Learning from success

An ITTO survey of the private sector identified a number of companies whose forest operations are well on the way to sustainability. What can we learn from them?

by Ivan Tomaselli and Marco Tuoto

STCP
Curitiba, Brazil

Inventory: foresters measure and mark a tree during a pre-felling inventory in the Guavirà forest, the management of which is a private-sector success story. *Photo: STCP*

Landed: a log is extracted from Guavirà's forest. *Photo: STCP*

AS PART of ITTO PROJECT PD 48/99 REV. 1 (M,F): 'Sharing of information and experiences on private-sector success stories in sustainable forest management', a major survey was carried out across the tropics in 2001–2003 to identify examples of successful private ventures in sustainable tropical forest management. The findings of the survey, and a number of case-studies, were presented at a conference held in Kuala Lumpur last April (see *TFU* 14/2). This article presents an overview of the findings for Latin America and the Caribbean.

The survey process

The first stage of the project comprised a survey of sustainable forest management (SFM) at the company level in ITTO producer countries. In Latin America and the Caribbean, questionnaires were sent to 852 companies, of which 69 responded *(Table 1)*, a low tally considering the efforts made to encourage responses.

Follow-up contact with a number of non-responding companies illuminated some of the reasons for the low response rate. They included the absence of technical personnel in the company with the capacity to answer the questionnaire in-house, a lack of information related to the questions posed, suspicions that supplied information could be used against the responding company, and—perhaps most discouragingly—a lack of interest in the subject.

The questionnaires that were returned were of a reasonably high quality. Nearly 80% were completed almost in totality, while the remaining 20% lacked responses to a number of questions but still contained useful information. An analysis of the questionnaires yielded the following:

- **types of company:** of the 69 responding companies, 97% were privately owned, with the majority small-and-medium-sized enterprises; the remaining 3% were joint ventures between government and private entrepreneurs. No completed questionnaires were received from state-owned companies;
- **forest management:** 94% of surveyed companies had a forest management plan. However, only 54% of such plans were consistent with the ITTO *Guidelines for the sustainable management of natural tropical forests* and *Guidelines for the conservation of biological diversity in tropical production forests*; in fact, 41% of companies surveyed had no knowledge of the ITTO guidelines series. The majority (65%) of surveyed companies practised a 'selection' forest management system, 42% used a 'shelterwood' system, 12% employed clear-felling and 9% used 'ad-hoc' systems (note that some companies practised more than one system, so the total exceeds 100%);
- **logging:** the only harvesting system reported was tractor-skidding. Most respondents claimed to be using reduced impact logging techniques;
- **biodiversity conservation:** endangered species were reportedly present in the forest areas of 43% of companies surveyed. Shooting and hunting in production forests were prohibited by 87% of the companies, while 70% claimed to have areas reserved for conservation or protection;

Low response

Table 1: Responses to questionnaire by companies contacted in the Latin America/Caribbean region

COUNTRY	Total number of companies contacted	Number of responses obtained	% in relation to the responses obtained
Brazil	232	40	17
Bolivia	67	7	10
Colombia	101	5	5
Ecuador	59	6	10
Guatemala	89	1	1
Guyana	10	1	10
Honduras	52	2	4
Panama	6	2	33
Peru	156	3	2
Suriname	9	–	0
Trinidad and Tobago	25	–	0
Venezuela	46	2	4
TOTAL	**852**	**69**	**–**

- **use of non-wood forest products (NWFP):** only 20% of surveyed companies produced NWFP, predominantly medicines, fruits and nuts;
- **forest services, recreation and ecotourism:** most of the surveyed companies (64%) claimed to be providing some type of forest service, including conservation, protection, education and wildlife refuge. Less importance was given to recreation and carbon sequestration;
- **social aspects:** most surveyed companies provided some kind of welfare facilities for their employees and for local communities. The most common benefit provided was housing (70% of respondents), followed by health-care (62%), water (49%), electricity (43%) and education (28%);
- **wood products:** more than half (56%) of companies produced sawnwood, 31% produced plywood and 23% produced secondary wood products such as flooring, mouldings and furniture;
- **security and law enforcement:** 81% of responding companies reported that they had not been involved in court cases related to violations of forest laws in recent years;
- **research and development (R&D):** 51% of responding companies said they were undertaking some kind of R&D activity. International cooperation has been playing an important role in the region's forest research: this is reflected in the fact that 57% of the R&D projects being undertaken by responding companies had external funding; and
- **certification:** 19% of companies had a certified forest, while 78% did not possess any kind of certification. Encouragingly, around 62% of the non-certified forest companies stated that they intended to undertake forest certification in the near future.

Case-studies

Based on the analysis of the first questionnaire, nine companies with strong SFM programs—four in Brazil, three in Bolivia, and one each in Colombia and Ecuador—were selected for assessment in a second stage. A second questionnaire was sent to each; these were mostly completed by the project consultants in cooperation with representatives of the selected companies.

The third stage comprised the preparation of four case-studies, two of which are presented here.

Open and shut case: doors manufactured by La Chonta—another private-sector success story—are ready for transport. *Photo: STCP*

La Chonta

La Chonta is a privately owned company in Bolivia. The company manages 220 000 hectares of tropical forests distributed in two concessions (of government forest land) located in the Guarayos and Bajo Paragua regions in central-western Bolivia. The company employs 350 people and has an annual revenue of about US$4 million.

After the enactment of a new forest law in 1997, the company, whose forest operations until then had been of a 'conventional' nature, decided to embark on a new approach and the forest concession began to be managed in a sustainable way. Today, both La Chonta forest concessions are certified under the umbrella of the Forest Stewardship Council (FSC).

To improve forest practices and adopt SFM, La Chonta has increased the number of tree species harvested, and thus is able to harvest higher volumes per unit area. In the past the company's operations were based on a few valuable species—such as mahogany and cedro—and removals were normally less than 1 m^3/hectare; these species are now rare in the concessions. With the new or 'lesser-known' species (LKS), the company is harvesting 3–8 m^3/hectare, still a relatively small volume compared to operations in some other countries in the region.

La Chonta has two sawmills, both located close to forest concessions (La Chonta and Lago Rey). Part of the production is traded in bulk, while better grades are reprocessed into value-added products. The production capacity of the re-manufacturing facility is around 2000 m^3/year of finished products (doors, mouldings and flooring) and about 20 000 doors are produced annually. The chain of custody is also certified under the FSC.

Wood-processing activities were strongly affected when SFM was adopted, particularly by the increase in volume of new species, the processing characteristics of which were largely unknown. Several actions were needed to improve the efficiency of the mills, including investments to develop new processes and products, and also investments in processing facilities.

The increase in the volume removed reduces harvesting costs (per unit volume) but creates another problem: many of the LKS are not known in the international market and, when accepted, have a low market value. La Chonta therefore faces difficult times, since in many cases the cost of production (particularly given the difficult transport logistics in Bolivia, a landlocked country) is a strong limitation for timbers with no tradition in the market. The domestic market could, in principle, provide an alternative, but it is very small.

The La Chonta experience suggests that introducing LKS is fundamental when adopting SFM. Processing LKS requires an increase in the scale of production (starting in the forest) and the adoption of improved processing technologies

Inroads: a logging road in the La Chonta concession. *Photo: STCP*

Mill-bound: a road train is ready to haul its load to the Guavirà mill. *Photo: STCP*

in order to reduce production costs and increase product values.

Many LKS have a lower market value, well below those of traditional wood species, at least initially and probably for some time. Thus, without a reduction in costs and addition of value, profitability is difficult to obtain, yet is necessary to improve forest practices.

La Chonta's experience also shows that an adequate policy and legal framework, and particularly law enforcement, plays an important role in the promotion of SFM. However, the private sector in Bolivia has ended up paying the full costs of SFM, since the government has no economic instrument or other mechanism to help meet such costs. There was hope that the additional costs could be recovered from the market, but this has proved elusive, with practically no price premium apparent for sustainable produced timber, even when certified.

The changes towards SFM require more than good will. New investments in the whole value chain are needed. This has been a strong limitation for La Chonta, since in Bolivia financial sources for direct investments in the timber industry are limited and, when available, costs are high.

The increasing complexity of the legal framework covering forests and the growing overlap of regulations resulting from an on-going decentralisation process are continuously increasing operational costs. This stimulates informality and corruption, especially when coupled with weaknesses in law enforcement

Guavirá

Guavirá Industrial e Agroflorestal Ltda is a privately owned company in Brazil. Its operation is totally integrated, from forest operations and harvesting to manufacturing (primary and secondary processing) and trading. The company employs about 250 people and its annual turnover is around US$7 million.

Guavirá owns about 80 000 hectares of land in Mato Grosso state. Of this, 58 000 hectares are covered by natural tropical forests managed for production. The forest management plan prepared by Guavirá is considered by state authorities and also by the national forestry agency (IBAMA) as an exemplary model that could be followed by others. Although the company could purchase logs in the local market, currently all timber supply originates from its own forestland.

The forest owned by Guavirá is quite atypical, with a much higher density of a single marketable tree species, cedrinho (*Erisma uncinatum*), than in other parts of the Amazon; it comprises around 50% of total timber removals with a harvestable volume varying between 10 and 15 m^3/hectare (depending on location). This high concentration of a single, valuable tree species is an important competitive advantage for Guavirá and, indeed, may well be the single most important factor in ensuring profitability.

Another factor is the ability of the company to conduct harvesting and transportation operations all year round; in contrast, most operations elsewhere in the Amazon are interrupted by the rainy season and therefore can be sustained for no more than 6–8 months per year. Guavirá can operate all year round because of the nature of the soils and the high quality of roads constructed by the company. The equipment used for harvesting comprises one skidder, one front-end loader and five 70-ton trucks, which is sufficient to supply 85 000 m^3 to the mill each year.

Guavirá has also modernised its processing facilities with a view to strengthening its competitive advantage by increasing productivity, reducing wood waste and improving product quality. This involved the construction of a new sawmill with a production capacity of 60 000 m^3/year of sawnwood to replace the existing three smaller ones, the building of a modern secondary processing plant to add value to the sawnwood and to improve wood recovery, and the establishment of a power plant based on wood waste.

The total investment was around US$12 million, about half of which was financed by the National Bank for Economic and Social Development (BNDES)—the first such loan by BNDES to a company harvesting and processing timber from natural tropical forests in the Amazon. These investments were important in enabling the company to capture a share of the international market; prior to the commissioning of the new mill, 100% of production was sold in the domestic market, mainly for construction.

Guavirá currently produces 45 000 m^3/year of tropical sawnwood. Higher grades—about 10 000 m^3/year—are transformed into value-added products such as mouldings, decking and furniture components and sold mainly in international markets. As a result of this strategy of adding value to a significant part of the production and trading in the international market, the average selling prices obtained by Guavirá have more than doubled over the last three years, and profitability has also increased.

Value adding: logs harvested in the Guavirià forest are sawn in the mill shown on the left; the resulting sawnwood is further processed in the factory on the right. *Photo: STCP*

Despite its success, questions remain over the long-term economic sustainability of Guavirá's business. The increasing complexity of the legal framework covering forests and the growing overlap of regulations resulting from an on-going decentralisation process are continuously increasing operational costs. This stimulates informality and corruption, especially when coupled with weaknesses in law enforcement. There are serious doubts about the effectiveness with which laws related to property rights will be enforced in the future. Moreover, other land-uses in the area—notably the cultivation of soybeans—are proving more profitable than sustainable forest management.

Some key issues

There is no doubt that the private sector is the main investor in SFM in the Latin America/Caribbean region. Although governments and the private sector have agreed on a range of standards to implement SFM, it seems that most governments have underestimated the need for new and additional funds, leaving the task of implementation to the private sector. Moreover, the private sector is expected to support growing government expenses resulting from excessive regulation and the growing size of the state, with the result that the private sector ends up paying twice for its troubles. As the private sector is often not willing (or has no means) to pay the full bill, the result is less money to implement SFM, and growing informality (illegal logging).

Nevertheless, this survey has shown that a significant number of forest operators are doing their best to achieve SFM. The area of forest under the influence of such regimes is relatively small, and there are few signs that the extent of 'sustainably managed' forest will expand dramatically in the near future. For this to happen, a number of obstacles will need to be removed from the path of those companies committed to the pursuit of SFM.

Property rights

The absence of well-defined property rights for forests has been a key obstacle to the attraction of investments in the forest sector (and, consequently, in SFM) in the region. In most countries in the Latin American/Caribbean region (particularly Bolivia, Guyana, Peru and Suriname), the resolution of conflicts over land-tenure rights and the enforcement of laws on property rights are prerequisites for SFM.

Incentives and financing

For some countries in the region, the level of incentives and the availability of financing for the establishment of forest plantations are already adequate. By contrast, no incentives or financing mechanisms for natural forest management are available in the region.

There is no simple solution to this, but the basic principle is clear: governments and other stakeholders must create an environment in which the investments needed to improve the performance and competitiveness of the forest sector in (particularly the international) markets will be forthcoming. In the end, the market will be the main source of funds for the financing of SFM.

Incentives should also be developed to catalyse adoption and to enhance performance, but other conditions must also be met for the process to be sustained. These include, among other things, appropriate, stable and transparent regulations, economic and political stability, and guaranteed access to forest resources and markets (including international markets).

Profitability

The private sector pursues profits, but SFM is often not as attractive as other investment opportunities: there are usually easier and safer ways to make comparable (or better) returns, both within the forest sector and outside it. Thus, the main policy effort should be to make unsustainable forestry less profitable and to make SFM more financially rewarding.

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However, making SFM more attractive than unsustainable forest management is not a sufficient condition in itself. Timber is not the only business in the world, and investment will flow to other sectors if they are offered a better and/or more secure return. The net result of this would be more forest clearance—to make way for agriculture and other land-uses.