEs. The forest sector remains one of the most regulated sectors. Regulatory frameworks were designed mainly to mitigate the environmental impact of large-scale forest extraction rather than to promote the development of community

forest management operations and related value adding. Regulations governing forest product extraction and commercialization, such as permit requirements, are often complex. In some cases, SMFEs are forced



to operate without the required permits in order to compete effectively, even when they sustainability manage their forests. Requirements that SMFEs hire professional foresters to elaborate and execute forest management plans impose additional costs on SMFEs given their typically low production volumes. Government agencies may also require SMFEs to seek approval of the statutes and internal regulations governing implementation and monitoring of their forest management plans. In some cases, appropriate forms of business organization have yet to be developed that take into account the unique institutional arrangements of SMFEs and their pursuit of both social and economic objectives. For example, an SMFE may have little option but to register officially as an NGO or association, thus preventing it from accumulating capital or distributing profits among SMFE stakeholders.

SMFEs consequently develop in a context of incomplete, unrealistic and counterproductive regulations. They often have insufficient social and financial

Table 1. Approaches to forest sector development, 1960s to 2000s

| | 1960-1970s: export-led growth | 1980s: reforestation and food security | 1990s: sustainable forest management | 2000s: SMFE development |
|------------------------------|---|---|--|---|
| Main development focus | Capital accumulation via exploitation of forest resources | Technical skills development: reforestation and small-scale natural forest management | Social, environmental and economic dimensions of forest management | Increased income through environmentally sound and economically viable community forestry |
| Principal stakeholders | Export-oriented timber industries | Forest-based communities and industrial reforestation projects | Forest-based communities and timber concessionaires | Forest-based communities and community forest enterprises |
| Product and/or service focus | Precious woods | Fast-growing plantation species | NTFPs, lesser-known species (LKS) and precious woods | Precious woods, LKS, NTFPs, environmental services and tourism |
| Key drivers | Governments | Donors and NGOs | Donors and NGOs | Businesses, NGOs and donors |

capital to manoeuvre through the bureaucratic processes, and their remoteness only adds to the costs of obtaining information and doing business. Weak or selective enforcement of existing regulations has failed to curb illegal logging and creates unfair competition for SMFEs.

National governments can level the playing field by offering financial incentives for start-up SMFEs. Governments can also reduce the regulatory burdens on SMFEs or favor those with track records for sustainable forest management and, possibly, forest certification. In addition, governments can address regulatory issues related to land tenure clarification, export promotion and simplification of bureaucratic requirements for sustainable forest management and processing of forest products. Other promising options are green and social purchasing policies (buying forest products that originate from environmentally friendly and/or socially responsible SMFEs). The market can also be harnessed, for example, by facilitating payments of environmental services, such as biodiversity conservation, watershed protection, carbon fixation and maintenance of scenic beauty through sustainable forest management.

4 Toward more competitive SMFEs

To capture increased benefits in supply chains for forest-based products, SMFEs need to increase their productivity and efficiency. They can start by putting

in order their own sets of rules and regulations that govern their organization and administration. Internal conflicts over economic and social objectives (for example, profits versus employment or social investments) have resulted in increased production and administration costs and lost opportunities for increased value adding through quality enhancement.

SMFE leaders seldom have much experience in business management, accounting or marketing. In many cases, senior management posts are occupied by members of the board of directors rather than professional managers and consequently tend to rotate every few years. This leads to zigzagged learning curves, which require additional investments in human capital formation if economic and other losses caused by improper management decisions are to be avoided. Conflicts may also arise when SMFEs organize into second-level associations for collective (centralized) processing and marketing efforts. Conflicts often relate to the large trade-offs between increased on-site employment at the first level and increased productivity and efficiency through centralized processing at the second level. These situations reflect an overall lack of entrepreneurial vision and restricted access to the specialized support services required for SMFE development.

Most SMFEs need to strengthen their capacity to establish lasting partnerships with other businesses

along the supply chain, including specialized processors and buyers. Partnerships may offer increased capture of benefits through the formulation of benefit/risk sharing mechanisms, clear labor division and related value adding, and access to specific information and embedded technical, business and financial services. They also require that SMFEs communicate and coordinate effectively and deliver quality products on time and in sufficient volumes. Investments in infrastructure and productivity-enhancing technologies and related capacity building are often necessary to meet these requirements, as is innovation in product design and business organization.

Providers of technical, business and financial services, such as government agencies, NGOs, projects, consultants and private businesses, can play a critical role in promoting the development of SMFEs and their successful integration into supply and value chains. Service providers have tended to focus their efforts on building the technical capacities of SMFEs for forest management and conservation and, more recently, for the processing of timber and NTFPs. Relatively little attention has been paid to providing services that promote business development and chain integration. Specialized business development services (BDS) are required for local institutional strengthening and capacity building in business administration, market analysis, strategic planning and business leadership. Providers of financial services have been reluctant to offer services because of the especially high risks involved in SMFEs. Perceptions of high risk stem from the remoteness and isolation of many SMFEs, the cumbersome political–legal frameworks in which they operate, and their limited possibilities for insurance against risk (collateral), in addition to poor understanding of forest product markets and related opportunities and risks.

Market-based delivery mechanisms for business development and financial services can increase the quality and coverage of services available to SMFEs. But their implementation will require significant investments on both the demand and supply sides. For example, on the demand side, SMFEs will need to increase their willingness and capacity to pay for services as well as increasing their awareness of the services required for long-term SMFE development. On the supply side, there is need to strengthen the capacities of a critical mass of service providers to respond effectively to the demands and needs of SMFEs.

5 The way ahead

Overcoming the challenges facing SMFE development requires concerted action by the various stakeholders. The following recommendations emerged from the conference.

SMFEs need to address the following:

- seek out new business opportunities and acquire the capacities to initiate new business models and form mutually beneficial partnerships with other businesses along the supply chain, including processors and traders
- invest in associations that unite SMFEs for increased economies of scale in processing and marketing and greater bargaining power
- foster alliances—with technical, business and financial service providers—that have an impact on the bottom line and promote strengthened rural livelihoods among community members



- ensure that productivity and efficiency receive at least as much attention as social and environmental goals through the development of specific institutional arrangements for business management at the community level and among SMFEs

Service providers, including government agencies and NGOs must:

- broaden support to include services that effectively promote business development and supply and value chain integration
- assist SMFEs in formulating their demands for technical, business and financial services through a process of awareness raising, critical self-assessment, negotiation and mutual trust building

- identify and strengthen core competencies and establish partnerships with other service providers and businesses that can provide complementary services
- promote market-based approaches to the delivery of technical and business development services by designing and implementing effective cost/benefit sharing mechanisms with SMFEs
- make credit accessible to SMFEs: expand the range of credit and saving products available, broaden customer bases and take measures to reduce transaction costs, for example, by allowing for alternative forms of collateral, improving management information systems and reducing excessive paperwork.
- promote communication platforms and networks among SMFEs, providers of technical, business and financial services and other actors along the supply chain
- support research for increased understanding of successful cases and sound practices of SMFE development, the underlying critical success factors and the potential for scaling up

For more information

For more information about the international conference on “Small and Medium Forest Enterprise Development for Poverty Reduction: Opportunities and Challenges in Globalizing Markets” at CATIE in Turrialba, Costa Rica, May 23-25, 2006, visit www.catie.ac.cr/econegociosforestales/conference and www.fao.org/forestry/site/35689/en.

Governments and international organizations should:

- create an enabling environment for SMFE development: clear tenure rules, simple business registration and export procedures, and accessible tax and financial incentive schemes
 - facilitate information flows along supply chains and trade fairs for speciality timber and NTFPs
 - foster market-based approaches to service delivery through innovation payment mechanisms (for example, vouchers) and upgrading the capacities of service providers to identify and respond to the needs of SMFEs
 - promote increased cooperation among individual service providers for increased impact
 - facilitate multistakeholder platforms for facilitating conflict management and community–company links
- For more information on activities related to SMFE development, please visit:
- The Tropical Agricultural Research and Higher Education Center (CATIE), www.catie.ac.cr/cecoeco
 - Food and Agriculture Organization of the United Nations (FAO), www.fao.org/forestry/site/25491/en
 - The Interchurch Organization for Development Co-operation (ICCO), www.icco.nl
 - The International Institute for Environment and Development (IIED). www.iied.org/NR/forestry/index.html
 - SNV Collaborative Forest Management, www.snvworld.org/irj/portal/anonymous?navigationtarget=navurl://a535117edd7b3116e7c7134f47833f26

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