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ITTO Tropical Forest UPDATE

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Why so glum?

FROGS aren't well known for their sense of humour, but they might need to develop one in coming decades. Perhaps more than any other order of animals, frogs and toads are under threat—from phenomena like climate change and habitat destruction and a mysterious fungus called *Batrachochytrium dendrobatidis*. Several rainforest species have gone missing in recent years and others are becoming rarer: according to the recent Global Amphibian Assessment, 1653 of the 5067 known frog and toad species globally are either threatened or extinct.

This edition of the *TFU* is not about frogs. But these moist and vocal creatures are as good a symbol as any of the challenges facing advocates of natural tropical forests. Forests continue to be cleared, and those that remain are increasingly fragmented and, in many cases, declining in quality.

Should we be concerned? What happens if, say, another 50% of the world's tropical forests are cleared?

It will be a mixed bag. Probably we will lose more frogs, and a host of other plant and animal species; nobody knows how many or to what effect. More carbon will be released into the

ITTO

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Design Justine Underwood
Database Manami Ohshima

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International Tropical Timber Organization
International Organizations Center – 5th Floor
Pacifico-Yokohama, 1–1–1 Minato Mirai, Nishi-ku
Yokohama 220–0012 Japan
t 81–45–223 1110
f 81–45–223 1111
tfu@itto.or.jp
www.itto.or.jp

Cover image *Photo: C. Vega, Conservation International*

... Editorial continued

atmosphere, contributing to possible climate change, although emissions from fossil fuels will spew out much more. The lifestyles of people living in or near destroyed forests will transform dramatically: some will lose important sources of income, sustenance and cultural heritage, but others will see their incomes grow as agriculture and industry replace the forest. Downstream towns and cities might notice a decline in the quality of their water, but they might also undergo increased development on the back of the agro-industrial expansion.

We know that while forests tend to be undervalued at a national level when they are widespread, they are regarded more and more highly as they disappear and as the nations themselves become richer. In many tropical countries we might therefore expect deforestation rates to eventually slow and perhaps even reverse—as they have done in Europe and the United States.

But there is also a risk that deforestation will go so far that the environmental and social problems it causes become intractable. It might sound like a contradiction, but the best outcomes for forests will occur when deforestation is done well. This means that the agriculture that replaces the forest should be well suited to the climate and soils and the economic benefits distributed fairly. Moreover, the forests that remain should be ecologically viable, well-managed and capable of sustaining a large proportion of their original biological diversity.

They should also be economically viable. Since its inception ITTO has been helping countries to receive greater value from their timber exports, but in many forests timber alone won't do it. In this *TFU* Alf Leslie (page 14) predicts the future demand for forest goods and services; by his reckoning, global demand for forest environmental services will be worth US$2.6 trillion in 2040. Even if this number—which no doubt will be controversial—is out by orders of magnitude, the implications are immense; forests will one day be so valuable they will be almost untouchable.

But, as Leslie points out, realising the power of environmental services as an economic driver needs actual money to change hands; while most of us agree we need these services, so far we've not been good at paying for them. Usually if you don't pay for a service you don't get it. So the forests are removed.

At the moment one of the big hopes for payments rests with carbon. As Hwan Ok Ma reports (page 32), the Kyoto Protocol has finally come into effect and developed countries can now use the Clean Development Mechanism to help offset their carbon emissions. One option is to finance afforestation and reforestation (but not natural-forest) projects in the tropics; this might increase the income earned from planted forests, but the extent to which it will do so is still unclear. Even more unclear is how this might help or hinder natural forest management.

ITTO continues to focus its efforts on the permanent part of the forest estate, funding projects to support management in both timber-production and protected forests along with a host of other related activities (page 17). In Malaysia, progress is being made in improving the quality of forest management; efforts towards the certification of forest concessions in Sarawak are reported on page 12. And an ITTO mission to Cambodia, which presents its findings on page 3, concludes that the ban on industrial concessions there, while courageous, should now be lifted, partly because "a small number of well-managed, large concessions will contribute to national sustainable development goals and bring benefits to local people".

'Well-managed' is the key term: if the forests that owners decide to keep are looked after, many of the disasters that could arise from deforestation might be avoided. 'Well-managed' usually also means 'well-funded': increasing the capacity of the forestry and land-use planning sectors should therefore remain the priority of those concerned enough about tropical forests to put money towards them. With good management, maybe the frogs won't need to be so glum, and fewer than expected will croak.

Alastair Sarre

Cambodia's challenges

An ITTO mission to Cambodia recommends the cautious resumption of timber-harvesting

by Jeff Sayer[1], Efransjah[2], Sheikh Ibrahim[3], Misao Ishijima[4] and Xuhe Chen[5]

[1]Worldwide Fund for Nature International
Gland, Switzerland

[2]United Nations Development Program
Kuala Lumpur, Malaysia

[3]Gaya Tunas Sdn Bhd
Kuala Lumpur, Malaysia

[4]Japan Forest Engineering Consultants Foundation
Tokyo, Japan

[5]Distinguished Fellow of the International Network for Bamboo and Rattan (INBAR)
Beijing, China

Orientation: Mission members study a forest map during an inspection of a social forestry project near Siam Riep.

IN FEBRUARY 2003 the Forestry Administration (FA) of the Royal Government of Cambodia requested ITTO to undertake a diagnostic mission to analyse the obstacles to achieving sustainable forest management (SFM) in Cambodia.

The objectives of the mission were to: identify those factors that most severely limit progress towards achieving ITTO Objective 2000 and SFM; classify these constraints in order of importance; and recommend a series of measures aimed at lifting these constraints. A five-member mission (comprising the authors of this article) duly visited Cambodia on 16–30 October 2004 to consult a broad range of stakeholders and make field visits to concession areas, areas of forest encroachment, community forest projects, a national park and forest research sites. The mission's work was assisted by the report of an independent forest-sector review (IFSR), which was commissioned by the Government of Cambodia supported by a consortium of six development-assistance agencies and published shortly before the mission took place.

Cambodia's resources

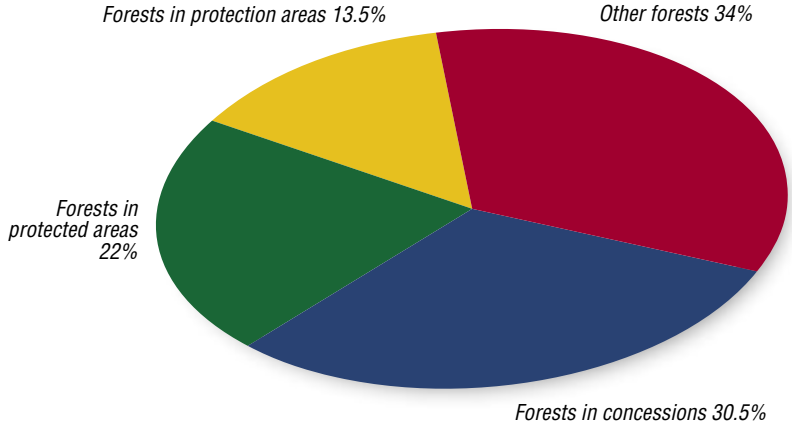
The official FA figure for forest cover, derived from an assessment in 1997, is 59% of the country's land area, down from 73% in 1969. A considerable area of forest is now degraded as a result of agricultural encroachment, fire and poor logging practices, but extensive forests rich in timber and biodiversity still exist. *Figure 1* shows the official allocation of forest-use in Cambodia, while the map *(Figure 2)* shows forest cover by broad forest type.

Suspension of logging

The government suspended all logging in concessions on 1 January 2002. The licences of 17 companies covering 3.50 million hectares in 24 concessions were cancelled and a further twelve concessions covering 3.37 million hectares were required to produce new 'strategic forest management plans' as a basis for renegotiating their concession agreements. These plans were still under review and all industrial forestry was thus suspended at the time of the mission (and remained so as of March 2005). In addition

Allocation

Figure 1: Forest uses in Cambodia, 2004



the FA closed, and sometimes destroyed, 1351 illegal sawmills and 653 small wood-processing plants.

Some timber is still legally available from government-approved land conversion activities. However, some sources claimed that the granting of land-conversion permits, for rubber estates, for example, has not followed legal procedures and has sometimes been motivated by the access it gives to the timber resources on the land to be cleared. The mission was informed that timber is still available in the major towns and prices are reported to have remained stable. It is apparent, then, that the effect of the logging ban has been to stimulate a significant illegal timber industry.

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Key challenges and obstacles

The principle behind the ITTO diagnostic missions is that there will be a small number of major obstacles to the attainment of SFM. However, our work in Cambodia leads us to conclude that the country is suffering from a large number of inter-linked problems that need to be dealt with in a coordinated manner. Some of these problems can also be viewed as opportunities. We have developed a problem tree *(Table 1)* to show the nature of some of the linkages.

Unstable policies: the Forestry Law and the Forest Policy Statement adopted in 2002 should have paved the way for the development of a national forest program (NFP). However, the logging ban, the uncertainty about industrial concessions and the decision to undertake the IFRS have drawn attention away from the NFP. A draft forestry action plan has been prepared in outline form and contains the elements needed for an NFP; moreover, it appears to offer a basis for a more coherent approach to forest development and could provide a structure for much-needed donor coordination.

Contribution to national development goals: until the imposition of the logging ban, forests contributed around 4% of Cambodia's gross domestic product (GDP). Analyses in other countries show that the subsistence and other non-market values of forests often exceed those recorded in official statistics and we conclude that the true contribution of Cambodia's forests to GDP may have been closer to 10%. However, there has been a major problem of equity in the distribution of costs and benefits from forests. The major challenges are to encourage an increased flow of benefits to poor people and to ensure that legitimate rents are not lost to corruption.

Securing local livelihood benefits: poor people gain benefits from fuelwood, charcoal and a wide variety of non-timber forest products (NTFPs), and there is a long tradition of community forest management in the country and a great deal of receptivity to initiatives to strengthen community forestry. The major challenge is to empower local communities to manage forests for their own benefit.

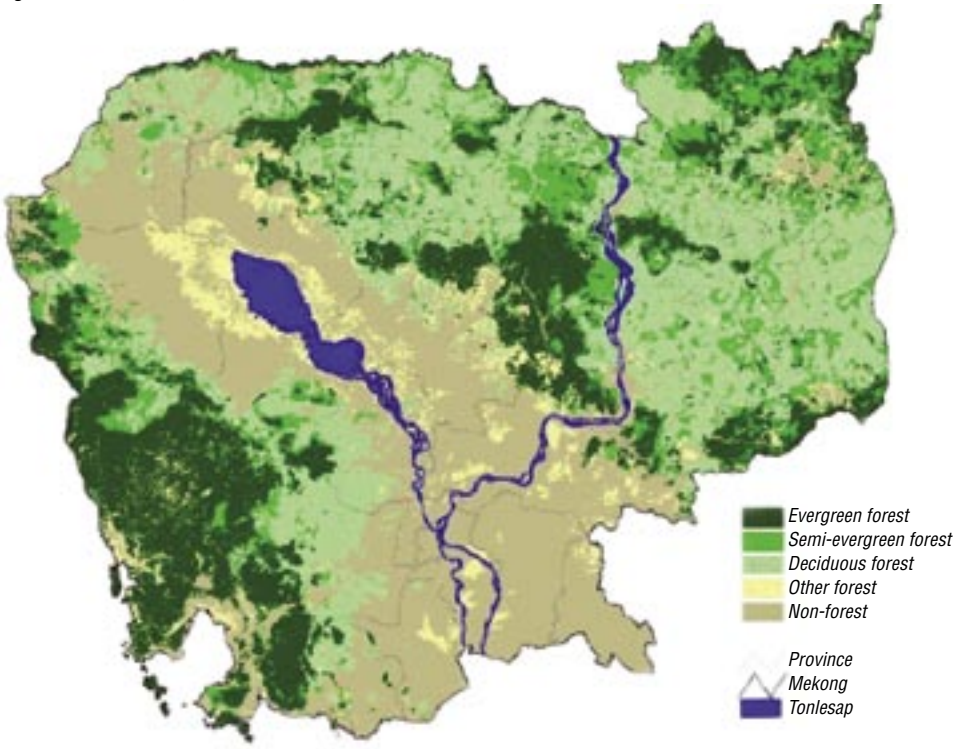
The degradation of the forest resource by unsustainable logging: anarchic logging has reduced the potential of forests to sustain timber yields, the availability of NTFPs and (possibly) biodiversity values and may also have increased stream siltation and the risk of forest fire. The challenges are to enforce environmental measures to reduce logging damage and to ensure that logging operators respect the rights of local people.

Expand agriculture and estate crops in a planned and rational manner: at present, land clearance for agriculture is either opportunistic or motivated by the chance to circumvent the logging ban. The challenge is to establish and delineate a permanent forest estate (PFE), identify those forest areas that may be made available for conversion to estate crops and agriculture, and ensure transparency in the selection of land for estate-crop development.

Meeting biodiversity conservation objectives: Cambodia has a very extensive system of protected areas, but opinion is divided on the intrinsic value of some of these areas and their protection status. The challenge is to establish and manage an effective system of biodiversity reserves within the PFE.

Good cover

Figure 2: Forest cover, Cambodia



Source: Adapted from Joint Royal Government of Cambodia and Donor Committee (2004)

Comfort zone: 26% of Cambodia's land area is under some form of protection. Mission members discuss management problems in the Phnom Kulin National Park near Siam Riep.

The roles of institutions: at present, most forest management activities are centralised in the mandate of the FA, while the Ministry of Environment (MoE) has a mandate for most protected areas. Local governments—the commune councils—have no role in forest conservation and management and the roles of communities are still ill-defined. The technical skills and stakeholder networks required for managing production forests and those needed for protected areas differ and capacity needs to be strengthened in both. The challenge is to clarify the mandates of the FA and MoE in forest management and to ensure that all forest-related activities are properly coordinated.

Land allocation: the mission did not have the opportunity to examine land issues in detail. However, land titling will be a key issue in the longer-term establishment of decentralised forest management and in the delineation of a PFE. The challenge is to establish a land-tenure regime that offers households, communities and the private sector secure rights to forested lands while ensuring that the environmental values of these lands are protected by the state.

Suggested actions

The IFSR identified a number of actions that are required to improve the performance of the forest sector in Cambodia. The mission has taken these into account and has also identified further priority actions. The mission believes that a single solution designed from outside is unlikely to work. The highest immediate priority is to provide the FA with the resources that it needs to become an effective professional institution.

The enabling environment for SFM

The policy and legal framework for SFM has been the subject of intense debate in recent years; a new forest policy and law were adopted in 2002 and a number of sub-decrees have also been put in place. However, there is still a high level of uncertainty about how the present framework will be implemented.

The mission suggests that the following general principles be adopted:

- the existing draft forestry action plan should be further developed into an NFP and efforts should be made to link all donor support to the implementation of this program;
- the FA should not seek to apply a single uniform approach across the whole country. A diversity of conditions exists that will require differing approaches;
- the FA must build its own capacity to implement different management models and this will require experimentation and learning; and
- measures are needed to strengthen the forest-management capacities of the private sector and civil society.

The mission recommends that a variety of approaches be taken, including: the licensing of a limited number of carefully monitored industrial-scale concessions linked to efficient processing capacities and providing high local value-added

The mission recommends that a variety of approaches be taken, including:

- the licensing of a limited number of carefully monitored industrial-scale concessions linked to efficient processing capacities and providing high local value-added;
- cautious experimentation with a competitive bidding system for annual coupes linked to approved management plans in forest-rich areas outside the industrial concessions;
- preliminary attempts to develop partnership approaches with commune councils in forest-rich areas;
- a significant expansion of community-based approaches in a diversity of situations; and
- the careful development of different types of private plantation forestry at both a small scale for fuelwood and poles and at a larger scale for industrial timber and pulp plantations.

Rows of woes

Table 1: Problem analysis

IMPACTS	Lack of trust amongst stakeholders	Forest resources being depleted	Low revenues to government	Low benefits to communities	Inequitable rent capture	Poor industrial performance	Economic potential not realised	
CORE ISSUE	Low contribution from forest resources to sustainable development							
MAIN CONSTRAINTS	Unstable forest policies and institutional arrangements	Inadequate capacity of forestry sector	Poor knowledge of forest resources	Lack of incentive for decentralised management	Non-conducive land-use allocation	Concessions not operational	Partnership forestry untested	Plantation potential not realised
UNDERLYING CAUSES	Excessive regulations and poor enforcement	Lack of financial resources for FA	Low recognition of economic value of NTFPs	Weak local institutional capacity	Land allocation and tenures not clear or supported by law	Lack of confidence in concessionaires' commitment	Commune councils lack experience	Lack of private investment
	Lack of cooperation among agencies and other stakeholders	Little opportunity for experimenting and learning	Poor information on standing stock and growth	Supporting regulations not in place	Uncontrolled land-grabbing	Weak incentives for SFM	FA structure not suitable	Land conflicts
	Conflicting policies and technical advice from donors	Training level and skill mix require improvement	Biodiversity areas not properly identified	Excessive central control	Encroachment on forest lands	Conflicts with communities	Commune is too small for landscape planning	No local experiences
	Administrative responsibilities unclear and contested	Capacity of private sector weak and civil society not organised effectively	Inadequate knowledge of biodiversity—few biological surveys	Local forest owners' rights not protected	Insecure tenure for local forest managers	No experience with concession management		Lack of markets for plantation products
		Unsustainable logging				Low efficiency and little local value added		Low public awareness of planted forestry

The issue of industrial concessions

The concession schemes were subject to serious abuse in the anarchic years of the 1990s and even today most concession companies have failed to satisfy minimum requirements for the establishment of management plans. We applaud the courageous decisions of the government to suspend or cancel the operations of most concessions and ban the transport of logs. We are also aware that there are doubts about the real commitment of even those concessions that have developed management plans. Notwithstanding this we conclude that a small number of concessions should be allowed to proceed to the next stage of their management planning. The reasons for reaching this conclusion are as follows:

… forests are a major economic resource in Cambodia. A small number of well-managed large concessions will contribute to national sustainable development goals and bring benefits to local people

- given the present supervisory capacity of the FA, the control of a small number of large concessions will present fewer problems than the supervision of very large numbers of small logging operations;
- forests are a major economic resource in Cambodia. A small number of well-managed large concessions will contribute to national sustainable development goals and bring benefits to local people;
- the supervision of concessions will be easier than any of the alternative schemes for managing large areas of sparsely populated forested lands. In particular we doubt if it will be feasible to develop decentralised forest management in the short term and we see practical difficulties in the administration of annual timber sales or auctions from public forest lands;
- community forest management will not be possible at the scale required to deal with extensive forest-rich landscapes—although it should be developed in appropriate locations within these landscapes; and
- independent monitoring capacity exists in the country and could be extended to provide supervision for a small number of industrial-scale concessions. We appreciate that this will involve costs and urge international donors to contribute to this.

The extent of government control of forestry

Experience in many other countries has shown that excessive regulation is one of the factors that leads to corruption; this applies at all levels, from industrial concessions to community forestry. We are concerned that many of the proposals that have emerged from internationally supported studies of the

Cambodian forest sector advocate intensities of regulation that are unrealistic given the weakness of government institutions. World-Bank-sponsored studies of concession management have produced 15 sets of guidelines that, if implemented, would give Cambodia a very sophisticated, technically difficult and costly concession management system. This is unrealistic; moreover, the mission considers that only a subset of these guidelines addresses issues that are really important in Cambodia at present.

The mission is also concerned that the present models for community forest management developed by the FA are unnecessarily restrictive and are based on a highly centralised system of control. A simpler system could provide more opportunity for local adaptation and learning and higher economic returns to local people. NGOs can be valuable intermediaries in developing community-forestry activities. The mission urges policymakers to recognise that complex regulation will not eliminate—and, on the contrary, may encourage—corruption. Policymakers should also be aware that to some extent all forestry programs in Cambodia will be experimental and that it will be important to monitor them closely, learn from them and retain flexibility and adaptability.

The mission therefore recommends:

- avoiding the use of overly prescriptive and complicated policy and legal measures; and
- the expansion of the capacity to independently monitor forestry activities at all scales. International and Cambodian groups should be empowered to conduct such monitoring as the main means of combating illegal forest activities.

Building capacity

Many studies have recommended the strengthening of capacity to achieve SFM in Cambodia, and much has already been achieved through formal training, short courses, study tours, seminars, etc. We commend these initiatives and encourage their continuation: Cambodia now has a reasonable cadre of people with conceptual-level training in different aspects of forest management. However, capacity cannot be built in a vacuum: real capacity-building requires that forestry staff gain practical work experience in field conditions.

The mission notes that even if the FA had staff with high levels of technical skills it would not have the capacity to manage forests sustainably unless it also had the resources to operate efficiently. This means the provision of housing for forest officers near where they work, transportation for them and, above all, adequate salaries. It would be better that the FA had fewer but better-paid and more highly-motivated officers than a large number of officers who were under-paid and poorly motivated. The mission therefore recommends:

- a greater capacity-building focus on supporting practical efforts to bring forests under sustainable management in a diversity of situations;
- the building of this practical capacity not only in the FA but also in civil-society organisations, communities, communes and the private sector;
- the independent monitoring of all forestry activities as a way of enhancing the capacity-building role of pilot projects;
- conditions of service for FA officers sufficient to motivate them. This means that salaries should be raised to a level where officers are less likely to seek to supplement their incomes from informal sources; and
- changes towards service-oriented professionalism amongst FA staff. Training in technical skills remains important but should also be provided in the social and organisational sciences.

The mission urges policymakers to recognise that complex regulation will not eliminate—and, on the contrary, may encourage—corruption.

Reference

Joint Royal Government of Cambodia and Donor Committee 2004. *Independent forest sector review: the forest sector in Cambodia*. Part I: Policy choices, issues and options. Part 2: Issues chapters. CD ROM. DANIDA Mission, Phnom Penh, Cambodia.

The ITTO mission also made a range of recommendations relating to research, monitoring and technical serivces, prioritising the decentralisation of forest management, developing an economically viable plantation resource, and options for ITTO support in Cambodia. A copy of the full report can be obtained at http://www.itto.or.jp/live/PageDisplayHandler?pageId=205, or contact the ITTO Information Officer at the address given on page 2.

Why don't trade numbers add up?

Discrepancies in tropical timber trade data highlight the continuing need to strengthen capacity for data collection and analysis

by Alberto Goetzl

Seneca Creek Associates, LLC
17203 Lightfoot Lane
Poolesville, MD 20837, USA

Mis-directed? Tropical timber trade data often show discrepancies between what is reported as exported by a supplying country and that reported as imported by the receiving country. *Photo: A. Sarre*

TRADE statistics published by ITTO and other international organisations often show discrepancies between what is reported as exported by a supplying country and what is reported as imported by the receiving country. The discrepancies appear particularly large in the case of tropical timber products and are apparent in the 'direction of trade' data presented in the ITTO *Annual review and assessment of the world timber situation*.

At its 31st session in November 2001, the International Tropical Timber Council authorised the preparation of case-studies assessing export and import data on tropical timber and timber products in the context of international trade, with a view to improving the accuracy of ITTO's economic and market intelligence.

By September 2004, case-studies for ten countries—Bolivia, Brazil, China, Indonesia, Japan, Malaysia, Papua New Guinea (PNG), Republic of Congo, the UK and the USA—had been completed. These ten countries represent tropical wood exports of US$5.6 billion, or approximately 64% of the ITTO-reported total in 2002, and imports of US$4.8 billion, or 51% of the ITTO-reported total in 2002.

This article summarises the major findings and recommendations of the ten country case-studies. To assist in the summary, the compilers of the case-studies were also requested to complete a short on-line survey, which canvassed their views on a range of issues; responses were received from eight of the ten case-study consultants.

... at least three of the case-study consultants cited the lack of consistent preparation and filing of the JQ as contributing to ITTO data discrepancies.

Sources of trade data used by ITTO

Compiling statistics on global production, trade and consumption of forest products each year is a formidable task. ITTO currently obtains and reports data on imports and exports of wood products from several sources, including: 1) annual responses to the Joint Forest Sector Questionnaire (JQ) administered jointly by the Food and Agriculture Organization of the United Nations (FAO), ITTO, Eurostat and the UN-ECE (United Nations-Economic Commission for Europe) Timber Committee; 2) the COMTRADE database maintained by the United Nations; 3) FAOSTAT and UN-ECE databases; 4) the Global Trade Information Service (GTIS); and 5) other official and unofficial sources. The primary sources of raw trade data are the official customs statistics of individual countries as organised through the Harmonized Tariff Classification System (HS). By international agreement, countries use the same definitions of products down to the HS six-digit level of classification. Beyond this level, more detailed product classifications often vary by country.

Major factors contributing to trade data discrepancies

Compilation of trade statistics

The JQ is a collaboration of country correspondents, each of whom provides a variety of data related to the production, consumption and trade of wood products. The reliability and consistency of the JQ-supplied data vary by country and from year to year; at least three of the case-study consultants cited the lack of consistent preparation and filing of the JQ as contributing to ITTO data discrepancies. In completing the JQ, some countries define tropical sawnwood and plywood using a relatively detailed list of six-, eight- and ten-digit HS codes that exclude all coniferous and temperate hardwood species. Other countries (and ITTO generally) work with more inclusive data at just the six-digit level. Thus, variability in the JQ responses is a source of data discrepancies.

Other aspects of the global data compilation process potentially cause errors or lead to discrepancies. It is impossible to use a single source for tropical timber trade statistics, so analysts rely on various estimating methods. Due to a lack of responses to the JQ, for some countries ITTO relies on the COMTRADE database or the GTIS to derive tropical wood trade flows based on country of origin or HS

codes. The manipulation of these various sources of data potentially results in discrepancies for one or more of three reasons. First, the categories for tropical timber are not always the same in each of the databases (or they may have been recorded incorrectly). Second, the use of varying weight estimates, and conversions between weight and volume, can lead to discrepancies between data derived from different sources. Third, in some cases data from two sources may be blended to produce an import estimate that may vary from the corresponding export statistic or vice versa. For example, the total volumes which ITTO calculated for USA imports of tropical sawnwood in 2001 (356 000 m^3) based on COMTRADE did not match the total volumes reported as imports by the USA in the JQ (277 000 m^3). To reconcile the two figures, ITTO adjusted the COMTRADE-derived volumes by country proportionately to the total volume reported in the JQ.

Inadequate trade data collection systems

The data collection, compilation and reporting systems of customs agencies vary in sophistication. In some countries they are highly automated and integrated: in the USA, for example, the vast majority of transactions is recorded and tracked electronically (less than 1% of USA import transactions is filed manually). The USA system networks all facets of the import/export process.

In contrast, mechanisms to ensure the validity of trade data collection, recording and reporting in many developing countries covered by the reports—including PNG, the Republic of Congo and Indonesia—are much less sophisticated. While all countries require the filing of import and export documents (electronically or by paper), the types of information collected are not necessarily the same (or even similar) across all countries. Thus, the lack of sophistication and consistency of the raw data collection systems produce trade discrepancies.

Classification practices

In the follow-up survey for this synthesis report, misclassification was rated by investigators as the most important contributing factor to data discrepancies. Six of the eight respondents rated misclassification as either very significant or highly significant.

Classification practices differ widely and in many cases do not adequately distinguish tropical from temperate sources. For example, until 2003 Chinese imports of tropical roundwood reported to ITTO apparently also included logs from temperate countries. China has since implemented procedural changes that should correct some of the discrepancies by sorting trade data to the eight-digit level before conveying the data to international organisations. Malaysian roundwood statistics apparently also include some portions of the HS 4401 (chips) and HS 4409 (molding) classifications, and sawnwood includes HS 4406 (railway sleepers). According to the China case-study, inconsistencies in classification practices could account for 3–5% of data discrepancies.

One of the consultants (for the Brazil case-study) noted that the classification of tropical plywood is particularly problematic. Data for plywood laminated with a combination of tropical hardwood and conifer (and/or temperate) species is often classified in incorrect HS codes when recorded officially.

Product measures and conversions

Among the most frequently cited and significant causes of data discrepancies was the use of differing product measures and conversion factors. Documentation in some countries requires that both weight and volume units be recorded for timber products. In others, either weight (kg) or volume (usually m^3 but sometimes m^2 for plywood or veneer) are recorded. Often, conversions from weight to volume are inconsistent; according to the Indonesia case-study, using different conversion factors could explain as much as 8–14% of trade data differences. Conversion factors from weight to cubic volume range from 650 kg/m^3 to 750 kg/m^3. In some cases, part of the export trade is recorded by weight and the other part by volume. For example, while most Indonesian exports of logs and lumber are reported in m^3, some are recorded in kg; Hong Kong reports plywood exports in m^2. In veneer trade, units and conversions for reported volume are perhaps the most variable, with little consistency in practices among countries or agencies.

Differences in log-scaling practices were also cited as a significant cause of trade data differences. Indonesia uses an average-diameter and shortest-length methodology to determine volume. Malaysia employs two standards: one for Sabah and one for Sarawak. The Japan case-study suggested that scaling differences could account for as much as 10% of trade discrepancies with that country's trading partners. Similarly, most roundwood data are collected 'underbark', but at least one reporter noted that roundwood measures were 'overbark'.

Illegal activity and trade data

Illegal behaviour, including smuggling and the intentional misclassification of products or species, was cited in many of the reports as a potential contributor to trade data discrepancies. However, such discrepancies by themselves would not appear to be a reliable indicator that illegal trade or trade in illegal timber products is occurring because too many other factors contribute to the differences in reported exports and imports. Vincent (2004) also found that trade data discrepancies were not reliable indicators of illegal activity: such discrepancies occur even where trade flows are known to be legitimate and legal.

Nevertheless, according to several of the case-studies, misclassification or under-reporting to either disguise trade of illegal products or avoid paying duties is a likely source of trade data discrepancies. By definition, smuggling activities are difficult to monitor or measure and are made more so in the timber trade by the remote nature of some border crossings. Several of the reports also noted that illegal products could be misclassified, mislabelled or trans-shipped to disguise the country of origin, thus making detection through trade statistics difficult. In the follow-up survey, seven of the eight respondents indicated that illegal trade was either somewhat important (5) or very important (2) in explaining data discrepancies.

The Indonesia case-study suggested that smuggling was the most significant factor in explaining discrepancies involving Indonesian trade data. This is supported by the fact that reported Indonesian exports of major forest products are consistently orders of magnitude smaller than trading partner import reports. In some countries there is a clear incentive to under-report or misclassify products in order to circumvent export duties. In Indonesia, for example, the case-study investigators suggested that veneer could be listed as plywood to avoid a 15% export duty. Similarly, green lumber, on which an export duty is normally assessed, may be mixed in a shipment with kiln-dried lumber, for which there is no export duty.

Trans-shipments and triangular trade

Incomplete or fraudulent documentation of trans-shipments contributes to data discrepancies. Some of the problems relate to poor administration and monitoring of export/import documentation and processing; others are the

result of purposeful and fraudulent deceit to move illegal products or avoid levies. Products might be moved through a third country with falsified documentation to take advantage of transport discounts or shipment routes, legalise their production and transport if restricted in the country of origin, or avoid paying royalties or export taxes.

Most Chinese imports of tropical forest products from Indonesia, Malaysia and Thailand are trans-shipped through Hong Kong, and data discrepancies arise from the incorrect specification of origin or destination of shipment. Products are often further processed or re-traded in Hong Kong, confusing the original source. According to the Malaysia case-study, trade data discrepancies between Malaysia and China are significantly reduced when trade through Hong Kong is factored into an analysis. Because of the procedures used in the Netherlands, European trade through Dutch ports was cited in the UK case-study as a potential source of data discrepancies. The USA case-study investigators believed that a data discrepancy in Bolivian/USA sawn timber trade was likely the result of trans-shipments (legal, but poorly tracked) through Chile.

Conclusions

Data discrepancies are not unique to tropical timber trade; they also occur in discrete categories of coniferous forest products, pallet and secondary processed wood products. However, trade data discrepancies involving tropical timber trade are in many cases very large and significant.

In general, import data tend to be more reliable than export data because most countries are more vigilant inspecting and ensuring duty collections on imports. One might expect that countries that impose export-related duties would also monitor exports carefully to ensure payments, but several case-studies noted that significant data discrepancies occur in these cases because of undervaluing or under-reporting exports to circumvent export duties.

The data collection, compilation and reporting systems of customs agencies vary in sophistication. In some cases, data discrepancies are a product of simple data-entry errors, which in turn are a consequence of the sheer volume of transactions, inadequate training and/or carelessness: in some of the trade flows described in the case-studies, discrepancies could be explained by a simple misplacement of decimal places.

Customs and port officials are not well-trained in identifying species or types of specific products. The lack of familiarity with timber species could make it easier for illegally traded CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)-listed species to pass through export/import inspections.

Product definitions and classifications beyond the six-digit HS level are rarely consistent between countries. Measurement standards and product conversions also vary. Several case-studies highlighted confusing product classifications and differences in log-scaling methods for reporting volume as contributing to observed discrepancies.

The most common factors that result in trade data discrepancies would appear to be misclassification, shipments of mixed product types or species, inconsistent units of measure and conversions, data entry errors and illegal trade (including the avoidance of taxes). Triangular trade and trans-shipments are a significant factor in data discrepancies, particularly with respect to trade through Taiwan Province of China, Hong Kong and Singapore.

Recommendations

Discrepancies in the reporting of the tropical timber trade could be reduced by the implementation of a wide range of measures, some of which are listed below.

Actions for ITTO consideration

1) Provide guidance and/or conduct a workshop on unifying tropical timber product classifications, standard units of measure, log-scaling techniques, and conversions for trade data reporting purposes
2) Consider additional studies (eg to more specifically compare required documentation for forest products' production, transport and trade in ITTO member countries)
3) In preparing data for publication in the *Annual review of the world timber situation*:
   a) to the extent possible, rely on originally sourced country data and avoid multiple manipulations of the same data
   b) where data are made available on-line, consider obtaining data directly from the customs collection organisations in member countries

Actions for ITTO consideration in conjunction with other international organisations

1) Provide guidance to country correspondents to improve consistency in identifying and recording HS classifications for traded tropical timber products (FAO, UNECE)
2) Co-sponsor a workshop to define common routines and procedures for checking and guaranteeing the consistency, integrity and quality of reported data (FAO, UNECE, COMTRADE)
3) Consider working with the World Customs Organization (WCO) to sponsor workshops or provide technical assistance to ITTO countries in the areas of customs collection and enforcement procedures
4) Consider working with the WCO and/or FAO to provide technical assistance in the identification and recording of tropical timber species
5) Consider convening an international expert group to assess the need for changes to HS codes relating to timber products with the goal of making less confusing the separation of tropical timber products from temperate and coniferous products

Recommendations for member countries

1) Ensure more accurate reporting of trade data to ITTO and other international organisations through the consistent administration of the JQ
2) Sponsor reconciliation studies with partner countries where timber products' trade data show large discrepancies and/or sponsor internal audits of customs procedures and data collecting and reporting
3) Consider alternatives to export levies and/or improve enforcement to reduce incentives for misclassifying traded products
4) Where data collection and compilation systems are antiquated or inefficient, increase funding and oversight, provide more training and automate systems.

More negotiations in June

The second part of a United Nations negotiating conference made progress on—but didn't conclude—a successor to the International Tropical Timber Agreement, 1994

THE UNITED NATIONS Conference for the Negotiation of a Successor Agreement to the International Tropical Timber Agreement, 1994 (ITTA, 1994), Second Part, was convened at the Palais des Nations in Geneva, Switzerland, on 14–18 February 2005. It was attended by over 180 representatives of governments and organisations.

Despite a renewed call against procrastination made by the President of the Conference, H.E. Ambassador Parños, delegates were generally aware of the time-line for the negotiating process, with many preferring to play a waiting game, particularly with respect to the core issues of finance, scope and organisational matters. A few delegations ventured to make their first crack at the financial issues with some imaginative and radical proposals. Considerable time was spent on 'ventilating' these proposals but the overall response was cautious, exploratory and non-committal. The Conference made progress in cleaning up the draft text of the successor agreement through two working groups and several contact groups, albeit on matters considered less contentious, including the preamble.

Objectives

Delegates devoted considerable attention to the formulation of 'overarching' objectives, although there was no agreement on whether these would eventually be included in the new agreement. The ITTA, 1994 contains 13 specific objectives but no overarching objectives. Of these 13, many have been reformulated in the proposed new agreement. Examples of draft specific objectives that are mostly unbracketed (and therefore—in principle—agreed) are:

> *Developing and contributing towards mechanisms for the provision of new and additional financial resources and expertise needed to enhance the capacity of producer members to attain the objectives of this Agreement;*
>
> *Improving marketing and distribution of tropical timber [and tropical forest products] [and timber products] exports from sustainably managed and legally harvested sources, including promoting consumer awareness [and encouraging information sharing on private voluntary market-based mechanisms];*
>
> *Promoting better understanding of the contribution of non-timber forest products and ecological services to the sustainable management of tropical forests and cooperating with relevant institutions and processes to this end;*
>
> *Encouraging members to recognize the role of forest-dependent indigenous [peoples] and local communities in achieving sustainable forest management and develop strategies to enhance the capacity of these communities to sustainably manage tropical timber producing forests; and*
>
> *Identifying and addressing relevant new and emerging issues.*

Draft specific objectives that remain completely bracketed are:

> *[Strengthening the capacity of members to [address illegal logging and related trade in tropical timber, including through] improve forest law enforcement and governance [and exchanging statistical data on trade];]*
>
> *[Promoting the certification of tropical timber producing forests;].*

Financial accounts

The issues of assessed financial contributions (for the administrative budget) and the distribution of votes proved to be sources of contention at the Conference, with the tabling of a number of new proposals throughout the week. While these proposals generated plenty of discussion, agreement proved elusive.

A proposal tabled by the USA to change the ratio of the distribution of votes and, correspondingly, assessed contributions from 50:50 to 60:40 for the consumer and producer groups respectively took many delegates by surprise. In fact, it challenged one of the key elements of many commodity agreements, which is the equal voting power of the producer and consumer groups. This proposal was ultimately counterbalanced with a proposal from the producer group, which called for an 80:20 ratio for assessed contributions while maintaining the 50:50 distribution of votes.

The issue of voluntary funding for projects is also unresolved; for some producers, project funding is a key reason for engagement in ITTO's work. However, the producer proposal to increase voluntary contributions to 20 times the level of administrative-account funding was perceived by many consumer members to be unrealistic.

Another issue where compromise proved elusive was on the obligation of members to submit timber statistics. The producer group called for the deletion of a paragraph on measures that could be taken by Council in case of the non-submission of such statistics by members, arguing that it went against the cooperative spirit of the article and the Agreement. One consumer member said the penalty for data non-submission was not overly severe compared to other international organisations that also require members to submit data.

This Second Part of the Conference was useful in zeroing in on core issues, but delegations and the Conference bureau will have to redouble their efforts to address such issues and achieve a break-through at the next meeting. A third round of negotiations will take place on 27 June–1 July 2005.

Compiled by the ITTO Secretariat, drawing on the summary written by the Earth Negotiations Bulletin *(http://www.iisd.ca/vol24/enb2457e.html)*

Private concession certified in Malaysia

Samling Plywood's Sela'an Linau forest management unit in Sarawak is the first private operation to be certified in Malaysia

by Amha bin Buang

ITTO Secretariat

eimi@itto.or.jp

Certified: an aerial view of the Sela'an Linau FMU. *Photo courtesy MTCC*

THE AWARD of a certificate of forest management and a certificate of chain-of-custody by the Malaysian Timber Certification Council (MTCC) to Samling Plywood (Baramas) Sdn Bhd on 4 January 2005 marked a significant milestone in the implementation of forest and timber certification in Malaysia. With the award, Samling Plywood (Baramas) Sdn Bhd has become the first private company managing a forest management unit (FMU) in Malaysia to be certified under the MTCC certification scheme. It has also become the first company and FMU in the state of Sarawak to be certified under the scheme.

The company's journey towards sustainable forest management (SFM) began in 1996 when it achieved ISO 9001 certification for its forest operations in Ulu Baram. Two years later, the company cooperated with the Forest Department of Sarawak and the German Agency for Technical Cooperation (GTZ) in developing a comprehensive forest management information system database to be used for SFM programs in the state. Since then, Samling has worked to improve practices in the Sela'an Linau FMU with a view to achieving certification.

... the Corporation has identified 65 FMUs in Sarawak covering 4.3 million hectares of PRF and five main timber operators in the state that have responded positively and agreed to work towards certification this year

Samling's 55 949-hectare Sela'an Linau FMU, comprising 72% mixed hill dipterocarp forest and 28% kerangas and mountain forest, underwent a pre-assessment in September 2003 to determine its readiness for the main assessment against the standard then used under the MTCC scheme: the *Malaysian criteria, indicators, activities and standards of performance for forest management certification* (MC&I), agreed in 2001, which are based on the *ITTO criteria and indicators for the sustainable management of natural tropical forests*. The main assessment of the FMU was conducted in March 2004 by SIRIM QAS International Sdn Bhd, an independent assessor registered with the MTCC, resulting in the issuance of two major corrective action requests (CARs) relating to infringement of the buffer zone along permanent waterways and non-compliance with specifications in the construction of skid trails.

A follow-up assessment to verify the corrective action taken to address the major CARs previously issued was carried out in August 2004. Based on the assessor's recommendations, the decision to award the certificates was made in October 2004. The MTCC certificate for forest management provides assurance that the FMU has complied with the requirements of the MC&I and that the timber is harvested legally, while the certificate for chain-of-custody provides assurance to buyers that the raw material used in the products originate from an MTCC-certified FMU. With these certificates, the Samling Group is now in a position to supply MTCC-certified products through Samling Plywood (Baramas) Sdn Bhd and Samling DorFohom Sdn Bhd, which have both been awarded the MTCC certificate for chain-of-custody for plywood and moulded door skins respectively. The group has received orders for certified products from Europe and the USA and expects the demand for environmentally certified timber to grow. It is now looking for customers who are willing to buy certified products at prices that reflect the costs of certification and thus support its efforts to achieve SFM and sustain it.

New standard developed

This development augurs well for certification in Malaysia and boosts ongoing efforts by the MTCC to become one of the few national certification schemes to emerge successfully from developing tropical countries—which otherwise have lagged seriously behind many developed temperate countries in the field of forest and timber certification. The MTCC certification scheme began in October 2001 using a phased approach and the MC&I as the standard. To date, nine FMUs covering a total of 4.73 million hectares of permanent forest reserves (PRFs) have been awarded the MTCC certificate for forest management, while 55 timber companies have been awarded the MTCC certificate for chain-of-custody. By November 2004 a total of 31 853 m^3 of MTCC-certified timber products had been exported to countries in Europe and Australia. The MTCC scheme is progressing to its next phase this year in which a new standard, the MC&I of 2002, which are based on the principles and criteria of the Forest Stewardship Council (FSC), will be used as the template.

Further certification expected in Sarawak

Hopes are now high in Malaysia that this ground-breaking achievement by Samling Plywood (Baramas) Sdn Bhd will spur other FMUs in the Samling group as well as other private companies managing FMUs in Sarawak and in other states in Malaysia to take up the certification challenge. Prior to this, certification under the MTCC scheme covered eight FMUs, all of which are located in Peninsular Malaysia and are managed by state forestry departments. Progress in Sarawak is particularly crucial and strategic for the development of certification in Malaysia, since Sarawak is by far the biggest state and has the largest area under forests, amounting to 9.84 million hectares or 50% of the total forested area in the country, 6.16 million hectares or 50% of the total forested area in PRFs and 1 million hectares or 47% of the total land area in national parks and wildlife and bird sanctuaries. Sarawak has also been a focus of international attention with regards to its forests and forest policies in the last three decades.

Prospects for further progress in certification in the state are promising. The Sarawak Forestry Corporation met the Sarawak Timber Association (STA) in 2004 to discuss the implementation of SFM based on the MC&I. In consultation with logging operators, the Corporation has identified 65 FMUs in Sarawak covering 4.3 million hectares of PRF and five main timber operators in the state that have responded positively and agreed to work towards certification this year under the new set of MC&I. If successful, this initiative will have the potential to double the area of forests certified under the MTCC scheme.

MTCC promotes label in Europe

In spite of the great challenges in securing international acceptance of its scheme, the MTCC has persevered in its promotion programs. A number of authorities and companies in importing countries have responded positively to MTCC-certified timber products, including the Danish Ministry of the Environment, which has included the MTCC scheme as one of the accepted schemes in its environmental guidelines for the purchase of tropical timber—in which the MTCC certificate is recognised as providing a guarantee of legal forest management and progress towards sustainability. The procurement policy of the UK government also considers that the MTCC scheme provides assurance of legally harvested timber. Discussions are ongoing with the Hamburg City Authority in Germany with regard to the provisional acceptance of the MTCC scheme, while efforts to convince the UK Department for Environment, Food and Rural Affairs and the UK Central Point of Expertise on Timber regarding the involvement of relevant stakeholders in the standard-setting process of the MTCC scheme will be continued in the hope of securing acceptance of the scheme as an assurance of sustainability as well. In the meantime, an action plan has been adopted by the Multi-stakeholder National Steering Committee to set up an FSC national working group to develop a certification standard which can be submitted to the FSC for endorsement. The MTCC is also in the process of submitting its scheme for endorsement within the framework of mutual recognition under the Programme for the Endorsement of Forest Certification Schemes (commonly known as PEFC) and is playing a leading role in the development of the Pan-ASEAN Timber Certification Initiative, which has the aim of establishing an ASEAN timber certification scheme.

Phased approaches essential in tropics

Forest certification emerged in the 1990s with an initial focus on tropical forests as an alternative to the threat of bans and boycotts against tropical timber. However, the impressive progress in the implementation of certification worldwide has so far been achieved in developed temperate countries, which currently account for 93% of the total area of forests certified, leaving tropical forests behind with a mere 7% share. The wide range of internal and external factors contributing to the considerable gap between the actual level of forest management and the standard of management required by certification implies that meeting the full requirements of certification in one go is grossly unrealistic for tropical timber-producing countries.

... the impressive progress in the implementation of certification worldwide has so far been achieved in developed temperate countries, which currently account for 93% of the total area of forests certified, leaving tropical forests behind with a mere 7% share.

In response, ITTO has been helping to develop phased approaches to certification as a pragmatic way of facilitating progress in the implementation of certification in the tropics. The work comprises the development of procedures for phased approaches and financial cost-benefit analyses of them. Assisting in this work and helping to promote phased approaches among consumers in developed importing countries is the forthcoming ITTO International Workshop on Phased Approaches to Certification, which will be convened in Berne, Switzerland on 19–21 April 2005.

For more information on ITTO's work in certification and on the above-mentioned workshop, go to http://www.itto.or.jp/live/PageDisplayHandler?pageId=101

What will we want from the forests?

Estimating the current and future demand for forest products and services

by Alf Leslie

Awamutu, New Zealand

CURRENT WORLD demand for the products and services of forests is a mix of static or only slightly increasing demand for wood, a steady but slowly increasing demand for non-timber forest products (NTFPs), and a burgeoning but largely unmonetised demand for environmental services.

Any estimate of future demand cannot safely be based on current and recent past demand. A large number of developments inside and outside the forest sector have to be incorporated and combined to produce a 'realistic' outlook. The estimate of future demand presented in this article does that and indicates, among other things, that the global economic importance of forests will increasingly lie in their non-timber products and especially in their environmental functions.

'Forests are more than wood factories' could become a slogan of the future. Wood in that future will increasingly be a by-product of sustainable management for forest conservation.

... the global economic importance of forests will increasingly lie in their non-timber products and especially in their environmental functions.

Current demand

The estimate of the current demand for forest products and services presented here is based on the following premises:

1) the Food and Agriculture Organization of the United Nations (FAO) series of global forest products' statistics is the main data source for timber products;
2) industrial roundwood (IRW) plus fuelwood constitute timber products' demand (all other significant timber products are derived from IRW);
3) production is an adequate proxy for current demand for timber products at the world level;
4) demand, wherever the data allow, is measured in volume terms as a better indicator of the effect on the forest resource than demand measured in monetary terms;
5) demand for value-added timber products and NTFPs is measured in value terms because of the inability to aggregate the various physical units involved. For value-added timber products, the lack of global production values necessitates the use of export values as a proxy, meaning that total production/demand for these products is likely to be significantly higher than indicated here;
6) quantities are expressed as the mean of data available for the most recent two successive years in order to reduce the effects of unknown annual changes in stocks and governing economic conditions; and
7) demand for the very diverse range of environmental services is, at present, only partially quantifiable either in physical or value terms and is therefore based on recent estimates of the economic value of such services. Actual financial transactions involving such services are currently a tiny fraction of the estimated value of demand.

On that basis, the current demand for forest products and services is estimated to be at the levels summarised in *Table 1*.

Three features of current demand are brought out by these estimates. They are that:

- at a little over 1 m^3/hectare/year, demand for timber and wood products presents no great threat to the sustainability of the world's forests;

Current demand

Table 1: Current (2003) world demand for the products and services of forests

CATEGORY	SUB-CATEGORY	BY VOLUME *billion m^3 roundwood*		BY VALUE *billion US$*		SOURCE	APPROXIMATE LEVEL OF CONFIDENCE IN ESTIMATE
Timber products	**TOTAL**	**3.5**		**150***		*FAO (2004)*	70%
	IRW		1.6				
	Fuelwood		1.9				
Value-added products, world trade	**TOTAL**			**33**		*ITTO (2004 & 2005)*	80%
	Furniture				27		
	Doors/joinery/other				6		
NTFPs, world trade	**TOTAL**			**9**		*Scherr et al. (2004; Table 8)*	40%
Environmental services**	**TOTAL**			**900**		*Scherr et al. (2004; Table 8)*	5%
	Watersheds				30		
	Recreation				90		
	Biodiversity***				200		
	Climate				450		
	Miscellaneous				130		

*Value of world trade of all primary timber products (thus a lower limit in value of demand)
**Estimated as value/hectare/year multiplied by the 3 billion hectares of forest estimated to exist globally in 2000
***Calculated from total minus other sub-categories

- the global importance of forests apparently derives from the environmental services they provide, not from their so-called productive functions; and
- the essentially social valuation of environmental services is not reflected in the financial calculations which control the monetary accounts and flows relating to forest utilisation and management. In other words, despite the high apparent value of environmental services they are not being paid for and therefore have little impact on forest-related cash flows.

Future demand

Current demand does no more than set a baseline. It tells us nothing about the much more relevant and crucial question for the formulation of forest policy, conservation policy and management, which is how demand is likely to develop in the future. The required demand forecasting can be approached in any or all of three ways:

1) by the projection of trends detected in demand data covering the recent past;
2) by derivation from estimated or given future levels of demand determinants such as population and income growth; and
3) by derivation from a broader scenario of the future pieced together not only from trends and the demand determinants but also including clues about supply, alternative materials, consumer tastes and socioeconomic development.

By trend projection

Estimating the future level of demand by trend projection depends heavily on the period covered by the recent past. *Table 2* illustrates the effect on future demand for IRW. The method is of limited validity other than to 'justify' almost any pre-determined desired level of future demand.

By demand determinants

In a working paper prepared by FAO in 1999, demand for industrial roundwood in 2010 based on expected future economic and population growth was estimated to be 1.8 billion m^3. The implied average annual rate of growth in demand of 1.2% per year is well above anything recorded over the recent past. The likelihood of such a reversal of or impetus to recent trends is not high. The estimate of the future level of demand can, of course, be varied by applying other rates of change to the demand determinants. But that leaves the method open to the same indictment of manipulation that applies to trend projection.

By scenario-building

Both trend projection and demand determinants are conditional on nothing else changing in the future other than the factors specifically allowed for in the calculations. But this would be fiction: many clues that portend a vastly different future for forests are already visible. Within the sector, for example, the world's existing plantation resource has the potential capacity to meet a demand for industrial roundwood approaching 2 billion m^3 per year. Technological advances are enhancing the in-use performance, reliability and uniformity of timber products to help regain markets lost to non-renewable substitutes—although such substitution will continue for some time to act as a check on overall timber demand. Improved efficiency of production and utilisation of by-products means that the production of finished products can increase without increasing demand for industrial roundwood. Demand for fuelwood as a feedstock for bio-energy could reverse the declining trend in fuelwood demand that accompanies economic and social development.

Outside the sector, changes associated with economic globalisation, trade liberalisation, global warming, declining oil reserves, rising demand for hydrological services and reforms in governance systems will have vast impacts on what happens to and within the sector.

Predicting future demand by past trends

Table 2: Future world demand for industrial roundwood by trend projection

RECENT PAST	TREND	AVERAGE ANNUAL RATE OF CHANGE	DEMAND IN YEAR *(billion m^3 roundwood)*		
			2010	2020	2030
1992–2002	Stagnant	0	1.6	1.6	1.6
1987–2002	Declining	-0.06%	1.5	1.4	1.3
1982–2002	Rising	+0.06%	1.6	1.7	1.8

... despite the high apparent value of environmental services they are not being paid for and therefore have little impact on forest-related cash flows.

Scenario-building is a deliberate attempt to incorporate such changes into the demand outlook. But it is still a conditional method, the condition being that the changes occur and act in the way assumed in the scenario. However, it at least recognises the high probability of situational change rather than just ignoring it. Another crucial feature is that the dimensions and structure of the scenario have to be built up more by subjective judgement than by econometric calculation. Finally, there are few data on recent trends or demand determinants for value-added products, NTFPs or forest environmental services, leaving no choice but to use scenario analysis to make projections.

From this background, a plausible scenario from which to derive future demand would include, among other things, the following key components:

- almost static demand for IRW (impact of growing populations offset by increased processing efficiency and substitution by competing products);
- initially declining demand for fuelwood with the decline halting and then slowly reversing several decades hence;

Predicting future demand by scenario-building

Table 3: Estimated future demand for the products and services of forests to the year 2040 based on scenario-building

CATEGORY	UNIT	DEMAND IN YEAR			
		2010	2020	2030	2040
IRW total	$m^3 \times 10^9$	1.6	1.7	1.7	1.8
Saw & veneer logs		0.9	0.9	0.8	0.8
Pulpwood		0.5	0.6	0.7	0.8
Other		0.2	0.2	0.2	0.2
Fuelwood total	$m^3 \times 10^9$	1.9	1.7	1.8	1.9
Domestic & commercial		1.9	1.5	1.5	1.4
Industrial bio-energy		0	0.2	0.3	0.5
Value-added products	$US x 10^9	40	60	100	140
NTFPs	$US x 10^9	10	15	20	35
Environmental services					
Total	$US x 10^9	1050	1420	1960	2600
Watersheds		50	80	140	200
Recreation		100	110	120	140
Biodiversity		250	350	500	700
Climatic		500	700	1000	1300
Miscellaneous		150	180	200	220

- a continuing increase in processing efficiency, especially for paper and value-added products;
- plantations becoming a main global source of timber and wood products in 10–20 years;
- an accelerating rate of transfer of trade from primary processed timber products to value-added products;
- rapid acceleration and widening of the demand for environmental services and gradual extension of quantitative valuation of them (eg the 'ecosystem marketplace' initiative of the Katoomba Group);
- intensified price competition in export markets as plantation sources tend towards over-supply of commodity-grade timbers; and
- decreasing availability of natural forests for timber production.

… a plausible scenario from which to derive future demand would include, among other things: rapid acceleration and widening of the demand for environmental services and gradual extension of quantitative valuation of them [and] intensified price competition in export markets as plantation sources tend towards over-supply of commodity-grade timbers

The accumulation of that partial set of scenario components results in the demand outlook presented in *Table 3*.

It must be stressed that this outlook is largely subjective and completely dependent on the set of assumptions listed above. Nevertheless, it does provide an informed judgement of how demand could and is likely to evolve over the first decades of this century. It also illustrates the huge challenge in converting the enormous demand potential and social valuation of forest environmental services into an effective demand based on adequate financial flows to pay for providing those services.

References

FAO 1999. Working paper prepared for the World Bank Forest Policy Implementation Review and Strategy. Food and Agriculture Organization of the United Nations, Rome, Italy.

FAO 2004. FAOSTAT forest products statistics. www.fao.org. Food and Agriculture Organization of the United Nations, Rome, Italy.

ITTO 2004. *Annual review of the world timber situation 2003*. ITTO, Yokohama, Japan.

ITTO 2005. *Annual review of the world timber situation 2004*. Draft. ITTO, Yokohama, Japan.

Scherr, S., White, A. & Khare, A. 2004. *For services rendered: the current status and future potential of markets for ecosystem services provided by tropical forests*. ITTO Technical Series 21. ITTO, Yokohama, Japan.

This article is based on material prepared for ITTO as a contribution to a background paper for the Country-led Initiative in Support of the United Nations Forum on Forests on the Future of the International Arrangement on Forests, which was convened in Guadalajara, Mexico, on 25–28 January 2005.

ITTO's new projects

The projects summarised here were financed at the 37th session of the International Tropical Timber Council in December 2004

Promotion of sustainable management of African forests (PD 124/01 Rev.2 (M), Phase I, Stage 2*)

Budget

ITTO:	$634 983
ATO:	$172 750
Total	**$807 733**

Implementing agencies African Timber Organization (ATO) and ITTO
Funding sources Unearmarked funds of the Special Account

The first stage of Phase I of this project finalised the draft ATO/ITTO *Principles, criteria and indicators for the sustainable management of natural tropical forests* (PCI) for endorsement of both organisations, trained 60 relevant forestry staff in three countries in their implementation, and developed an auditing framework for African forests. Over 60 trainers able to conduct audits based on the ATO/ITTO PCI at the forest management unit level were also trained in the first stage. This second stage will include activities to strengthen country reporting using the PCI, further national training on the PCI and auditing framework, development of national PCI/certification standards in five countries, the collection of data on PCI in ten countries, improvement of national monitoring/auditing frameworks in ten countries, and enhancement of ATO's advisory and dissemination capacity in relation to PCI.

Enhancement of the forest statistics information & management system (STATFOR) through the integration of a computer module for processed log management (Gabon; PD 182/03 Rev.2 (M))

Budget

ITTO:	$285 768
Government of Gabon:	$153 850
Total	**$439 618**

Implementing agency Direction des Inventaires, des Aménagements et de la Régénération des Forêts (DIARF)
Funding sources Japan, USA

This project is designed to further develop the STATFOR computerised forest management/monitoring system developed in three earlier ITTO projects [PD 36/92 (M), PD 15/98 REV.2 (M) AND PD 56/00 REV.3 (M)] and which is also being used in a large World Bank project currently under way in Gabon. The project will create a new module for STATFOR called TRANSFOR which will extend the bar-code monitoring system developed earlier for logs to processed products like sawnwood and veneer. This will assist the government in monitoring the movement of logs from felling to final product, thereby improving tax revenues and laying a foundation for the eventual certification of exported timber products.

Review of the present situation and development of a strategy and project for enhancing the national forestry statistics management system (Cote d'Ivoire; PPD 61/02 Rev.2 (M))

Budget

ITTO:	$62 555
Total	**$62 555**

Implementing agency Ministère des Eaux et Forêts (Direction de la Planification de la Programmation, des Projets et des ONG)
Funding source Japan

This pre-project will: evaluate the present situation regarding capacities, human and material, and data collection, processing and analysis methods; propose a strategy for the implementation of an operational system able to provide forestry statistics on a permanent basis; organise a workshop for the dissemination and validation of the strategy; and formulate a project proposal for the enhancement of the national forestry statistics system.

Development and promotion program for financial compensation of environmental services derived from tropical forest ecosystems in Guatemala (PPD 101/04 Rev.1 (M))

Budget

ITTO:	$46 440
Government of Guatemala:	$13 600
Total	**$60 040**

Implementing agency Instituto Nacional de Bosques (INAB)
Funding sources Switzerland, Finland, Norway, USA

The objective of this pre-project is to increase recognition of the economic worth of environmental goods and services, particularly those derived from natural and planted forests. This involves: the identification of forest services in Guatemala; the development of basic guidelines for the promotion and regulation of such services; the formulation of a proposal for the definition of the most suitable compensation mechanisms; and the strengthening of the Department of Forest Externalities (Departamento de Externalidades Forestales—DEXFO) of INAB to help create national technical capacity.

Promoting selected non-timber forest products based on community participation approach to support sustainable forest management in East Kalimantan (Indonesia; PD 277/04 Rev.3 (I))

Budget

ITTO:	$401 937
Government of Indonesia:	$126,473
Total	**$528 410**

Implementing agencies Forestry Research and Development Agency (FORDA) in cooperation with Biopharmaca Research Center, Bogor Agricultural University, Indonesia
Funding sources Switzerland, Bali Partnership Fund (Sub-account A), Republic of Korea, Norway

This 36-month project aims to increase the contribution of non-timber forest products (NTFPs) to forest-sector earnings in East Kalimantan through the establishment of small-scale NTFP industries focusing on medicinal plants from the forests and a marketing system of NTFP. Project activities will focus on the establishment of plantations for selected NTFPs on both state and private lands, as well as on the development of technical guidelines for the sustainable management of NTFP resources, the establishment of appropriate NTFP processing techniques and the development of small-scale NTFP industries and business plans.

Improving utilization and value adding of plantation timbers from sustainable sources in Malaysia (PD 306/04 Rev.1 (I))

Budget

ITTO:	$499 867
Government of Malaysia:	$830 134
Private sector:	$116 000
Total	**$1 446 001**

Implementing agencies Forest Research Institute Malaysia (FRIM) in cooperation with the Timber Research & Technical Training Centre of the Sarawak Forest Department and the Forest Research Centre of the Sabah Forest Department
Funding sources Bali Partnership Fund (Sub-account A)

This project is designed to produce technical data on the characteristics of selected plantation-grown timbers from Malaysia. Expected outputs include: harmonised procedures for the evaluation of basic properties of plantation species; technical information and data on anatomical, physical, chemical and mechanical properties of test timber species as well as their sawing, machining, veneering, drying and bonding properties; and the technical evaluation of value-added products such as doors, windows and solid flooring boards.

Quality control and standardization of Ghanaian wood products (PD 318/04 Rev.2 (I))

Budget

ITTO:	$197 424
Government of Ghana:	$33 201
Ghana timber industry:	$10 400
Total	**$241 025**

Implementing agencies Forestry Research Institute of Ghana in cooperation with the Ghana Forestry Commission, the Ghana Timber Millers Organisation and the Furniture and Woodworkers Association of Ghana
Funding sources Switzerland, USA

The objectives of this project are to develop guidelines and standards for Ghanaian timber and wood products and to promote their application with a view to enhancing quality control and the efficient utilisation of wood products. The project will help initiate a wood-quality control process with the participation of all stakeholders for a number of identified wood products. The project will also strengthen the capability of the Ghana Forestry Commission to undertake such reforms and to ensure their efficient implementation and monitoring. The main project outputs will include: the review of policy and legislation for the standardisation of wood products; the identification of market requirements for standards and priority areas for grading rules; the development of standards for selected wood products; and the strengthening of institutional arrangements and governance for standards development.

Capacity strengthening of forestry stakeholders to support the implementation of the national code of practice for forest harvesting (China; PD 325/04 (I))

Budget

ITTO:	$143 284
Government of P.R. China:	$66 205
Total	**$209 489**

Implementing agency State Forestry Administration
Funding sources Netherlands, USA, Republic of Korea

The objective of this twelve-month pre-project is to provide training and education at all levels of the forestry sector to effectively implement China's Code of Practice for Forest Harvesting. Activities include the launch of the Code; a review of existing training approaches and institutional frameworks for training through study tours to Australia, Indonesia and Malaysia; the organisation of a workshop to discuss and select training approaches; the development of training modules and manuals; and the development of strategies for expanding the training program.

Promotion of tropical non-timber forest products (NTFPs) in Guangxi Autonomous Region, China based on sustainable community development (PD 73/01 Rev.5 (I,M))

Budget	ITTO:	$286 677
	Government of P.R. China:	$283 258
	Total	**$569 935**

Implementing agency Guangxi Forestry Research Institute (GFRI)
Funding source Japan

This three-year project aims to promote the sustainable use and management of promising NTFPs in order to contribute to the social and economic development of the project sites in Fangcheng District, Shansi and Ninming counties, Guangxi region. The project will conduct field surveys of the three promising NTFPs to determine their distribution, production, processing and markets and establish three demonstration plots of 100 hectares each to enhance the participation of local communities in managing and utilising the selected NTFPs on a sustainable basis. Training courses will be organised for key stakeholders involved in promoting NTFPs and the project will also establish three community-based cooperatives to promote selected NTFPs at the project sites.

International conference on innovation in the forest and wood products industries (Australia; PD 268/04 Rev.2 (I))

Budget	ITTO:	$147 960
	Government of Australia:	$159 000
	Others:	$346 000
	Total	**$652 960**

Implementing agency Innovations'06 Pty Ltd
Funding sources Unearmarked funds of the Special Account, Japan, USA, Republic of Korea

The objective of this project is to organise an international conference with a view to assessing the current state of research and development, innovation and other technological developments in the global forest and wood product industries.

Improvement of the sustainable management and utilization of non-timber forest products (NTFPs) in Cambodia (PD 275/04 Rev.3 (I))

Budget	ITTO:	$440 312
	Government of Cambodia:	$130 100
	CIRAD:	$18 000
	Total	**$588 412**

Implementing agency Cambodia Forestry Administration
Funding sources Bali Partnership Fund (Sub-account A), Norway

This 36-month project will promote the sustainable management of NTFP resources by improving social, economic and legal aspects of NTFP production and trade. Specifically, the project will: help strengthen the local management of NTFPs in four provinces (Kampong Chhnang, Kampong Thom, Mondulkiri and Rattanakiri) through the development of villagers' associations in collaboration with local communities and NGOs; and build local capacity to better integrate local villagers with NTFP markets by addressing socioeconomic and legal aspects of existing market channels.

The establishment of seed orchards for selected indigenous tree species in Sabah, Malaysia (PD 200/03 Rev.4 (F))

Budget	ITTO:	$367 632
	Government of Malaysia:	$362 150
	Total	**$729 782**

Implementing agency Sabah Forestry Department
Funding sources Netherlands, Bali Partnership Fund (Sub-account A), USA, Japan

The development objective of this project is to encourage and support the large-scale planting of indigenous timber tree species. Its specific objectives are to establish seed orchards of selected indigenous tree species and promote the planting of such species.

Participatory establishment of collaborative sustainable forest management in Dusun Aro, Jambi (Indonesia; PD 210/03 Rev.3 (F))

Budget	ITTO:	$588 835
	Government of Indonesia:	$201 243
	Total	**$790 078**

Implementing agencies Directorate General of Land Rehabilitation and Social Forestry, Ministry of Forestry, in collaboration with the Faculty of Forestry, Bogor Agricultural University
Funding source Japan

This project will assist the achievement of sustainable forest management through appropriate forest utilisation and the establishment of a collaborative forest management system. Its specific objectives are to: restore degraded primary forests, manage secondary forests and rehabilitate degraded forest lands in Dusun Aro Jambi following the ITTO guidelines; and establish a collaborative forest management system with the full participation of local stakeholders.

Establishing a cooperative framework between ODEF and the communities living in the Eto-Lilicope Forest Complex for the sustainable, participatory management of this complex (Togo; PD 217/03 Rev.2 (F))

Budget	ITTO:	$139 898
	Government of Togo:	$43 050
	Total	**$182 948**

Implementing agency Forest Development Authority of Togo (Office de Developpement et d'Exploitation des Forëts—ODEF)
Funding source Japan

Social conflicts between government and the communities living around the Eto-Lilicope gazetted forests have led to a series of problems affecting the forests including arson, encroachment, illegal logging and the illegal allotment of land for sale to third parties. This project will contribute to the sustainable and participatory management of the Eto-Lilicope gazetted forests with a view towards sustainable timber production. Specifically, it will create a framework of cooperation for the consensual and sustainable management of the gazetted forests.

Antimary Forest Management Regional Training Center (Brazil; PD 248/03 Rev.4 (F))

Budget	ITTO:	$577 800
	FUNTAC:	$207 000
	Total	**$784 800**

Implementing agency State of Acre Technology Foundation (FUNTAC)
Funding sources Switzerland, Japan, USA

This project will contribute to the sustainability of forest management practices in the western Amazon and the achievement of ITTO's Objective 2000 through the establishment of a regional training centre for sustainable forest management in the State of Acre. This centre will take advantage of the existing facilities in the Antimary State Forest and will focus on improving the knowledge and capacities of forest operators and forest workers at the forest management unit level. It will also put in place several dissemination mechanisms oriented towards the promotion of sustainable forest management practices not only for the Brazilian states of Acre, Amazonas, Rondonia and Mato Grosso but also for the Bolivian departments of Pando and Beni and the Peruvian department of Madre de Dios.

Development of national principles, criteria and indicators for the sustainable management of Congo forest based on the ITTO criteria and indicators for SFM (Republic of Congo; PD 272/04 Rev.2 (F))

Budget

ITTO:	$447 702
Government of Congo:	$96 504
Total	**$544 206**

Implementing agency General Directorate for the Forest Economy Direction (Direction Générale de l'Economie Forestière—DGEF)

Funding sources Japan, Bali Partnership Fund (Sub-account A), USA

This project will assess and promote sustainable forest management in Congolese forests. It will develop a set of national criteria and indicators (C&I) adapted to Congo's specific conditions based on ITTO's C&I in order to assess the progress towards SFM at both the national and forest management unit levels. It will also develop national expertise in SFM auditing procedures through training.

Revised world atlas of mangrove for conservation and restoration of mangrove ecosystems (Japan; PD 276/04 Rev. 2(F))

Budget

ITTO:	$430 920
ISME:	$93 530
Others (United Nations Food and Agriculture Organization, United Nations University, United Nations Educational, Scientific and Cultural Organization, United Nations Environment Programme/World Conservation Monitoring Centre, and others):	$209 500
Total	**$733 950**

Implementing agency International Society for Mangrove Ecosystems (ISME)

Funding source Bali Partnership Fund (Sub-account A)

This project will produce a revised, updated and comprehensive world mangrove atlas that can also be used as a tool for decision-makers to improve mangrove conservation and development.

Fire management and post-fire restoration with local community collaboration in Ghana (PD 284/04 Rev.2 (F))

Budget

ITTO:	$585 894
Government of Ghana:	$63 977
IUCN:	$82 054
Total	**$731 925**

Implementing agencies IUCN—The World Conservation Union in collaboration with the Forest Research Institute of Ghana and the Resource Management Support Centre of the Ghana Forestry Commission

Funding sources Bali Partnership Fund (Sub-account A), USA, Norway

Fire arising from farming, hunting and other rural-based, income-generating activities is considered the single most important threat to the integrity of Ghanaian forests. The underlying causes are poverty, a lack of awareness related to forest-fire impacts and a lack of strong legislative measures to prevent burning. This project will promote the contribution of efficient community-based fire management to forest restoration and sustainable management in fire-prone areas in Ghana.

Management of the Emerald Triangle Protected Forests Complex to promote cooperation for transboundary biodiversity conservation between Thailand, Cambodia and Laos (Thailand and Cambodia; Phase II; PD 289/04 Rev.1 (F))

Budget

ITTO:	$688 208
Others:	$863 735
Total	**$1 551 943**

Implementing agencies Royal Forest Department (main agency) (Thailand); Forestry Administration (Cambodia)

Funding sources Bali Partnership Fund (Sub-account A), Switzerland

This project constitutes the second phase of PD 15/00 REV.2 (F). It will continue efforts to conserve biodiversity in the Emerald Triangle Protected Forests Complex situated between Thailand, Cambodia and Lao PDR in the framework of a transboundary biodiversity conservation area. Its specific objectives are to: i) strengthen cooperation between Thailand, Cambodia and Laos for biodiversity conservation in the transboundary conservation area; ii) enhance protection measures and monitoring of the biological resources along the tri-national borders; and iii) strengthen the involvement of local communities and stakeholders to ensure the sustainable use and management of natural resources both in community enclaves within the conservation areas and in the buffer zones.

Towards the municipal decentralization of forest management in the Chaco and Yungas eco-regions of Bolivia (PPD 98/04 Rev.1 (F))

Budget

ITTO:	$94 500
ADS-AMT:	$10 100
Municipalities:	$30 000
Total	**$134 600**

Implementing agencies Alliance for Sustainable Development (ADS) in coordination with the Association of Municipal Governments (AMT)

Funding sources Switzerland, Japan

This pre-project will: i) assess the current status of the implementation, operation and equipment of municipal forest units (MFUs) in the Chaco and Yungas regions (Andean and Bolivian-Tucuman regions) in order to establish and effectively operate these MFUs as required by the Forestry Law; and ii) develop a project proposal in accordance with the needs of the MFUs and forest stakeholders in these two eco-regions, prioritising activities and outputs and providing a methodology for the provision of technical support for forest management.

Development of a project proposal to support the implementation of the national forest strategy in Peru (PPD 104/04 Rev.1 (F))

Budget

ITTO:	$48 854
BSD:	$21 800
Total	**$70 654**

Implementing agencies Bosques Sociedad y Desarrollo (BSD) in cooperation with the Technical Secretariat of the National Forest Dialogue and Consensus-building Roundtable

Funding sources Switzerland, USA, Japan

This pre-project will collect supplementary and updated information on the dynamics of the forest sector in Peru with a view to formulating a project proposal to support the continued implementation of the country's National Forest Strategy for 2003–2021, which was previously developed on the basis of a participatory approach.

In addition to the projects and pre-projects described above, funds from donors, the Bali Partnership Fund and the Special Account were committed to policy initiatives and the continuation of several projects.

**The prefix PD in the bracketed code denotes project and PPD denotes pre-project. The suffix F denotes Committee on Reforestation and Forest Management, M the Committee on Economic Information and Market Intelligence, and I the Committee on Forest Industry. Budget amounts are in US dollars.*

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China
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European Union
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Belgium/Luxembourg
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Ireland
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United Kingdom
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Nepal
New Zealand
Norway
Republic of Korea
Switzerland
United States of America

Japan: the slumbering giant

While growth in the Chinese timber sector captures the headlines, Japan is still a major player

by Mike Adams

ITTO Secretariat

itto-mis@itto.or.jp

TALK TO ANYONE about today's trends in the timber sector and inevitably the conversation will turn towards the impact of Chinese imports and exports of wood products on global trade. With total imports of logs, sawnwood, veneer and plywood running at around US$8 billion annually and double-digit annual growth in the import, export and consumption of wood products for the past ten years, this is not surprising.

Important imports: unloading shipping containers at Yokohama port, Japan. *Photo: M. Adams*

Amid all the hype about China it is easy to forget the giant economy to the east. Japan may no longer the darling of the timber-trade media but it is still a massive importer of wood products.

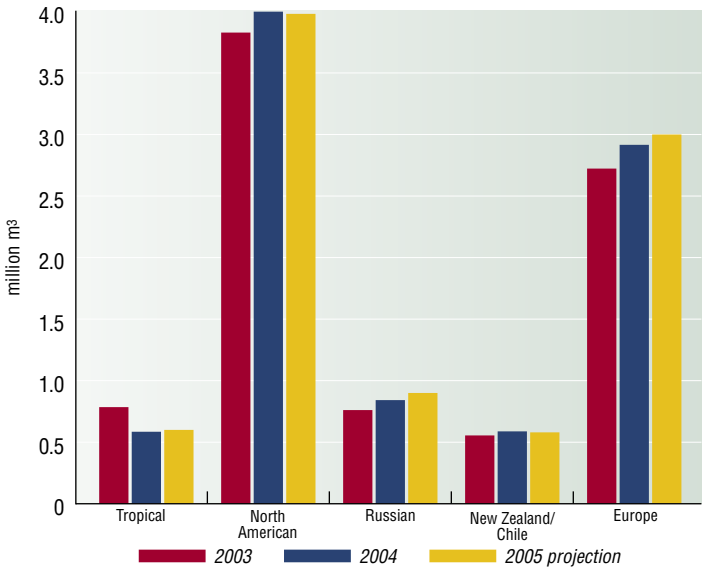
The Japanese market is extremely diversified and open to both raw materials and manufactured wood products. If an exporter can meet the exacting standards of the Japanese market, prices are good and, provided that quality and delivery standards are maintained, the market is loyal.

… demand for imported logs and sawnwood in 2004 was up around 3% compared to 2003.

Current timber imports by Japan from ITTO (producer and consumer) member countries are around US$6 billion annually, a close second to imports by China. And, even for primary products (logs, sawnwood, veneer and plywood), Japan is still importing a higher proportion of tropical timbers (31%) than China (27%; ITTO 2004).

Increase in sawnwood imports

Figure 1: Japan's actual 2003 and 2004 and predicted 2005 sawnwood import volumes, by region



Projections of demand

In January 2005 the Japan South Sea Sawnwood Conference (SEA), which comprises the Japan Sawnwood Importers Association, the Japan North American Sawnwood Conference and the New Zealand Sawmillers Conference of Japan, reviewed demand for imported wood products in Japan in 2004 and made projections for 2005. It concluded that demand for imported logs and sawnwood in 2004 was up around 3% compared to 2003.

For 2004, demand for wood products increased as housing starts in Japan grew. Total housing starts in 2004 were reported at 1.19 million units, an increase of 2.5% on 2003.

Japanese builders reported that demand for housing was strong in 2004 as the Japanese economy improved and because of continuing tax breaks on housing loan interest (see *TFU* 14/4 page 19). The driving force for 2004 starts was 'built for sale' units, particularly for detached units in suburban areas. Some 345,000 of these units were manufactured in 2004, an increase of nearly 6% over 2003. In contrast, individual, owner-built unit sales declined by almost 1% to 369,852, while the construction of rental units increased by 3%.

Log imports

Japan's total log imports in 2004 were in the region of 12 million m³, an increase of just under 3% over 2003. In 2005, log imports are forecast to drop back to 2003 levels.

At around 1.6 million m³, tropical logs make up 13% of the country's total log imports, mainly from Malaysia, Papua New Guinea and the Solomon Islands; by species, meranti

and mixed light hardwoods dominate. African log suppliers once had a small but important market share but in recent years strong Chinese demand for African logs has pushed aside the Japanese importers.

Russian log demand

Demand for Russian logs climbed by 800 000 m^3 in 2004, especially for plywood production, a 10% increase on 2003. However, SEA forecasts that Russian log imports will fall by 370 000 m^3 in 2005.

This forecast decline is partly attributable to changes in requirements for ships docking at Japanese ports. Last year, several foreign-registered ships, including Russian log-carriers, ran aground in Japanese territorial waters and caused oil spills. Japan's Transport Ministry has announced that from March 2005 all vessels calling at Japanese ports must carry protection and indemnity insurance. This is the ship owners' insurance to cover liabilities and expenses the event of any mishap such as the loss of the ship, damage to port and marine facilities and oil and chemical spills. The Japanese trade press suggests that some Russian-registered log-carrying vessels are so old that insurance companies may decline to cover them. As a result, log arrivals after March may decline or freight costs may go up due to a limited availability of insured vessels.

Estimates by SEA of Japan's total North America log imports for 2004 are in the region of 3.6 million m^3, some 2% down on 2003.

Sawnwood imports

Figure 1 shows that the bulk of Japan's sawnwood imports comes from North America and Europe; imported tropical sawnwood represents just 6.5% of the total imports by Japan. SEA predicts that demand for sawnwood in Japan will increase in 2005: total sawnwood demand in 2004 was up 3.2% compared to 2003. Much of this increase was due to an increase in 2x4 housing starts in 2004, which were the second highest in history. Also, heavy inventory replenishing purchases in early 2004, after critical inventory shortage in late 2003 and early 2004 pushed imports up.

Sawnwood imports are likely to increase a further 1.5% in 2005. The increases are likely to come from Russia, Europe and tropical countries, while imports from North America, New Zealand and Chile could be slightly down.

Japan's sawnwood imports from Russia continue to grow and to set new records; in 2004 sawnwood imports from Russia were the highest ever recorded. Moreover, the proportion of kiln-dry imports is increasing due, say analysts, to low energy costs in Russia.

Total imports of North American sawnwood were close to 4 million m^3 in 2004, 4.4% more than in 2003. The majority was for 2x4 house construction.

Plywood market in 2004

Japan's total 2004 consumption of plywood from domestic and import sources was around 8.1 million m^3, 6.7% higher than 2003 and the first time in four years that consumption exceeded eight million m^3. Imports were 4.9 million m^3, 8% more than in 2003, while domestic production was up 4.9% to 3.2 million m^3. These increases can be attributed to the increased building activity noted earlier.

The domestic production of plywood increased as manufacturers expanded production lines for structural panels and panels made of domestic timbers. Manufacturers of softwood panels also increased the production of thicker panels.

Imports of plywood increased in 2004 as more overseas manufacturers became JAS [Japan Agricultural Standards]-certified and because domestic panel prices rose giving importers confidence to buy larger quantities. By source, 2.4 million m^3 came from Indonesia, up 8.1% over 2003, and an additional 2.0 million m^3 came from Malaysia, up 7.9%. A further 334,000 m^3 were imported from China, 22.3% more than in 2003.

The total domestic production of softwood plywood was 2.0 million m^3, 14.6% more than in 2003, of which panels thicker than 12 mm made up some 1.85 million m^3, up 16%. Overall, the share of softwood panels in Japanese domestic production increased 5.8% to almost 68% in 2004.

The modest recovery reported over recent months has relied on exporters, whereas it is Japanese private consumption that is the stronger economic driving force in Japan.

And what lies ahead

The economic news out of Japan is still not very encouraging. The modest recovery reported over recent months has relied on exporters, whereas it is Japanese private consumption that is the stronger economic driving force in Japan. At the moment, Japanese consumers are keeping their hands in their pockets and their money in savings. The official government stance in March 2005 was that the economy is recovering at a moderate pace.

On the corporate front, profits are improving and business investment has shown signs of increasing moderately but private consumption is still flat. The folks on the street in Japan are acutely aware of the fragile employment situation and, while there has been a slight drop in the unemployment rate, it is still at levels never before seen in post-war Japan.

Government analysts say that short-term economic prospects remain solid and that if the recovery in the world economy is sustained the corporate sector will remain the cornerstone of any growth. Of considerable concern, given its potential to derail the positive trend, is the recent surge in oil prices—this will increase raw-material import costs and domestic production costs across the board.

Reference

ITTO 2004. *Annual review and assessment of the world timber situation.* ITTO, Yokohama, Japan.

Clear policies on the marketing of products from community forests are needed in Nepal to maximise the contribution of forests to sustainable development

by Bhim Nath Acharya

bhimnatha@yahoo.com

Market-bound: this load of firewood will be traded in the local market. *Photo: Bhim Nath Acharya*

NEPAL'S community forestry program, adopted as one of the major strategies for managing the country's forests, has made a significant contribution to the livelihoods of forest-dependent people in several parts of the country. The management of about 1 million hectares of national forest has already been handed over to about 13 000 forest-user groups.

For many years timber has been viewed as the main—if not the only—economic product derived from the forest. Recently, however, a wide range of non-timber forest products (NTFPs) have been attracting more attention from economists because of their contributions to household incomes, food security and national income (Pandit unpublished). It has become increasingly clear that the economic condition of community-forest users is heavily dependent on timber and NTFPs and their proper marketing. This last factor, marketing, is often ignored by foresters, yet it may be the key to the sustainable development of community forests.

Unclear guidelines about marketing, limits to individual collection and trading rights, and short duration of access to the forest were all identified as major problems.

Objectives and methods

I conducted research for a masters' thesis in two watersheds of the Nawalparasi and Chitwan districts, which encompassed four handed-over community forests under four village development committees (VDCs). The general objective of the study was to analyse comparative marketing systems for timber products and NTFPs with a view to making recommendations for improving such marketing systems in the future. The specific objectives were to: i) assess the timber products and NTFPs traded from the districts and identify major market centres and their accessibility; ii) analyse the existing marketing system and marketing channels and assess opinions on the marketing of timber products and NTFPs; iii) assess price variations and analyse marketing margins for major NTFPs; iv) analyse the factors affecting the pricing of timber products and NTFPs and income from those products; and v) identify problems, constraints and potentials and suggest recommendations for strengthening the marketing of timber and NTFPs.

Household survey was the main tool used for data collection. However, other qualitative data collection tools like reconnaissance survey, observation, key-informants' interviews, focus-group discussions and market surveys were also used.

Findings

The research showed that the marketing of forest products from community forests is still in the development and learning phase. Few users participated in trading activities, which was limited to a small number of products. Most commonly, the products harvested by forest-user groups were sold to group members; the volume of individual harvesting and trading was very small. There was a significant practice of collecting and selling major medicinal and aromatic plants. Trading activities associated with timber products were focused on fuelwood, timber and some finished products (such as furniture).

The major buyers of the timber and its finished products were forest-user-group members and local people; a very limited volume of products was sold to the market and to distant consumers. Most NTFPs were sold to cooperatives and local traders; forest-user groups could only sell their products outside if the local demand was saturated, even though prices in regional markets were higher.

Forest-user groups preferred cooperative and group marketing systems. However, some collectors of NTFPs still followed an individual marketing system because they were committed to selling to local traders.

Prices tended to be higher in the regional or higher-level markets than in local markets and the marketing margin was also higher. Good market information was the most important factor for obtaining higher profit margins.

The research identified various social, economic and institutional/legal factors that were important in determining the profitability of community forestry. The most important of all were institutional—including those relating to security of access to the resource, the forest-user-group operation plan (including its approach to marketing), the harvesting and trading rules established by the forest-user groups, and the presence or absence of marketing institutions. Unclear guidelines about marketing, limits to individual collection and trading rights, and short duration of access to the forest were all identified as major problems.

The findings of this research show that there is enormous potential for the promotion of community forestry and forest-product marketing. Institutional and legal reforms would help in the realisation of such potential through an increase in the efficiency of forest-product marketing.

Recommendations

Based on the key findings of this research, recommendations can be made to strengthen the existing marketing system and to promote an efficient approach to marketing forest products from Nepal's community-managed forests. They focus particularly on institutional/legal factors.

Clear policies on marketing of products from community forests: the individual sale of timber products and NTFPs is either not permitted or is permitted only on a limited scale by current policies and laws. This should be addressed.

Marketing measures incorporated in operational plan: the rights of users to harvest and sell forest products should be clearly specified in forest-user-group operational plans.

Price information by proper institutional arrangement: price information about the products being marketed has a strong influence on profit margins. Such information should be made more accessible to forest users.

Promotion of group and cooperative marketing: findings shows that forest users prefer a cooperative approach to marketing, particularly for NTFPs. Cooperative approaches should therefore be encouraged.

Promotion of small-scale local processing industries: to some extent, the local, small-scale processing of medicinal plants already takes place. This should be encouraged.

Reference

Pandit, B. unpublished. *Prospects of promoting non timber forest products in the mountains of Nepal*. PhD dissertation submitted to Asian Institute of Technology, Thailand. 2003.

The article is based on the author's masters' thesis entitled Market analysis of major products from the community managed forests: a study from the foothill watersheds of Nepal, *2004, Asian Institute of Technology, Thailand. The research was conducted with the support of the ITTO fellowship program.*

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 mongraphs; 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 utilisation 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
- reasonable ness 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 **7 September 2005** for activities that will begin no sooner than 1 January 2006. Applications will be appraised in November 2005.

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

On the conference circuit

Photo: M. Sathoud

Heads of state discuss Congo Basin forests

2nd Summit on Forests for Heads of State of Central Africa

5 February 2005
Brazzaville, Congo

At the 1st Summit on Forests for Heads of States of Central Africa, which was held in March 1999 in Yaounde, Cameroon, the heads of state of six Central African nations signed the Yaounde Declaration in the presence of representatives of the international community. The 2nd Summit was convened to assess what has been done so far in the implementation of the Yaounde Declaration and to define new directions and commitments for Central Africa in the conservation and sustainable management of forest ecosystems.

The following heads of state attended the 2nd Summit: Paul Biya (Cameroon); François Bozize (Central African Republic); Denis Sassou Nguesso (Republic of Congo); Joseph Kabila (Democratic Republic of Congo—DRC); Omar Bongo Ondimba (Gabon); Obiang Nguema Mbasogo (Equatorial Guinea); Idris Deby (Chad); Eradique Bandeira Melo de Menezes (Sao Tome and Principe); and Jacques Chirac (France). The Summit was also attended by official representatives of African, American, Asian and European countries, as well as by representatives of international organisations and non-governmental organisations.

At the opening ceremony, statements were made by the representative of the Secretary-General of the United Nations (Klaus Töpfer, Executive Director of the United Nations Environment Programme) and the heads of state of Cameroon, Gabon, DRC, France and Congo. In the afternoon, statements were made by Kenya's Nobel Prize-winning Ms Wangari Muta Maathai and by representatives of the following countries and international organisations: Rwanda, South Africa, Italy, USA, ITTO, FAO, the World Bank, the African Development Bank, the Worldwide Fund for Nature, the Wildlife Conservation Society and the United Nations Forum on Forests.

One of the noteworthy actions taken at the Summit was the signing by the heads of state of a treaty giving legal backing to the Conference of Ministers in charge of Central African Forests (COMIFAC). COMIFAC is a sub-regional institution designed to coordinate and supervise initiatives and actions in matters relating to the conservation and sustainable management of Central African forest ecosystems. Three countries—Sao Tome and Principe, Rwanda and Burundi—became new members of COMIFAC by signing the treaty. The Summit also adopted a sub-regional 'convergence plan' and COMIFAC was mandated to coordinate the implementation of this plan; in addition, the heads of state pledged their commitment to combating illegal logging and bushmeat trade.

The heads of state also approved the COMIFAC Year 2015 Objective, according to which all forests of the permanent forest estate in the region will be sustainably managed by the year 2015. The process will be based on the guidance provided by the African Timber Organization/ITTO *Principles, criteria and indicators for the sustainable management of African natural tropical forests*.

During the preparatory meetings for the 2nd Summit, the Dja-Odzala-Minkebe (TRIDOM) Agreement was signed by the ministers in charge of forests from Cameroon, Gabon and Congo. Covering about 14.6 million hectares and representing an estimated 7.5% of the Congo Basin, this transboundary conservation area spans the three signatory countries.

The third meeting of the Congo Basin Forest Partnership (CBFP) took place on 4 February 2005 in conjunction with the 2nd Summit on Forests. It was decided that facilitation of the CBFP would be undertaken by France for the next two years. The framework of cooperation between partners involved in the CBFP and the terms of reference for the French facilitation were also approved. The focus will be on three main areas:

- strengthening regional cooperation at all levels;
- capacity-building in conservation and sustainable forest management; and
- strengthening governance by harmonising forestry laws and promoting the fight against illegal logging within the framework of the European Forest Law Enforcement and Governance (FLEG) initiative and/or the African FLEG initiative.

Forests on the table in Venezuela

IV Venezuelan Forestry Congress

19–26 November 2004
Barinas, Venezuela

With its slogan 'forests, life and development', this event was attended by nearly 400 people from different parts of Venezuela, including foresters and professionals in other related disciplines, industrialists, the private and public sectors, and teaching institutions.

Congress discussions covered five thematic areas—environmental services, environmental management, silviculture and forest management, watershed

conservation and management, and forest industries—which made up the framework for the presentation of more than 100 papers and posters in two parallel sessions. Ten keynote speeches, given by international guest speakers from ITTO, FAO, Italy, France, Costa Rica and Brazil as well as by distinguished professionals from Venezuela, highlighted the significance of Congress topics. One day of the Congress was devoted to technical field trips to observe forest plantation management, agroforestry, wildlife management and fish-farming practices.

Concerns about the drastic changes that have been taking place in the country's western lowlands region, where the Congress was held, were raised in an open-ended roundtable. Large areas of forest in the region have been converted into agricultural lands and pastures, and the remaining forests are becoming degraded. The roundtable canvassed possible alternatives to the current situation based on community management, ecotourism and agroforestry development.

Efforts are also being made partly by the government but mostly by the private sector towards the gradual rehabilitation of these lands through plantations using introduced species, a combination of agricultural and forestry techniques, the participation of forest communities in sustainable forest management activities, and the implementation of innovative activities that contribute to food security in the country. Agroforestry is clearly an important mechanism for the restoration of forests in these lowland areas; such restored forests will admittedly be different to the original forests but will nevertheless create a healthier landscape in that part of the country.

Among its most relevant conclusions, the Congress underlined the need to redirect both public and private actions and strategies to take into account Venezuela's new environmental priorities. Forests are an important focus of these priorities because they play a key role in the conservation of biodiversity and in meeting the growing demand for goods and services derived from these forest resources.

The Congress also recommended that the government should pay more attention to the promotion of sustainable forest management in the South Orinoco region. These forests, with their heterogeneous forest mix and high biodiversity, are unique in the world and should be conserved and managed under a system that is: i) consistent with forest certification standards to ensure their sustainable management over time; ii) economically viable for effective timber and NTFP utilisation; and iii) aimed at meeting the needs of the population.

Such recommendations and developments imply a need for change in forestry education, because the world of forestry is now much broader than just ensuring the maintenance of timber production. Capacity-building in government, the private sector and civil society will be essential for the implementation of this new, holistic vision of forestry in Venezuela. Government will need to work with those sectors concerned with forest and environmental education, with the participation of civil society and forest communities.

The proceedings of IV CONFORVEN have been published in CD format and the conference presentations and papers can be seen in: www.conforve.ula.ve

Reported by Osvaldo Encinas O.

Repairing the damage

Rehabilitation of tsunami-affected forest ecosystems: strategies and new directions

7–8 March 2005
Bangkok, Thailand

This regional coordination workshop, which was convened by the United Nations Food and Agriculture Organization (FAO), brought together 15 government representatives from seven countries (Indonesia, India, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand) affected by the 26 December 2004 tsunami in Asia. They were joined by about 30 representatives of international, regional and sub-regional organisations, including ITTO. The workshop provided participants with the opportunity to share information, collectively assess initial findings related to rehabilitation needs and opportunities, share plans and proposals for future rehabilitation work, and develop mechanisms for collaboration and joint activities.

After a welcome and introduction, four invited speakers set the scene with presentations covering: the role of mangroves and other vegetation in protecting against tsunamis and tidal surges; the role of trees and forests in integrated coastal-zone management; the latest assessment of the impacts of the tsunami on coastal vegetation; and the assessment of wood use and needs for reconstruction in the region.

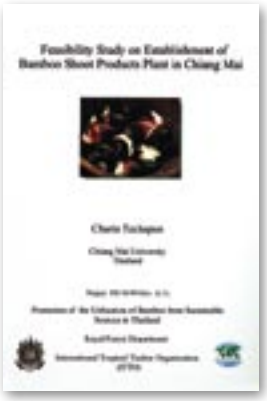
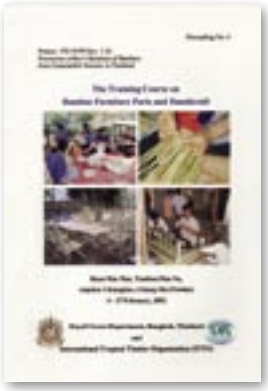
During an open forum, participants from the affected countries described rehabilitation and reconstruction activities related to trees and forests. Representatives of the international organisations also had the opportunity to outline ongoing and planned activities. Based on the presentations, discussions and ideas expressed, participants were divided into three working groups to draw joint conclusions and elaborate a common vision and principles to guide forest-related rehabilitation and reconstruction efforts in the region.

The workshop made a number of recommendations. In particular, participants recommended the establishment of a regional partnership to foster collaboration and coordination of forest-related initiatives in rehabilitation efforts. The partnership would include affected countries, international and regional organisations, NGOs, research organisations and other stakeholders including donors. The objective would be to support a forestry response to the tsunami that is cost-effective, comprehensive, technically sound and developed within the context of integrated coastal-zone management and sustainable livelihoods. The immediate activities of the partnership would be oriented towards tsunami-affected areas in Asia but would also be relevant to other affected areas and to mitigation and rehabilitation efforts in future coastal disasters.

For more information contact: Patrick B. Durst, FAO Regional Office for Asia and the Pacific, 39 Phra Atit Rd, Bangkok 10200, Thailand; Tel 66–2–697 4000; Fax 66–2–697 4445; Patrick.Durst@fao.org

Recent editions

Edited by Alastair Sarre



Techapun, C. no date. **Feasibility study on establishment of bamboo shoots products plant in Chiang Mai.** ***Internal technical report of ITTO project PD 56/99 Rev.1 (I). Royal Forest Department, Bangkok, Thailand.***

Subansenee, W., Nilkamhaeng, N., Sroithongkham, P. & Chiablaem, S. 2002. **The training course on bamboo furniture parts and handicraft.** ***Technical report of ITTO project PD 56/99 Rev.1 (I), No 2. Royal Forest Department, Bangkok, Thailand.***

Hosokawa, K., Subansenee, W., Panyathanya, W. & Kuhakanchana, C. no date. **Bamboo charcoal.** ***Internal technical report of ITTO project PD 56/99 Rev.1 (I), No 3. Royal Forest Department, Bangkok, Thailand.***

Tesoro, F., Subansenee, W., Nilkamhaeng, N. & Fueangvivat, V. no date. **Bamboo marketing in Thailand.** ***Internal technical report of ITTO project PD 56/99 Rev.1 (I), No 4. Royal Forest Department, Bangkok, Thailand.***

Royal Forest Department 2004. **Sustainable development of bamboo resources: proceedings of the National Conference on Sustainable Development of Bamboo Resources, Chiang Mai, Thailand.** ***Technical report of ITTO project PD 56/99 Rev.1 (I), No 2. Royal Forest Department, Bangkok, Thailand.***

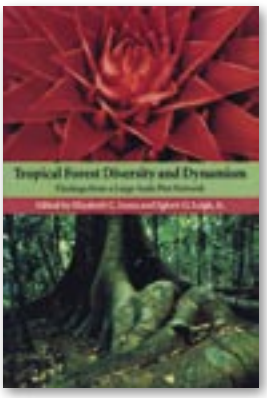
Royal Forest Department 2004. **Sustainable management and utilization from bamboo.** ***Final technical report of ITTO project PD 56/99 Rev.1 (I), No 2. Royal Forest Department, Bangkok, Thailand.***

Available from: *the Information Officer, ITTO Secretariat, ahadome@itto.or.jp (see page 2 for full contact details)*

These publications are all outputs of an ITTO project aimed at promoting the utilisation of bamboo from sustainable sources in Thailand. The final report contains papers on a range of technical issues, including the physical and mechanical properties of bamboo species in Thailand, the improvement of bamboo charcoal techniques, the use of bamboo as flooring and the sustainable management of bamboo.

Losos, E. & Leight, E. (eds) 2004. **Tropical forest diversity and dynamism: findings from a large-scale plot network.** ***University of Chicago Press, Chicago, USA. ISBN 0 226 49346 6.***

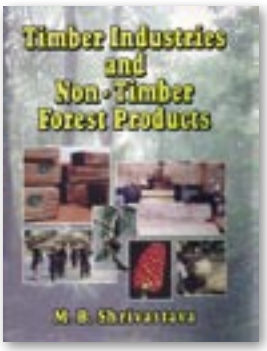
Available from: *University of Chicago Press, www.press.uchicago.edu; US$38*



This book presents the findings from a network of 16 growth-monitoring plots, each of which is 50 hectares in size, established in tropical forests around the world—including in Panama, Malaysia, Democratic Republic of Congo, Colombia, Thailand and India—coordinated by the Smithsonian Tropical Research Institute's Center for Tropical Forest Science. Collectively the plots are monitoring nearly 3 million trees of about 6000 species; the oldest, on Barro Colorado Island (BCI) in Panama, was established in 1980. By the year 2000 five censuses—in which all woody stems larger than 1 cm diameter at breast height (dbh) were tagged, measured, mapped and identified to species—had been conducted on BCI. According to Stephen Hubbell, one of the scientists who set up the BCI plot, "the most remarkable finding of all is how dynamic the BCI forest is … In just 18 years, 40% of all trees and saplings over 1 cm dbh in the plot have turned over. For trees over 10 cm dbh, 34% died during the same period".

Shrivastava, M. 2005. **Timber industries and non-timber forest products.** ***CBS Publishers & Distributors, New Delhi, India. ISBN 81 239 1175 0.***

Available from: *CBS Publishers & Distributors, 4596/1-A, 11 Darya Ganj, New Delhi 110 002, India; cbspubs@del3.vsnl.net.in; www.cbspd.com. Rs1995; US$49.95.*

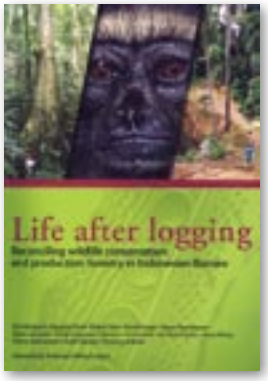


This book, which is derived from lecture notes developed by the author during his tenure at the Papua New Guinea University of Technology, is designed to provide "in simple and readily intelligible language" the basic technologies used in the industrial development of timber and non-timber forest products. It explains, for example, the function of a gullet in a saw blade, provides

a glossary of sawmilling terms, and describes in great detail the sawmilling process (including maintenance and saw-doctoring). There are also chapters on chainsaws and portable sawmills, a large section on reconstituted wood products (including plywood, particleboard and composite products), chapters on other uses of timber, such as for charcoal, and a relatively short section on non-timber forest products. The book is illustrated by somewhat crude but effective drawings. It should serve as a useful primer for those wishing to understand the basics of wood-processing technology.

Meijard, E., Sheil, D., Nasi, R., Augeri, D., Rosenbaum, B., Iskandar, D., Setyawati, T., Lammertink, M., Rachmatika, Il, Wong, A., Soehartono, T. & O'Brien, T. 2005. **Life after logging: reconciling wildlife conservation and production forestry in Indonesian Borneo.** ***Center for International Forestry Research, Bogor, Indonesia.***

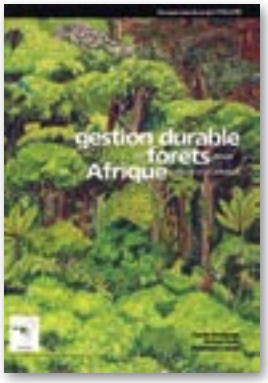
Available from: *CIFOR, PO Box 6596 JKPWB, Jakarta 10065, Indonesia; Tel 62–251–622 622; Fax 62–251–622 100; cifor@cgiar.org; www.cifor.cgiar.org*



This book derives from research conducted under ITTO PROJECT PD 12/97 REV.1 (F) in the Bulungan Model Forest in Indonesia's East Kalimantan. It is aimed at three kinds of audiences: those interested in assessing and regulating timber-havesting activities in Southeast Asia; those involved in trying to achieve conservation goals in the region; and those undertaking research to improve multipurpose forest management. It consists of a literature review, an analysis of data on the effects of logging on wildlife, a section on forest management, including recommendations to managers and government planners, and recommendations for researchers. The authors suggest that their recommendations for managers should be viewed as "biodiversity friendly additions to, and as added support for, RIL [reduced impact logging] practices".

FORAFRI/CIRAD-Forêts, 2003. **La gestion durable des forêts denses d'Afrique Centrale et Occidentale.** ***CIRAD & CIFOR, Montpellier, France and Bogor, Indonesia. CD-ROM. ISBN 2 87614 559 6.***

For more information contact: *Charles Doumenge at charlesdoumenge@cirad.fr or Dominique Louppe at dominiquelouppe@cirad.fr*



The French-funded regional project FORAFRI, which was implemented between 1996 and 2002, aimed to collate and disseminate the results of forestry research conducted in selected Central and West African countries over the last 20 years. These results have been presented in 39 documents on the following main topics: the ecological basis of the management of production forests, the management of production forests, forest products, and forestry research and capacity-building.

The above-mentioned documents, already published by FORAFRI, include the following: a scientific and technical synthesis on subjects related to the management of African dense forests; technical sheets/leaflets on some commercial timber species; a bibliography on forests of several countries in Central and West Africa; a toolbox for the follow-up of sustainable forest management; training manuals; and reports/proceedings of conferences and workshops, etc. All 39 documents, which contain useful forestry information for decision-makers in governmental institutions, the private sector and NGOs, are presented in this CD-ROM.

Bigombe Logo, P. & Dabire Atama, B. 2003. **Gérer autrement les conflits forestiers au Cameroun.** ***UCAC, Yaoundé, Cameroon. ISBN 2 911380 60 6.***

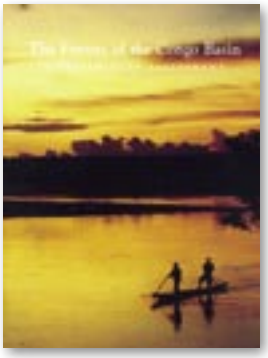
Available from: *Presses de l'Université Catholique d'Afrique Centrale, BP 11628 Yaoundé, Cameroon; pucac@cenadi.cim or visit www.pucac.com*

The Cameroonian forestry sector faces an increasing number of conflicts among forest stakeholders, including central and local state authorities, forest concessionaires, local communities and NGOs; such conflicts are a major constraint to the pursuit of sustainable development and poverty reduction in Cameroon.The first part of this book presents an overview of forest-management conflicts in Cameroon, a typology of the conflicts, an analysis of the parties concerned by the conflicts and the main existing mechanisms for conflict management.

The second part of the book proposes the implementation of an alternative approach based on a participatory process of communication, dialogue and negotiation to prevent or solve conflicts related to forest management in Cameroon. This would tackle forest conflicts by harmonising the approach of the state's forest law with the traditions of local communities after assessing their enforcement-related strengths and weaknesses.

CARPE 2005. **The forests of the Congo Basin. A preliminary assessment.** ***USAID Central African Regional Program.***

Available at: *http://carpe.umd.edu/products/PDF_Files/FOCB_APrelimAssess_EN.pdf (English) or http://carpe.umd.edu/products/PDF_Files/FOCB_APrelimAssess_FR.pdf (French)*



This publication was prepared within the framework of the Congo Basin Forest Partnership by the USAID [United States Agency for International Development] Central African Regional Program (CARPE). It highlights the incredible natural and human resources of the Congo Basin and acknowledges the multi-layered partnerships that have emerged in support of the Central African countries to protect, conserve and sustainably develop those resources. This initial report showcases US Government-supported activities in the Congo Basin and could form the basis of periodic and more detailed assessment of the Congo Basin forest.

Adapted from the publisher's notes.

ITTO to convene plywood conference

As part of its ongoing work to study and promote policies and other measures to increase the competitiveness of the tropical timber industry, ITTO will convene an international conference on tropical plywood in Beijing, China on 26–28 September 2005.

In close collaboration with the private sector, national and regional plywood associations and relevant international organisations, there is a need to assess:

- markets and market share for tropical plywood;
- processing productivity and the profitability of tropical plywood manufacturing;
- marketing knowledge, trade efficiency and transparency in the tropical plywood trade; and
- awareness of the tropical plywood sector regarding the environmental and social responsibilities of their activities.

The conference will tackle these issues through keynote addresses and presentations in four sessions relating to opportunities and challenges of tropical plywood markets, manufacturing, raw-material supply and corporate social and environmental responsibilities.

The conference is open to all interested parties and there are no fees for registration.

More details will be made available on the ITTO website in due course, or contact Mr Paul Vantomme, ITTO Secretariat, itto@itto.or.jp; www.itto.or.jp/live/PageDisplayHandler?pageId=223&id=909

Study tour offered

The Regional Community Forestry Training Centre (RECOFTC) is offering a study tour on 'sustainable livelihoods and community forestry'. The tour, which will take place on 16–23 August 2005 in Thailand, will cost US$990. Participants can expect to gain real insights into the relationships between people, forests and livelihoods and how local communities are benefiting from forests and forests from people. It will provide an opportunity to explore sustainability in a very practical and 'hands-on' manner and to see how forest-dependent communities utilise forest resources to build resources that allow them to deal with exposure to outside pressures and shocks. The outcomes of the tour will be experiences and knowledge to improve the implementation of community forestry programs in the participants' own countries. Participants will:

- see how community forestry contributes to rural livelihoods;
- learn how local forest management systems have developed to support local livelihoods;
- gain a better understanding of the relationship between people, forests and livelihoods;
- discover how forest management policies and other institutional arrangements can influence community forestry and local livelihood outcomes; and
- be challenged to develop systems for sustainable forests and sustainable livelihoods.

If you're interested contact: *Leela Wuttikraibundit, Capacity Building Program, RECOFTC, Kasetsart University, PO Box 1111, Bangkok 10903, Thailand; Tel 66–2–940 5700; Fax 66–2–561 4880; contact@recoftc; www.recoftc.org*

Sir

ITTO was created to assist tropical countries to maintain and improve benefits for their economies and people from the sale of tropical wood in world markets. The Organization has endeavoured to do this in the context of environmentally compatible forest policies. Over the years, environmental considerations have been very much in the forefront of ITTO's work.

For developing nations, the export flow of tropical wood and wood products is an important contributor to national economies in terms of revenues and jobs, and a catalyst for other beneficial services. However, it is not easy to see significant long-term increases in the volumes of tropical wood traded internationally. In quite contrary ways, sustainable forest management and uncontrolled logging mitigate against global increases in tropical log extraction. The fundamental driving force is, of course, the appreciation of the usefulness and versatility of wood in its many forms, to the extent that some tropical countries which once exported timber now have to import some of their needs. Wood has to come from somewhere. Ensuring adequate wood supply is an essential part of ITTO's work.

Strengthening and maintaining ITTO strategies (I believe the adjective 'overarching' is used in ITTO circles) which assist in the creation, management and intial cycle funding of industrial wood plantations would be of benefit to producer member countries. This would reinstate the earnings from timber which some countries have lost. Tree-planting and harvesting would alleviate pressure on natural forest and forest systems. There would be timber to meet internal domestic demand and development as well as provide fuelwood.

A final comment: there is international debate about climate change, and prospects for offsetting atmospheric pollution by carbon-emitting activities through the absorption of carbon dioxide by trees during their early growth. Whatever views are held as to the effectiveness of this carbon equation, it is an avenue which some carbon-emitting organisations wish to follow and which can only be good news for those who want to grow trees. Tree-farming for future wood supply should now rank high among the objectives of ITTO.

Geoffrey Pleydell

Surrey, UK

3 February 2005

Interactive forest and nature policy in practice

12 September–1 October 2005
Wageningen, the Netherlands
Cost: €3050

Forest and nature management policies have entered a new era—one of facilitating dialogue, joint learning and collaborative action among stakeholder groups and organisations. A new breed of professionals is in high demand. Do you know how to bring different stakeholders together? Can you design and lead processes of critical reflection and learning? Can you help people to understand each other's perspectives and manage conflict? Can you aid in the negotiation of agreements and action between diverse interest groups? If you would like to develop your skills as a 'new' professional, this is a course for you. The process of collaborative learning looks beyond the simple act of stakeholder participation to focus on the social processes and dynamics that make stakeholder participation work as an effective force for sustainable resource management decision-making. Crucial for this so-called social learning is that learning together concerns changes, not only in what a stakeholder knows but also in attitudes, beliefs, skills, capacities and actions.

Contact: *Wouter Hijweege, Course Coordinator, International Agricultural Centre (IAC), PO Box 88, 6700 AB, Wageningen, the Netherlands; Tel 31–317–495 495; Fax 31–317–495 395;Training.iac@wur.NL; www.iac.wur.nl*

The 2005 ProForest forest and certification summer training programme

11–15 July 2005
Oxford, UK

This program provides a range of courses for those involved in forest management, forest 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.

Training courses will be available in the following subject areas:

- introduction to certification and standards (one day);
- forest certification in practice including practical auditing (four days);
- responsible purchasing in practice, including product tracing and chain of custody (two days);
- high-conservation-value forests and biodiversity monitoring (two days); and
- climate change policy and forests (one day).

Delegates 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 courses, and fees range from £200 for one day to £850 for four or five days. Fees include coffee, lunch and training materials.

Contact: *Andry Rakotovololona, ProForest, ProForest Ltd, South Suite, Frewin Chambers, Frewin Court, Oxford OX1 3HZ, United Kingdom; Tel 44–1865–243439; Fax 44–1865–244820; info@proforest.net*

Good governance and decentralisation in the natural resource sector

6–16 June 2005
Bangkok, Thailand
Cost: US$3000

This training course will provide participants with a framework for exploring the principles and processes of 'good governance' in a decentralised planning process. Unique to this course will be the opportunity for participants to explore and analyse governance processes in the field and the resulting outcomes. From this, an assessment can be made as to what is 'good governance', what needs to be in place to achieve this and what outcomes might be expected. The course will:

- increase participants' understanding of the rationale and implications of good governance within a decentralisation process;
- provide participants with an analytical framework in which to explore and evaluate good governance;
- explore and assess field experiences in establishing good-governance processes and provide participants with tools and techniques to evaluate such processes;
- develop participants' knowledge and skills in deliberative and inclusive processes that foster good governance in civil society; and
- provide opportunities for participants to share experiences and ideas on good governance and the ability to convert these discussions into workplace outcomes.

Contact: *Peter Stephen, Regional Community Forestry Training Centre for Asia and the Pacific (RECOFTC), Kasetsart University, PO Box 1111, Bangkok 10903, Thailand; opjs@ku.ac.th or contact@recoftc.org; Tel 66–2–940 5700 ext. 1230; www.recoftc.org*

Participatory action research for community-based natural resource management

15–30 August 2005
Cavite, Philippines
Cost: US$2600

This course will enhance the skills of professionals in these areas whilst encouraging them to act as seeds of change within their organisations. Specifically, participants will have the opportunity to reflect upon and share experiences of community-based natural resource management (CBNRM), explore principles of participatory action research (PAR), experiment with a range of tools for examining different perspectives relevant to CBNRM with different actual stakeholders, critically analyse the PAR approach in relation to CBNRM, and be encouraged to apply lessons to their own NRM and organisational contexts. Emphasis will be placed on providing a stimulating learning environment for the sharing of ideas among participants, facilitators and other resource people. The course is geared specifically to senior decision-makers, project managers and middle-level field workers who have experience with and are working on CBNRM. As the workshop is in English, proficiency in spoken and written English is essential. Women are encouraged to apply.

Contact: *PAR for CBNRM, International Institute of Rural Reconstruction (IIRR), Y.C. James Yen Center Silang 4118, Cavite, Philippines; Tel 63–46–414 2417; education&training@iirr.org; www.iirr.org or Ronnakorn Triraganon, Regional Community Forestry Training Centre for Asia and the Pacific (RECOFTC), PO Box 1111, Bangkok 10903, Thailand; Tel 66–2–940 5700 ext. 1234; contact@recoftc.org; www.recoftc.org*

RECOFTC and/or IIRR also provide a customised PAR for CBNRM course in any appropriate requested location. When requesting such a course, three months' notice would be appreciated.

Participatory management of protected areas

12–27 September 2005
Bangkok, Thailand
Cost: US$2600

It is increasingly recognised that the key to the successful management of protected areas involves the active participation of local communities and other stakeholders. In order to involve communities in the management of protected areas, protected area management personnel require additional skills, knowledge and attitudes which can foster and maintain the participation of local communities. This course is designed to provide forestry, natural resource and conservation professionals with a deeper understanding of why it is important to include local communities in the management of protected areas and to better understand how this can be done. It will also help participants gain the analytical skills needed to enable them to better conceptualise and overcome problems in the application of participatory protected area management within their own specific situations. Applicants should currently have either direct responsibility in a protected areas program or be scheduled to work in PA management on completion of the course. As the course is taught in English, proficiency in spoken and written English is essential.

Contact: *Ronnakorn Triraganon, Regional Community Forestry Training Centre for Asia and the Pacific (RECOFTC), Kasetsart University, PO Box 1111, Bangkok 10903, Thailand; Tel 66–2–940 5700 ext. 1234; contact@recoftc.org; www.recoftc.org*

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.

Meetings

4–8 April 2005. **Forest Landscape Restoration Implementation Workshop**. Petropolis, Brazil. Organised by the Global Partnership on Forest Landscape Restoration and co-sponsored by ITTO. ***Contact:*** *Carole Saint-Laurent, Senior Forest Policy Adviser, IUCN, Coordinator, Global Partnership on Forest Landscape Restoration, 70 Mayfield Avenue, Toronto, Canada M6S 1K6; Tel 1–416–763 3437; CarSaintL@bellnet.ca*

6–9 April 2005. **Panelexpo 2005. 2nd International Seminar & Exhibition on Plywood and Panel Industry**. New Delhi, India. Co-sponsored by ITTO. ***Contact:*** *Federation of Indian Plywood & Panel Industry, 12/22 East Patel Nagar (1st Floor), New Delhi 110 008, India; Tel 91–11–2575 5649; Fax 91–11–2576 8639; fippi@fippi.org; www.panelexpo.com*

19–21 April 2005. **ITTO International Workshop on Phased Approaches to Certification**. Berne, Switzerland. ***Contact:*** *Amha bin Buang, ITTO Secretariat; eimi@itto.or.jp*

16–27 May 2005. **5th Session of the United Nations Forum on Forests**. New York, USA. ***Contact:*** *Mia Söderlund, UNFF Secretariat; Tel 1–212–963 3262; Fax 1–212–963 4260; unff@un.org; www.un.org/esa/forests*

20 May 2005. **Workshop on Teak Prices for Plantation Investment**. Coillte, Ireland. ***Contact:*** *International Teak Unit, Coillte Consult, Dublin Road, Newtown Mount Kennedy, County Wicklow, Ireland; Tel 353–1–201 1111; Fax 353–1–201 1199; teakunit@coillte.ie*

1–3 June 2005. **The Global Forest and Paper Summit 2005**. Vancouver, Canada. ***Contact:*** *Forest Products Association of Canada, Suite 504–999 Canada Place, Vancouver, British Columbia, Canada V6C 3E1; Tel 1–604–775 7300; Fax 1–604–666 8123; info@globalforestpapersummit.com; www.globalforestpapersummit.com*

15–17 June 2005. **Facilitating Forestry Mitigation Projects in India: Promoting Stakeholder Dialogue and Capacity-building**. Dehra Dun, India. ***Contact:*** *Indian Council of Forestry Research and Education, PO New Forest, Dehradun, Uttaranchal 248006, India; hoodan@icfre.org*

20–24 June 2005. **5th International Conference on Forest Vegetation Management: Useable Science, Practical Outcomes and Future Needs**. Corvallis, Oregon. ***Contact:*** *Dr Robin Rose, Director, Vegetation Management Research Cooperative, College of Forestry, Oregon State University, 308 Richardson Hall, Corvallis, OR 97330 USA; Fax 1–541–737 1393; Tel 1–541–737 6580; robin.rose@oregonstate.edu*

21–24 June 2005. **38th Session of the International Tropical Timber Council and Associated Sessions of the Committees**. Brazzaville, Republic of Congo. ***Contact:*** *Information Officer (Mr Collins Ahadome); Tel 81–45–223 1110; Fax 81–45–223 1111; itto@itto.or.jp; www.itto.or.jp*

27 June–1 July 2005. **UN Conference for the Negotiation of a Successor Agreement to the ITTA, 1994, Third Part**. Venue to be announced. ***Contact:*** *UNCTAD Secretariat; Tel 41–22–917 5809; Fax 41–22–917 0056; correspondence@unctad.org; www.unctad.org*

28–30 June 2005. **V Ibero-American Congress of Environmental and Forest Rights (V Congreso Iberoamericano de Derecho Forestal Ambiental 2005)**. Aguascalientes, Mexico. ***Contact:*** *Lic. Fernando Montes de Oca Dominguez, Secretario General del V Congreso, Garibaldi #1810 Col. Ladrón de Guevara, Guadalajara, Jalisco, Mexico; Tel 52–133–1058 1803; www.imacmexico.org*

5–7 July 2005. **Restoration and Sustainable Forest Management in Ghana**. Elmina, Ghana. ***Contact:*** *Kwame A. Oduro; kwame.oduro@wur.nl* ***or*** *kwameoduro@gmail.com; frits.mohren@wur.nl; www.tropenbos.org/news/GhanaConference2005.htm*

17 July 2005. **International Seminar on Sarawak Herbal Medicine and Spices**. Kuching, Sarawak, Malaysia. ***Contact:*** *Sally Sheriza Ahmad, Sarawak Forestry Corporate Office, Kuching, Sarawak, Malaysia; sally@sarawakforestry.com*

10–17 July 2005. **Canopy Ecology—Tropical versus Temperate Forests**. Leipzig, Germany. ***Contact:*** *Wilfried Morawetz, University of Leipzig Institute for Botany; Tel 49–341–973 8590; Fax 49–341–973 8549; morawetz@uni-leipzig.de*

24–30 July 2005. **Regional Workshop on Sustainable Development of Rattan Sector in Asia**. Beijing, China. ITTO PROJECT PD 100/01 REV. 3 (I). ***Contact:*** *Huang Shineng, PhD, Assistant Project Director & Secretary of the Workshop Organizing Committee, Research Institute of Tropical Forestry, Chinese Academy of Forestry, Long Dong, Guangzhou 510520, P R China; Tel 86–20–8702 8675; Fax 86–20–8703 1622; snhuang@pub.guangzhou.gd.cn*

26–28 July 2005. **Symposium on Tropical Rainforest Rehabilition & Restoration: Existing Knowledge and Future Directions**. Kota Kinabalu, Sabah, Malaysia. ***Contact:*** *Secretariat, Symposium on Tropical Rainforest Rehabilitation & Restoration, c/o Research & Development Division, Yayasan Sabah Group, 12th Floor, Menara Tun Mustapha, PO Box 11201, 88813 Kota Kinabalu, Sabah, Malaysia; joan@icsb-sabah.com.my; www.ysnet.org.my/symposium.htm*

8–13 August 2005. **Forests in the Balance: Linking Tradition and Technology**. XXII IUFRO World Congress. Brisbane, Australia. ***Contact:*** *Congress Manager, PO Box 164, Fortitude Valley QLD 4006, Australia; Level 2, 15 Wren St, Bowen Hills QLD 4006, Australia; Tel 61–7–3854 1611; Fax 61–7–3854 1507; iufro2005@ozaccom.com.au; www.iufro2005.com/*

10–15 September 2005. **Meeting of IUFRO Working Party 7.03.04 (Diseases and Insects in Forest Nurseries**. Uherske Hradiste, Czech Republic. ***Contact:*** *Dr Zdenka Prochazkova, WP Coordinator, FGMRI RS Uherske Hradiste, 686 04 Kunovice, Czech Republic; Prochazkova@vulhmuh.cz*

20–24 September 2005. **VII Plywood and Tropical Timber International Congress and VI Machinery and Timber Products Fair**. Belém, Brazil. ***Contact:*** *WR São Paulo; Tel 55–11–3722 3344; wrsp@wrsaopaulo.com.br*

26–28 September 2005. **ITTO International Conference on Tropical Plywood**. Beijing, China. *Contact: Paul Vantomme, ITTO Secretariat; itto@itto.or.jp*

30 September–6 October 2005. **8th World Wilderness Congress**. Anchorage, Alaska. *Contact: 8th WWC Secretariat, The WILD Foundation, PO Box 1380, Ojai, CA USA 93024; Tel 1–805–640 0390; Fax 1–805–640 0230; info@wwc.org; www.8wwc.org*

7–12 November 2005. **39th Session of the International Tropical Timber Council and Associated Sessions of the Committees**. Yokohama, Japan. ***Contact:*** *Information Officer (Mr Collins Ahadome); Tel 81–45–223 1110; Fax 81–45–223 1111; itto@itto.or.jp; www.itto.or.jp*

15–17 November 2005. **Eighth Round-Table Conference on Dipterocarps**. Ho Chi Minh City, Vietnam. ***Contact:*** *Dr Nguyen Hoang Nghia APAFRI Secretariat, FSIV c/o FRIM. Kepong, 52109 Kuala Lumpur, Malaysia; Tel 6–03–6272 2516; Fax 6–03–6277 3249; nhnghia@netnam.vn* ***or*** *secretariat@apafri.org*

23–25 November 2005. **5th Iberoamerican Forest and Environmental Law Congress**. Mexico. IUFRO 6.13.01. ***Contact:*** *Fernando Montes de Oca Dominguez; Tel 52–33–3615 0473; fernandomontesdeoca@imdefac.com.mx*

Institutional arrangements to facilitate the AR-CDM: according to the CDM project cycle, parties participating in the CDM need to set up a designated national authority (DNA) for the CDM. To date, most countries have set up their DNAs within their ministries responsible for the environment, but questions remain about how the forest sector will be engaged in the process. Clear terms of reference will be necessary for project assessment and approval at the national level, together with clear mandates and the allocation of responsibilities among stakeholders. The effective participation of the forest sector in the work of DNAs is vital for the provision of initial and final approval of AR-CDM projects at the national level.

Technical capacity to design and implement AR-CDM: the CDM project cycle is very challenging for project developers: it includes project design and development, validation, registration, monitoring, verification and certification, and the issuance of carbon credits *(see Table 1)*. In particular, there is difficulty in the use/development of methodologies to define baselines, monitoring and additionality. Many potential host countries have limited capacity to implement projects and to interact in the validation, verification and certification processes. Potential project developers will need full access to relevant information and capacity-building programs for the design of project activities. One of the biggest challenges is the development of community-level AR-CDM projects with the participation of small-scale farmers; the support of local governments, NGOs, civil society and the international community will be essential for this.

Financing and investment: In addition to institutional and technical barriers, one of the major problems in promoting AR-CDM projects is the lack of financing for their implementation. There is no established seed capital with which to develop project-design documents and high transaction costs must be met to validate, monitor and certify projects. Another difficult challenge for project developers will be the identification of investors or project participants at an early stage of project development. In many countries, official development assistance (ODA) could play a vital role in CDM development, but participating parties of the Kyoto Protocol agreed that ODA could not be diverted to finance CDM projects. The role of ODA in promoting CDM projects needs to be clarified: in particular, it should be used to enhance capacities in developing countries.

Conclusion

Although the scale of the carbon market for the AR-CDM will be quite small in the first commitment period and will apply only to reforestation and afforestation (and not to natural forest management), it still represents an exciting development in tropical forestry. For the first time, a significant amount of carbon sequestrated by tropical forests will be traded in the marketplace as an environmental commodity—constituting a substantial payment for an ecosystem service. Extending the CDM to include natural forests in the next commitment period could make an important contribution to tropical forest conservation; it is hoped that Kyoto Protocol negotiators will work towards such an extension in future commitment periods. In the meantime, plantation and forest-restoration projects in the tropics should investigate the opportunities presented by the CDM in the first commitment period.

Sources

ITTO 2005. *Project proposal: PD 359/05 (F): Building capacity to develop and implement afforestation and reforestation projects under the Clean Development Mechanism under the Kyoto Protocol in tropical forest sector*. ITTO, Yokohama, Japan.

Murdiyarso, D. 2004. Implications of the Kyoto Protocol: Indonesia's perspective. *International Review for Environmental Strategies* 5:1.

Robleo, C. 2004. Small change from climate-change negotiations? *ITTO Tropical Forest Update* 14:1.

Timetable

Table 1: CDM project cycle

PROCESS	ESTIMATED TIME REQUIREMENT	RESPONSIBLE PARTY
PROJECT IDENTIFICATION		Project developer
↓		
DEVELOPMENT OF PROJECT DESIGN DOCUMENT	12–24 months	Project developer
↓		
APPROVAL	6 weeks	Host government (designated national authority)
↓		
VALIDATION	1 month	Operational entity
↓		
REGISTRATION	2 months	CDM Executive Board
↓		
IMPLEMENTATION & MONITORING	During project lifetime	Project developer
↓		
VERIFICATION & CERTIFICATION	2 weeks	Operational entity
↓		
CER ISSUANCE		CDM Executive Board

Out on a limb

The Kyoto Protocol took effect last February. What sort of opportunity does it present for tropical forestry?

by Hwan Ok Ma

ITTO Secretariat
Yokohama, Japan
ma@itto.or.jp

THE KYOTO PROTOCOL, a treaty negotiated within the United Nations Framework Convention on Climate Change (UNFCCC), finally took effect on 16 February 2005. Under the Protocol, certain afforestation and reforestation (AR) project activities are qualified to be included in the Clean Development Mechanism (CDM).

The CDM is an instrument under the Kyoto Protocol; it allows industrialised countries (Annex-I countries in the UNFCCC) to meet a portion of their binding emission reduction targets through greenhouse-gas (GHG) reduction projects within developing countries (non-Annex-I countries to the UNFCCC). In addition, the CDM allows project proponents in developing countries to earn certified emission reduction (CER) units that would be traded through market mechanisms established by the Protocol.

Clear terms of reference will be necessary for project assessment and approval at the national level, together with clear mandates and the allocation of responsibilities among stakeholders.

During the Protocol's first commitment period (2008–2012), the use of the CDM for carbon-sink activities will be limited to afforestation and reforestation, while the purchase of CERs from the carbon-sink CDM is limited to 1% of participating Annex-I Parties' base-year emissions times five; globally this amounts to a maximum of 121 million tonnes of carbon dioxide (CO_2) equivalents (Mt CO_2e) per year. In the first commitment period (2008–1012), AR-CDM markets will be most influenced by demand, since the potential supply of CERs in tropical and subtropical developing countries far exceeds the total yearly amount of tradable CO_2. If a tonne of CO_2e is worth US$3–5, the AR-CDM could raise US$360–600 million per year during the first commitment period.

In need of a CDM project? Degraded forest land in Papua New Guinea. *Photo: A. Sarre*

Main issues relating to AR-CDM

Although the AR-CDM will not develop into a particularly large market during the first commitment period, government agencies and other concerned stakeholders in developing countries may still wish to build capacity in order to take full advantage of the CDM—and any potential expansion of it in the next commitment period. To promote AR-CDM project activities in tropical countries, the following major issues need to be addressed.

Enabling policy framework in support of the AR-CDM: under the Protocol, AR-CDM projects should contribute to the sustainable development of host countries; a country wishing to undertake such a project therefore needs a clear forest policy statement and associated criteria and indicators in support of the goals of national sustainable development in the forest sector. The socioeconomic impacts of AR-CDM project activities should be demonstrated clearly in project design documents; such documents should also show how local communities will be engaged in the project (this is not a requirement for energy CDM projects). Particular attention may be given to small-scale AR-CDM projects, defined as "those that are expected to result in net GHG removals by sinks of less than eight kilotonnes of CO_2 per year and are developed or implemented by low-income communities and individuals as determined by the host Party". Community-based, small-scale AR-CDM projects stand a good chance of receiving favourable attention from the CDM Executive Board—which will decide the registration of AR-CDM projects—although the economic viability of these types of projects seems to be low (because of the high overheads they would incur for a relatively low benefit). Early adoption of the definition of 'forest' at the national level, in line with the criteria provided by the Marrakech Accords, is also recommended.

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