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# ITTO Tropical Forest UPDATE

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## CITES branches out

**UNTIL THE EARLY 1990s**, there were relatively few timber species listed by the Convention on International Trade in Endangered Species (CITES), an organization established to monitor and control trade in endangered species by placing them in one of three Appendices, Appendix I having the strictest controls. Listed timber species generally had restricted ranges and minimal trade. Beginning in 1992, concerted efforts began to list wide-ranging and economically important timber species in the CITES Appendices, the most notable being afrormosia (*Pericopsis elata*, listed in Appendix II in 1992), bigleaf mahogany (*Swietenia macrophylla*, listed in Appendix III by several countries since the mid-1990s and in Appendix II with effect from 2003) and ramin (*Gonystylus* spp, listed in Appendix III by Indonesia since 2001 and in Appendix II with effect from 2005). Appendix II listing means that exports of specified products made from these timber species (primary products for the first two but all—including secondary—products of ramin) require certificates from any exporting country stating that the export of those specimens would not be detrimental to the species' future survival in the wild. These so-called non-detriment findings (NDFs) are essentially confirmation of the sustainable production of exports of these timber species, providing a clear link between the requirements of CITES and the work of ITTO.

This link was first recognized by ITTO in 1992, when the first of several International Tropical Timber Council decisions calling for cooperation between ITTO and CITES on the listing of tropical timber species was taken. The CITES Conference of the Parties (CoP) called for ITTO to be consulted

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**Cover image** A large (35m +) mahogany tree on the Las Piedras River, Madre de Dios, Peru. *Photo: Walter H. Wust*

## ... Editorial continued

on proposed tropical timber listings in a resolution on implementing the Convention for timber species in 1997. ITTO participated in a CITES timber working group which gave rise to that resolution, and has been actively participating in (including co-funding meetings of) a CITES mahogany working group that provides advice on the implementation of the Convention for that species.

Recent developments indicate that the role of CITES in regulating the trade of tropical timber (tropical species make up virtually all of the timber species listed by CITES) is set to expand further, leading to increased opportunities for collaboration with ITTO. CITES is formulating a new strategic plan, which will include a special focus on timber. And at CoP 14 this June in the Netherlands, tropical timber will feature explicitly in several agenda items, including a review of Peru's mahogany trade, a report of the mahogany working group, another report of an ITTO-sponsored meeting on NDFs for mahogany, a proposal on (tropical) timber identification, a proposed CoP resolution calling for cooperation between CITES and ITTO on tropical timber trade, and proposals for listing five new tropical timber species in Appendix II (including all species in the genus *Cedrela*, economically important in Latin America—see page 22).

Given all of these developments, it is encouraging that ITTO and CITES have already laid the groundwork for collaboration in ensuring that countries have the capacity and means to effectively implement the requirements on listed timber species. A large joint project (page 5) is just getting underway which will, *inter alia*, provide assistance to countries to improve the management of listed species and the capacity to carry out NDFs for them. Workshops on mahogany and ramin (page 3) have been convened by ITTO to bring together all stakeholders involved in or impacted by the CITES listings of these species. ITTO has been instrumental in involving the trade sector, a key constituency in ensuring that CITES is implemented effectively, in such meetings. As is clear from the article by Brignole (page 6), however, there is still some way to go in ensuring that information is effectively channeled and understood by all to ensure that CITES can meet its aim of promoting trade in sustainably produced specimens of listed timber species. Unfortunately, some traders (and some countries) continue to view CITES listings as barriers to trade rather than as a means to facilitate trade in sustainably produced specimens. CITES and ITTO have a shared vested interest in changing such perceptions.

As CITES branches out to cover more tropical timber species, it will increasingly bump up against the issues that have been ITTO's focus over the past two decades: the still limited progress towards sustainable forest management (SFM) in many countries, and the even more limited resources available to facilitate such progress. Alastair Sarre (our former editor and colleague) focuses on the issue of financing SFM in *Out on a limb* (page 32), and finds grounds for optimism in the recent global climate change discussions on averted deforestation. Certainly there is a need for additional resources for SFM at both the national and international level, including for the work of UNFF (currently in the process of approving an ambitious work program for 2007–2015—see page 24), CITES, ITTO and others working towards better forest management. We need to be relentless in seeking innovative new ways to attract more funds to SFM in the tropics, be it through carbon markets, biofuel schemes or other avenues, to ensure that tropical timber species can one day soon start being removed from the CITES Appendices rather than added to them.

**Steve Johnson**

# Implementing ramin's CITES listing

***An ITTO expert meeting helps to plot the way forward***

**by**
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**Non-detrimental:** tagged ramin log in the Rimbaka forest concession, near Kuantan, Peninsular Malaysia. *Photo: A. Sarre*

**RAMIN IS A TIMBER** trade name encompassing 31 species of the genus *Gonystylus* (Thymelaeaceae). The genus occurs in the tropical forests of Southeast Asia and the Pacific islands and it produces a whitish timber which is highly prized and popular for decorative uses. The most valuable species, *Gonystylus bancanus*, is found in the peat swamp forests of the region. Due to the timber's wide acceptability and use, ramin has been heavily exploited in the countries of origin. In the attempt to curb detrimental population loss, Indonesia included the genus *Gonystylus* in the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) Appendix III with annotation #1 with effect from 6 April 2001. Annotation #1 states that all trade in ramin parts and derivatives, with a few exceptions like seeds, seedlings and tissue culture, have to be accompanied by a CITES permit or certificate. At the 13th Meeting of the Conference of the Parties to CITES held in Bangkok, Thailand, from 2 to 14 October 2004, the genus was uplisted to Appendix II, with the listing entering into force on 12 January 2005.

***Due to the timber's wide acceptability and use, ramin has been heavily exploited in the countries of origin. In the attempt to curb detrimental population loss, Indonesia included the genus* Gonystylus *in the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) Appendix III with annotation #1 with effect from 6 April 2001.***

In an effort to address several persisting issues, particularly in trade and enforcement, an Expert Meeting on the Effective Implementation of the Inclusion of Ramin (*Gonystylus* spp) in Appendix II of CITES was convened from 16 to 19 May 2006 in Kuala Lumpur, Malaysia. Convened by ITTO pursuant to ITTC Decision 2(XXXVII) on 'Enhanced Cooperation between ITTO and CITES for Ramin and Mahogany', the meeting was hosted by the Malaysian Ministry of Natural Resources and Environment (NRE) and organized jointly by the Forest Research Institute Malaysia (FRIM), the Forestry Department Peninsular Malaysia (FDPM), and the Malaysian Timber Industry Board (MTIB) in collaboration with TRAFFIC. Some 50 participants from 15 countries representing forestry, customs, timber trade organizations, regulating agencies, civil society and international organizations attended.

The meeting had four objectives:

- to exchange experiences in the implementation of the inclusion of ramin in Appendix II of CITES including undertaking non-detriment findings (NDF) as well as training on identification and relevant CITES procedures;
- to review recent trade figures and data submitted to CITES, experiences in tracking a full range of products and measurement and reporting issues;
- to identify and examine problems and issues relating to the implementation of the inclusion of ramin in Appendix II of CITES; and
- to recommend follow-up actions for countries, CITES and ITTO to improve the implementation of the inclusion of ramin in Appendix II of CITES.

The meeting was officiated by His Excellency Dato' Suboh Mohd. Yassin, Secretary-General of NRE, Malaysia. It included 18 presentations, working group discussions and a field trip to a local timber factory that uses ramin and FRIM where participants were briefed on the UNDP/GEF funded Peat Swamp Forest Project. Topics that were covered in the presentation sessions were:

- promoting a better understanding of CITES implementation issues for ramin;
- sharing knowledge about current ramin forest management, enforcement and governance in range countries;
- identifying current challenges for increasing the effectiveness of implementation of CITES for ramin in importing countries; and
- understanding and promoting private sector and civil society roles and support to implement CITES.

Presentations by the CITES Secretariat and TRAFFIC were complemented by reports from the key range countries, Malaysia and Indonesia, and importing countries such as Canada, the US, the Netherlands, China and Hong Kong SAR. These presentations, including those made by private sector and civil society representatives, provided background information, illustrated case studies and initiated points for discussion and deliberation.

The working groups deliberated on the following topics:

- ecological and management status of ramin (*Gonystylus* spp);
- review of the market and international trade in ramin;
- capacity building for meeting the requirements of CITES Appendix II listing of ramin; and
- coordination and cooperation for the effective implementation of the inclusion of ramin in Appendix II of CITES.

***There appears to be a lack of research and thus a lack of information on the biological characteristics, ecology and regeneration patterns of ramin in its natural habitats. Ecological and botanical information is required to form the basis for silvicultural treatments as well as logging techniques that could reduce the impact on the peat swamps.***

## Ecological and management status

There appears to be a lack of research and thus a lack of information on the biological characteristics, ecology and regeneration patterns of ramin in its natural habitats. Ecological and botanical information is required to form the basis for silvicultural treatments as well as logging techniques that could reduce the impact on the peat swamps. This information, together with trade, legal and management data, is required to determine the NDF for ramin. The issue is compounded by the lack of funding and skilled human resources which in turn affects research, particularly ecological research on regeneration patterns, mortality, growth and yield, etc and the development of new technologies for reducing the impact of logging practices.

Recommendations with reference to the ecology and management of ramin are to:

- develop artificial regeneration techniques for *G. bancanus* in Indonesia to assist in the rehabilitation of degraded peat swamp forests, and to increase opportunity to develop ramin plantations for commercial production;
- introduce controls on the quantity of *G. bancanus* harvested for each forest management unit (FMU) based on appropriate inventory systems;
- seek funding for applied biological and ecological research to enhance the commercial aspects of ramin;
- share current methodologies for forest management and inventories used in Indonesia and Malaysia with other range states as appropriate;
- conduct an inventory of ramin in Sarawak, Malaysia (Sarawak has the largest area of peat swamp forests in the country);
- develop and introduce cost-effective reduced impact logging practices for peat swamp forests; and
- establish a standard methodology for NDF formulation for timber species which all relevant countries could use or refer to.

## Markets and international trade

The working group noted that CITES trade report data often differed from customs statistics and that no standard conversion factors existed to assist in reconciling international statistical data sets between countries. Countries in general did not analyze data from the CITES annual reports including seizure information as there were no dedicated staff to undertake this. There is currently no system to assess whether ramin trade exceeds quotas. The potential threat to the enforcement of CITES regulations arising from barter trade, and problems related to the abuse of trans-shipment procedures and the use of the Free Trade Zone facilities were noted.

Recommendations related to markets and international trade in ramin were:

- range countries should formally notify the CITES Secretariat of annual export quotas for ramin beginning from 2006 together with an explanation on how the quotas were derived, including where possible the NDF methodology used, and details of standard conversion factors stipulated by the relevant authorities. Methods used should be transparent;
- re-exporting countries should, where necessary, establish and share information on procedures and methodologies (such as standard conversion factors) to check that the volumes re-exported do not exceed the volumes of legal ramin imported;
- management authorities (MAs) should monitor the quotas against export permits issued to date, using the same roundwood equivalent (RWE) conversion factor for

# CITES and ITTO join forces to promote the conservation and sustainable harvest of tropical timbers

*by Milena Sosa Schmidt (CITES Secretariat) and Steve Johnson (ITTO Secretariat)*

The secretariats of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and of the International Tropical Timber Organization (ITTO) have launched a four-year project aimed at ensuring that international trade in CITES-listed timber species is consistent with their sustainable management and conservation, with a budget of €3 million provided primarily through a grant from the European Commission.

Concerned that the long-term survival of commercially valuable timber species is being threatened by over-exploitation, afromosia, bigleaf mahogany and ramin were all relatively recently included in CITES Appendix II, which means that specimens of these species may only be traded if the exporting country has established that the export of the specimens will not be detrimental to the survival of the species (the so-called 'non-detriment findings' outlined in Article IV of CITES) and issued a CITES export permit.

The CITES and ITTO secretariats realize the challenges that range states of these timber species face to implement listing requirements and therefore decided to collaborate on this project to assist them in this task. The project's goals are to help countries strengthen their capacities to make non-detriment findings and to adopt national legislation that ensures the proper implementation of CITES. This, together with capacity-building and other related activities, allows the project to meet countries' needs with regard to CITES implementation for these species.

Both CITES and ITTO have been active in promoting sustainable management of tropical forests, which is why the partnership makes sense. CITES had been considering capacity building efforts for assisting countries to implement timber listings for some time and invited ITTO to collaborate on a joint project in 2005. The CITES and ITTO secretariats worked in close collaboration to develop and complete a project proposal and, in September 2006, the European Commission generously accepted to provide 80% funding for it through ITTO's 2006–2007 Work Program. Remaining funding will be provided by other donors to this Work Program activity, including the US.

The project will assist range states in building coherent policy frameworks that benefit the timber industry, local communities that depend on tropical forests, and the biodiversity-rich forests themselves. It will focus on the three internationally most traded tropical timber species currently listed in CITES Appendix II: afromosia, bigleaf mahogany and ramin.

**Afromosia (*Pericopsis elata*)** is native to the equatorial forests of west and central Africa. It is classified as 'Endangered' by the World Conservation Union (IUCN) and has been hard hit by logging. The project will support the efforts of Cameroon, the Republic of Congo and the Democratic Republic of the Congo to enforce existing legislation and to strengthen the quality of non-detriment findings. Although procedures are not yet fully in place to ensure full compliance with Article IV of CITES in these countries, their national authorities are increasingly collaborating at the regional level and their timber industry is undergoing a radical reform. The CITES and ITTO secretariats will support these efforts through this joint project.

**Bigleaf mahogany (*Swietenia macrophylla*)** thrives in dry tropical forests ranging from southern Mexico to the Amazon basin. Although the species is not currently at risk of extinction, many populations are seriously threatened and their genetic variation has been depleted. The support to be given to the main exporting countries of bigleaf mahogany, Bolivia, Brazil and Peru, reflects the international interest in this resource. The project will strengthen the range states' capacities to comply with the implementation of CITES requirements for this and other timber species.

**Ramin (*Gonystylus* spp.)** has long been one of Southeast Asia's major export timbers. Native to swamp forests, many ramin species are now considered to be over-exploited and vulnerable owing to heavy logging (much of it illegal) and habitat destruction. The inclusion of ramin in CITES Appendix II requires in many cases that exporting countries put in place a different management system for this taxon. In particular they need to improve the coordination of the work of the national CITES Management Authorities, CITES Scientific Authorities and enforcement authorities, as well as of the 'Ramin Tri-National Task Force', so that CITES regulations may be implemented effectively. The range states of Malaysia and Indonesia will participate in the project.

Whilst the main aim of the project is to ensure that international trade in these CITES-listed timber species is consistent with their sustainable management and conservation, the project should eventually help the countries concerned to develop robust forestry systems that will also benefit other timber species in trade.

The Conference of the Parties (i.e. member states) to CITES will meet in The Hague, the Netherlands, in June 2007, for its 14th meeting (CoP14), where it will discuss the issue of timber species, particularly proposals to include more such species in Appendix II. The Conference of the Parties will also adopt a new strategic plan until 2013 that is likely to give greater attention to international trade in timber species.

The CITES Plants Committee is also recommending the adoption of new decisions related to the development of guidelines implementing CITES for tree species. Should these decisions be adopted, cooperation with other international organizations such as ITTO will be certainly sought.

Finally, the possibility to formalize the cooperation between CITES and ITTO through a CoP resolution and/or establishment of an MoU will also be discussed at CoP14. This would allow strengthening the partnership between the two organizations and the support they provide to countries with regard to the responsible management of tropical forests and timber trade.

specific products compared with ramin log production. MAs should take into account possible domestic use as a factor in determining export quotas;

- permits issued should be placed on MAs' websites so that the authenticity of the permits could be checked online by customs officials in importing countries;
- CITES provisions should be considered in the discussions of the Forest Law Enforcement Governance and Trade (FLEGT) initiative of the European Union (EU), particularly during the negotiations of Voluntary Partnership Agreements (VPAs) with Malaysia and Indonesia;
- MAs should submit CITES annual reports using actual export data and not data from permits issued;
- countries should work together to improve common reporting frameworks for international trade data to reconcile CITES and customs data sets;
- countries should enhance chain-of-custody mechanisms and link CITES export permits to the resource management and verification of origin of ramin timber; and
- countries should improve legislation and establish measures to address policy and management gaps in Free Trade Zone areas and transhipment procedures with a view to reducing the scope for illegal activities in these areas.

## Capacity building

High-quality data on ramin distribution and growth are available from a handful of sample sites, which could provide the biological requirements to support the determination of quotas and exports. There are many publications available related to the identification of commercial timber species such as manuals, toolkits, etc which could be translated into local languages as appropriate.

The inability of enforcement officers to identify CITES specimens was noted, as was the lack of training at the enforcement level on the identification of ramin wood. In terms of cooperation, the Tri-National Task Force on Ramin, the Association of Southeast Asian Nations Wildlife Enforcement Network (ASEAN-WEN) and other links between national and international stakeholders have been established. However, among the weaknesses recognized are an absence of a chain-of-custody monitoring from processing to export, lack of national legislation to implement the requirements of the Convention, and lack of communication and cooperation between exporting and importing countries.

***High-quality data on ramin distribution and growth are available from a handful of sample sites, which could provide the biological requirements to support the determination of quotas and exports.***

Recommendations on capacity building are to:

- translate and adapt, as appropriate, timber species identification manuals into various national languages;
- strengthen and coordinate the ability to translate policy into action including cultivating the political will to act and considering mechanisms for transparency and verification;
- make infractions records for ramin easily available;
- disseminate tools for identifying species included in the Appendices of CITES, especially the new staining technique from the US for ramin products, to all MAs and the CITES Plants Committee; and
- update existing CITES training and other materials, and develop new materials to increase awareness and capacity of staff and personnel of CITES Management and Scientific Authorities, and relevant enforcement agencies, emphasizing training of enforcement officers on identification of ramin, preferably through a hands-on approach.

## Coordination and cooperation

Problems identified include: the lucrative nature of illegal trade; the lack of financial resources for law enforcement; the difficulty in obtaining timely information; problems with the use of the Harmonized System (HS) of customs classification; and difficulties in implementing measures at local levels.

Recommendations on coordination and cooperation are to:

- strengthen enforcement in Indonesia to prevent illegal logging of ramin in the country, particularly in national parks, forest concessions and peat swamp forests;
- enhance knowledge and awareness in range states of regulations, ramin trade and enforcement actions at the national, provincial and district levels, especially in border areas;
- improve inter-regional communication and cooperation between MAs through direct and regular communications;
- enhance inter-agency and inter-regional cooperation between stakeholders through better coordination of processes for the sharing of data and experiences and verification of information, including the possible use of pre-export notification protocols; and
- improve communication and exchange of intelligence between regional and inter-regional enforcement agencies.

## Conclusion

The meeting recommendations will be followed up by countries as well as by ITTO, CITES and others. Many activities called for will be at least partially facilitated through activities planned in a large collaborative ITTO-CITES capacity building project (see *Box* on previous page). In addition, the Government of Malaysia has recently submitted a request to ITTO for support for the inventory of ramin in Sarawak called for by the meeting.

*The full meeting report is available from the ITTO Secretariat (itto@itto.or.jp)*

# Mahogany catch 22

***A first person account of one trader's navigation of CITES regulations***

**by**
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I AM A US CITIZEN working in Nicaragua, exporting tropical lumber. On 21 June 2006, the Nicaraguan government passed law 585, which is comprised of about 16 articles. One of the articles states that the Nicaraguan government will no longer permit the exportation of sawn lumber. According to this new law, all species of lumber must now be processed to 'second transformation' before being exported from Nicaragua. The supposed purpose of this particular article is to force an increase in Nicaraguan employment, as well as to export a 'valued added' product.

There are numerous problems that have been caused as a result of this new law. One problem is that CAFTA (the Central American Free Trade Agreement) prohibits 'export restrictions', which means that a partner-country cannot allow the export of a CAFTA-listed product in one form, but then disallow it to be exported in another form. My business partner and I came to Nicaragua because 'Sawn Tropical Lumber' was listed in the Nicaraguan catalog of CAFTA products. Only after making a large investment in the purchase of mahogany (*Swietenia macrophylla*) logs were we told that we were unable to export sawn lumber under the new law.

**Molded or sawn:** Minimum processing required for export from Nicaragua. *Photo: D. Brignole*

Most exporters of sawn lumber do not have the knowledge, the machinery or the market connections for manufacturing and selling wood furniture. It would take months to be able to obtain these prerequisites, assuming the exporter was willing to make that transition. However, the Nicaraguan government did not provide any type of grace period, nor a grandfather clause, so that exporters could gradually transform themselves into fabricators/sellers of furniture, or else simply pull out of their existing investments.

Another problem has been that 'second transformation' has never been officially defined, even nine months after the passing of the new law. Realizing that there must be a state of processing somewhere between a 'finished product' (like a chair or a door), and sawn lumber, the Institute of National Forestry (INAFOR) of Nicaragua last year was showing samples of what they would consider the minimum qualification for 'second transformation'. However, no one in the government has given a clear definition in writing—despite many requests—for that type of absolute clarity. The photo above is of the mahogany samples that were being shown by INAFOR last year to illustrate the minimum processing required to qualify for 'second transformation', to be judged by the *delegados* (agents) who are charged with inspecting lumber destined for export.

This created another problem. The CITES authority in Nicaragua (MARENA) stated that they would not be issuing CITES certificates for the export of mahogany processed to this minimum level of 'second transformation'. Their reasoning was that—although sawn mahogany requires a CITES certificate in order to be traded internationally—mahogany that is in 'second transformation' is no longer 'sawn lumber', and therefore does not require a CITES certificate.

Not wanting to take the risk of shipping a container of mahogany to the US (our principal market) to have it be refused entry on the basis that it did not have a CITES certificate, I decided to first ensure that this type of wood processing qualified mahogany as exempt from needing a CITES certificate as MARENA had indicated it would be. I contacted our import broker in the US and asked him if mahogany in 'second transformation' required a CITES certificate. Needless to say, he did not know what 'second transformation' meant (it seems very few people do). He

**Getting started:** a two-year old mahogany plantation developed on a former banana plantation in Machala, Province of Oro, Ecuador. *Photo: J. Leigh*

said that he believed we would still need a CITES certificate, and sent me a copy of the ITTO book *Making the mahogany trade work*, which contained a host of contacts related to the international trade of bigleaf mahogany.

***I should point out that exporting mahogany planed on the top surface and both sides, with a molding edge on the top two edges, is not what we ideally wanted to do. We had purchased that lumber at a price that allowed it to be sawn and shipped, and then sold at a price which would earn a reasonable profit.***

I sent emails to over 40 of the contacts, including the CITES Secretariat in Switzerland, the International Tropical Timber Organization (ITTO) in Japan, the International Wood Products Association (IWPA), and the World Wildlife Fund (WWF). In response, I was sent copies of the CITES resolution which states that mahogany only requires a CITES certificate when it is in the form of sawn lumber, logs, plywood and veneer. I was also sent copies of the relevant sections of the internationally agreed Harmonized System of Customs Classification codes (HS), which defines various types of processing and assigns code numbers to them. The HS codes clearly state that 'sawn lumber' is classified as code 4407, while code 4409 (moldings) is "… lumber that has been continuously shaped along any one of its edges …". The mahogany that we were hoping to export would have two continuously shaped edges, therefore defining it (according to the HS) as moldings and not sawn lumber. And since the CITES resolution on the listing of mahogany does not apply to moldings (or other finished products), we were informed that if the rules were strictly interpreted, we should not require a CITES certificate.

I should point out that exporting mahogany planed on the top surface and both sides, with a molding edge on the top two edges, is not what we ideally wanted to do. We had purchased that lumber at a price that allowed it to be sawn and shipped, and then sold at a price which would earn a reasonable profit. But now we were being forced to incur additional labor costs, plus a significant loss of wood (in the planing and edging) which we had not anticipated. In addition, our buyer did not want to purchase moldings, so he was planning on cutting off the molded edges—which would result in a further loss of wood. And, of course, we would be paid less for it. However, at this point, we were just trying to recover our investment. We had purchased about 2000 $m^3$ of mahogany logs. If we could successfully ship this 'processed' mahogany to the US, we might at least break even—which is certainly better than losing the entire investment. But we did not come to Nicaragua to conduct a zero-profit business, nor a money-losing enterprise. And apparently Nicaragua was not concerned with abiding by the requirements of CAFTA, nor were they concerned with causing the loss of foreign investments, nor the resulting loss of foreign investor confidence.

Around the time that I was receiving confirmation that mahogany moldings should not require CITES certificates, I learned that another Nicaraguan exporter had sent four containers of this type of mahogany to the US—but they were being held in the port of Miami because they did not have CITES certificates. I contacted the US Department of Agriculture (USDA) and the US Department of Trade (USTD), and asked what the problem was. They told me that they were in discussions with the US Department of Fish and Wildlife (DFW), as well as the Department of Customs and Border Patrol (CPB), and were deciding if they should allow the import of this type of processed mahogany in the absence of CITES certificates. I forwarded to them all the materials which I had been sent by the CITES Secretariat, ITTO, the IWPA and others, and explained that this type of processing clearly falls into the description set forth in HS Code 4409.

The US authorities told me that they needed to know "how these wood products would be used", as well as the "end purpose" for this type of transformation of the lumber before deciding whether to allow it to enter the US without CITES export permits. I told them that as far as I knew, the language of the CITES regulations does not include anything about 'final use' of a product, nor of the 'purpose' of a particular transformation of lumber. And, since the HS and CITES are based on international agreements or treaties, I assumed that the US would adhere to them. However, I had also been told by the CITES Secretariat, as well as ITTO and the IWPA, that each partner country is allowed a margin of interpretation and can apply the CITES regulations as they deem appropriate within the framework of the Convention.

Eventually—after approximately two months—the US decided to refuse import of this type of mahogany boards if they were not accompanied by CITES certificates. They told me that as far as they were concerned, these boards still qualify as HS Code 4407—sawn lumber—because it did not

appear that the boards would be used as is. They essentially said that if it is not a recognizable product—like a door, a table, floor boards or panelling—then it is still sawn lumber. I admitted that we were not processing the boards in this particular fashion with the intention of making a useable product. We were simply abiding by the new Nicaraguan law which requires this minimum transformation in order to qualify for export. And we believed that this particular transformation should be classified under HS Code 4409, thereby not needing a CITES certificate. But the US authorities had another concern: people might create a molding edge on their sawn lumber simply to avoid getting a CITES certificate. The issuance of CITES certificates serves as a way of ensuring that mahogany has been obtained legally and sustainably. If one could avoid the requirement for a CITES certificate simply by carving a molding edge onto their sawn lumber, they might be able to obtain and ship illegal mahogany.

Ultimately, what matters most is that the country of export and the country of import follow the same standards. If the US is requiring CITES certificates, then Nicaragua should be issuing CITES certificates—otherwise international trade is impeded. So I asked CITES, ITTO and IWPA to contact Nicaragua's MARENA and ask them to begin issuing CITES certificates for mahogany, even if it met their requirement of 'second transformation'. Fortunately, MARENA agreed to begin issuing CITES certificates to all mahogany exports since the US was requiring it. Part of this new flexibility might have something to do with changes in the Nicaraguan government. Former President Enrique Bolaños finished his term on 9 January 2007, and Daniel Ortega was re-elected as President of Nicaragua. Although the term 'second transformation' has still not been officially defined, INAFOR has stated that they will allow mahogany boards to be exported with only the two faces and two sides planed—without the requirement for a molded edge. This is better, but still not ideal. We will still have some wood loss, as well as additional processing costs. But at least we can deliver a product to our US buyer that will not require the edges to be cut off by both of us, which will allow us to get a better price for our Nicaraguan mahogany.

In the end, it became clear that the international trade of mahogany is getting more and more difficult. As an endangered species, there will always be restrictions, limitations, and conflicting policies between countries regarding its trade. In countries such as Nicaragua, many of the indigenous communities rely heavily on the sale of timber, and they believe that the government should have no authority over indigenous areas. Moreover, the economic constraints of a third-world government make it impossible to adequately patrol the forest, so there will always be a degree of illegal activity. This illegal activity affects those of us who want to conduct a legal and sustainable business. Nicaraguan law 585 (which includes a number of moratoriums and other restrictions) is a demonstration of efforts, as yet poorly executed, to control such illegal activity. However, due to uncertainties in implementing the new law, illegal forest activity has actually increased recently, while those of us working legally have had to completely stop operations for nine months while problems such as those related here were sorted out.

**Forest giant:** a mahogany seed tree in a forest concession in the Department of Madre de Dios, Peru. *Photo: W. Nalvarte/CNF Peru*

The efforts of CITES to monitor the international trade of bigleaf mahogany have unfortunately led to one more political hurdle to overcome in the trade of this species between countries. Perhaps the CITES mahogany listing would be more effective if it applied to all products (including finished products). Only then would there be an accurate representation of how much international trade is occurring in this particular species, and there would not be disputes over the interpretation of definitions.

***The efforts of CITES to monitor the international trade of bigleaf mahogany have unfortunately led to one more political hurdle to overcome in the trade of this species between countries. Perhaps the CITES mahogany listing would be more effective if it applied to all products (including finished products).***

*I would like to express my gratitude to Milena Schmidt of CITES, Steven Johnson of ITTO, Cliona O'Brien of the WWF, Brigid Shea of the IWPA, and David Brooks of the Office of the US Trade Representative in helping sort out this issue. It can be difficult doing business in countries where government decisions often seem unreasonable and unproductive. It is nice to know that there are helpful and knowledgeable people out there that can help resolve some of the problems.*

# The allure of plantations

***Many tropical countries want to develop industries based on tropical forest plantations but may lack the information to do it properly***

**by**
**Ivan Tomaselli**

STCP Engenharia de Projetos Ltda
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TIMBER production in natural tropical forests is set to decline. It already appears to have plateaued: tropical industrial roundwood production in ITTO producer member countries has remained in the range of 122–126 million m³ for the last five years (ITTO 2006), well below the 140 million m³ achieved in the early 1990s. A further decline in the industrial timber harvest in natural tropical forests can be expected in the medium term (as predicted by Leslie 1999).

The tropical forest industry is therefore looking for alternative sources of timber supply. Imports are one option; another is plantation timber.

Forest plantations in tropical countries are portrayed by some as a saviour of natural forests because they can be highly productive and cost-effective and have the potential to substitute natural forests in timber production. Moreover, they can help drive economic development by providing downstream industries with a reliable supply of raw materials.

Some tropical countries are already encouraging major plantation programs and others are contemplating similar moves. But a lack of reliable information on the prospects for tropical plantations is hindering development and increasing the risk that poor strategic decisions will be made. In early 2006, ITTO commissioned the Brazilian consultancy company STCP Engenharia de Projetos Ltda to examine issues related to plantation development in the tropics. Are domestic plantations needed or desirable? Will products from tropical plantations be competitive in the marketplace? How much will certification act as a market-driven incentive for tropical plantation development?

This study used data gathered from field visits to selected countries, questionnaires completed by stakeholders in the regions of interest, secondary sources such as technical reports and the internet, and STCP's own databases, to build a picture of the current status of plantation development in the tropics and to make recommendations for the future. This article summarizes the study's main findings.

## How much area?

**Table 1:** Area of tropical forest plantations for industrial uses, 2005

| REGION | TOTAL AREA ('000 hectares) | AREA OF PRODUCTIVE FOREST PLANTATION ('000 hectares) | PRODUCTIVE AREA As % of total |
|---|---|---|---|
| ASIA-PACIFIC | 54 073 | 24 640 | 46 |
| AFRICA | 4730 | 3528 | 75 |
| LATIN AMERICA & CARIBBEAN | 8805 | 8036 | 91 |
| **TOTAL** | **67 608** | **36 136** | **53** |

*Source: FAO (2005), adapted by STCP*

## Current plantation area

The study focused on softwood and hardwood plantations growing in tropical countries for industrial uses; 'tropical countries' were taken to be all countries with all or the greater part of their territories between the tropics of Capricorn and Cancer. All countries combined possess an estimated 67 million hectares of tropical forest plantations, of which almost 80% are in the Asia-Pacific region, 13% in Latin America and the Caribbean and only 7% in Africa. *Table 1* shows the total and estimated productive (that is, capable of producing a commercial harvest) industrial forest plantation area in the tropics and its distribution among the three tropical regions. Of the 36 million hectares considered to be productive, 68% are in the Asia-Pacific region.

*Eucalyptus* is the most widely planted tree in the tropics, comprising 24% (8.6 million hectares) of the productive forest plantation area. Pine, with 6.4 million hectares, is also important, as is rubber (also 6.4 million hectares, although some of this may not be available for timber harvesting). Another widely planted tree species is teak.

## Production

*Table 2* shows the total estimated industrial roundwood production in tropical countries in 2004 and that part of the total estimated to have been derived from plantation forests. Note that these totals include production from plantations outside the tropics in countries straddling the tropical zones. The total industrial roundwood production in the tropics was about 322 million m³, of which almost half (47.5%) was from plantations. In Latin America and the Caribbean, plantations make a significant contribution to total industrial roundwood production (63% in 2004). This is due largely to the pulp industry, which relies heavily on plantation-grown fibre. The contribution of plantations to industrial production is also high in Asia (46%) but relatively low in Africa (8%).

The figure shows the end-uses of total and planted industrial roundwood in tropical countries by segment (sawnwood, plywood, pulpwood, particleboard, hardboard and medium-density fibreboard—MDF). Plantations supply more than 80% of total roundwood volume for the particleboard, pulp, MDF and hardboard sectors; this is not surprising because

## How much volume?

**Table 2:** Estimated industrial roundwood production in tropical countries, 2004

| TROPICAL REGION | INDUSTRIAL ROUNDWOOD PRODUCTION ('000 m³) | | PLANTATION SHARE (%) |
|---|---|---|---|
| | TOTAL | FROM FOREST PLANTATIONS | |
| ASIA-PACIFIC | 144 000 | 66 800 | 46.1 |
| AFRICA | 44 000 | 3580 | 8.0 |
| LATIN AMERICA & CARIBBEAN | 134 000 | 84 900 | 63.4 |
| **TOTAL** | **322 000** | **155 280** | **47.9** |

*Source: STCP fieldwork*

all are suited to a supply of small-diameter logs, whereas the sawnwood and ply sectors have historically used larger diameter logs. Despite this, 31% of all sawnwood is produced from plantation timbers such as rubberwood, pine and, to a lesser extent, eucalyptus. Countries with large pine plantations—such as Brazil, Chile and New Zealand—are now important players in the international market.

Brazil, Indonesia, Thailand, Malaysia and India are the major producers of manufactured products based on tropical plantation timber. These countries will likely remain competitive in this area, with the potential to further increase their share of world markets in selected plantation-based products such as pulpwood, sawnwood and some reconstituted wood panels.

## Prospects for plantations

Tropical forest plantations have some significant potential comparative advantages over other timber sources. In particular, they can achieve mean annual increments that are, on average, 5–10 times higher than those in natural forests and often significantly higher than what non-tropical plantations can achieve. The production costs of plantation timber are therefore lower, meaning that tropical plantation timber is cheaper than timber from natural forests or from temperate plantations.

For higher-end uses, however, plantation timber has its limitations. Forest plantations generally produce timber of inferior quality for solid wood products compared to that obtained from natural forests and therefore usually fetch lower prices. Prices for teak logs from planted forests, for example, are much lower than for logs from natural teak forests because they contain more juvenile wood and sapwood, and have much smaller diameters.

This does not prevent plantation timber from being used in solid wood products; on the contrary, the low price helps capture market share. Log prices for rubberwood are low compared to those from natural forests, which, coupled with wide availability and reasonable workability, has allowed rubberwood products to gain new markets, including in value-adding sectors such as furniture manufacture.

The success of the pulp industry in the tropics, mainly in Brazil, can be explained largely by the strong competitiveness of plantation timber. Pulp production costs in the tropics are among the lowest in the world thanks mainly to the low cost of plantation wood, guaranteeing a competitive advantage for the pulp industry.

The plywood industry is also gradually moving towards plantation timber. In recent years, pine from plantations has become widely accepted by the plywood industry. The high quality of the product coupled with its low price has made it a winner in the international market. Brazil, followed by Chile, is now by far the world's largest plantation pine plywood producer and its largest softwood plywood exporter, overtaking traditional exporters like Canada and Finland. Brazil accounts for one-half of European softwood plywood imports and almost two-thirds of US softwood plywood imports.

Eucalypts from plantations also have the potential to displace some timbers for plywood production, while *Eucalyptus* veneer is penetrating the laminated veneer lumber sector. The main reason for the success of tropical plantation timbers is the lower cost of delivered logs, but they also often attract less environmental pressure, have lower transaction costs, and are generally subject to less regulation and bureaucracy.

***Brazil, followed by Chile, is now by far the world's largest plantation pine plywood producer and its largest softwood plywood exporter, overtaking traditional exporters like Canada and Finland.***

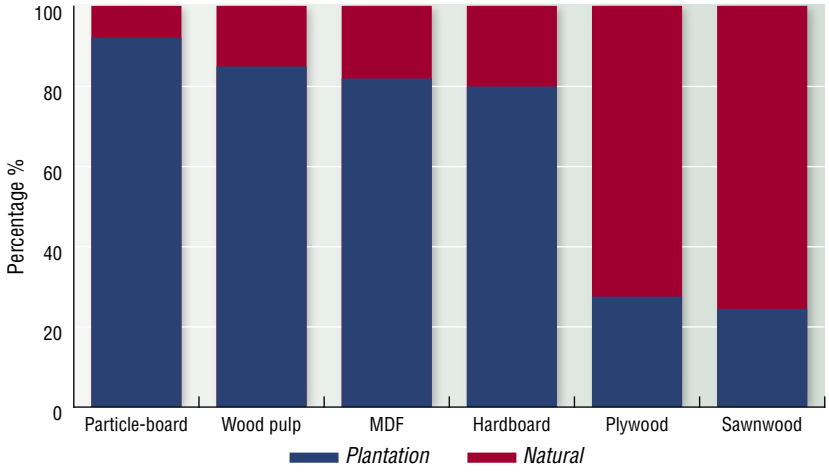
Nevertheless, there are still problems to be solved. A large portion of *Eucalyptus* veneer, for instance, is of relatively low grade due to the presence of knots and other wood defects intrinsic to the species. On the other hand, industrial technology is developing rapidly and many of the quality problems of fast-grown timbers are starting to be solved or at least greatly reduced. There is also still much to be done on the marketing side. *Eucalyptus* wood is regarded almost universally as a low-quality product, and this perception needs to be changed if wood value is to increase. Similar problems apply to *Acacia* plantations.

## Forest certification

*Table 3* shows that about 3.2 million hectares of planted forests were certified in the tropics in 2004. More than 90% of these were in Latin America and the Caribbean and a large part of that was associated with Brazil's pulpwood industry. In general, the area of certified forest plantations for products other than pulp is still negligible in the tropics. It is worth noting that the area of certified forest plantations

### Splitting uses

End uses of natural forest and plantation industrial roundwood




*Source: FAO (2004), adapted by STCP*

## How much is certified?

**Table 3:** Certified tropical forest plantations, 2004

| REGION | COUNTRY | TOTAL PRODUCTION AREA | CERTIFIED AREA BY CERTIFICATION SCHEME *('000 HECTARES)* | | | |
|---|---|---|---|---|---|---|
| | | | FSC | PEFC | MTTC | TOTAL |
| LATIN AMERICA & THE CARIBBEAN | Brazil | 5597 | 1818 | 762.7[1] | – | 2580.7 |
| | Colombia | 141 | 58.5 | – | – | 58.5 |
| | Ecuador | 167 | 1.4 | – | – | 1.4 |
| | Costa Rica | 152 | 40.4 | – | – | 40.4 |
| | Venezuela | 863 | 139.7 | – | – | 139.7 |
| | Others | 778 | – | – | – | – |
| | ***SUBTOTAL*** | ***7698*** | ***2058*** | ***762.7*** | **–** | ***2820.7*** |
| AFRICA | Zambia | 75 | 1.0 | – | – | 1,0 |
| | Zimbabwe | 141 | 85.7 | – | – | 85.7 |
| | Others | 3244 | 0.0 | – | – | 0.0 |
| | ***SUBTOTAL*** | ***3460*** | ***86.7*** | **–** | **–** | ***86.7*** |
| ASIA-PACIFIC | Indonesia | 4841 | 51.4 | – | – | 51.4 |
| | Malaysia | 1750 | 12.5 | – | 77.0 | 89.5 |
| | Thailand | 4920 | 0.9 | – | – | 0.9 |
| | Others | 13 183 | 0.0 | – | – | 0.0 |
| | ***SUBTOTAL*** | ***24 694*** | ***64.8*** | ***0.0*** | ***77.0*** | ***141.8*** |
| **TOTAL** | | **35 852** | **2209.5** | **762.7** | **77.0** | **3049.2** |

[1]*Under the Brazilian CERFLOR system (mutual recognition)*
*Source: World Resource Institute website (accessed 2006), adapted by STCP.*

almost doubled in the four years to 2004 in Latin America and the Caribbean, stayed more-or-less the same in Africa and declined in Asia-Pacific.

## Policy issues

In the past, a major obstacle to plantation forest development has been a lack of clear government policies; where such policies have been present it has not always been obvious who should implement the policies and by what instruments. Even today, forest policies in most of the countries covered in this study focus on natural resource management and protection, social and community forestry, and wildlife conservation. Only in a few cases do they also cover commercial plantation development and the promotion of forest-based industry.

*While the responsibility of forest management and timber production is tending to shift towards the private sector and communities, there is a lack of coherent support for such a shift. Policies to promote forest plantation development need to consider, among other things, the involvement of smallholders and tree farmers in the timber supply chain.*

### Industrial development

Investing in industrial plantations without taking into consideration industrial development is another frequent mistake in the forest development policies of tropical countries. As a result of several distortions, many tropical countries have relatively large forest plantation areas but a timber industry based largely on natural forests. This clearly shows that merely establishing plantations is not sufficient; processing and marketing must also be promoted. The technology required for plantation timber-based industry is different to that required for an old-growth resource, and this means that moving into plantations will also require investments in the industry. Low-technology processing results, in most cases, in a low-priced commodity product. In many cases this results in unprofitable operations and resource depletion.

### Incentives

Some countries—notably Brazil and Malaysia—that have provided strong incentives in the past to encourage forest plantation development now have strong forest-based industries and important positions in domestic and international markets. These incentives have promoted social improvement by generating employment, reducing environmental pressure on natural resources and facilitating the economic strengthening of stakeholders, including in many cases at the level of local communities. However, while government incentives and subsidies are important, they are only part of the equation.

### Supporting communities and private sector

While the responsibility of forest management and timber production is tending to shift towards the private sector and communities, there is a lack of coherent support for such a shift. Policies to promote forest plantation development need to consider, among other things, the involvement of smallholders and tree farmers in the timber supply chain. Mechanisms to guarantee and facilitate market access to these sources of supply are needed and require research, education and market intelligence. Financial incentives or

subsidies are also often needed to encourage the involvement of communities and out-grower schemes in enlarging the forest plantation base.

### Good information

Good decision-making requires good information, but this is largely lacking in the forest plantation sectors of many tropical countries. Policy-makers must understand that information and market intelligence are among their most important tools and devise policies to encourage better data and analysis and to promote investments. Inadequate information makes monitoring and enforcement ineffective.

## What ITTO should do

Forest plantation-based industries are likely to expand in the tropics as long as they are attractive to investors. This will depend on the macroeconomic and political climate, which affects the forest sector indirectly, as well as on factors intrinsic to the forest sector.

The main activities that should be supported by ITTO and implemented by member countries are in most cases directed towards factors intrinsic to the forest sector; they form part of a general strategy to develop markets for tropical timber and, to a greater or lesser extent, are already under way. They include: (i) the development of national information systems on the production and trade of plantation timber products; (ii) increased cooperation among stakeholders; and (iii) work to identify and reduce trade barriers.

To support industrial development in the tropical timber plantation sector, ITTO should concentrate efforts on: (i) assisting professional skills' improvement programs; and (ii) promoting private investments by providing reliable information to stakeholders, encouraging financial banks to create or improve their forest investment portfolios, and assessing portfolio risks. ITTO should also support market development for plantation timber by: (i) promoting database development and dissemination (markets, industry and trade); and (ii) undertaking special studies and analyses.

In general, ITTO actions do not target government decisions in sectors outside the forest sector. Nevertheless, ITTO can take a number of actions to influence non-sectoral policies that would benefit the forest plantation-based sector. These include:

- **international trade:** ITTO should continue to work to open markets to tropical timber products, including through reductions in tariff and non-tariff trade barriers and policies that combat illegal logging and illegal forest products trade;
- **government transparency:** a lack of transparency has greatly affected the development of forest-based industry in a number of countries. ITTO can assist its members to address this issue;
- **fiscal environment:** by encouraging governments to take actions related to their fiscal policies, ITTO can help reduce the tax burden on the forest sector and create incentives to develop an efficient forest plantation timber industry;
- **legal framework:** ITTO can contribute to the debate revolving around improving the legal aspects of forestry and forest industry and trade;
- **labour:** ITTO can collaborate with government and industry in support of professional training and continued education in tropical countries; and
- **credit mechanisms:** ITTO can provide guidance and support for the creation of innovative financial mechanisms for the development of a plantation-based industry in producer countries.

***The main activities that should be supported by ITTO and implemented by member countries are in most cases directed towards factors intrinsic to the forest sector; they form part of a general strategy to develop markets for tropical timber and, to a greater or lesser extent, are already under way.***

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*This article is based on the reports of two related studies carried out for ITTO: 'Report on the market study on tropical plantation timber products' and 'Monitor and Assess the Environmental, Social and Economic Costs and Benefits of Forest Plantation Development and Utilize that Information to Promote New Plantations – Study Report'. The full reports are available on www.itto.or.jp or from the ITTO Secretariat (itto@itto.or.jp)*

# Fighting illegal logging in Indonesia

***Ex-post evaluation of an ITTO project shows evidence of progress***

**by**
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**Illegal float?:** log raft in Indonesia. *Photo: M.I. Shaharuddin*

ILLEGAL LOGGING (the harvest, transportation, purchase or sale of timber in violation of national laws) is a pervasive problem, causing enormous damage and destruction to forests, local communities and national economies. It has become a widespread problem in Indonesia, especially following the Asian financial crisis of 1997–98. Some drivers of the problem are: 1) a high demand for timber in domestic and international markets; 2) lack of coordination between relevant government agencies; 3) lack of professionalism of law enforcement officers, especially those in the forestry sector; 4) corruption, collusion and nepotism; and 5) ongoing decentralization, giving rise to uncertainty with regard to laws, roles and responsibilities between the central, provincial and local governments. The situation has been exacerbated by a national economy that has yet to fully recover from the financial crisis; complex issues of property rights, particularly community customary rights; and a forestry industrial structure that is grossly larger than the national capacity for supplying timber on a sustainable basis.

There have been several initiatives, projects and efforts to combat illegal logging in Indonesia, but most have been undertaken in an ad hoc, uncoordinated and ineffectual manner. Against this background, ITTO PROJECT PD 74/01 REV.1 (M) was formulated with the development objective of fostering the sustainable management of forests in Indonesia by enhancing institutional capacity and producing practical guidelines for controlling illegal logging. In support of this objective, the project had two specific objectives: 1) conducting statistical studies on flow of wood, rate of forest degradation and the related socio-economic background to illegal logging practices; and 2) establishing institutional capacity for controlling illegal logging. To realize these specific objectives, a number of activities were undertaken, namely: quantitative description of log production, illegal log flow and trading; documentation and publication of socio-economic conditions related to illegal logging; identification of the trends in and distribution of forest degradation; improvement in government capacity for monitoring and eradication of illegal logging activities; design of a log tracking scheme; production of up-to-date guidelines for controlling illegal logging activities; and establishment of coordination forums for forest security and encouraging proper forest law enforcement.

The project was implemented by the Ministry of Forestry (MoF) Indonesia and the World Wide Fund for Nature (WWF) Indonesia as joint implementing agencies operating from a project office at the MoF, Jakarta, and at two project sites located in Pekan Baru, Riau, Sumatera, and Pontianak, Kalimantan Barat, Kalimantan. Project implementation commenced in May 2002 with a planned duration of two years. Operations were completed in May 2005 following a twelve month extension without additional ITTO funds. The total approved ITTO budget of the project (US$741,100) was funded by the governments of Japan (US$615,850), the US (US$50,000) and Indonesia (US$75,250).

## Lessons learned

Prior to project implementation, widespread illegal logging aggravated by a host of interrelated factors (including lack of professionalism, negative attitudes and behavior, and uncoordinated and ineffectual efforts to address the problem) prevailed. These deficiencies can be attributed to the absence of valid information and analyses of the problem; inadequate knowledge, skills, know-how and technology in combating illegal logging; and a lack of societal motivation and commitment to overcome the problem.

Upon project completion, changes implemented through the project resulted in several improvements, including:

- technical and statistical information and analyses on relevant aspects of illegal logging;
- software systems for identifying and monitoring forest degradation caused by illegal logging;
- enhanced human and institutional capacity to combat illegal logging;
- six volumes of comprehensive guidelines to combat illegal logging; and
- establishment and consolidation of coordination forums for forest security and law enforcement.

Improvements could also be seen in the knowledge, skills, awareness, commitment, involvement, participation and networking of all stakeholders involved, including the government, NGOs and civil society (universities, the private sector, local communities and the general public).

The training package developed under the project contributed to increased knowledge and skills of relevant stakeholders in combating illegal logging including in the application of appropriate technology. The above-mentioned six volumes of comprehensive guidelines were a product of a systematic effort of updating, coordinating and streamlining policies, guidelines and directives that already existed. These guidelines have the potential to enhance coordination and synergy in efforts to control illegal logging in Indonesia.

The establishment and mobilization of coordination forums was a key project element, since stakeholders' consultation, empowerment, involvement and participation were considered essential for an effective response to bring illegal logging under control as opposed to relying mainly on the conventional method of enforcement by relevant government authorities. However, securing these outputs proved time consuming and maintaining them will be a continuing challenge.

## Impacts and effects

The impacts and effects of the project occurred at every level—local, regional and national—albeit at varying degrees. Naturally, most impacts and effects occurred in the provinces of Riau and Kalimantan Barat, where the two project sites were located, at both the provincial and local (*kabupaten*) levels. The impacted parties included the central government represented by the provincial offices of MoF, the police and judiciary, the local government which was given some autonomy in the context of the national decentralization policy, NGOs and civil society, universities, communities, the private sector and the general public.

Specifically, government benefited from the reports generated and the capacity-building activities conducted by the project, particularly in the enhancement of knowledge to combat illegal logging. Through participation in coordinating forums, the project helped increase awareness, change attitudes, and build confidence, trust and commitment for NGOs, civil society, universities, communities and the general public, leading to increased social empowerment, involvement, participation and mobilization against illegal logging. At the time of the evaluation, both forums (JIKALAHARI in Riau and KAIL in Kalimantan Barat) were still functioning actively, utilizing the project outputs in their activities. The sustainability of the project after its completion depends on the extent to which these forums are maintained, strengthened and replicated in other parts of Indonesia in the future. However, difficulty in securing the cooperation and participation of the private sector may be an indication that the impact and effect of the project on the sector was relatively less profound.

The impacts and effects of the project extended well beyond its geographical limits. At the national level, these were most felt at the MoF, particularly in the context of its policy analysis and development. The statistics and analyses generated by the project have been widely used. Specifically, the guidelines were formally adopted by MoF and together with the 'Ten Steps to Eradicating Illegal Logging', a summary of the guidelines produced by the WWF-World Bank Alliance, will guide the formulation of official government policies and action plans on illegal logging in the near future.

The project further extended its impact through cooperation, networking and coordination at the local, provincial and central levels with other initiatives on illegal logging, including the WWF-World Bank Alliance, the European Commission Illegal Logging Response Center, bilateral initiatives of the United States Agency for International Development (USAID), the UK Department for International Development (DFID), and the Japan International Cooperation Agency (JICA), as well as work by NGOs Telapak and Environmental Investigation Agency (EIA). The proliferation of initiatives on illegal logging in Indonesia has given rise to some instances of overlapping and duplication, but the interaction between the project and other initiatives has addressed this problem while generating synergies through the sharing of information, experiences, outputs and results.

The final and arguably the most crucial consideration in judging success is the extent to which the project has impacted illegal logging in Indonesia in general and in the two provinces in particular. Illegal logging is a complex, widespread and ongoing problem in Indonesia, extending well beyond the boundaries of the two provinces in which the two project sites were located. It is therefore unrealistic to expect a single project of limited duration to have a quick and lasting impact in eradicating the problem country-wide. It is also difficult to collect and maintain information on incidence and frequencies of illegal activities except those which are reported, discovered or monitored. Therefore, an accurate measurement of the impact of the project on illegal logging would require an exceedingly in-depth effort. However, based on opinion, perception and observations made by all project stakeholders, it has contributed towards alleviating the problem by establishing and nurturing the enabling conditions for a more efficient and effective approach to forest law enforcement as well as prevention and suppression of illegal logging and related activities. As indicated, the impacts and effects of the project have been most profound in, though not limited to, the two provinces in which the project sites were located. The challenge is to ensure that these impacts and effects can be maintained and sustained in the two provinces concerned and extended to and replicated in other parts of Indonesia where illegal logging continues to be a serious problem.

## Recommendations

Based on the findings of this ex-post evaluation, the following recommendations were presented for consideration by the government of Indonesia and ITTO:

1. To the extent possible, all tangible outputs of the project should, as appropriate, be maintained, updated, disseminated, applied and replicated in the context of the ongoing efforts to combat illegal logging in Indonesia.

Continued on page 16

# Community participation in forest management

***Results from ex-post evaluation of projects in six countries***

**by**
**Marc J. Dourojeanni and Juan E. Sève[1]**

**Community labours:** Ghanaian participants relax in front of project-funded teak nursery. *Photo: M. Dourojeanni*

THIS PAPER HIGHLIGHTS the main conclusions and lessons summarized in the report of an ex-post evaluation of seven ITTO community forest management projects completed between early 2002 and 2005.

Community participation in forest management, rightly considered an essential feature in the conservation of tropical forests worldwide, has been pursued for decades. However, it has proven to be a very elusive objective, despite significant efforts made on every continent. Few programs or projects can claim enduring success in terms of increased community income, sustainable forest management (SFM) and/or conservation.

ITTO projects are no exception to this reality; the successes they have achieved are limited. However, the seven ITTO projects reviewed here (in Bolivia, Ghana, Panama, Peru, the Philippines and Togo) have proven, once again, that the main problems are not related to the participating communities themselves, but essentially are consequences of serious project design failures, important technical deficiencies, and to a lesser extent, flawed project implementation.

[1]*ITTO consultants working with the support of Carlos Rodríguez Chang (Bolivia, Panama and Peru), Baharuddin Haji Ghazali (the Philippines) and Astrid Bergqvist (Ghana and Togo).*

*... continued from page 15*

2. Training and enhancement of human and institutional capacity using updated and adapted materials, tools and technology generated from the project should continue to increase the knowledge and skills of those involved in forest law enforcement and combating illegal logging.
3. Concerted efforts should be taken to disseminate and facilitate the actual and systematic implementation of the guidelines developed under the project for controlling illegal logging throughout the country at local, provincial and national levels. Provinces, districts and parties that have adopted or shown interest in adopting the guidelines should be supported in this regard.
4. The coordinating forums established and consolidated under the project (JIKALAHARI in Riau and KAIL in Kalimantan Barat) should be strengthened to maintain the momentum gained in the campaign against illegal logging in the two provinces and to highlight their status as pioneering pilot case studies on addressing illegal logging using a multi-stakeholder consultation and participation approach.
5. The difficulties encountered by the project in securing the cooperation and involvement of the private sector should be examined further to identify and overcome obstacles including through appropriate motivation and incentives.
6. Appropriate methodologies and mechanisms to manage and resolve conflicts among stakeholders should be further developed to facilitate the activities of the coordinating forums.
7. Alternative sources of income for local communities, including community forest projects, should be developed to reduce their involvement in illegal activities and encourage their support and participation in campaigns against illegal logging.
8. The experiences and achievements of the project in Riau and Kalimantan Barat should be adapted and replicated in other parts of Indonesia where illegal logging is still rampant.

*The complete report of this ex-post evaluation is available from the ITTO Secretariat.*

## The projects

*Table 1* presents a list of the seven projects that were evaluated. Three were located in Latin America (Bolivia, Peru and Panama), three in West Africa (Ghana and Togo) and one in Southeast Asia (the Philippines). These projects were approved between 1996 and 2001. Their total cost, not including the first phases of four of them, amounted to US$5.7 million and ITTO's contribution to this total was US$4.2 million.

### Community list

**Table 1:** Sumary of projects evaluated

| PROJECT NUMBER | PROJECT TITLE, LOCATION & COUNTRY | TOTAL & ITTO BUDGETS *(US$)* | START-UP *(mm/yy)** | COMPLETED *(mm/yy)*** |
|---|---|---|---|---|
| **PD 44/99 Rev.2 (F)** | Implementation of a Management Plan by the *Chiquiacá* and *Orozas* Communities in Tarija **(Bolivia)** | 505 439<br>285 589 | 06/01 | 06/04<br>(11/04) |
| **PD 48/98 Rev.1 (F)** | Reforestation of the *Abutia* Plains by Indigenous Communities in the Volta Basin **(Ghana)** | 712 088<br>576 188 | 12/99 | 12/03<br>(03/05) |
| **PD 49/98 Rev.1 (F)** | Participatory Tropical Forest Development by Women in Indigenous Communities in *Worobong* **(Ghana)** | 833 334<br>589 534 | 07/00 | 09/03<br>(03/05) |
| **PD 37/95 Rev.2 (F)** | Management of Cativo Forests and Non-timber Products with the Participation of Rural and Indigenous Communities in *Darién* **(Panama)** | 1 585 667<br>1 042 667 | 09/96 | 12/01<br>(02/02) |
| **PD 38/99 Rev.1 (F,I)** | Demonstration Community Forest Management in the Natural Cloud Forests of the *Urumba* Basin in San Ignacio **(Peru)** | 623 100<br>443 100 | 10/99 | 09/01<br>(02/02) |
| **PD 21/97 Rev.2 (F)** | Developing Tropical Forest Resources through Community-Based Forest Management in *Nueva Vizcaya* **(the Philippines)** | 957 135<br>913 285 | 07/98 | 12/01<br>(09/02) |
| **PD 9/99 Rev.2 (F)** | Sustainable Management of *Missahoé* Reserved Forest Forestry Resources with the Participation of the Local Rural Communities for an Optimal Timber Production in Kpalimé **(Togo)** | 508 994<br>384 524 | 11/99 | 11/02<br>(04/03) |
| **TOTAL** | | **5 725 757**<br>**4 234 887** | | |

**Official dates of project initiation* ***Expected dates of project completion (actual dates of project completion, including formal project extensions)*

Similarities and differences between the projects are summarized in Table 1. All projects: 1) addressed direct long-term social and economic development of local farmers or indigenous (often tribal) people through their direct involvement in these activities; 2) dealt with mostly residual protection forests or forest lands usually already highly degraded by past abusive uses; and 3) were included in buffer zones, or located in the vicinity of protected areas.

The differences among projects were, in some cases, substantial. Orozas and Chiquiacá in Bolivia, Urumba in Peru and Darién in Panama were essentially focused on natural forest management, while Abutia and Worobong in Ghana were exclusively oriented to reforestation, and Nueva Vizcaya in the Philippines and Missahoé in Togo were a mix of both. The project in Bolivia was, for all practical purposes, two projects in one, and (in contrast to the others) Panama's was essentially a research project. Five out of eight projects (considering Orozas as a second Bolivian project) were executed by NGOs, including the Smithsonian Tropical Research Institute of Panama. In addition, the Latin American projects were developed in very distant and inaccessible locations, while the African and Asian projects were more easily accessible.

The projects also differed in terms of implementation status and length: four of the projects (Urumba, Nueva Vizcaya, Abutia, Worobong) had completed their second phases at the time of evaluation, implying a much longer presence of ITTO financed operations in the field (seven to ten years) than in those with a single project phase. The time elapsed between project completion and ex-post evaluation varied from five years (Darién) to less than a year (Abutia).

## Important social engineering successes

In all projects except one, the target populations were poorer rural, traditional, indigenous and/or tribal groups. All projects were either successful (Darién, Abutia) or very successful (Worobong, Missahoé, Nueva Vizcaya, Orozas/Chiquiacá, Urumba) in promoting participation, raising local people's environmental and forestry awareness, organizing and empowering communities, developing forestry community enterprises, and training community and enterprise members on a variety of themes. On the whole, the project executing agencies overcame traditional resistance and mistrust, and achieved very high levels of participation and considerable enthusiasm regarding project objectives that were often sustained after project completion.

The evaluated projects reveal a number of innovative approaches regarding participation that may be useful for future ITTO work in this area, including the following:

- The establishment of formal for-profit community enterprises bringing together those community members interested in the forestry venture. Often, not all community members are willing to participate.
- Payments to community members for actual work in logging, or planting and maintenance, must be considered a production cost, not a 'benefit' or a 'share of benefits', as is usually the case in community development projects.
- Revenues derived from the projects, or project-created enterprises, must directly benefit those members who effectively participate, and should not be exclusively oriented to community infrastructure improvements, which also benefit community members who do not work and/or participate in project activities.
- Early and clear definition of the share of benefits obtained at harvest corresponding to each shareholder (government, landlords, community, and participating community members) is essential to avoid conflicts.

- The establishment of a 'Forest Fund' constituted from a portion of the resources from the project, by saving a portion of the initial incomes to be provided by the project, or (eventually) by imposing a small levy on the salaries paid to community workers (as in Missahoé, Togo), is an excellent option to ensure the maintenance of plantations until major profits are generated from project activities.

While community participation in project design was below desirable levels in projects that were in their first phase, participation during execution was excellent in five of the projects. The mechanisms of project governance at the enterprise and community level, as well as at the project level, were efficient. Additionally, in several of the projects the enterprises created were useful for carrying out business activities other than forestry or were different from those proposed by the project.

Women's participation in the projects and community enterprises was a part of all projects, and was especially important in the Worobong project. Forest enterprises run exclusively by women were established in Orozas and Missahoé, and strong leadership on the part of women was also visible in Nueva Vizcaya and Chiquiacá. However, enthusiasm and participation are clearly fading in some of the communities as a consequence of the projects' failure to fully achieve most development objectives, especially the generation of additional income.

## Deficient project design

Poor project design has been identified as the key weakness of most reviewed projects, especially with regard to four aspects: 1) inadequate strategic analysis of the options available to associate community abilities, needs, and interests with the economic potential and technical requirements of forest activities; 2) absence of economic analysis of forest ventures proposed for the new community enterprises created by the projects; 3) deficiencies in forestry technical matters including low quality or absence of forest management plans; and 4) insufficient project duration.

### Inadequate strategic analysis

Two of the Latin American natural forest management projects focused on the sustainable utilization of largely inaccessible protection forests, with no adequate consideration given to high production and transportation costs and associated environmental risks. Two of the three African projects planned to establish more than 1000 hectares of forest plantations in only two to three years, with no serious provision for future maintenance costs, the continuity of planting, or the sustainability of the plantations. Another project included degraded land rehabilitation to provide ecological services; however, this mainly benefited rich farmers in the lowlands with costly responsibilities imposed on poor hill farmers, and no provision for compensation. Also, alternative or complementary options, such as reforestation with fast growing tree species in natural forest management projects, sequential planting, properly adapted *taungya* systems, or adequate fruit tree planting in forest plantations, were not adequately considered.

All these problems, among others, are a consequence of a lack of proper analysis during project preparation and, in several cases, of insufficient detailed consultations with local populations before project approval.

### Absence of economic analysis

Inadequate economic analysis was the most serious issue faced by the ventures to be developed by the new community enterprises under the projects. The project proponents generally did not take into consideration that the projects were to become self sustaining, profitable economic ventures at completion. Technical and especially economic feasibility studies were absent in all evaluated projects. Most proposed ventures were assumed to be *a priori* profitable actions, an assumption not borne out by reality.

### Deficiencies in forestry technical matters

Most projects faced serious technical problems or deficiencies regarding quality baseline information, detailed soil studies, site and species selection, and silvicultural practices, among others. In most cases, the plantations as well as forest nurseries were abandoned after planting or as soon as projects concluded. Essential maintenance activities such as pruning, weeding, thinning, and fire control were not carried out. The management plans for natural forests, as well as for forest plantations, were either entirely absent, of very low quality, or incomplete. Most of the plans examined were overly simplistic and, if applied, they would not ensure economic or ecological sustainability.

### Insufficient project duration

Time constraints were a constant problem across all projects. None of the projects, including those that were already in a second phase, were completed on time and some even required extensions of over 15 months to reach formal completion. Nevertheless, in no case were these additional periods long enough to achieve objectives. The problem is especially significant for reforestation projects that may require over 25 to 30 years before final harvest. Farmers faced serious difficulties in maintaining plantations while at the same time needing to produce food under the increasing shade of the growing trees, with less land available for new crops.

## Implementation problems

Some projects faced serious problems during execution. The two South American projects failed because essential conditions for achievement of project objectives were not granted by the responsible governmental agencies. These necessary conditions include: legal community access to the forest resources, and/or authorizations (such as management plan approval and the granting of logging permits) to utilize the forest resources. However, even if these legal aspects had been rectified, these two projects would probably not have achieved their objectives as a consequence of other project design weaknesses. Another project (Darien) was successful at providing technical information, as planned, but unable to achieve its general objectives regarding sustainable management, in part because the species that was the main subject of the project lost its economic importance nationwide in the course of project implementation.

All projects had at least nominal official support from governments. However, the more successful projects were those with the highest level of effective support from governmental forestry agencies, including Nueva Vizcaya, Missahoé and Worobong, which received considerably more technical inputs from forestry agencies than the others. The less successful projects received less effective support, including cases where the executing agency's financial contribution was not delivered in its entirety.

## Gap between social aspects and economic and technical aspects

As a consequence of the deficiencies discussed above, the considerable success of the projects at organizing local communities and at achieving their active and informed participation in the forest ventures was not matched by the project results in terms of expected benefits. None of the seven projects achieved their respective development objectives, even though in most cases they attained most expected outputs. In general, the projects were not able to provide either significant additional welfare or increased

## More alike than not

**Table 2:** Main similarities and differences among evaluated projects

| FACTS/PROJECTS | OROZAS | CHIQUIACÁ | URUMBA | DARIÉN | NUEVA VIZCAYA | MISSAHOÉ | ABUTIA | WOROBONG |
|---|---|---|---|---|---|---|---|---|
| GENERAL OBJECTIVE | Forestry activities developed by local communities to improve their own social & economic welfare | | | | | | | |
| SPECIFIC OBJECTIVES | Mostly management of natural forests & to a lesser extent reforestation | | | | | | Reforestation | |
| | Timber marketing improvement, species diversification | | | Research | Watershed management | Forest management | Forest land and forest rehabilitation | |
| STRATEGIC OBJECTIVE | Information, effective participation, organization, training and empowerment of local people | | | | | | | |
| FOREST TYPES | Often highly degraded mature protection forest and/or secondary protection forests and denuded forest land | | | | | Denuded forest land and/or very degraded production forests | | |
| PROTECTED AREA STATUS | Most projects are located in protected areas, their buffer zones or in the vicinity of protected areas | | | | | | | |
| BENEFITED COMMUNITIES | Farmers | | | Tribal & afro-american | Farmers & tribal | Tribal farmers | | |
| RURAL POVERTY LEVEL | Middle | Poor | Very poor | Very poor | Poor | Poor | Very poor | Very poor |
| EXECUTING AGENCY | NGO | NGO | Government | NGO | Government | Government | NGO | NGO |
| DURATION *(planned)* | 36 months | | 24 months | 48 months | 36 months | | 48 months | 36 months |
| DURATION *(actual)* | 41 months | | 28 months | 67 months | 38 months | 41 months | 63 months | 55 months |
| PROJECT PHASE | I | I | II | I | II | II* | I | II** |

** ITTO project preparation facility utilized ** a project not executed exclusively in the same area*

income to the participating communities during project implementation. Additionally, because project activities and initiated community ventures were not continued or maintained, it can only be expected that they will not accomplish these goals in the future unless additional measures are applied.

The gap between results and proposed objectives has given rise to frustration and disappointment of participating communities in most of the projects. All of these communities are requesting and expecting to be granted either project extensions or new projects to attain the initial development objectives.

In this general scenario, Missahoé (Togo), Nueva Vizcaya (the Philippines), and Worobong (Ghana) show good to very good possibilities of achieving their development objectives if moderate follow-up assistance is provided. These were, by all evaluated parameters, the most successful projects. A fourth project with good prospects is Chiquiacá, one of the sub-projects included in the Bolivian project. The Missahoé and Worobong projects, thanks to better technical advice that allowed for good site and species selection, had exceptionally good results in significant portions of the plantations established. Missahoé also better met community needs for crop production and forest plantations, while Worobong realistically reduced the original excessive project plantation target by one-half.

In some cases, the main successes were not related to the objectives of the project. In Urumba, for example, the project improved the productivity of coffee and successfully promoted several other social infrastructure improvements, including the construction of a new road, a medical post, and an electrical power plant. In Worobong, the project increased local incomes through cassava processing plants, and in Nueva Vizcaya, the project was instrumental in obtaining additional assistance for local farmers to improve agricultural productivity.

## Conclusions and recommendations

The poor performance of most of these projects is clearly not a demonstration of any inherent difficulty to successfully implement community forestry management. None of the causes of failures can be attributed to the participating communities that demonstrated extraordinary commitment in trying to meet project objectives. All causes of failure were related to project design, or to a lesser extent to implementation deficiencies.

Projects aiming to create economic ventures for communities must be treated like any other for-profit investment and not like conventional or traditional development projects. Sustained profits are the best proof of and the main condition for success of forestry-based community projects. Therefore, projects of this nature should include or be preceded by economic and technical feasibility studies.

The need for technical forestry assistance was evident in all projects except in Darién, especially at the stage of project preparation. The three most successful projects benefited from either a first phase (Nueva Vizcaya and to some extent Worobong) or a project preparation facility (Missahoé). Technical assistance must make up for the often limited understanding of the principles of sustainable forest management in communities. Options to address this problem include:

1) Considering the complexity of community forestry projects, it may be more cost effective for ITTO to provide technical assistance for the preparation of projects than to conduct intense ex post evaluations. Formal project preparation facilities such as offered in Missahoé (Togo) should be extended to other communities/countries.

2) ITTO may also consider strengthening training programs to revitalize and renew the basics of forest management, especially among young professional foresters and relevant community stakeholders of producer countries.

Natural regeneration is an important and underutilized tool to restore degraded forest land as has been demonstrated in Nueva Vizcaya. Projects such as Worobong, Missahoé, Orozas and Urumba could also take advantage of this simple and inexpensive approach.

The duration of community forestry development projects, especially those dealing with plantation forests, must be realistic and the prospects for sustainability of project outputs must be enhanced. Several options to ensure sufficient durations/sustainable outputs that can be combined are available, including:

Continued on page 20

# Market trends

## Weather factors steer timber prices

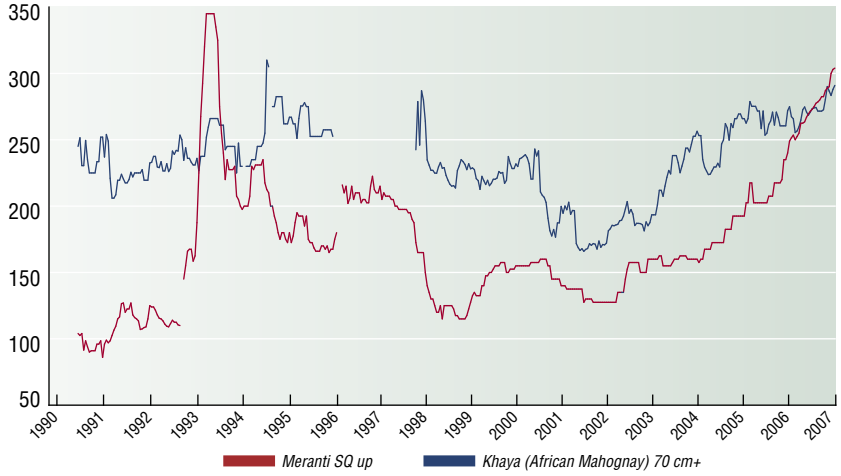
by
Jairo Castaño

ITTO Secretariat

IN RECENT MONTHS, tropical timber prices have been particularly affected by weather. A longer than usual rainy season in West and Central Africa and heavy thunderstorms in Southeast Asia have driven prices upwards due to supply shortages. Mild winters in Europe and Japan have held demand relatively steady, further contributing to rising prices. This is in stark contrast to previous years when business slowed considerably during Christmas and the winter months, usually resulting in downward pressure on prices.

### Logs

**Figure 1:** Nominal FOB prices of African and Southeast Asian logs ($/m³)




### Far East demand lifts African prices

West and Central African timber prices held onto 2006 gains in December as opposed to previous years when prices weakened ahead of the Christmas holiday. Tight supply and active demand from China and India continued to support prices. In January, West and Central African log prices surged on the back of robust demand from the Far East, a longer than usual rainy season and a mild winter in Europe. *Figure 1* shows that prices for African mahogany (khaya) logs are reaching new 13-year highs. Sapele log prices have also been edging up and are at levels roughly similar to those of iroko.

### Flooding sends Southeast Asian prices up

Prices for Southeast Asian timber products rose sharply across the board in early January after severe thunderstorms struck several production areas and floods forced evacuations in Malaysia and Indonesia. Prices for Southeast Asian timber products have risen moderately since then as flooding receded in most states, except the Jakarta area and Sarawak. Some small mills may be driven out of business due to inadequate insurance coverage for such disasters. As of February 2007, meranti logs had reached 14-year highs while dark red meranti sawnwood prices were at their highest level since ITTO started to track this product in 1998 *(see Figure 2)*. Meanwhile, prices for Southeast Asian plywood (notably meranti) reached fresh ten-year highs, finally

... continued from page 19

- spreading the budget over a longer implementation period;
- planning for a second (or follow-up) phase at project conception;
- building a reserve into project budgets for maintenance costs ('Forest Fund') such as was adopted in Missahoé; and
- building into the project economic options for sustainability after funding has ended.

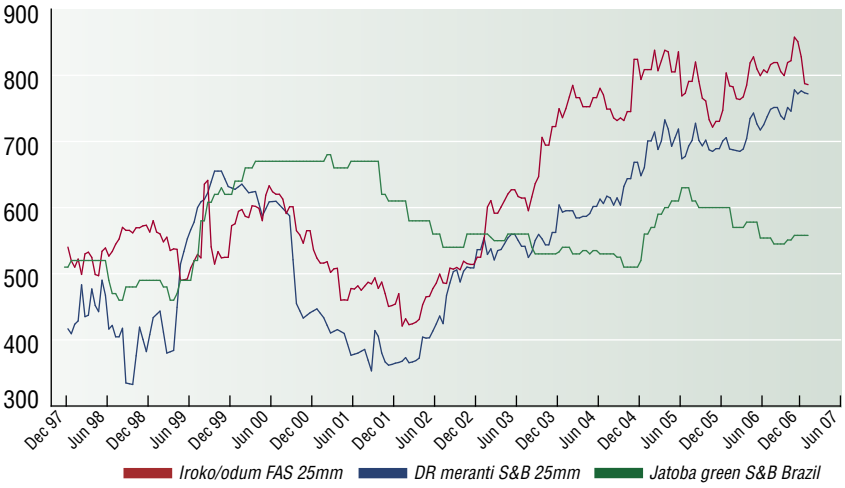
Some other comments/recommendations for ITTO and its members are:

1) Openness and flexibility in considering project modifications is a definite advantage. Addressing design errors in approved projects during implementation (eg Worobong) is much better than enduring such errors (eg Abutia).
2) ITTO should consider limiting its project investments exclusively to permanent fruit trees when requested to finance community development actions that are not related to forest products. If other agricultural crops are needed for the success of the project, the funding should come from other sources.
3) ITTO should generally not invest in pure forest research projects. When such support is justified, ITTO should seek participation of other specialized agencies.
4) Member governments should avoid submitting community forest management project proposals to ITTO unless they can guarantee clear community land tenure or access to forest resources, as well as clearance of forest management plans and/or logging authorizations.
5) Transfer of the infrastructure and pertinent goods acquired with project funds to community enterprises should be included in project completion procedures.

*The complete report of this ex-post evaluation is available from the ITTO Secretariat (itto@itto.or.jp)*

## Sawnwood

**Figure 2:** Nominal FOB prices of African, SE Asian and Brazilian sawnwood ($/m³)




recovering from the doldrums that followed the Asian financial crisis of a decade ago. Prices for rubberwood raw materials and furniture have also risen, fuelled by record prices for natural latex and weather-related factors. Business activity in Southeast Asia slowed in mid-February ahead of the Chinese New Year celebrations.

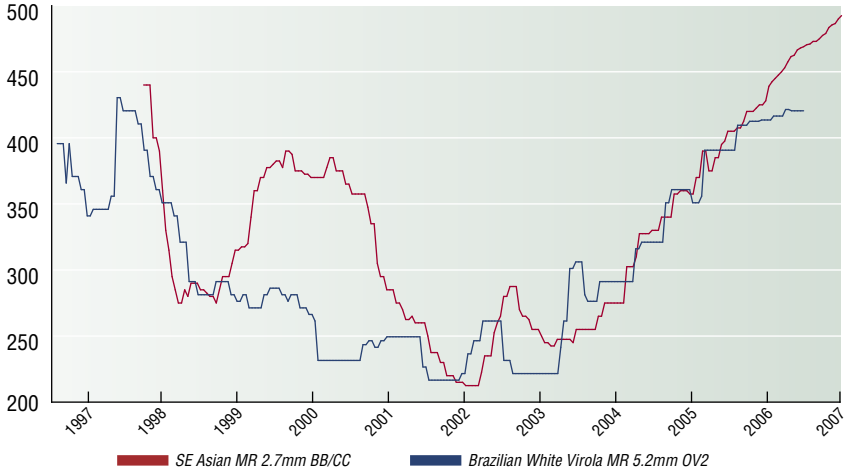
Indonesia and the EU agreed in January to start formal talks towards a voluntary partnership agreement (VPA) under the EU's Forest Law Enforcement, Governance and Trade (FLEGT) initiative aimed at establishing a trading system and a licensing mechanism to curb the sale of illegal timber products to the EU. The EU initiated similar formal VPA talks with Malaysia in September 2006. Malaysia and the EU have since then agreed to appoint an independent body to audit the legality of timber exported to Europe.

## Brazilian currency hits export industry competitiveness

In Latin America, initial timber trade statistics for 2006 confirm a contraction in export volumes from Brazil. Brazilian exports of tropical sawnwood (down 1.4%), plywood (down 23%) and furniture (down 6.7%) declined in 2006. *Figure 3* shows that prices for white virola plywood have been moving upwards since 2002. However, the trend has not been as steep as that for Southeast Asian plywood prices. Brazilian timber products have lost some competitiveness in the international market due to the strengthening of Brazil's currency against the US dollar. Peru's timber exports (mostly sawnwood) reached a new high in 2006. Bolivian export statistics reveal that the US imports mainly added-value wood products while China imports mostly sawnwood.

## Plywood

**Figure 3:** Nominal FOB prices of SE Asian and Brazilian plywood ($/m³)




## Chinese plywood swamps European markets

Chinese plywood continues to rapidly gain market share in major European markets at the expense of tropical plywood. In the UK, traders said that the oversupply of Chinese plywood (mainly poplar) was devaluing the market. Following a complaint by the European Federation of the Plywood Industry (FEIC), the European Commission (EC) is investigating Chinese plywood imports to Europe. The EC is studying whether to extend anti-dumping duties it already imposes on okoume-poplar plywood to other Chinese plywood products with different face veneers, such as bitangor, red canarium and kedondong. Chinese plywood is 25–40% cheaper than competing tropical products. If approved, the anti-dumping duties could narrow the price gap between these products. Similarly, the US Trade Representative filed on 2 February a complaint against Chinese plywood at the WTO. The complaint challenges China's use of subsidies for hardwood plywood products. Meanwhile, Chinese manufacturers recently announced increased poplar plywood prices for Europe.

New timber procurement policies have recently been announced in some consumer countries. New Zealand adopted a new public procurement policy for timber in a bid to clamp down on illegal logging in the South Pacific. Germany, in turn, announced that its timber procurement policy would be based on Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC) and comparable certificates. Meanwhile, an EU timber trade seminar urged countries to harmonize their timber procurement policies, echoing similar calls from other fora.

In Japan, imports of tropical logs and plywood surged in 2006. Plywood supply from Southeast Asia recovered sharply last year, lured by higher prices in Japan and an improved housing market. However, in February, Japanese plywood mills were resisting higher log prices due to declining domestic plywood prices amid adequate plywood stocks.

In the US, demand for timber products has been severely affected by the ongoing correction in the housing sector. Although US housing starts surged briefly in late 2006, privately owned housing starts fell 14% in January 2007, for a cumulative 38% drop since January 2006.

*ITTO's Tropical Timber Market Information Service newsletter is available bi-weekly on www.itto.or.jp or on request from the ITTO Secretariat (itto@itto.or.jp)*

# Forest concessions take root in Madre de Dios department, Peru

by
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**Directed down:** Directed felling training by WWF-Madre de Dios in the Emfoportillo forest concession, Madre de Dios. The species being logged is cedar (*Cedrela odorata*). *Photo: R. Cossío*

IN 2000, Peru (with 74.2 million hectares of natural forest in the Amazon region) passed a new forest and fauna law (No 27308) that requires, for the first time, sustainability in the use and management of the country's natural resources. Forest concessions have been granted to small- and medium-scale loggers since 2002 under the new law, making them increasingly important stakeholders of the forests of the Amazon region—either individually or through organized enterprises. Concessions, awarded through public bidding, are areas of public land that are designated for permanent forest production. Concessionaire enterprises must submit a general forest management plan for each 40-year (renewable) concession and must file annual operating plans to show that they are implementing their approved management plans. In addition, concessionaires have to pay an annual area-based harvesting fee in US dollars.

Madre de Dios is a department in the Eastern Peruvian Amazon known as "the biodiversity capital of Peru" and one of the mega-diverse zones in the world (Dios & IIAP 2000). Logging is the area's most important economic activity, employing 65% of the economically active population in the department. The main tree species harvested are *Swietenia macrophylla* (mahogany), *Cedrela odorata* (cedar) and *Cedrelinga catenaeformis* (tornillo); together these three species represent almost 60% of the total volume harvested in the department (Ambiental 2003). However, in the last several years, severe forest degradation—due principally to illegal logging, estimated at 95% of total harvests (Mateluna 2003)—has become a major problem affecting the forested ecosystems of Madre de Dios. This article summarizes the general internal and external factors influencing performance and prospects for success in forest management of small forest enterprises located in this department, based on structured and semi-structured interviews with representatives of environmental non-governmental organizations, government and grassroots organizations, and concessionaires.

## Forests for sale

**Table 1:** Concessions granted in Madre de Dios

| YEAR | NUMBER OF CONCESSIONS | TOTAL AREA *(ha)* | AVERAGE AREA *(ha)* |
|---|---|---|---|
| **2002** | 56 | 1 107 360 | 19 775 |
| **2003** | 30 | 184 664 | 6155 |
| **TOTAL** | 86 | 1 292 024 | 15 025 |

## Factors influencing forest management sustainability

In 2002, Madre de Dios became the first department in Peru to implement a concession system. At the time there was much support both for and against a new forest regime, from a diverse range of interested parties. *Table 1* shows the amount of forest granted in the department in the two public bidding processes carried out in Madre de Dios through 2006.

Although the concession process has received support from environmental NGOs and some grassroots organizations,

there have been problems with its implementation, including many social problems. Specific constraints faced by small concessionaire enterprises have been identified as follows:

- Lack of awareness of and information on the concept of sustainable forest management and its implications on the part of most new concessionaires.
- Low levels of human and social capital. Most forest concessionaires have a limited level of education and many have little or no previous logging experience. Most also have no experience in business management and/or other planning and marketing skills.
- Limited finances. Timber harvesting is considered a risky business, so formal lines of credit through banks or financial institutions for this activity do not exist.
- High harvesting fee offers, mainly from petitioners in the first round of public bidding. This has resulted in repayment problems and has led to seizure of harvested timber.
- Deficient geographic/survey information; some harvesting units overlap rights already held by third parties (miners, farmers, and indigenous communities).
- Third party invasions. Some concessions have been, and are currently being, invaded by illegal loggers in the areas where concessionaires have not begun working.
- Slow and centralized administrative functions by the National Institute of Natural Resources (INRENA), which is the public agency responsible for administration and supervision of forest concessions.
- INRENA's inefficiency in controlling and monitoring concessionaire activities. This is attributed to constant changes of personnel, lack of manpower and financial resources, and corruption of some personnel.
- Increase of illegal logging in the last few years, which constitutes unfair competition for concessionaires operating legally. Most illegal loggers harvest only mahogany and cedar which they sell for prices lower than can be offered by legally operating concessionaires.
- Lack of markets for lesser known/used species, contributing to excessive harvesting of the most valuable commercial species (mahogany, cedar, and Spanish oak) and perpetuating illegal logging of these species.
- High transportation costs. The poor condition of road infrastructure makes timber extraction and marketing more expensive.

## Conclusion

Although several problems have been identified in the implementation of Peru's new concession system, this new model of forest conservation has reorganized the administration of Peruvian forests, which for many decades have been subject to near total mismanagement by forest authorities. This new forest model is only beginning to take root in the Peruvian Amazon. Securing the commitment and support of all stakeholders involved in the forest sector is a priority to overcoming the difficulties identified here and making the system contribute to SFM.

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## ITTO fellowships offered

ITTO offers fellowships through the Freezailah Fellowship Fund to promote human resource development and to strengthen professional expertise in member countries in tropical forestry and related disciplines. The goal is to promote the sustainable management of tropical forests, the efficient use and processing of tropical timber, and better economic information about the international trade in tropical timber.

**Eligible activities include:**

- participation in short-term training courses, training internships, study tours, lecture/demonstration tours and international/regional conferences;
- technical document preparation, publication and dissemination, such as manuals and monographs; and
- post-graduate studies.

**Priority areas:** eligible activities aim to develop human resources and professional expertise in one or more of the following areas:

- improving transparency of the international tropical timber market;
- promoting tropical timber from sustainably managed sources;
- supporting activities to secure tropical timber resources;
- promoting sustainable management of tropical forest resources;
- promoting increased and further processing of tropical timber from sustainable sources; and
- improving industry's efficiency in the processing and utilization of tropical timber from sustainable sources.

*In any of the above, the following are relevant:*

- enhancing public relations, awareness and education;
- sharing information, knowledge and technology; and
- research and development.

**Selection criteria:** Fellowship applications will be assessed against the following selection criteria (in no priority order):

- consistency of the proposed activity with the Program's objective and priority areas;
- qualifications of the applicant to undertake the proposed fellowship activity;
- the potential of the skills and knowledge acquired or advanced under the fellowship activity to lead to wider applications and benefits nationally and internationally; and
- reasonableness of costs in relation to the proposed fellowship activity.

The maximum amount for a fellowship grant is US$10 000. Only nationals of ITTO member countries are eligible to apply. The next deadline for applications is **5 September 2007** for activities that will begin no sooner than 1 January 2008. Applications will be appraised in November 2007.

*Further details and application forms (in English, French or Spanish) are available from Dr Chisato Aoki, Fellowship Program, ITTO; Fax 81–45–223 1111; fellowship@itto.or.jp (see page 2 for ITTO's postal address) or go to www.itto.or.jp*

## Central African forest law enforcement

### FAO/OIBT/COMIFAC Sub-Regional Workshop on Forest Law Enforcement in Central Africa

**9–11 January 2007**
Libreville, Gabon

This three-day regional workshop included participants from the forest and fauna administrations, civil society and private sector of the Central African Forest Commission (COMIFAC) member countries (Burundi, Cameroon, Central African Republic, Republic of Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda, Sao Tomé & Principe, and Chad) and from donor organizations. Its objective was to promote a multi-stakeholder dialogue and the exchange of experiences among COMIFAC member countries on best practices for improving law compliance in the forest sector. The expected outputs were: better understanding of the causes and effects of non-compliance with law in the forest sector as far as rural poverty, sustainable forest management and forest ecosystem conservation are concerned; exchange on alternatives that exist in the sub-region to deal with the problem of illegal activities; identification of key strategies and actions to improve forest law enforcement in respective countries; reinforcing existing regional networks and initiatives for improving forest law enforcement.

The workshop emphasized the presentation of countries' experiences and reflections in working groups on three main themes: sector policies and legal framework, structures and institutional mechanisms for civil society participation, and technology and information. The exchange of experiences was enriched by general presentations based on the FAO/ITTO document *Best practices for improving law compliance in the forest sector*.

The main outcomes of the workshop include: stronger ownership of the forest law enforcement process in the Central Africa sub-region; deeper commitment of the public sector, private sector and civil society to collaborate; and greater awareness of the need to go from meetings and workshop recommendations to concrete actions. The participants recommended the following priority actions:

**To countries:**

- create national technical committees for the elaboration and validation of forest regulations and to revise and harmonize existing laws and regulations;
- elaborate and/or update, in a participatory manner, national forest sector policies; and
- reinforce capacities for the control and enforcement of laws.

**To COMIFAC:**

- involve all stakeholders in the process of harmonizing existing forest and fiscal laws;
- reinforce the sub-regional consultation and cooperation framework for the control of illegal transboundary activities; and
- provide support to countries in establishing instruments to reinforce forest control, particularly a binding inter-state Convention.

**To FAO and ITTO:**

- continue supporting countries in their efforts to reinforce capacities for forest policy and law enforcement, particularly in relation to AFLEG/FLEGT processes; and
- support the translation, diffusion and extension of forest laws and regulations.

**To other partners, namely the Congo Basin Forest Partnership:**

- support the AFLEG/FLEGT Taskforce in order to provide better information and effective control of forest law compliance;
- support the translation, diffusion and extension of forest laws and regulations; and
- support the involvement of all stakeholders in the process of forest law enforcement.

Participants identified several follow-up activities, including: establishing a national technical committee for the elaboration and validation of forest regulations in each COMIFAC member country; elaborating a regional road map for the AFLEG/FLEGT process; and adopting an inter-state convention for forest control.

*Reported by James Gasana, ITTO Consultant*

## Setting the agenda for UNFF

### International Expert Meeting on the Multi-year Program of Work of the United Nations Forum on Forests: Charting the Way Forward to 2015

**13–16 February 2007**
Bali, Indonesia

Two items are expected to dominate the agenda of the United Nations Forum on Forests (UNFF) at its upcoming Seventh Session (UNFF 7) from 16 to 27 April 2007, namely consideration of its second multi-year program of work (MYPOW) for 2007–2015 and a non-legally binding instrument (NLBI) on all types of forests. To facilitate UNFF's consideration of the MYPOW, an expert meeting was convened as a country-led initiative (CLI) in support of the UNFF, co-hosted by the governments of Indonesia and Germany and supported also by eight other developed countries as well as the World Bank and the Center for International Forestry Research (CIFOR).

### Convening the Bali International Expert Meeting

Attended by some 150 participants from 66 countries, 10 international organizations, three regional groups and eleven 'major group' organizations, the meeting was co-chaired by Indonesia and Germany. Two papers were presented to guide deliberations: 'Developing a Multi-year Program of Work for the UNFF' by the UNFF Secretariat and 'Revitalizing the UNFF: Critical Issues and Way Forward' by CIFOR. A presentation on SFM financing and means of implementation was made by PROFOR (World Bank Program on Forests) followed by presentations by some major groups.

Further guidance was drawn from the United Nations Economic and Social Council (ECOSOC) resolution 2006/49 on the outcome of the UNFF 6. This calls for the switch from annual to biennial sessions after UNFF 7 on the basis of a focused MYPOW; a review of the effectiveness of the International Arrangement on Forests (IAF) in 2015; and the three additional principal functions to be performed by the IAF relating to (i) internationally agreed development goals, (ii) maintenance and improvement of forests resources and (iii) strengthened interaction with relevant regional and sub-regional forest related entities. The resolution also highlights the need to progress towards the four global objectives on forests to (i) reverse loss of forest cover, (ii) enhance forest-based benefits, (iii) increase significantly areas of protected forests, areas of sustainably managed forests and products from sustainably

managed forests and (iv) reverse decline in official development assistance for SFM and mobilize significantly increased new and additional financial resources for SFM. It calls for UNFF 7 to conclude and adopt a NLBI on all types of forests and notes the UN's proclamation of 2011 as the International Year of Forests (IYF). Lessons learned from the implementation of the UNFF's first MYPOW (2001–2005), work programs of other relevant bodies as well as significant emerging issues were also taken into account.

Three working groups deliberated on the themes for the UNFF biennial sessions, the modalities of the MYPOW and approaches to enhancing regional and sub-regional dimensions in the MYPOW.

## Themes for UNFF Biennial Sessions

In deliberating on the themes for the UNFF sessions in 2009, 2011, 2013 and 2015 (and thus the major elements to be included in the MYPOW), WG 1 noted that while the second MYPOW needed to be focused, it should, nevertheless, cover all key issues on forests so as to ensure the relevance and credibility of the UNFF. WG 1 offered the three options summarized in *Table 1* for the session themes.

WG 1 also expressed a range of views on cross-cutting and other issues that needed to be integrated into the second MYPOW, including means of implementation; monitoring, assessment and reporting (MAR); criteria and indicators for assessment of progress; and enhanced roles for regional processes.

## Modalities for the MYPOW

WG 2 examined the methods and mechanisms of work of the UNFF that would result in the effective performance of its functions as well as the implementation of its mandate. These methods and mechanisms included preparations and arrangements for: UNFF sessions (pre-sessional, sessional and inter-sessional); the IYF; ministerial and high-level segments; roundtable sessions; multi-stakeholder involvement; regional and sub-regional involvement; and MAR. While lessons learned from existing procedures will be useful in further enhancing future UNFF sessions, appropriate new procedures should also be considered particularly in addressing new regional and sub-regional dimensions.

WG 2 recommended: efforts to maximize the contribution of ministers in making breakthroughs and buy-ins during negotiations; options on the frequency, timing and format for high level segments; enhancement of the effectiveness of dialogue with heads of the Collaborative Partnership on Forests (CPF) member organizations and major groups; strengthening the role of CPF in supporting the UNFF; clarification of the role of the UNFF in providing guidance to the CPF; adequate time for sharing of information and experiences on progress made by UNFF members; use of Intergovernmental Preparatory Meetings as a mechanism to facilitate inter-sessional preparatory work for the UNFF; guidelines and procedures for channeling regional and sub-regional inputs to the UNFF; coordination of UNFF inputs to ECOSOC and other UN and non-UN processes; strategic planning for the effective launching of IYF; enhancement of stakeholders' participation and involvement through better communication, networking and funding; adoption of the thematic elements of SFM and the four global forest objectives as the basis of reporting; identification and categorization of reports to reduce the burden of reporting; development of appropriate guidelines, criteria and indicators for the evaluation of the IAF; options for periodic and mid-term reviews of the effectiveness of the IAF; and capacity-building for members requiring assistance in fulfilling their responsibilities to the UNFF.

## Regional and Sub-regional Dimensions

WG 3 stressed the importance of utilizing and strengthening existing forest-related arrangements and mechanisms at the regional and sub-regional levels. It examined how existing mechanisms could cooperate in providing relevant inputs to the UNFF through effective communication, interaction and coordination. It stressed that there was no need for additional mechanisms or meetings in the regions or for new and additional forest related regional meetings to be conducted but recognized the need for flexibility within and among regions and sub-regions. Some of the options identified for regional coordination include utilizing UN regional geographic groupings, FAO regional forestry commissions and UN regional economic commissions.

WG 3 called for adequate time for regional and sub-regional perspectives to be presented at the UNFF biennial sessions. In this connection, voluntary reports from regional and sub-regional mechanisms as well as national reports incorporating relevant regional and sub-regional information could be encouraged and, as required, synthesized by UNFF with the assistance of CPF member organizations.

WG 3 also considered how UNFF issues could be linked to the agenda of the meetings of regional and sub-regional mechanisms and vice-versa without disrupting or over-burdening existing work programs. It recommended that forest-related regional and sub-regional entities should address the issues to be included in the second MYPOW of the UNFF particularly the implementation of the global objectives on forests, taking regional peculiarities into account and focusing on implementation (including means). It was also suggested that flexibility be built into the second MYPOW to enable it to accommodate the NLBI on all types of forests once it is concluded and adopted.

## Conclusion

The UNFF must approve and adopt its second MYPOW at UNFF 7 regardless of whether an NLBI on all types of forests is concluded and adopted. Unfortunately, this meeting did not produce a draft second MYPOW that could be used as a basis for deliberations at UNFF 7. Nevertheless, it did generate a plethora of ideas, views and suggestions as well as a host of options and recommendations on the MYPOW, all of which will be available in the meeting report to be presented at UNFF 7. The remaining task and challenge is for these valuable inputs to be integrated, crystallized and synthesized into building blocks for the formulation of the UNFF's second MYPOW.

*Reported by Amha bin Buang, ITTO Secretariat*

## Lots to talk about

**Table 1:** WG1 Session theme options

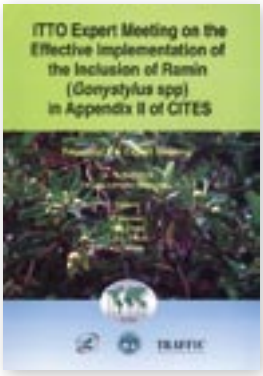
| | OPTION A | OPTION B | OPTION C |
|---|---|---|---|
| **UNFF 8 (2009)** | Forests for Development (Global Objectives 1 and 4) | Delivering Sustainable Forest Management | Means of Implementation for SFM |
| **UNFF 9 (2011)** | Forests for Livelihoods (Global Objectives 2 and 4) | Forests, People and Livelihoods: Delivering Development | Forests for Development and Growth |
| **UNFF 10 (2013)** | Forests for Growth (Global Objectives 3 and 4) | Forests: Delivering Environment Stability | Sustainable Forest Management and Global Environmental Issues |
| **UNFF 11 (2015)** | Review of the Effectiveness of the IAF | Review of the Effectiveness of the IAF | Review of the Effectiveness of the IAF |

# Recent editions

**Edited by Hana Rubin**

***Aminah, H., Chen, H.K., Chua, L.S.L. and Khoo, K.C. (eds) 2007.* ITTO Expert Meeting on the Effective Implementation of the Inclusion of Ramin (*Gonystylus* spp) in Appendix II of CITES. *ISBN 978 983 2181 84 2***

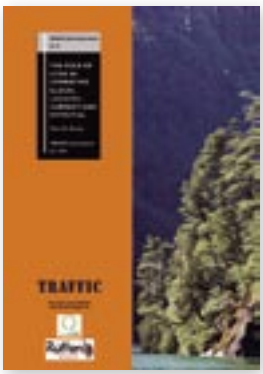
***Available from:*** *ITTO Secretariat (see page 2 for contact details)*




This report presents the proceedings of an ITTO-supported workshop hosted in May 2006 by the Ministry of Natural Resources and Environment and organized jointly by the Forest Research Institute Malaysia, the Forestry Department Peninsular Malaysia and the Malaysian Timber Industry Board in collaboration with TRAFFIC. This volume contains a summary of the workshop, highlighting recommendations made by four working groups on: ecological and management status of ramin; review of market and international trade in ramin; capacity building for meeting the requirements of CITES Appendix II listing of ramin; and coordination and cooperation for the effective implementation of the inclusion of ramin in Appendix II of CITES. See page 3 for an article on the workshop and its outcomes.

***Chen, H.K. 2006.* The Role of CITES in Combating Illegal Logging – Current and Potential. *TRAFFIC International, Cambridge, UK. ISBN 1 85850 221 7***

***Available from:*** *TRAFFIC International, 219a Huntingdon Road, Cambridge CB3 0DL, UK; Tel 44–1223–277427; Fax 44–1223–277237; traffic@trafficint.org; www.traffic.org*




This TRAFFIC Online Series report considers CITES to be the only readily available international mechanism that could be used to impose effective sanctions on illegal logging and/or illegal trade of timber species listed in the CITES appendices. Commissioned by the World Bank, the report reviews the tools available in CITES to determine if they can reduce illegal logging and enhance forest governance by focusing on four species case studies: alerce (*Fitzroya cupressoides*—Appendix I), agarwood (*Aquilaria malaccensis*—Appendix II), bigleaf mahogany (*Swietenia macrophylla*—Appendix II) and ramin (*Gonystylus* spp.—Appendix II). The report also gives an overview on legislation and administrative procedures relating to forests and timber trade and provides various definitions for illegal logging and illegal timber, noting that the lack of generally agreed definitions is a problem. It also identifies a number of recommendations that could be adopted to link CITES with measures to control illegal logging of species listed in its appendices at national level.

***Rietbergen-McCracken, J., Maginnis, S. and Sarre, A. (eds) 2007.* The Forest Landscape Restoration Handbook. *Earthscan, London, UK. ISBN 1 84407 369 6***

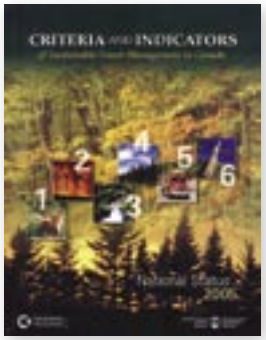
***Available from:*** *Earthscan, 8–12 Camden High Street, London NW1 0JH, UK; earthinfo@earthscan.co.uk; www.earthscan.co.uk*


This report was originally published as ITTO Technical Series 23, *Restoring Forest Landscapes: An introduction to the art and science of forest landscape restoration*. This updated book published by Earthscan includes an additional chapter, presenting the latest thinking on the concept of forest landscape restoration. Authored and edited by a team of international forestry experts (including former *TFU* editor Alastair Sarre), the Handbook is the first comprehensive, practical treatment of Forest Landscape Restoration (FLR). FLR provides a complementary framework to sustainable forest management and the ecosystem approach in landscapes where forest loss and degradation have caused a decline in the quality of ecosystem services. The main aim of FLR is not to re-establish pristine forest, even if this were possible; rather, the objective is to strengthen the resilience of landscapes and thereby keep future management options open. It also aims to support communities as they strive to increase and sustain the benefits they derive from the management of land. The result is an indispensable, easy-to-read handbook for practitioners in all aspects of forestry and natural resource management.

***Canadian Council of Forest Ministers 2006.* Criteria and Indicators of Sustainable Forest Management in Canada: National Status 2005. *Canadian Council of Forest Ministers, Ottawa, Canada. ISBN 0 662 42817 X***

***Available from:*** *Natural Resources Canada – Canadian Forest Service, 580 Booth Street, Ottawa, Canada, K1A 0E4; Tel 1–613–947 7341; Fax 1–613–947 7396; cfs-scf@nrcan.gc.ca; www.ccfm.org/current/ccitf_e.php*

This is the second report by the Canadian Council of Forest Ministers (CCFM) on Canada's progress towards sustainable forest management using the Montreal Process framework of criteria and indicators (C&I). The first assessment was published in 2001 as *National Status* 2000; this latest report highlights changes and assesses progress since the first study




was completed. While this volume is geared towards policymakers and decision-makers in Canada, the report is a valuable reference for anyone interested in forest related reporting and particularly for countries with less developed forest monitoring and reporting capacities.

***Kunwar, R. 2006.*** **Non-timber Forest Products of Nepal: A Sustainable Management Approach.** ***Center for Biological Conservation. Nepal. ISBN 99946 992 0 2***

***Available from:*** *Ripu M. Kunwar, GPO Box 19225, Kathmandu, Nepal; Tel 977–9841–275021; ripu@gmail.com*

This volume, which was published with the assistance of an ITTO fellowship, presents information for Nepalese non-timber forest products important in local and global medicine markets. Recognizing the role of medicinal and aromatic plants in biodiversity conservation as well as their growing economic impact worldwide, this volume gives detailed information for 25 species, including distribution and habitat, flowering and fruiting, inventory, use, chemical constituents, and marketing.

***CFET/ITTO 2006.*** **RIL Implementation in Indonesia with Reference to Asia-Pacific Region: Review and Experiences.** ***Proceedings of an ITTO-MoF Regional Workshop. Center for Forestry Education and Training, Bogor, Indonesia. ISBN 979 25 8370 X***

***Available from:*** *ITTO Secretariat (see page 2 for contact details)*

This report presents the proceedings of an ITTO-Ministry of Forestry (MoF) workshop on reduced impact logging (RIL) held in Bogor, Indonesia, in February 2006. It contains several papers on RIL training, planning, and implementation experiences in Indonesia and other countries in the Asia-Pacific region, including Myanmar, Vietnam, PNG and Malaysia.

***MCPFE 2007.*** **Report of the Inter-Criteria and Indicators (C&I) Process Collaboration Workshop.** ***Ministerial Conference on the Protection of Forests in Europe, Warsaw, Poland. ISBN 10 83 922396 6 0***

***Available from:*** *ITTO Secretariat (see page 2 for contact details)*

This report presents the results of the Inter-Criteria and Indicator (C&I) Process Collaboration Workshop, a collaborative effort by ITTO, the Montreal Process, the Ministerial Conference for the Protection of Forests in Europe (MCPFE), FAO, the UN Economic Commission for Europe (UNECE) and the US Forest Service hosted in Poland in 2006 by the MCPFE Secretariat. This volume (printed by the Montreal Process Liaison Office in Japan) includes three papers presented during the workshop as well as a summary report of the observations and recommendations made by workshop participants to promote collaboration between C&I processes on definitions used and implementation of C&I as a tool for monitoring, reporting and assessing sustainable forest management.

***ISME and ITTO 2006.*** **Improving and Expanding Global Mangrove Database and Information System (GLOMIS) and its Networking.** ***International Society for Mangrove Ecosystems, Okinawa, Japan. ISBN 4 906584 12 8***

***Available from:*** *ITTO Secretariat (see page 2 for contact details)*


GLOMIS is a searchable database containing information pertaining to mangroves, including scientific literature, institutions and scientists, and regional projects and programs. The GLOMIS project commenced in 1997 and was implemented by the International Society for Mangrove Ecosystems (ISME) with the support of ITTO. It recently completed its third and final phase. This publication gives an overview of GLOMIS development and historical background through an archive of the project's news and electronic journals. It also provides background information on the GLOMIS project and gives information on accessing the GLOMIS database, which is accessible on the web at www.glomis.com and is also available on an accompanying CD-ROM.

# Topical and tropical

Edited by Hana Rubin

## Humanitarian timber project

Phase 1 of a two-phase project funded by OCHA (UN Office for the Coordination of Humanitarian Affairs) to develop field guidelines for humanitarian workers on the procurement, logistics and use of timber in emergencies is complete. Download the first draft of *Timber: a guide to the planning, use, procurement and logistics of timber as a construction material in emergencies (draft)* in either A5 or A4 format from www.humanitariantimber.org. The details of Phase 2 of this project are yet to be finalized, but it will include a formal review of the draft guidelines later in 2007. Until this process is clarified, comments on the current draft should be sent to contact@humanitariantimber.org. To order a hard copy of the Phase 1 report please send your postal address and the number of copies required with 'Timber guideline – hard copy request' in the subject line to lsu@un.org

## Sustainable forest management indicator database

The Sustainable Forest Management (SFM) Indicator Database (http://www.sfmindicators.org) is a new website that sets out to: 1) facilitate communication between people who work with indicators in SFM (and in other sustainability initiatives); 2) create a useful tool for indicator research and indicator selection processes; and 3) create an international forum for sustainable forest management indicators. The site features a database of indicators, including for each indicator a rationale, a basic description, methods, who it is used by, examples of reporting and other information. The database can also be edited by anyone who registers. In addition to the database, the site offers a forum where discussions can take place and a blog space where users can create their own blogs. User entries from individual blogs are then automatically compiled into a single summary blog page for easy reference.

## Carbon Credit Support Program

The Global Forestry Services Carbon Credit Program (GFS CCSP) aims to ease and enable access to carbon related forestry projects. It was developed in response to the large volume of requests received from the global business community to aid in the development of carbon forestry projects to mitigate the effects of global warming and obtain 'carbon neutral' status. The objectives of the CCSP are to: 1) provide a structure for the design, development and implementation of carbon forestry projects to generate carbon offsets and tradable credits; 2) facilitate comprehensive 'project due diligence' to ensure project viability; 3) facilitate project development between partner organizations and clients; 4) support value-added services of existing forest management through risk analysis and strategies involving carbon offsets; and 5) support carbon forestry projects and forest management through international standards of certification. For more information on the Carbon Credit Programme, go to http://www.gfsinc.biz

## E-Newsletter 'Echo from the Rainforest'

Sarawak Forestry Corporation launched *Echo from the Rainforest* (ER), a monthly e-newsletter for timber-related communities, in early 2007. ER aims to be a platform for all timber-related stakeholders to speak out and share information, keep abreast on latest developments and inform each other on the latest news in the timber industry. The newsletter is available free of charge and is sent via email on a monthly basis. For more information, contact Sally Sheriza Ahmad, Executive, Public Affairs, Sarawak Forestry Corporation Sdn Bhd; sally@sarawakforestry.com; www.sarawakforestry.com

## Billion tree campaign

Within two and a half months after the launch of its Billion Tree Campaign in 2006, the United Nations Environment Programme (UNEP) reported over 165 million tree planting pledges. As of March 2007, more than 655 million pledges had been made, with a reported 3.5 million seedlings already planted. Under this campaign, people, communities, organizations, business and industry, civil society and governments are being encouraged to plant trees and enter tree planting pledges on the campaign website (www.unep.org/billiontreecampaign/). The objective is to plant at least one billion trees worldwide during 2007. According to the campaign website, the idea for the *Billion Tree Campaign* was inspired by Professor Wangari Maathai, Nobel Peace Prize laureate for 2004 and founder of Kenya's Green Belt Movement, which has planted more than 30 million trees in twelve African countries since 1977. When a corporate group in the United States told Professor Maathai it was planning to plant a million trees, her response was: "That's great, but what we really need is to plant a billion trees."

## New Leaf for Bangor Forestry

On 1 August 2006, the School of Agricultural and Forest Sciences (SAFS) at the University of Wales, Bangor, re-launched itself as the School of the Environment and Natural Resources (SENR). SENR, together with the University's School of Biological Sciences (SBS), the School of Ocean Sciences (SOS), and research-led units including the Biocomposites Centre and CAZS Natural Resources comprise the University's newly-formed College of Natural Sciences.

As well as running undergraduate degrees in *Forestry* and *Conservation and Forest Ecosystems*, SENR has been actively building on the strengths of its existing full-time postgraduate programs with the launch of three new forestry-related MSc courses in 2006 and further planned innovations from 2007.

Master's courses in Environmental Forestry and Agroforestry are now complemented by the Erasmus Mundus MSc in Sustainable Tropical Forestry (SUTROFOR) which is run in conjunction with partner European Universities (see www.sutrofor.net and TFU 16(4)). There are also increased postgraduate distance-learning opportunities (see distance.bangor.ac.uk). In addition to the distance learning MSc in Forest Industries Technology, the University has just launched two further innovative distance-learning courses—MSc in Forestry and MSc in Forestry and Forest Products. In addition, 2007 will be the inaugural year for the new Erasmus Mundus MSc in Sustainable Forest and Nature Management (SUFONAMA – see www.sufonama.net).

# Courses

## 2007 forest and natural resource certification summer program

**Oxford, UK**
**16–20 July 2007**

The ProForest summer training program provides a range of courses dealing with current issues for those involved in forest management, certification and sustainable natural resource management.

The courses are based on up-to-date practical experience and are designed to bring together key players in a range of fields to provide a unique training opportunity. Participants can select the combination of courses that suits their needs and attend them in one integrated event. The courses range from one-day introductions to five-day intensive sessions.

Any five-day combination of courses costs £900. The course fees include coffee, lunch, and training materials. All prices are inclusive of VAT.

All courses will be held in central Oxford at the Mansfield College and the adjacent Rothermere American Institute. To book a place, please fill out the booking form on www.proforest.net and return it to the contact below. There are a limited number of places for each course.

***Contact:*** *ProForest, South Suite, Frewin Chambers, Frewin Court, Oxford, OX1 3HZ, UK; Tel +44 1865 243439; Fax +44 1865 244820; info@proforest.net or andry@proforest.net; www.proforest.net*

## International Young Scholar Network for Earth Systems Science – Third Workshop

**Bristol, UK**
**2–5 June 2007**

This small workshop will focus on understanding decision making on land-use issues, in order to move towards modeling these processes in Earth System Models. Interdisciplinary applicants from the natural and social sciences, economics, engineers and scholars from the humanities with research interests in the Earth system are encouraged to apply. The goal of the YSN workshop will be publication of a manuscript reviewing state-of-art decision-making in land-use modeling and its impacts on biogeochemistry and climate from an Earth Systems perspective, and to prioritize future research topics. Participants will be expected to write papers before the workshop, and to assist in finalizing the manuscript after the workshop.

***Contact/application:*** *http://www.aimes.ucar.edu/activities/YSN/2007_UK/YSN_BRISTOL.shtml*

*Courses are in English unless otherwise stated. By featuring these courses ITTO doesn't necessarily endorse them. Potential applicants are advised to obtain further information about the courses of interest and the institutions offering them.*

## International seminar on protected area management

**1–18 August 2007**
**Cost: US$4750**
**Application deadline: 17 May 2007**

## International seminar on forest administration and management

**1–19 October 2007**
**Cost: US$6500**
**Application deadline: 15 April 2007**

Invited participants for these US Forest Service-supported courses are selected to reflect the widest possible geographic distribution and diversity of experience. Program activities will take advantage of the experience of the participants, as well as the unique heritage of the field locations included in each seminar. The programs are designed for English-speaking senior natural resource management professionals who desire to improve their managerial capabilities and administrative skills.

***Contact/application:*** *www.fs.fed.us/global/is*

## Leadership and adaptive management: supporting decentralised forest and nature management in rural development

**2 October–10 November 2007**
**Cost: first module (three weeks) – €2800 (Wageningen, the Netherlands); second module (three weeks) – €3450 (Ghana)**

The course covers state of the art thinking about collaborative action at the local, district and regional level. It offers participants the opportunity to acquaint themselves with methodologies and approaches for facilitation and learning in action, and encourages them to develop strategies for introducing them in the workplace. In particular, the course should enable participants to: build an awareness of their own skills and competencies for leading innovations in multidisciplinary work approaches; practice a broad range of participatory methods and adaptive management tools; understand and assess the implications of up scaling participation to working with diverse stakeholder groups at various levels; design, plan and implement change processes with small teams to support decentralized management practices in natural resources management; assess the impact of their own values and personal learning style and to further develop their competence as team leaders.

***Contact:*** *Wageningen International CD&IC Programme, PO Box 88, 6700 AB Wageningen, Netherlands; Tel 31–317–495 495; Fax 31–317–495 395; training.wi@wur.nl; www.cdic.wur.nl*

# Letter

Sirs

I have been reading your editorial and the contributions by D. Asumadu and PNGEFF with great interest (*TFU* 16/4). I have been confronted with the issue of what is legal and what is not since the winter 1946–47 when I started my career as forest apprentice in Germany and subsequently accumulated a varied experience of the elusive issue in SFM, utilization and products trade through five decades of practical and academic forestry, including even PNG (the unhappy fate of maturing teak plantations and their timber after the PNGFA had to hand them over to the territorial clans).

Reviewing first the Flyvbjerg book *Making Social Science Matter*, 2001, and just now the report of an international, rather controversial, broad and deep reaching debate on Flyvbjerg's social science approach, titled *Making Political Science Matter*, 2006, and reading in the papers the recent statement of the PM of Thailand concerning the causes and possible remedies of the woes of the southern provinces, in a general way confirmed my forestry experience. That is, the issue is so multi-faceted, convoluted and site-specifically contextual that focused probes by specialists and narrow repair strategies guided by standard rules, rigid regulations and fragile consensus do not lead to sustained success …

I also liked your review of Fenton's book and enjoyed the differences in our perspectives. Flejzor's review of Humphrey's book indicates the relevance of reining in the big corporations and making the legal mechanisms more effective and independent. This also comes up in the Flyvbjerg debate.

**Eberhard Bruenig**
**Chair of World Forestry**
University of Hamburg
*Germany*

# Meetings

22–24 April 2007. **3rd International Coral Reef Initiative General Meeting**. Tokyo, Japan. ***Contact:*** *Kohei Hibino; khibino@jwrc.or.jp*

23–25 April 2007. 4th China's City Forest Forum. Chengdu, China. ***Contact:*** *Ms Chen Yujie and Ms. Chen Jie, Chinese Academy of Forestry, Beijing 100091, China. Tel 86–10–62889091/ 62889733; Fax 86–10–62887192/ 62884229; chenyj@forestry.ac.cn* **or** *cjpanda@forestry.ac.cn*

30 April–11 May 2007. **15th Session of the UN Commission on Sustainable Development (CSD-15)**. New York, USA. *Contact: Division for Sustainable Development, Department of Economic and Social Affairs; Tel: 1–212–963–8102; Fax 1–212–963–4260; dsd@un.org; www.un.org/esa/sustdev/csd/ policy.htm*

7–12 May 2007. **42nd Session of the International Tropical Timber Council and Associated Sessions of the Committees**. Port Moresby, Papua New Guinea. ***Contact:*** *Information Officer (Mr Collins Ahadome), ITTO Secretariat; Tel 81–45–223 1110; Fax 81–45–223 1111; itto@itto.or.jp; www.itto.or.jp*

8–10 May 2007. **2007 Forest Leadership Conference**. Vancouver, Canada. ***Contact:*** *Forest Leadership, 353 St Nicolas - Suite 101, Montreal, QC, H2Y 2P1, Canada; Tel 1-514-274 4344; Fax 1-514-277 6663; info@ForestLeadership.com; www.forestleadership.com*

14–19 May 2007. **IUFRO Conference on Forest Landscape Restoration**. Seoul, Republic of Korea. ***Contact:*** *Dr. John A. Stanturf, Chair of Conference or the Hanjin Travel Service, Co.; jstanturf@fs.fed.us* **or** *leesy@hanjinpco.com; www.srs.fs.usda.gov/korea/*

14–18 May 2007. **LIGNA+ HANNOVER 2007: World Fair for the Forestry and Wood Industries**. Hannover, Germany. ***Contact:*** *Deutsche Messe,Messegelände, D-30521 Hannover; Tel 49–511/89–0; Fax 49–511/89–32626; www.ligna.de*

17–19 May 2007. **International Conference on Wood-based Bioenergy**. Hannover, Germany. ***Contact:*** *ITTO Secretariat, Forest Industry Division; Tel 81–45–223 1110; Fax 81–45–223 1111; fi@itto.or.jp; www.itto.or.jp*

3–7 June 2007. **Growing Forest Values. Combined Conference of the Institute of Foresters of Australia and the New Zealand Institute of Forestry**. Coffs Harbour, Australia. ***Contact:*** *Merilyn, All Occasions Management, 41 Anderson St, Thebarton, South Australia 5031, Australia; Tel 61–8–54 2285; Fax 61–8–8354 1456; conference@aomevents.com*

3–8 June 2007. **IUFRO Tree Biotechnology 2007**. Azores, Portugal. ***Contact:*** *Conference Secretariat, Rua Carlos Anjos, 891 cv, 2765–174 Amoreira Estoril, Portugal; Tel 351–21–464 3390; Fax 351–21–464 3399; iufro2007@cpl.pt; www.itqb.unl.pt/iufro2007*

3–15 June 2007. **14th Meeting of the Conference of the Parties to CITES**. The Hague, the Netherlands. ***Contact:*** *CITES Secretariat; Tel 41–22–917 8139; Fax 41–22–797 3417; cites@unep.ch; www.cites.org/eng/news/ calendar.shtml*

19–23 June 2007. **9th International Symposium on Legal Aspects of European Forest Sustainable Development**. Zikatar, Armenia. ***Contact:*** *www.iufro.org/science/ divisions/division-6/60000/61300/*

10–13 June 2007. **10th North American Agroforestry Conference**. Québec City, Québec. ***Contact:*** *Québec 2007 North American Agroforestry Conference, Departement de Phytologie, FSAA, Pavillon Comtois, Université Laval, Sainte-Foy, Québec, G1K 7P4; Fax 1–418–656 7856; www.agrofor2007.ca*

18–20 June 2007. **3rd International Green Energy Conference**. Västerås, Sweden. ***Contact:*** *Professor J. Yan, Chair of IGEC-III; yanjy@ket.kth.se; www.igec.info*

2–6 July 2007. **CBD SBSTTA-12**. Paris, France. ***Contact:*** *CBD Secretariat; Tel: 1–514–288–2220; Fax 1–514–288–6588; secretariat@biodiv.org; www.biodiv.org/meetings/ default.shtml*

9–13 July 2007. **2nd Meeting of the CBD Open-ended Working Group on Review of Implementation of the Convention**. Paris, France. ***Contact:*** *CBD Secretariat; Tel 1–514–288 2220; Fax 1–514–288 6588; secretariat@biodiv.org; www.biodiv.org/meetings/ default.shtml*

16–20 July 2007. **Community Forest Management and Enterprises: Global Issues and Opportunities**. Rio Branco, Acre, Brazil. ***Contact:*** *Augusta Molnar, Director, Community and Markets Program, Rights and Resources Group; Tel 1–202–470 3892 (office), 1–202–341 7319 (mobile); Fax 1–703 276–8524; amolnar@rightsandresources.org*

25–27 July 2007. **Opportunities for Investment in Asia: Utilizing Tropical Forests**. Bangkok, Thailand. ***Contact:*** *ITTO Secretariat, Forest Industry Division; Tel 81–45–223 1110; Fax 81–45–233 1111; fi@itto.or.jp; www.itto.or.jp*

19–23 August 2007. **International Symposium on Forest Soils and Ecosystem Health: Linking Local Management to Global Challenges**. Sunshine Coast, Australia. ***Contact:*** *Centre for Forestry and Horticultural Research, School of Science, Faculty of Science, Griffith University, Kessels Road, Nathan, Brisbane, QLD 4111, Australia; Tel 61–7–3735 6709; Fax 61–7–3735 7656; cfhr@griffith.edu.au; www.griffith.edu.au/centre/ cfhr*

28 August–1 September 2007. **VI Congreso Latinoamericano de Derecho Forestal**. Quito, Ecuador. ***Contact:*** *Ms. Carla Cardenas; ccardenas@ambiente.gov.ec*

3–6 September 2007. **BIOENERGY 2007.** Jyväskylä, Finland. ***Contact:*** *Ms Mia Savolainen; Tel 358–207–639 602; http://seminaarit.ohoi.fi/default.asp?seminarID=6*

3–7 September 2007. **International Conference on Poverty Reduction and Forests: Tenure, Market and Policy Reforms**. Bangkok, Thailand. ***Contact:*** *conference@recoftc.org; http://conference.recoftc.org*

9–12 September 2007. **Parks, Peace and Partnerships Conference**. Alberta, Canada. ***Contact:*** *Tel 403–220–8968; info@peaceparks2007.org; www.peaceparks2007.org*

10–14 September 2007. **5th Meeting of the CBD Ad Hoc Open-ended Working Group on Access and Benefit-Sharing**. Montréal, Canada. ***Contact:*** *CBD Secretariat; Tel 1–514–288–2220; Fax 1–514–288–6588; secretariat@biodiv.org; www.biodiv.org/meetings/ default.shtml*

19–21 September 2007. **International Conference to Promote the Development of Non-timber Forest Products and Services**. Beijing, China. ***Contact:*** *ITTO Secretariat, Forest Industry Division; Tel 81–45–223 1110; Fax 81–45–223 1111; fi@itto.or.jp; www.itto.or.jp*

30 September–3 October 2007. **Global Vision of Forestry in the 21st Century**. Toronto, Canada. ***Contact:*** *Shashi Kant, University of Toronto; Tel 1–416–978 6196; Fax 1–416–978 3834; www.forestry.utoronto.ca/ centennial/int_congress.htm*

23–27 October 2007. **2nd Latin American IUFRO Congress**. La Serena, Chile. ***Contact:*** *Santiago Barros; Tel 56–2–693–0700; Fax 56–2–638–1286; sabarros@vtr.net; seminarios@infor.gob.cl; www.infor.cl*

29 October–2 November 2007. **IUFRO—All Division 5 Conference**. Taipei, Taiwan. ***Contact:*** *Susan Shiau, Local Conference Organizer, 53 Nan Hai Road, Taipei 10066, Taiwan; Tel 886–2–2314–7905; Fax 886–2–2389–0318; susanshiau@tfri.gov.tw; www.alldiv5iufro2007.org.tw/index.htm*

UN Economic and Social Council (ECOSOC). One of these is to "reverse the loss of forest cover worldwide through sustainable forest management …".

This is asking a lot of SFM, which is currently being applied to less than 10% of the tropical production PFE. Expanding it to the entire PFE would be an extraordinary and meritorious achievement. But its deployment to the extent needed to reverse deforestation *outside* the PFE seems very remote indeed.

The ECOSOC resolution recognized that more international assistance is required if the objective of reversing forest loss is to be achieved. Another of the four objectives is to "reverse the decline in official development assistance for sustainable forest management and mobilize significantly increased new and additional financial resources from all sources …".

How would this be done? ECOSOC "urges countries to make concerted efforts to secure sustained high-level political commitment to strengthen the means of implementation …" by, among other things, "reversing the decline in official development assistance for sustainable forest management".

Similar language to this has been used before in international forest-related negotiations. It does not inspire confidence that "significantly increased new and additional financial resources" will be seen anytime soon. Nor is it reassuring that one of the stated ways of achieving an objective is an almost exact repetition of the objective itself.

The ECOSOC resolution suggests the review and assessment of "the possibility of setting up a voluntary global funding mechanism". If the pace at which the international forests debate has proceeded so far is any gauge, such a mechanism is a long way off. And, given that it would be voluntary if it ever came into being, there's no reason to think it would attract any more money than similar funds already in existence.

Alf Leslie (pers. comm.) commented recently that SFM "runs the risk of being little more than pious camouflage for closely studied inaction". He is right. Few people expect much extra official development assistance to flow towards SFM in the near future. The international community's call to reverse the loss of forest cover worldwide through SFM therefore sounds as hollow as a rotten log.

Are there alternative sources of funds? I can think of three.

One is the non-government environmental community, which is already investing significant sums in community-based biodiversity conservation projects. These sums could get bigger in the future—it only takes a billionaire to sign a check or two. But money raised by the environmental community is most likely to be deployed towards improving the management of protected areas. Spent well, it could help improve local conservation outcomes and provide economic opportunities for forest-dependent communities, but it will do little to reduce deforestation or degradation outside the protected area network—where most of the forest and therefore most of the problem lies.

The industrial sector might also start to invest more in sustainable natural forest management. These days, though, most private capital is being shovelled towards forest plantations, which are simpler to manage, more uniform in quality and offer less risk. It is difficult to see this changing.

A third and, in my view, most hopeful alternative is the carbon market. By some estimates, tropical deforestation and degradation accounted for 10–25% of global greenhouse gas emissions in the 1990s. The contribution could even accelerate in the future as fragmentation, fire and climate change itself increase the rate of forest degradation and loss. Offering incentives to tropical forest owners to reduce deforestation and improve forest management could make a substantial impact on greenhouse gas emissions and bring much-needed investment to the natural tropical forest sector.

***Offering incentives to tropical forest owners to reduce deforestation and improve forest management could make a substantial impact on greenhouse gas emissions and bring much-needed investment to the natural tropical forest sector.***

This isn't a new idea; climate-change negotiators have been arguing about it for more than a decade. But perhaps the political tide is turning—or, more accurately, the climate is changing. Even most sceptics seem to accept that human-induced climate change is real; the recent report by the Intergovernmental Panel on Climate Change leaves little space for doubters. In Australia, most people now believe that climate change is responsible for the current water shortage and, like water, the issue has stormed into the political consciousness. Climate-related disasters—such as recent hurricanes in the United States and heat waves in Europe—are affecting people in other rich countries as well. People can see it and feel it. Thus, the likelihood of a substantial response is increasing.

In fact, the world may be on the verge of a collective moment of clarity on climate change. If such a moment arrives, tropical forest policy lobbyists must seize it by strongly arguing the case for SFM in natural forests. If they are successful and money starts to flow, SFM could yet triumph in the tropical PFE.

# Out on a limb

***The* TFU*'s former editor takes aim at financing SFM***

**by**
**Alastair Sarre**

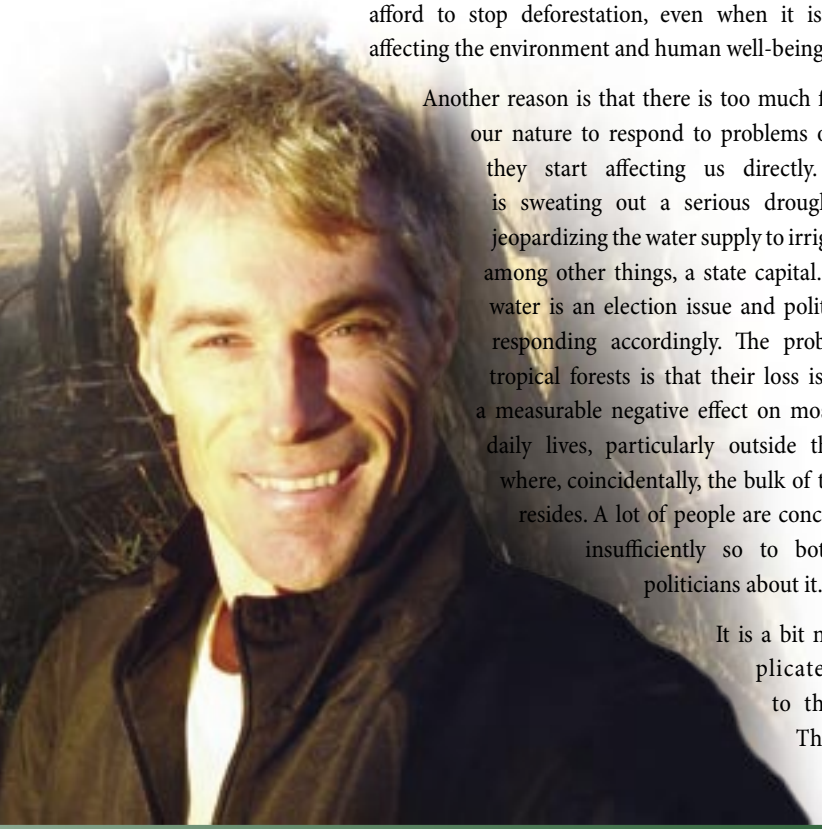
THE AUSTRALIAN GOVERNMENT recently announced a US$7.8 billion, ten-point plan to fix Australia's river systems. Poor management has been degrading these rivers for more than a century; erosion, salinity, the invasion of exotic species, eutrophication and general over-use and abuse have all taken their toll. Nevertheless, most water scientists and managers seem to think that US$7.8 billion, well spent, will go a fair way towards restoring the balance.

What has this to do with tropical forests? Not much, except that it proves that (reasonably) large amounts of money can be spared for the environment, even in a country with a smallish economy, like Australia.

*As a result, SFM is habitually out-competed by other land-uses for which biodiversity conservation is not required, subsidies are more readily available, product lines may be changed more quickly and markets are more transparent.*

Why is it, then, that tropical forests still attract only paltry sums? Many people think that their continued loss and degradation is a disaster (although see Alf Leslie's view in *TFU* 16/3) … so why don't we throw money at the problem and try to fix it?

One reason is that most tropical countries have even smaller economies than Australia and much lower levels of income per capita. Some are investing impressive amounts of money into natural forest management. But most can't afford to stop deforestation, even when it is seriously affecting the environment and human well-being.



Another reason is that there is too much forest. It is our nature to respond to problems only when they start affecting us directly. Australia is sweating out a serious drought that is jeopardizing the water supply to irrigators and, among other things, a state capital. Suddenly, water is an election issue and politicians are responding accordingly. The problem with tropical forests is that their loss isn't having a measurable negative effect on most people's daily lives, particularly outside the tropics where, coincidentally, the bulk of the money resides. A lot of people are concerned, but insufficiently so to bother their politicians about it.

It is a bit more complicated closer to the forests. The citizens of some tropical countries blame deforestation for local disasters such as declining soil fertility, changed weather patterns, landslides and floods, but generally their voices are heard only faintly. Others are not so concerned: deforestation and the agriculture that follows are important—if often wasteful—economic activities and many people want to expand them, not stop them.

In the meantime, international organizations with a mission to worry about tropical forests are encouraging sustainable forest management (SFM) as a way of minimizing the risk of disasters, promoting development and combating deforestation and forest degradation. Apply SFM to the permanent forest estate (PFE), say many advocates, including ITTO, because it can give us the lot: development, conservation, employment and profit.

At the moment, though, it is being applied to very little of the tropical PFE. According to ITTO's recent report on the status of forest management in ITTO producer countries, the area of production forest under SFM increased from less than 1 million hectares in 1988 to about 25 million hectares in 2005. That's a rate of increase of less than 2 million hectares a year. If maintained, less than a quarter of the tropical PFE in ITTO member countries will be under SFM by the end of the century. The spread of SFM needs to speed up—massively.

It won't happen spontaneously because SFM has a major deficiency: its economics. It is more expensive than a smash-and-grab approach and few consumers seem willing to pay extra for it. It requires technical know-how and clever marketing. It is undermined by cheap substitutes. And it needs, but rarely gets, conducive policy settings at a national and international level. As a result, SFM is habitually out-competed by other land-uses for which biodiversity conservation is not required, subsidies are more readily available, product lines may be changed more quickly and markets are more transparent.

The United Nations Forum on Forests, a body formed by the UN in 2000, agrees that SFM must be encouraged. It recently announced four 'Global Objectives on Forests', which were formalized in a resolution of the

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