

LATIN AMERICA & THE CARIBBEAN



*Same legend applies to country maps, but protected areas are not shown

BOLIVIA



Bolivia has made remarkable progress towards SFM over the past decade. It has launched and implemented a comprehensive and ambitious reform of its forest sector and embarked on a major process of conferring property rights for natural forests to indigenous communities.

Through an overarching political decentralization process, responsibilities and monitoring functions are being decentralized to municipalities and rural communities; this has generated some tensions. Forest certification has become a major factor in the introduction of SFM practices, and Bolivia has the largest area of certified natural forest in Latin America. However, the reform process faces many obstacles; full implementation still needs time and continuous and strong political will.

KEY POINTS

- The PFE comprises an estimated 17.0 million hectares of production forest and 14.7 million hectares of protection forest. A further 16.3 million hectares of forest have not yet been allocated.
- There remain huge, partly unexploited forest resources in the Amazon Basin.
- The estimated area of natural-forest production PFE under sustainable management is at least 2.18 million hectares;

the estimated area of protection PFE so managed is at least 2.38 million hectares.

- The Ministry of Sustainable Development and Planning has overall responsibility for the national forestry regime.
- The Forestry Superintendency oversees adherence to the forest law.
- Territorial grassroots organizations are gaining increasing recognition in the new structure for the use of forest resources, but tensions remain.
- A well-established wood-processing industry, good professional knowledge and the establishment of certified forests provide a good basis for SFM. But access to some markets for certified timber remains problematic and the lack of a significant price premium may make it difficult to maintain high standards.
- An auditing system is in place; as it becomes operational, a clearer picture of the overall situation in production forests will emerge.
- Land tenure and, in particular, the absence of clearly defined property rights are key limitations to attracting investments to the Bolivian forest sector and, consequently, to achieving SFM.
- There are ambitious plans for the creation and management of protected areas, but these still need to be acted upon. The status of their management is mostly unclear.
- Illegal logging and illegal crops are constraints to the full adoption of SFM and the effective conservation of protected areas in many localities.

BRAZIL



Brazil is endowed with an incredible abundance and variety of flora and fauna; it has more known species of plant than any other country. The Amazon represents the single largest tract of tropical rainforest and is still 86% intact; in contrast, the Atlantic forest covers less than 7% of its original area

(although it still harbours a wide variety of biodiversity). Some of the most significant problems facing forestry in Brazil are: poor infrastructure; the remoteness of many forests from centres of commerce and control; the weak competitiveness of SFM as a land-use; the lack of competitiveness of the tropical timber industry; lack of full-cost pricing and the abundant availability of low-cost timber; a serious shortage of management skills; and a lack of enforcement of laws and regulations. To date, the high level of biodiversity in the Amazon has not been a development asset. Given that development will continue in the region, probably at an accelerated rate, there is an urgent need to find ways of using the biodiversity resource in financially remunerative and sustainable ways. Government has been working to address institutional barriers to SFM and a number of recent initiatives offer hope that the area of production PFE in the Amazon under SFM will expand significantly in the future.

KEY POINTS

- Brazil is a forest-rich country with a tropical-forest PFE of 370 million hectares. Despite deforestation in certain parts, there are still huge forest resources in the Amazon region.

- An estimated 1.36 million hectares of natural tropical forest production PFE are being sustainably managed; insufficient information was available to estimate the area of protection PFE so managed.
- Vast areas of the Amazon are currently under no threat from deforestation or other significant human-induced disturbance due to their remoteness.
- Brazil has successfully raised large-scale industrial forest plantations through private investment to ensure a sustainable supply of raw material.
- The majority of the production forest is under private ownership, although ownership and tenure disputes are a major problem.
- A wide range of policies, strategies, laws and regulations have been developed to facilitate forest administration and to achieve SFM.
- Institutional weaknesses and an inadequate capacity for enforcing policy and policy instruments have been a significant constraint.
- Only a small portion of the forest is under management plans; the bulk of wood production, though derived from private sources, is reported to be unauthorized because it is not based on official approvals. Harvests are often not based on any SFM criteria.
- A number of companies have come forward for the voluntary certification of their forest management operations. However, the financial competitiveness of SFM in natural forests with alternative land-uses is often low, leading to significant deforestation and threatening the long-term viability of sustainably managed natural forests.

COLOMBIA



The overall forest management situation in Colombia is not clear. On the one hand, advances have been made at the policy level in the priority activities identified under ITTO's Objective 2000, including the approval of a forest policy, new forestry legislation and the formulation of forest

management plans. Forests are administered within the wider context of environmental management, and existing policy goals emphasize protection and conservation functions as well as forest restoration and forest land rehabilitation. However, there is as yet no clear designation of the PFE and inadequate control of forest resources on the ground, in particular in the Amazon region; nor are silvicultural methods applied in natural production forests.

KEY POINTS

- Colombia has a rich and largely unexploited forest resource in the Amazon Basin.
- Indigenous communities own 22.1 million hectares of forest, mostly in the Amazon, and Afro-Colombians about 5.4 million hectares, mainly in the Pacific region.
- The PFE is estimated to be 14.5 million hectares – although this has not been designated officially – of which 5.65

million hectares is production PFE and 8.86 million hectares protection PFE.

- The estimated area of natural-forest production PFE under SFM is at least 200,000 hectares. Little information is available on the status of forest management in the protection PFE.
- There is a well-established and well-developed program to establish planted forests. A new forest law awaiting presidential approval would promote an increase in plantations to about 1.5 million hectares.
- There is a lack of forest law enforcement and transparency in the application of laws that deal with forest management. Because of armed conflict, there is little long-term management of or control over resources.
- No specific standards have been established for large-scale production forestry and there are no concession policies.
- However, the new forest law awaiting presidential approval seeks to make major reforms to the management of natural forests.
- National institutions appear to be under-resourced and unable to maintain an effective presence in the field.
- There is a well-established protected area system and a well-established system to monitor biodiversity.
- The wider role of forests in providing environmental services is recognized.

ECUADOR



SFM is a long way from being achieved in most of Ecuador's PFE. National forestry institutions remain weak. One reason for this is that there has been no organizational or staffing continuity in the ministry responsible for forests, and also a lack of clarity in the decentralization process. On the positive side there

is a declared political willingness to designate state forests to communes, indigenous communities, settlers and other interested groups if they can prove that they have the capacity to manage and conserve forest resources. Nevertheless, there is little sign of consistent progress towards SFM.

KEY POINTS

- Information on the forest sector is quite often poor and contradictory.
- The PFE is estimated to be 7.56 million hectares, of which 3.26 million hectares (including 164,000 hectares of plantations) may be regarded as production PFE.
- At least 101,000 hectares of natural forest in the production PFE are under SFM. Insufficient information was available for an estimate to be made of the extent of protection PFE so managed.
- Native forests are under threat mainly because of the expansion of the agricultural frontier near the coast and in the Amazon area.

- There is strong pressure on the forest from informal and illegal operators resisting change towards SFM, and illegal logging is widespread in all three forest regions.
- Many accessible forests are now degraded and secondary.
- The capacity to implement the national forest program and other forest-related policies and laws is low.
- In many cases, and despite new legislative provisions, forest tenure remains unclear.
- There is a discrepancy between actual harvesting practices and forestry regulations. Harvesting is generally unsustainable, and legal provisions for harvesting operations are unrealistic and may push forest-users towards illegality.
- Institutional weaknesses have created bureaucracy and additional costs, which have been transferred to the private sector. High transaction costs stimulate informality and corruption and increase timber volumes from illegal sources.
- The effective management of protected forests is inhibited by a lack of funding, a lack of sufficient political support to the forest sector and, in some areas, disputes over tenure.

GUATEMALA



Forests play an important role in Guatemala. They provide a source of income and household products for many poor and a resource for the commercial timber sector. However, SFM has been hindered in the past by, among other things, a protracted civil war, and deforestation was widespread. As the lowland

rainforests of the Petén are also opened up, the sector is attempting to improve forest management. Great strides are being made by both private operators and communities, to the extent that more than half the production PFE is now considered to be under SFM.

KEY POINTS

- The PFE comprises an estimated 1.14 million hectares of natural-forest production forest, 71,000 hectares of plantations and 1.24 million hectares of protection forest.
- At least 672,000 hectares of production PFE are estimated to be under SFM; insufficient data were available to estimate the area of protection PFE so managed.
- The system of protected areas and the monitoring of biodiversity have both been long established. However, information on the status of their management is lacking.
- A large part of the natural forest estate in the highlands has been over-harvested, and development is proceeding rapidly in the Petén.

- Enormous efforts have been made since the end of the civil war to reorganize the control and management of forest resources; this has included the decentralization of management and monitoring. But support for existing community forest management institutions remains weak.
- There is long-standing experience in the management of conifer forests. The recent implementation of a well-defined concession management policy in moist forest areas also constitutes a solid basis for SFM.
- Forest management certification has been widely introduced with the support of international donors in the community concessions in the Petén, but its long-term prospects will depend on its financial viability once donor support is withdrawn.

GUYANA



Guyana has a broad forest resource base and large growing-stock of hardwood timber. It has introduced and implemented a well-designed forest management and control system in its timber production forests. However, there is a gap between the well-functioning core staff of the Guyana

Forestry Commission and the industry that has to implement forest management in the field. Political and social uncertainty, lack of secure tenure, lack of understanding and awareness, lack of skilled labour, outdated management practices and, recently, a difficult economic environment have imposed major challenges for the achievement of SFM. Progress is being made in improving forest harvesting practice.

KEY POINTS

- Guyana's forests are still largely intact.
- The PFE comprises an estimated 5.45 million hectares of production forest and 980,000 hectares of protection forest. A further 7.35 million hectares of state forest have not yet been allocated.
- Uncontrolled gold mining is a significant cause of forest degradation and environmental pollution.
- At least 520,000 hectares of production PFE and 243,000 hectares of protection PFE are being managed sustainably.

- A detailed management provision and control system has been elaborated but is inadequately implemented.
- Progress is being made in the training of logging operators.
- The area of totally protected forests is low and there is not enough control and management in protected areas.
- The national forest policy is widely accepted as a sound guide for the forest sector but is yet to be fully implemented.
- A new forest law, which would establish a forest concession system in place of the current timber sales agreements and wood cutting leases, has been drafted but is yet to be enacted.

HONDURAS



Present management of the broadleaved natural forests in Honduras is sometimes more a matter of extracting only the most valuable species than of silvicultural management. Silvicultural and conservation measures described in forest management plans are often not respected and there is a risk that logged-over

areas will become degraded. Illegal logging is widespread and nourishes an informal wood sector that competes with legally produced timber and timber products. Protected forest areas are not clearly delimited and there are difficulties in protecting remote forest areas from forest degradation and deforestation. On the other hand, recent efforts have been made to overcome illegal activities and corruption and to strengthen institutions in order to integrate forests into sustainable development; the wider importance of forests for goods and environmental services has been recognized and the forest law is being revised. The challenge will be to translate a good theoretical framework of law and policy into effective implementation in the field.

KEY POINTS

- The PFE comprises an estimated 1.59 million hectares of production forest and 1.60 million hectares of protection forest.

- At least 187,000 hectares of production PFE are being managed sustainably. Insufficient information was available to estimate the area of protection PFE so managed.
- The broadleaved moist forest could make a larger contribution to sustainable development in Honduras, although the potential for timber production is not known.
- Management norms for the pine forests have been formulated and are being implemented in some forests; prescriptions for the sustainable management of the moist forests also exist but are less clear.
- Illegal logging is thought to be prevalent.
- The extent and status of protected forest areas are not clear. Few data are available on the level of protection afforded by forested protected areas.
- Many protected areas are threatened by land conversion.
- A revision and modernization of forest legislation was started in 2002 as part of the Honduras Forestry Agenda, but the new law is yet to be enacted.
- Forest tenure, particularly on public land, is subject to dispute; large tracts of moist forest have no clear ownership status.
- Generally, the forest administration lacks the finance and staff necessary to adequately enforce the law and manage the forests.

MEXICO



The management of Mexico's forests differs greatly between the pine and oak forests in the temperate zone, the forests in subtropical regions and the moist tropical forests in the south. The rate of deforestation has apparently slowed but is still high. Over-harvesting and illegal harvesting of

forest resources is widespread (although less so in the tropics than in the temperate zone); they exceed sustainable levels in many areas. Community management is the major form of forest management but, in many cases, communities are not equipped to manage their forests sustainably. Some of the problems that obstruct progress towards the sustainable management of the closed forest areas in communes (*ejidos*) include a lack of resources and know-how for the economic use of forest resources and discrepancies in the objectives between communities, the private sector and forest authorities. On the other hand, good progress has been achieved in forest certification, although much of this to date has been outside the tropics. Moreover, the government has taken steps to address shortcomings in the sector and is attempting to combat illegal logging and fire.

KEY POINTS

- The rate of deforestation has apparently slowed but is still high.
- Mexico has not formally designated a PFE. ITTO estimates that about 13.6 million hectares can be considered to constitute a tropical PFE, comprising 7.88 million hectares

of natural-forest production PFE, 5.60 million hectares of protection PFE, and 100,000 hectares of industrial timber plantations.

- The area of natural tropical production PFE under SFM is estimated to be at least 111,000 hectares, corresponding to the total area of certified natural tropical forest; insufficient information was available on the forest management outside these areas for an estimate to be made for the wider tropical production PFE.
- No data were made available on the status of management of Mexico's tropical protection PFE.
- About 8,500 *ejidos* and local communities own an estimated 80% of Mexico's forests. About 15% is owned privately and 5% is national land.
- A forest law enacted in 2003 governs the management of production forests, including in *ejidos*. Some states have also enacted their own forestry/environmental laws.
- The low financial viability of natural forest management appears to be inhibiting the uptake of SFM in some *ejidos*.
- The national government has taken steps to combat illegal logging and forest fire, but both these problems are still prevalent.
- The production potential of the natural forests in the tropics is an estimated 1.4 million m³, much more than current (official) production.
- Continuing conflicts over land-use are apparently inhibiting SFM in some areas.
- Some forests are classified as protected areas but are privately or communally owned, and their protection status is unclear.

PANAMA



The management of Panama's PFE is problematic. Concessions have been suspended, and smaller-scale logging is being carried out with little oversight and without detailed management plans or silvicultural prescriptions. The timber industry is in a poor state, with antiquated equipment

and an under-supply of legally produced timber. Large areas of forest are classified as protected areas; nevertheless, they are generally not managed or controlled effectively. Forest plantations are being developed, mainly on private properties. Forest management appears strongest in the watershed of the Panama Canal.

KEY POINTS

- The PFE comprises an estimated 350,000 hectares of natural production forest and 1.58 million hectares of protection forest. A further 1.60 million hectares of forest have not yet been allocated.
- No production PFE is considered to be under sustainable management. The estimated area of protection PFE under SFM is estimated to be at least 180,000 hectares, comprising the core protection area of the Panama Canal.

- The forest law recognizes the rights of indigenous communities to manage forests in indigenous reserves (called *comarcas*).
- The National Environmental Authority has insufficient human and financial resources to carry out the field-level monitoring and control of forestry operations necessary to ensure adherence to forest-related laws and regulations.
- The private sector and civil society have been minimally involved in the preparation of SFM policies and strategies.
- There is a lack of information on the silviculture of the country's natural forests and an apparent lack of research and training capacity.
- Most of the protected areas and protection forests are not well delimited and are threatened by encroachment.
- Illegal logging is widespread in the moist forest area, even in protected areas. This is a significant impediment to long-term SFM.

PERU



Over the past three years, Peru has taken significant steps towards integrating the forest sector into the broader macroeconomic objectives of sustainable development. The new forestry and wildlife law embodies the forest policy of the country and prescribes several options for SFM and reforestation.

An independent forest-control mechanism has been established and a broad coalition of stakeholders from the public and private sectors and civil society works together to develop joint approaches to SFM. Nevertheless, Peru still faces some major challenges in enforcing and applying regulations and planning instruments in the country's vast Amazon forests.

KEY POINTS

- Peru has a large forest resource with good potential for sustainable management.
- The PFE comprises an estimated 24.6 million hectares of natural production forest, 200,000–300,000 hectares of plantations and 16.3 million hectares of protection forest. A further 19.1 million hectares of forest have not yet been allocated.
- At least 560,000 hectares of production PFE and 1.54 million hectares of protection PFE are being managed sustainably. Moreover, large areas of the protection PFE, even if not formally under SFM, are under no imminent threat due to their remoteness.

- 59,600 hectares of natural forests have been certified in indigenous territories.
- The deforestation rate of about 269,000 hectares per year is one of the highest in the region; it is caused largely by the influx of settlers to the Amazon region and subsequent clearance for agriculture.
- A new forestry and wildlife law and its regulations were approved in 2000/2001, a national forest strategy was adopted in 2004 and a national reforestation plan was prepared in 2005.
- The forestry and wildlife law is a bold initiative to promote SFM; its effective implementation will probably require substantial investments in human resources in both the public and private sectors.
- Among other things, the new law sets out the parameters of a new concession system.
- An independent forest control and supervision agency has been created to oversee the implementation of this new system.
- The financial viability of SFM will depend in large measure on the prices that can be obtained for a range of lesser-known species.
- There are many informal forest operations, especially linked to caoba and cedro, but these species are becoming economically scarcer. Harvesting pressure for such timbers is increasing both in protected areas and in forests belonging to indigenous communities.
- The capacity to implement SFM at the field level is low, although considerable efforts are being made to address this through training and technical assistance.

SURINAME



Suriname has a large forest resource base that contains a sizeable growing stock of valuable hardwood timber. However, its forest-management institutions are not yet equipped to oversee the introduction of SFM in a commercial sector that has materialized only in the last decade or so. In addition, insecure tenure and recent

difficult economic circumstances jeopardize the implementation of SFM.

KEY POINTS

- More than 80% of Suriname is forested, and very little deforestation is taking place.
- The PFE comprises an estimated 6.89 million hectares of natural production forest and 4.43 million hectares of protection forest. A further 2.59 million hectares of forest have not yet been allocated.
- As of late 2003, 67 logging concessions had been allocated over a total area of 1.74 million hectares.
- A coherent forest policy and legislation is under development, and the 1992 forest law is currently being revised.
- Current requirements for forest management plans do not have a strong focus on SFM.

- No area of either production or protection PFE has been identified in this report as under sustainable management. Nevertheless, most of the PFE is intact due to a lack of development pressure.
- Suriname's forests produce an estimated 160,000 m³ of industrial roundwood per year; the sector is a significant employer.

TRINIDAD & TOBAGO



Trinidad and Tobago's strong tradition in forest management means that SFM has a good footing in the country; however, significant institutional and policy weaknesses could see the deterioration of this tradition unless remedial measures are taken. Both natural forests and plantations are affected

by over-harvesting, encroachment, fires and other forms of damage, although the extent of these has not been quantified and police patrols probably help reduce illegal activities. There appear to be few social conflicts over forest use, and stronger community involvement in forest management has been foreshadowed.

KEY POINTS

- The PFE comprises an estimated 142,000 hectares of production forest (including just over 15,000 hectares of plantations) and 59,000 hectares of protection forest.
- Most timber production derives from planted forests; the main species are teak and Caribbean pine.
- At least 15,000 hectares of natural-forest production PFE are being sustainably managed.
- The country has yet to develop a workable set of C&I for SFM suited to its special needs.

- Individually licensed loggers are able to cut a specified number of trees or volume as defined by the Forestry Division. In many cases this may have amounted to a 'logger's selection system'.
- Trinidad and Tobago imports round logs and squares from neighbouring Guyana and Suriname for local processing; it is a net importer of timber.

VENEZUELA



Venezuela still possesses vast unexploited forest resources in its two largest states of Bolivar and Amazonas. Relatively modest logging concessions and cutting permits have been granted over the past 35 years. Instead of increasing the harvesting of natural forests, plantation forestry has been developed

for many years. Today, much of the domestic need for industrial wood is met by planted forest. The country's forest-related laws contain strong environmental provisions, and a large proportion of its territory is in designated protected areas (although in some places under tenurial dispute by indigenous communities). However, there is a gap between the legal provisions and their implementation in the field. SFM for production and conservation has not yet been fully achieved; the enforcement of forestry regulations is considered to be far from optimal, and illegal logging, hunting and encroachment are reportedly widespread. Nevertheless, a basis has been laid for the development of SFM and effective forest conservation.

KEY POINTS

- The PFE comprises an estimated 13 million hectares of natural production forest and 20.6 million hectares of protection forest. There is also a substantial plantation estate (about 863,000 hectares).

- It is estimated that at least 480,000 hectares of the natural-forest production PFE is managed sustainably; insufficient information was available to estimate the extent of the protection PFE so managed.
- The forests north of the Orinoco River are heavily degraded and encroached. South of the Orinoco River, Venezuela still has extensive and timber-rich forest resources with good potential for SFM.
- The monitoring of forest resources and implementation of forest management are both deficient, particularly in more remote areas.
- There is a lack of clarity in administrative roles and responsibilities for forests, in particular between the Ministry of Environment and Natural Resources, the Ministry of Agriculture and the Ministry for Energy and Mining.
- The new national forest policy is not yet finalized or backed up with effective legislation, and the forest concession policy lacks clarity.
- Wood production is shifting from natural forest to plantations and to regulated forest concessions with management plans.
- Despite regulations to the contrary, logging in natural forests concentrates on the most valuable timber species.
- The long-term viability of the protection PFE depends on the continuous provision of financial resources and acceptance by local stakeholders.