

MAKING LATIN AMERICAN FORESTS WORK FOR PEOPLE AND NATURE

Essential forest policies for Latin America



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PREFACE

*M*aking Latin American Forests Work for People and Nature: Essential Forest Policies for Latin America was prepared jointly by the World Forests, Society and Environment (WFSE) Project — a Special Project of the International Union of Forest Research Organizations (IUFRO) — and the Tropical Agricultural Research and Higher Education Center (CATIE). It also received support from the Finnish Forestry Research Institute (METLA) and the generous financial support of the Ministry of Foreign Relations of Finland.

The purpose of this document is to offer a shared vision of recommendations for essential policies required to ensure that Latin America's forest resources are sustainably used and conserved, both

for the benefit of people and for the protection of nature.

The brief policy recommendations outlined in this publication are based on extensive scientific evidence compiled by the authors and were selected as a result of a long and creative discussion involving 18 researchers from this region at the end of March 2007 in Turrialba, Costa Rica. A synopsis was subsequently prepared by seven authors who took part in that meeting and was reviewed by numerous specialists in forest issues, to whom the authors express their sincere thanks.

In addition to the seven authors, the coauthors also made valuable contributions to this work, participating actively in the 2007 discussion and serving as reviewers of the final document.

URGENT POLICY RECOMMENDATIONS

The four chapters of this publication set forth the need to adopt and implement essential forest policies that would favor a reversal of current negative trends and take advantage of existing potential, thereby creating a better future for Latin America's forests and making use of the valuable goods and services they provide to the region. We consider it useful to summarize the key messages of each chapter at the beginning of this document to emphasize the policies that seem to us to be particularly vital and whose design and implementation are of great urgency.

Chapter I. Drastically reduce deforestation and the degradation of forest resources in order to conserve biodiversity and other environmental services while at the same time strengthening the effective application of sustainable forest management to achieve an appropriate balance between forest use and conservation.

Chapter II. Diminish the negative impacts of climate change, promoting measures to mitigate greenhouse gas emissions

from forests, particularly those related to deforestation and degradation (REDD), and implementing activities that promote and support the capacity of societies and ecosystems to adapt to this phenomenon.

Chapter III. Improve forest governance by decentralizing decision making, achieving effective social participation and empowering marginalized stakeholders. It is also essential to guarantee equitable access to forest resources by regulating their ownership, tenure and usufruct, while reinforcing compliance with forestry laws and regulations and exercising effective control over illegal activities.

Chapter IV. Strengthen the contribution of forestry programs and activities to poverty reduction, supporting the development of small and medium-size forest enterprises (SMEs), increasing their productivity and competitiveness, incorporating these businesses into value chains and promoting partnerships between local public and private stakeholders for the efficient generation of forest products and services.

INTRODUCTION

The United Nations Food and Agriculture Organization (FAO) estimates that in 2005 Latin America and the Caribbean had about 860 million hectares of forest (46% of the total land area), of which 90% is found in South America. This represents approximately one-quarter of the world's forest resources and half of the planet's tropical forests. However, the region's forests continue to suffer an alarming rate of deforestation and degradation — 4.48 million hectares annually between 2000 and 2005 according to FAO estimates — affecting the environmental services generated by forest areas and releasing significant quantities of carbon dioxide into the atmosphere at a global level.

The forest resources in Latin America's different regions and countries are as diverse as the social, cultural, institutional and economic contexts in which forest conservation and use occur. Few question the fact that the fate of many of the region's forests is closely associated with the problems of poverty, population growth, the expansion of the agricultural frontier and the marginalization of large sectors of society that live within or near forested areas.

Despite the wealth of Latin America's forest resources and increased production and trade in forest products, the forest sector contributes modestly to the Gross Domestic Product (GDP) of these countries, many of which are net importers of forest products. Forest plantations account for only 1.4% of the region's forested area, though

there is a clear trend toward increased use of timber from plantations. The impacts of globalization and a growing emphasis on environmental issues have forced a process of restructuring and consolidation within the large-scale forestry industry (Figure 1). Demand for certified products is gradually increasing and, as of 2008, almost 2% of the forests classified as productive have been certified.

Furthermore, 20% of Latin America's territory is currently under some regimen of protection, although in many cases it is not very effective. Property rights or usufruct rights to approximately 150 million hectares of forest lands have been granted to indigenous and peasant communities, whose subsistence often depends, in great measure, on goods and services provided by forests.

If the sectoral trends forecast by FAO for Latin America up to the year 2020 materialize, accelerated deforestation will continue. However, at the same time, the area of planted forests is expected to increase and will supply more than half of the raw material required by the timber industry. Growth in consumption and export of forest products is also anticipated, as is the emergence of carbon markets and greater attention to environmental issues, ecotourism and intersectoral integration.

This document offers a brief synopsis and recommendations for forest policies that require urgent implementation in Latin America. It is essential to act now on the issues addressed in order to counteract damage to the environment and loss of opportunities, at the same time more effectively contributing to an improvement in the well-being of the region's populations and its economies.

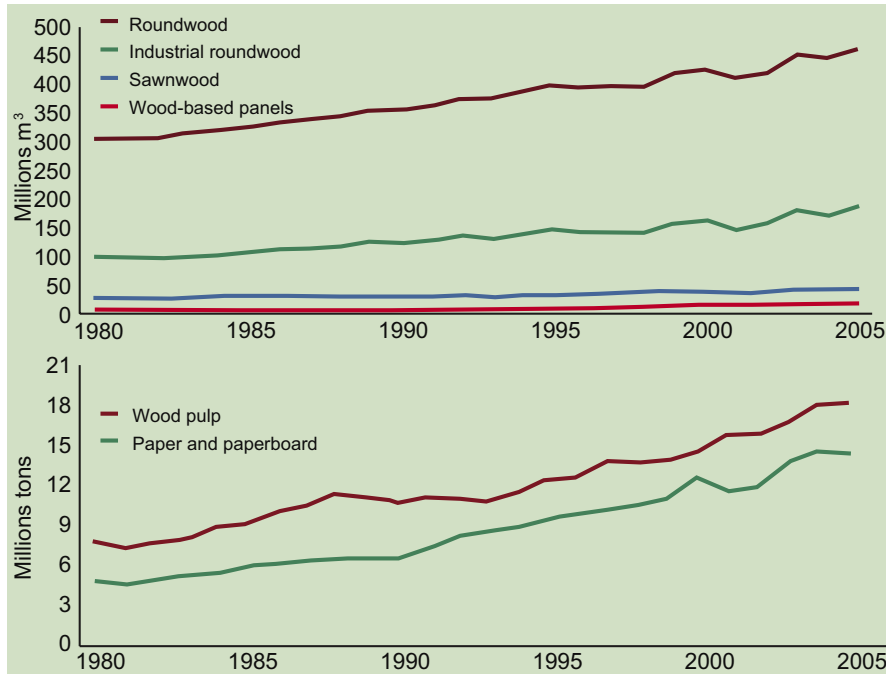


Figure 1. Despite the recent expansion of production in the Latin American timber industry, it is important to emphasize that this is concentrated in a few countries and that most of the production for export is in the hands of large corporations, particularly evident in the case of pulp and paper production. (FAOSTAT data).

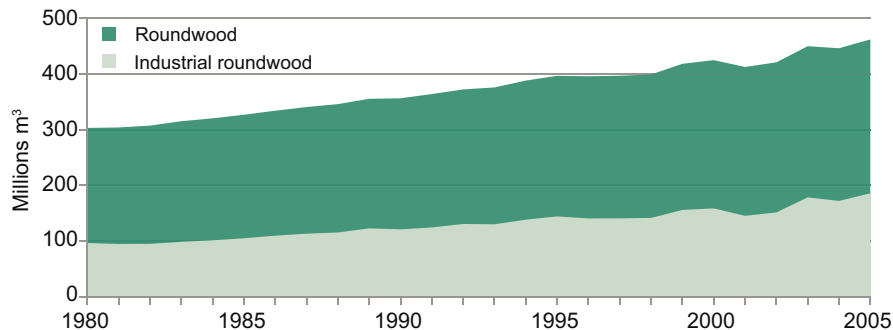


Figure 2. There is a low level of industrial processing of harvested timber in the region. Part of it is used for firewood and a significant amount is abandoned as residues in the forest (graphic at left, FAO figures). Moreover, a large portion of the industrial roundwood is exported as raw material with little value added.

CATIE Photo Archives

John Parrotta



John Parrotta

Bastiaan Louman

Photos of permanent removal of natural forest (upper left, Costa Rica; upper right, northeast Brazil) to create areas for extensive cattle ranching (lower left, northwest Brazil) or for agricultural crops (such as soya crops in Paraguay, lower right photo). This pattern of land-use change is often repeated in many countries of the region.

CHAPTER I — Promoting the conservation and sustainable use of forests for the well-being of society

One of the most important issues in Latin America is the implementation of effective government policies to support advances toward sustainable forest management (SFM) and the effective management of protected areas. The implementation of such policies must translate into the sustainable production of goods and services that address societal needs, provide sources of employment for rural populations and ensure the conservation of forest resources for present and future generations. At the same time, it is necessary to ensure compliance with the international agreements signed by the region's countries in the various international processes developed through the United Nations.

Basic considerations

● Forests are important because they supply goods and services to society, preserve the planet's biological cycles, conserve biodiversity and provide sources of income and decent work. Forests often supplement the incomes of rural families, providing a safety net in times of hardship that helps alleviate rural poverty. Large numbers of families that use forest products consume them directly as food, medicines, construction materials, utensils and firewood.

● Latin America's forests have been deforested at an alarming rate. Deforestation may be defined as the permanent removal of the forest cover in order to use the land for other purposes (agriculture, livestock production, mining, infrastructure, etc.). FAO has estimated that annual deforestation in the region reached 4.48 million hectares in the period 2000–2005. Various policies and development programs, particularly in the agricultural sector, have contributed substantially to this deforestation.

● The degradation of forests leads to a decline in their numerous environmental functions and a loss of their economic value, many times prompting their conversion to other uses. Although this process has continued for decades, the policies applied to address the problem have been ineffective and have failed to halt it.

● There is an urgent need to ensure the conservation and restoration of extensive natural forest areas in order to guarantee their functions, namely, preserving biodiversity and the genetic pool, regulating water quality and water flow, soil conservation, sequestering atmospheric carbon and preventing the warming of the atmosphere, among others.

● There are significant areas of forest in different stages of regeneration that have great potential to contribute to biodiversity conservation, carbon sequestration and the production of timber and nontimber products.

● Landscape management is an essential approach for the sustainable management of natural resources, one that requires coordinated interinstitutional action and the effective participation and involvement of diverse stakeholders. The failure to use this approach and the lack of land-use planning has contributed to processes of landscape degradation and fragmentation and loss of livelihoods for local populations.



The photos show eucalyptus plantations in Brazil, radiata pine in Chile and teak in Costa Rica. Forest plantations provide an increasing source of timber for manufacturing of different forest products. The region has extensive areas planted with exotic species of rapid growth, mainly in the eucalyptus and pine species. However, it is argued that these should not be regarded as a substitute for natural forests, which often provide goods and services different from those offered by plantations.

POLICY RECOMMENDATIONS

Establish programs, mechanisms and instruments of forest policy that lead to the effective reduction of deforestation and degradation of forests, creating a harmonious balance between their conservation and sustainable use.

The conservation of vast areas of forest is important to preserve biodiversity and provide valuable services that enhance human well-being.

Rural communities must be involved in and benefit from plans for conservation or efficient use of environmental services and timber and nontimber forest products.

The conversion of forest lands to other uses must be carefully planned and regulated, paying particular attention to the synergy between agricultural development, livestock production, forestry and tourism, and overseeing their integration into the landscape and into existing conversion incentives.

Efforts must be made to encourage the restoration of lands suitable for forestry that are currently deforested, either through programs that promote their natural regeneration or through plantation schemes, with the active participation of the stakeholders involved and with governmental support.

It is urgent to prioritize the application of land-use planning policies that involve all relevant sectors as a tool for the sustainable development of forest resources.



Patricio González



Erkki Oksanen

Latin America has great potential to produce biomass that can be used for cooking food, heating homes and generating energy, partially replacing the consumption of nonrenewable fossil fuels. Firewood is the dominant fuel in many rural areas and there is growing demand for wood pellets both for consumption by local populations and for export.

CHAPTER II — Enhancing the beneficial role of forests in the context of climate change

Global climate change is one of the greatest concerns facing contemporary society due to the calamitous socioeconomic consequences foreseen. Although estimates of the degree of atmospheric warming vary (between 1.4 and 5.8 degrees Celsius over the next 100 years), most scientists agree that global warming is a fact and that it will have serious repercussions for societies and natural resources, particularly affecting the most vulnerable inhabitants in the poorest nations.

The latest estimates by the Intergovernmental Panel on Climate Change (IPCC) project temperature increases and a reduction in soil moisture by the middle of the 21st century. This would lead to tropical forests being replaced with savannas in the eastern Amazon region, while the semiarid vegetation of Latin America would gradually be replaced with arid vegetation. There is a risk of significant loss of biodiversity through the extinction of species, particularly in many tropical areas. The driest areas can expect salinization and desertification of farmlands, leading to a reduction in the productivity of important agricultural crops and livestock, with serious implications for food security and rural economies. Experts also predict a substantial decrease in the availability of water for human consumption, agriculture and energy generation due to changes in rainfall patterns and the gradual loss of glaciers. In lowland areas, a growing risk of flooding is projected.

At present, two types of significant actions have been defined to address climate change: the reduction of emissions, or mitigation, and adaptation of ecosystems and communities to the expected changes. Forests can either play a beneficial role as carbon sinks or become a source of emissions, mainly through the burning and destruction of tree-covered areas (deforestation and degradation).

Adaptation efforts undertaken in some countries of the region have clearly proven insufficient due to a lack of basic information and research, shortage of monitoring systems, economic difficulties and the absence of frameworks for political, institutional and technological action, among other factors.

Basic considerations

- Latin American countries are vulnerable to climate change because of extensive areas of forest threatened with deforestation and degradation or extinction of species and because large numbers of people depend completely or partially on forests for their survival.
- Deforestation is one of the leading sources of greenhouse gas (GHG) emissions, generating 20% to 25% of total emissions into the planet's atmosphere. Latin America is a major source of GHG emissions, due to high deforestation (which FAO estimates at 4.48 million hectares annually). In this context, the REDD strategy — reduction of emissions from deforestation and forest degradation — may provide a highly promising mitigation initiative for the region when applied in the context of sustainable forest management.



Winfried Steiner

Timber may partially replace some products whose manufacturing process requires large amounts of energy (for example, cement). Timber products, in turn, act as temporary carbon sinks and are recyclable. Here, carpenters in Talamanca, Costa Rica, produce furniture for the local population.

- The use of energy from fossil fuels is the primary source of GHG emissions at the global level, although efforts are under way to increase the use of renewable forms of energy, including those produced from forest biomass and timber waste.
- There is growing interest in the development of biofuels (ethanol, biodiesel and others) produced from traditional agricultural crops (for example, sugar cane). However, this process may entail further deforestation because of the demand for new croplands, and at the same time it may threaten food security by creating shortages and raising the prices of basic foodstuffs.
- Natural forests constitute one of the planet's largest carbon deposits. The restoration and rehabilitation of degraded areas — soils and forests — can provide an important sink for atmospheric CO₂.
- Forest plantations also constitute significant carbon sinks. Today more than 12 million hectares of land in Central and South America are planted forests used almost exclusively for the production of timber and fiber for industrial purposes. It is estimated that nearly 70 million hectares of degraded lands are suitable for the establishment of plantation forests.
- One of the anticipated consequences of climate change is the degradation of forest ecosystems due to the increased frequency of forest fires, forest pests and the spread of invasive species.

POLICY RECOMMENDATIONS

The reduction of emissions from deforestation and forest degradation (REDD) should be a priority goal in order to reduce greenhouse gas emissions. An appropriate political and social framework for the implementation of mitigation measures should be developed, including those of REDD applied in the context of sustainable forest management. Priority should be given to actions in areas at high risk from deforestation, with high carbon content and that, at the same time, would lead to an increase in social well-being.

It is crucial to implement measures that promote adaptation to climate change in the forest sector. To implement effective and timely programs, it is of the utmost urgency to research, evaluate, provide technological support and monitor the impacts of climate change on forest ecosystems, on their vulnerability and on the people who depend on these ecosystems and their capacity to adapt.

Given the growing demand for energy generated from biomass, particularly biofuels, it is vital to ensure that this process does not increase deforestation or affect food security and that it leads to a real reduction in the use of fossil fuels.

Research and the transfer of technology for a more efficient production and use of biomass should be stimulated, particularly from firewood, woody fiber and forestry and agricultural wastes as sources of alternative and renewable energy.

The use of new technologies should be encouraged in order to manufacture more durable timber products, which could act as temporary carbon sinks, be totally recyclable and replace materials whose manufacture involves high energy consumption and significant greenhouse gas emissions.



César Sabogal

Local actors must assume new responsibilities such as protecting the forests under their responsibility, particularly with regard to fires, illegal logging and land-use change. Members of a community group in Peru discuss the use and protection of forest resources on their lands.

CHAPTER III — Improving governance of forest resources

Social demands for the implementation of effective management regimes for the conservation and sustainable use of forest resources are growing every day. This is reflected in the variety of stakeholders involved, the diversity of their interests and values and the complexity of the interactions among them, including those of a commercial nature. In other words, the pressure is increasing to improve forest governance, which is being defined as “the legal and institutional framework within which decisions are made in society.”

In general, the traditional vertical and hierarchical approach to decision making, in which forest policies are dictated by a central government, has not been successful. Sustainable forest development requires broad participation by a wide range of actors from different sectors of society and the effective management of conflicts to reconcile divergent positions and interests. The recognition of this principle has given rise to new initiatives aimed at decentralization, fostering democratic decision making in the forest sector, highlighting the importance of elements such as transparency, responsibility and equity and encouraging local governance of forest resources.

The application of policies, standards and regulations must be clear, concrete, realistic and practical, with a long-term vision and operating under fair and stable rules. It is also crucial to monitor and disseminate the results of policy implementation and have the flexibility to make changes deemed

necessary. Furthermore, this continuous analysis must be undertaken in a comprehensive manner with other sectors.

The devolution of land rights and/or the rights to benefit from forest products and services is a tangible example of efforts to expand and enhance social participation in the management and conservation of forest resources. More than 150 million hectares of land in Latin America have already been formally turned over to indigenous and peasant communities and this area is increasing with the passage of time. The process of devolution must be supported to ensure that it is accompanied with a more sustainable and efficient use of these areas. The well-being of many of these communities depends in great measure on the goods and services provided by forests.

Basic considerations

- In many countries, new forms of governance have emerged in the forest sector that emphasize interdependence, cooperation and a two-way learning process in the formulation and application of policies, involving various social and governmental organizations. There are policy networks that form part of a general effort to grant power and authority to civil society so that it can regulate itself and foster relations of trust and cooperation among stakeholders having different interests.
- Decentralization occurs through the delegation of authority and responsibilities for the development of the forest sector to the municipalities and other local players. Local governments and stakeholders require extensive training as well as technical and financial resources to effectively fulfill the mandate implicit in decentralization.



Bastiaan Louman

The community of San Antonio de Filadelfia (Bolivia) has launched a diversified management project in its forests and is establishing new forms of decision making and the granting of user rights within its communal area.

- In the context of sustainable forest development, achieving the active participation and empowerment of the different groups and their involvement in decision making on forest issues and related topics is essential.
- One potential advantage of broad social participation is the increased legitimacy and transparency of decision-making processes as well as in their implementation. A reduction in bureaucracy and an increase in institutional efficiency and stability are

crucial factors for advancement toward sustainable forest development.

- Local communities often possess a wide range of traditional knowledge or know-how that can enrich and improve forest management proposals, thereby broadening the benefits obtained. It is therefore important to disseminate successful experiences of community forest management.

POLICY RECOMMENDATIONS

Facilitate delegation of administrative power from national governmental institutions to local public institutions and civil society groups. Local institutional capacity should be strengthened through training, technical assistance and empowerment of the different social actors. It is also necessary to create an environment that promotes successful participation by those actors in sustainable forest management.

National forestry programs (NFP) and other management and development initiatives should explicitly contemplate the active participation of a broad spectrum of stakeholders. These participants from the civil society should be offered an opportunity to take part in the formulation and implementation of new rules of governance and management tools, as well as in their monitoring and adaptation. They should also have the opportunity to participate in public debates and in processes of conflict resolution.

Support the drafting of legislation for the regularization of property rights, land tenure and the usufruct of forest goods and services, resolving existing conflicts in an enduring manner and ensuring equitable access to and ownership of forest resources for marginalized social sectors.

Enforce compliance with legislation to ensure effective control over criminal and illicit activities, such as illegal logging and corruption in public and private entities, thereby facilitating transparency in the forest sector.

Ensure compatibility between laws, regulations and the institutional frameworks at different levels of decision making — federal, state and municipal — and also between different sectors.



Dietmar Stoian



Dietmar Stoian

The provision of technical, business and financial services helps to generate greater value added in the different links of value chains. Photos show members of the Shipibo indigenous community in the Peruvian Amazon processing timber extracted from their forests, thereby adding value to it.



John Parrotta

Increased local and regional demand for timber and nontimber forest products can provide a major boost to the development of small and medium forest enterprises. The photo shows the production of certified timber in Bolivia.

CHAPTER 4 — Increasing the competitiveness of the forest sector

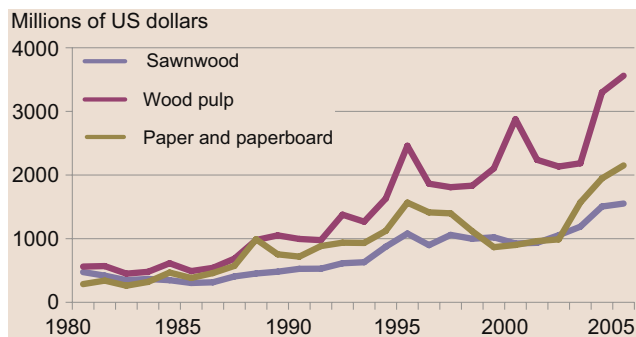
The livelihoods of more than one hundred million Latin Americans depend directly or indirectly on forests. The majority of these people live in extreme poverty in rural areas. They use timber resources and a large number of nontimber forest products, most for subsistence purposes but also for commercial purposes. Many families that depend on forests have been unable to emerge from poverty because they cannot obtain significant benefits from commercial forestry activities due to the following:

- ◆ Lack of financial capital to invest in processing facilities that would allow them to generate greater value added to forest products
 - ◆ Lack of legal security of property and land-tenure rights in forest areas and the consequent lack of investment in the forestry sector
 - ◆ Insufficient volume of products with the quality and attributes demanded by the market, offered on favorable terms and at competitive prices
 - ◆ Lack of business organization among small-scale forest producers, which prevents their successful integration into value chains of forest products and limits their access to certain economic incentives (payments for environmental services, clean development mechanisms, price premiums for certified forest products)
- ◆ Lack of financial resources to invest in equipment and machinery to utilize and process forest resources, permitting generation of more value added

Although many large forest enterprises in Latin America have managed to become competitive and viable, the challenge now is to promote the development of small and medium enterprises (SMEs) capable of interacting with large companies in value chains based on win-win relationships. This requires changes in the existing political-legal frameworks and the timely provision of technical, business and financial services to SMEs to overcome the aforementioned limitations. Measures such as creating legal access rights to use of forest resources, ensuring the availability of basic infrastructure for the extraction and processing of forest products, and developing the management skills of producers so that they can forge alliances with other chain actors and thereby gain access to lucrative markets or niches would help small forest-based businesses generate greater value added, promoting a more equitable benefit distribution.

Basic considerations

- The development of small and medium-size businesses tends to be a long-term endeavor. To make them competitive and financially viable in the short term, it will be essential to improve the technical, business and financial services provided to small and medium enterprises and foster stronger alliances with other chain actors and between these and services providers.



César Méry

Figure 3. Between 1980 and 2005, most exports of three of the region's leading forest products were made by large and medium-size enterprises. The activities of SMEs are often limited to local markets. The photo on the right shows a shipment of certified timber destined for European markets at the port of San Vicente, Chile.

- SMEs require technical assistance to achieve efficient and competitive production, an attractive design and the successful marketing of their products. An enhanced ability to meet market requirements and demands will facilitate their access to national and international markets.
- Strategic alliances between forest SMEs and large companies or buyers in the national and international markets require institutional arrangements that take into account the realities and potential of each of the partners in order to promote synergies and guarantee win-win relationships.
- It is very important to create partnerships between private stakeholders, including effective and equitable cooperation between large firms and SMEs (vertical alliances) as well as among the SMEs (horizontal alliances). A similar process of alliance building should be promoted with providers of technical, business and financial services.



César Sabogal

Sale of human health products extracted by small-scale producers from the natural forests of Iquitos in the Peruvian Amazon and sold to the local population.

POLICY RECOMMENDATIONS

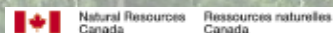
Create a favorable political-legal framework to promote the development of forest SMEs based on sustainable forest management: simplifying bureaucratic procedures, establishing incentives for sustainable businesses (for example, payments for environmental services) and penalizing illicit and unsustainable practices in the forest sector.

Facilitate the establishment and consolidation of forest SMEs through appropriate instruments (for example, tax exemptions for the first 5 to 10 years, joint investment in equipment and machinery, or other support measures) to help them overcome the obstacles that typically put start-up enterprises at risk.

Promote public-private alliances as well as private-private alliances in order to strengthen co-responsibility, co-investment and co-management among SMEs, large companies and governmental and nongovernmental agencies.

Promote better coordination among the technical, business and financial services provided to forest SMEs by government agencies, NGOs, consultancy firms and financial entities, among others, in order to facilitate the transfer of technology, access to capital, improvements in the quality of products and services generated, and increased productivity and competitiveness of the forest sector.

IUFRO-WFSE partner organizations



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