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Tight straits for the trade

THE TROPICAL TIMBER TRADE is beating against the current. Prices (particularly for plywood) might be on the rise after several years in the doldrums, but the policy environment in which the trade operates has never been tougher. This edition of the *TFU* looks at some of the issues.

Al Goetzl (page 3) wades into the controversial topic of subsidies. Governments often use subsidies to achieve policy aims, such as boosting employment, protecting or encouraging domestic industries, and increasing foreign revenue. They become contentious, says Goetzl, when they favour one economic sector over another, inhibit competition, have adverse environmental impacts, or distort trade. In the international setting, the subsidies that generate the heat are those that increase the competitiveness of one country's products at the expense of similar products from other countries. The forestry sector is not subsidized as heavily as agriculture, but it still receives (by one estimate) 3–4% of all subsidies worldwide.

A wide range of subsidies affect, or potentially affect,

Inside ▸ subsidies ▸ public procurement ▸ keeping trade legal ▸ more information for Peru …

Contents

Regular features

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Cover image A container ship moves along the Panama Canal with the help of tugboats. *Photo: Will & Deni McIntyre/Getty Images*

... Editorial continued

the tropical timber trade. Many timber-producing countries—both tropical and non-tropical—support the production of timber, most commonly by providing incentives for afforestation and reforestation. Others may subsidize forest operations through state-funded road construction or by offering state timber resources at lower than market value. Tax concessions that encourage investments in new equipment are also common.

Of most concern to tropical timber producers are subsidies that favour competing products such as temperate timber. According to Goetzl, some of the most commonly offered incentives to support the production of temperate timber products are associated with regional development; investment in wood-based panels may also be underpinned by subsidies. But one of the big problems in dealing with subsidies at the international level is measuring their effect: Goetzl recommends the development of a framework for categorizing and examining the subsidies used in forestry and the manufacture of forest and/or competing products as an aid to determining negative impacts and reducing such impacts through international dialogue.

Also of concern to tropical timber traders are the public timber procurement policies (PPPs) being developed by several countries, particularly in Europe (page 9). The general aim of these policies is to oblige or encourage buyers to ensure that the timber they purchase has been obtained legally and/or from a sustainably managed source. Countries such as Belgium, the Netherlands, France, Germany and Denmark are developing their own PPPs, apparently with little coordination between them. This is viewed with concern by tropical timber producers, who worry that they may be obliged to meet different criteria in different countries in order to obtain or maintain access to markets. In addition to the recent discussions on this topic by ITTO, an October meeting of the FAO-ECE Timber Committee will focus on the issue.

The tropical timber industry has been under attack from another quarter as well. The illegal trade of timber has been the subject of considerable international attention and hand-wringing, and the search for ways of reducing it continues. Last July, ITTO convened a small meeting of key parties involved in conducting or regulating the international shipping trade, including representatives of shipping companies, timber exporters and importers, non-governmental organizations, customs agencies and maritime organizations (page 12). This meeting was conceived jointly by ITTO's Civil Society Advisory Group and Trade Advisory Group as a way of identifying actions that could be taken to combat the illegal trade of timber. It made recommendations to ITTO and helped develop terms of reference for a larger, ITTO-funded conference planned for 2007.

The pursuit of legal and sustainable forest management is becoming a prerequisite for market access in many countries, and most commentators expect that environmental concerns will continue to shape international markets for tropical timber products. An article on page 15 shows how an ITTO-funded project assisted companies in the Brazilian state of Para to simultaneously improve their forest management practices and increase their international timber trade. The project yielded some promising results, although according to independent evaluator Enrique Toledo it should have reached more companies.

The global trade of tropical timber is changing fast. It isn't disappearing—not by a long shot—but it is facing tough times. Those traders who survive in the long term will be adaptive and focused on quality. They will obtain their supplies from well-managed forests. They will be well-organized and they will coordinate their efforts with other producers. And they will be engaged in public debate and the processes that shape the international policy environment, because only by being heard will they turn the tide in their favour.

Alastair Sarre
&
Steve Johnson

Subsidy or incentive?

The detailed analysis of subsidies affecting the tropical forest sector requires a well-thought-out framework

by
Alberto Goetzl

Seneca Creek Associates

Competitor: tropical timber vies for markets with temperate timber, such as that produced in this semi-natural Douglas fir forest on the Pacific coast of North America. Subsidies could have a big impact on competitiveness. *Photo: A. Sarre*

EVERY GOVERNMENT uses subsidies of one kind or another to achieve policy aims. Subsidies serve to stabilize producer or consumer prices, strengthen industries important to national security, provide a stable supply of agricultural or industrial commodities, develop energy resources, promote employment, and/or encourage conservation. Governments regularly fund various research, education, and arts and humanities programs as 'public goods' deemed worthy of subsidies. In fact, subsidies are an important policy tool for meeting specific social, economic and cultural needs.

What is a subsidy?

Definitions of subsidy vary depending on context. In one basic definition, subsidies are *government actions that encourage certain specified activities or improve the profitability of specific sectors in an economy*. Such a definition can be interpreted broadly or narrowly. In the broadest sense, almost all government programs might be considered subsidies. However, not all government actions affect the competitiveness of specific sectors of an economy. To the extent that government gives financial support directly or indirectly to assist a specific economic sector, such financial support can be viewed as a subsidy.

Subsidies are not always transparent and data on their value are not obtained in a consistent way. However, based on a compilation of data from different sources, the Organization for Economic Cooperation and Development (OECD 2004) estimated that its member countries transfer US$400 billion annually to different sectors. Other analyses peg subsidies on a global scale at over US$1 trillion, or equivalent to as much as 4% of global gross domestic product (Knirsch et al. 2006). While subsidies in industrialized countries tend to target agriculture, transport and manufacturing industries, developing countries tend to subsidize energy, water, fisheries and, to a lesser extent, agriculture (Pearce 2003).

Subsidies become contentious when they favour one economic sector to the detriment of another, inhibit competition, have adverse environmental impacts or distort trade. Subsidies are among the most controversial of all non-tariff measures on the agenda of the World Trade Organization (WTO) and other trade negotiations because they can and often do affect trade by protecting domestically produced products from import competition or, alternatively, by promoting exports.

Some subsidies are blamed for causing environmental harm; environmental groups cite them as a principal cause of forest degradation and destruction. Subsidy issues related to timber concessions, licensing and timber access have been at the centre of bilateral trade disputes as well as debates about over-harvesting and the loss of high-conservation-value forests. Consequently, substantial international attention is being paid to trade-distorting and environmentally harmful subsidies.

The question of whether subsidies for products that compete with tropical timber in global or specific country markets affect their supply and demand is difficult to analyse. While timber products compete against non-timber products in some applications, they most often compete against each other in ways that are both market- and technology-driven. The major categories of market competition for tropical timber products are: wood panels; coniferous and temperate species from natural or semi-natural forests; non-coniferous species from fast-growing plantations; non-wood construction materials; and non-wood industrial materials. In the context of tropical timber production, consumption and trade, care must be taken in defining what constitutes a subsidy, determining which competing sector is benefiting, calculating the extent to which they may be benefiting, and observing whether or not there are unintended environmental or other effects.

In their simplest and most transparent forms, subsidies are direct payments or income transfers to a specific class of producers. Thus, grants or low-interest loans to expand capacity for manufacturing steel could be considered a subsidy. The same would be true of a tax expenditure (tax rebate or preferential tax treatment) given to a class of producers to make it more profitable. Subsidies may be designed to affect land-use, commodity extraction, agricultural or manufacturing production, means of transport, energy use, capital investment, or trade. They can be used to protect domestically produced products from import competition or, alternatively, to promote their export.

From an analytical perspective, the effectiveness and consequences of subsidies can be very complicated. Subsidies can simultaneously have both positive and negative impacts on economic development and the environment. They can

Policy options

Subsidies potentially affecting forests, forest products and competing industries

DIRECT ASSISTANCE TO FOREST & FOREST PRODUCTS	
Reforestation/afforestation payments	Government support for tree-planting or to establish plantations, usually in the form of direct payments or tax credits; support for overseas plantation investments
Favourable concession terms	Fees or royalties at less than full economic rent; lax enforcement; foreign assistance to logging concessions
Favourable stumpage fees	Administratively priced timber fees at less than competitive market prices
State-owned enterprises	Reduced or forgiven taxes and debt; maintaining excess or idle plant capacity; funding for expansion
Price supports	Usually in the form of quotas on production, exports or imports
Investment grants & financing	Government loans and loan subsidies for capacity expansion and new technology; promoting foreign investment
Energy rebates/credits	Examples include tax credits for specific types of fuel use or energy production equipment; typically intended to lower energy costs for producers or encourage fuel switching
INDIRECT ASSISTANCE TO FOREST & FOREST PRODUCTS	
Support for infrastructure	Road-building in forest areas
Marketing & promotion	Government funding of domestic and/or export promotion for a given class of products
Conservation payments	Assistance in meeting regulatory requirements or improving timber stands
Management services	Government-provided technical or management assistance
Research & development	Government-financed research and development programs
Purchasing preferences	Government policies that influence purchasing decisions
Regulatory relief	Less restrictive environmental, safety or labour regulations
Other	Various government requirements such as phyto-sanitary rules that support one sector or another
DIRECT ASSISTANCE TO COMPETING MATERIALS	
Price supports	Usually in the form of quotas on production, exports or imports, but also government purchases or storage
State-owned enterprises	Reduced or forgiven taxes and debt; maintaining excess or idle plant capacity; funding for expansion
Energy rebates/credits	Exemption from value-added tax on energy purchases
Investment grants or financing	Government financing for manufacturing not available for wood products
Tax credits	Tax credits or other tax-related policies that are available to competing industries but not wood products
INDIRECT ASSISTANCE TO COMPETING MATERIALS	
Marketing & promotion	Funding of programs that favour competing products
Building infrastructure	Infrastructure spending that assists competing industries
Management services	Services available exclusively to competitors of wood products
Research & development	Research support geared to developing wood substitutes
Purchasing preferences	Government policies that discriminate against wood products
Regulatory relief	Less restrictive environmental, safety or labour regulations for non-wood industries
Preferential building regulations	Construction and product standards that favour non-wood materials and/or certain species over others

Making the grade? Funds from government for the construction of logging roads can be classed as a subsidy. *Photo: A. Sarre*

stimulate agricultural production to ensure a stable food supply while at the same time encouraging the increased use of pesticides, which could have deleterious effects on water quality and habitat. They can provide employment opportunities but also increase pollution due to industrial expansion. Direct payments for planting trees can lower fibre costs for processing wood products while also encouraging the restoration of degraded or hydrologically sensitive landscapes. Reduced-cost access to forests and timber can stimulate over-harvesting or, conversely, it can reduce high fuel loads that add to the risk of wildfire. In many cases, there are few easy answers to questions regarding the benefits or harmful effects of subsidies.

Subsidies in a trade context

The most commonly referenced 'official' definition of subsidies is used within an international trade context and is contained in the WTO Agreement on Subsidies and Countervailing Measures (SCM). The SCM specifies that a subsidy exists if "there is a financial contribution by a government or any public body within the territory" of a member government that "confers a benefit". In general, a subsidy covered under the SCM must involve a direct transfer of funds, a fiscal incentive, or provisions of goods and services, and it must confer a benefit that causes economic harm to producers in another member country. Most SCM-defined subsidies are not prohibited automatically but they are actionable if challenged and shown to cause economic injury to producers in another country. The WTO definition and rules require specificity: if a financial incentive is not specific to an industry or sector and is widely available in an economy, then it is not likely to be actionable under WTO rules.

While the WTO is the main forum for multilateral negotiations regarding subsidies in agriculture and non-agricultural manufacturing, discussions about environmentally harmful subsidies have also been on the agendas of the OECD, the Food and Agriculture Organization of the United Nations, the Asia-Pacific Economic Cooperation forum (APEC) and others. Greenpeace International recently published a report arguing that the Convention on Biological Diversity is a more suitable international policy framework than the WTO for reducing subsidies (Knirsch et al. 2006).

Estimating the value of subsidies

A large share of the analytical work carried out on subsidies has involved the agricultural sector. The measures most often used for assessing agricultural subsidies are the producer support estimate (PSE), consumer support estimate (CSE) and the aggregate measure of support (AMS). Each provides a specialized way of estimating the overall value that farmers and/or consumers obtain from agricultural support payments or other subsidies. The economic literature also includes numerous other indicators that can be used for measuring subsidies but, in general, there are no widely accepted indicators for measuring subsidies in forestry and forest products manufacturing.

Reduced-cost access to forests and timber can stimulate over-harvesting or, conversely, it can reduce high fuel loads that add to the risk of wildfire. In many cases, there are few easy answers to questions regarding the benefits or harmful effects of subsidies.

Common subsidies in the forest sector

When compared to subsidies that have been identified and studied in agriculture, subsidies in the forest products sector are quite small. For example, the European Union and the US combined spend more than US$150 billion annually on farm support payments alone. This contrasts with OECD (2005) estimates that subsidies in the forest sectors of its member countries are about US$6 billion. Knirsch et al. (2006) also cites estimates of forestry subsidies that represent at most 3–4% of total subsidies worldwide.

Subsidies directed specifically at the forestry and forest products sector can take a number of direct and indirect

forms and can be motivated by environmental, social (eg employment) or economic rationales, or a combination thereof. While the literature includes a number of reports about subsidies in the forest and forest products sector, no comprehensive global compilation of these could be found. Several multi-country or regional compilations of related information have been attempted, including for twelve European countries (EFI 2004), which found that the most common types of activities funded by government were related to forest protection, planning and forest inventory, infrastructure, and afforestation and reforestation. The *table* (page 4) shows some of the direct and indirect subsidies that may be used to assist the forest sector and its competitors.

Some argue that non-tariff barriers such as eco-labelling or verification requirements are forms of subsidies because they favour certain producers over others.

An APEC study of its members concluded that indirect subsidies on forest products such as export bans, quotas and trade import/export licensing requirements had the most obvious impact on international trade (APEC 1999). It also found that afforestation subsidies were among the most widespread of all subsidies in the sector. Environmental NGOs are typically critical of public policies or publicly funded programs that support logging in ways that might adversely affect the environment. Subsidies to logging companies in the form of below-market concession fees, tax preferences, road construction and other kinds of grants or assistance have been characterized as perverse because they contribute to forest loss or degradation (Sizer 2000).

Types of subsidized activities

Afforestation/reforestation

Incentives for afforestation or reforestation are relatively common throughout the world. In developing countries, funding for afforestation projects is often provided through foreign assistance. In most cases, support measures for afforestation and reforestation are enacted on environmental grounds, although subsidized forest planting can be controversial in areas where natural forests are being replaced by plantations or where local communities are perceived to be disadvantaged. Whether or not support for reforestation can be considered a subsidy depends on the nature of the project(s) and whether or not the intended purpose is to make wood fibre available for processing at a lower cost than would otherwise have been possible.

Harvesting rights, licences and concession policies

Another common—and often controversial—form of direct government intervention in the forest sector is through concessions or the granting of harvesting rights. Concessions might be considered subsidized if the costs, licensee fees or royalties are below a comparable resource rent that would reflect the full commercial value of logging rights. Thus, the price of timber as charged through the concession fees may be less than a comparable market-transacted price and/or less than the long-term cost of sustainable management. Forest concessions are granted for a variety of reasons, but subsidized resource rents are typically justified as a way of creating employment or promoting development in rural or remote areas (Contreras-Hermosilla 2000). In many of the world's tropical timber-producing countries, forests are owned by the state and exploited through concession systems. This immediately raises the issue of whether the fees charged for concessions or licences reflect any kind of market price or the costs (internal and external) of managing the resource on a sustainable basis. In some cases, concessionaires may benefit additionally from state-constructed infrastructure such as access roads they otherwise would have had to construct themselves if they owned the forest.

Export/import duties & restrictions

Subsidies in the form of export taxes, quantitative restrictions or bans on logs that benefit domestic processing have been enacted in some countries. Restrictions on the export of unprocessed raw material have the effect of lowering log costs for domestic manufacturers and thus increasing their competitiveness in domestic and global markets. Similarly, import tariffs and non-tariff import restrictions give price support to domestic producers. Tariff escalation, where raw material is allowed to enter a country duty-free or with low tariffs while more processed products have higher duties, also provides a form of price support and serves to protect domestic processors from import competition. Some argue that non-tariff barriers such as eco-labelling or verification requirements are forms of subsidies because they favour certain producers over others.

Grants/financing for infrastructure or increased capacity

Government programs that finance new capacity or promote the sale or use of particular products domestically or for export are also often cited as subsidies. Some governments provide budgetary transfers (direct payments or tax expenditures) to enterprises for building processing capacity specifically in forest areas or they underwrite road construction that provides access to an area of forest for harvesting.

Tax policies

Preferential tax programs for income related to the production and sale of forest products are also a significant form of government assistance to the forestry sector. Tax policies that encourage investment in new capacity, decrease property tax rates for forest use, provide tax preferences for reforestation and forest management expenses, or lower taxes on timber-related income are all forms of tax expenditures that are cited in the literature as subsidies. EFI (2004) found that half of the total value of government

assistance to forestry in the (European) countries studied was in the form of tax concessions. However, taxes that affect any one sector must be understood within the context of a country's overall tax system.

Frameworks for analysis

For future research on the issue of subsidies affecting tropical timber, it may be useful to organize subsidy information by one or more of the following categories, as described by Steenblik (2003):

- the intended target of the subsidy: consumers or producers, outputs, inputs and value-adding factors (individual and collective);
- the instrument used for the subsidy: eg budgetary expenditure, tax expenditure, assumption of contingent liabilities, market transfers, and under-pricing of a publicly owned or managed asset;
- how the subsidy is provided: ie the pathway of benefit—direct, indirect, explicit or implicit; and
- the subsidy's purpose: eg regional development or energy conservation.

Among the most common purposes cited for subsidies related to the forest and forest products sector are to promote conservation, increase exports, offset import competition, expand manufacturing and stimulate rural development.

Subsidies for competing sectors

Numerous factors affect the demand for timber products globally and tropical timber products specifically. Trends in tropical timber demand are affected by competition from non-tropical species (including those from fast-growing plantations), composite wood panels, and non-wood products, some or all of which might benefit from subsidies.

Coniferous and temperate species (natural forests)

Apart from grants or tax incentives for afforestation or reforestation, the most common subsidies that support the production of softwood or temperate species products are associated with regional development. For example, substantial funding has been provided for the modernization and expansion of timber-using enterprises in Eastern Europe and Germany. The governments of Canada, Korea and China, among others, provide support for new factories in the wood-using industries, most of which utilize non-tropical timber species.

Fast-growing plantation species

Wood from fast-growing plantations is competing with and substituting for tropical timber in an increasing variety of industrial applications, including furniture and plywood and composite panel products. During most of the 1980s and 1990s, plantation establishment in many countries was promoted through direct government payments, tax expenditures, or technical assistance.

Clear-cut case? Afforestation and reforestation incentives are regarded by many as subsidies that could adversely affect competing products, such as timber grown in natural tropical forests. *Photo: A. Sarre*

Wood panels

Increasingly, wood panels such as oriented strand board, medium density fibreboard and particleboard are substituting for solid sawn lumber in construction and industrial applications. The increase in the production and consumption of composite wood panels is, in some countries, supported by subsidies to establish fast-growing industrial plantations and/or for new or expanded capacities in manufacturing.

Non-wood construction materials

Requirements to assure the legality and sustainability of timber sourcing is likely having the effect of shifting demand from tropical to temperate timber and may also be shifting consumption away from wood products altogether towards competing materials such as steel and concrete. Government support for the steel and/or masonry industries may have a negative impact on the use of wood products.

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Non-wood industrial materials

In the industrial market, polyvinyl chloride, better known as PVC, and metals such as aluminium used for window and door frames, exit doors, shutters, mouldings and similar products are pervasive competitors of timber products and of tropical timber products in particular. Wood veneer also faces stiff competition from plastics and paper. In fact, the fastest-growing use of plastics and paper as a substitute for wood (principally veneer) is as an overlay for the composite panels used in furniture or architectural woodwork. In this case, the choice of material is probably less linked to subsidies as it is to price and performance. Nevertheless, this is a market for tropical timber products that could be

affected by government policy or intervention that favours capital-intensive manufacturing.

Subsidies for competing products

Of subsidies to the manufacturing sector, those available to steel, plastics or competing wood products are of particular interest to the tropical timber trade. No specific compilation of subsidies that foster competing materials is available. In general, it would be difficult to identify subsidies to these manufacturing sectors that bear directly on timber markets and tropical timber markets in particular.

In a number of countries, the steel industry has benefited from government intervention, mostly in response to foreign competition but also to construct new capacity. Steel has been viewed historically as a strategically important material for national security and to underpin other manufacturing (cars, trucks, machinery, etc), although direct aid to the steel sectors in many developed countries has declined over the last decade.

Policies that affect consumer purchases are sometimes justified on environmental grounds, whether or not they achieve their stated objectives or have unintended consequences. Thus, recycled-content requirements will spur purchases of recycled products but may defer investment in improving forest management. Recently, China imposed a 5% tax on disposable wooden chopsticks to reduce demand pressure on forests. Wooden chopsticks in China are typically made from fast-growing planted species such as poplar and bamboo, so the tax will have little or no impact on natural forests. Chopsticks are a low-value item and it is unclear whether the new tax will have a significant impact on consumption.

Finally, there is a nexus between the forestry sector and agricultural subsidies that has implications for land-use. To the extent that agriculture may be subsidized in some countries, an agricultural land-use might be favoured over forest. That, in turn, could stimulate the conversion of forests to agriculture.

Conclusions and next steps

Subsidies have both positive and negative economic and environmental effects and therefore are often highly contentious. Moreover, they are not always obvious or transparent, and the difference between an incentive and a subsidy is often a matter of perspective. The following suggestions may assist further work to explore the impacts of subsidies and develop effective policies:

(1) clear objectives should precede any analysis of subsidies. Is the intent to examine trade distortions? Environmental effects? Product competition? An inquiry into the nature of subsidies that may be available to competing products would require one kind of analysis. An examination of the environmental effects of subsidies involved in timber production would dictate another;

(2) determine a classification system or framework for categorizing and examining the subsidies used in forestry and the manufacturing of forest and/or competing products, perhaps based on purpose, target, type, or the nature of received benefit;

(3) once objectives for further analysis are identified, and a system for organizing subsidy information is developed, design a systematic approach to the collection of comparative information. This could be through surveys or other forms of data collection; and

(4) develop suitable economic and analytical tool(s) for assessing and comparing the value of subsidy programs.

The report that this article summarizes was commissioned by ITTO in December 2005 and presented to the ITTO Committee on Economic Information and Market Intelligence at the 40th session of the International Tropical Timber Council in June 2006. It was intended as a primer on the subject of subsidies as they may affect tropical timber production, consumption and trade and is based entirely on a review of literature and other available resources. The full report is available on request from the ITTO Secretariat. The Committee is currently considering possible follow-up work to the report.

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Where is procurement heading?

Governments and importers are busy devising and implementing policies for timber purchasing. They should coordinate their efforts

TIMBER PROCUREMENT policies have been devised or are being contemplated by a number of governments and companies, mainly in developed countries. They vary considerably in nature, but the general aim is to oblige or encourage consumers to ensure that the timber they buy has been obtained legally and/or sourced from a sustainably managed forest. Public timber procurement policies (PPPs) are those policies created to guide the purchase of timber by government agencies.

Each year, ITTO convenes an 'annual market discussion' during a session of the International Tropical Timber Council to explore issues affecting the market for tropical timber. The 2006 annual market discussion was held in Merida, Mexico, last May on the topic of timber procurement policies. It featured five speakers and was moderated by Barney Chan of the Sarawak Timber Association, Malaysia, who is also coordinator of the ITTO Trade Advisory Group. This article summarizes the presentations and ensuing discussion.

Properly procured? A boardwalk made of a tropical timber crosses the Seine River in Paris, France. *Photo: O. Pedersen*

Procurement in the European Union

In his keynote presentation, **Rupert Oliver** (Forest Industries Intelligence Ltd, UK) provided a background on PPPs in European Union (EU) countries, the driving forces (public, industry but mainly environmental non-governmental organizations—ENGOs) involved and the salient features of these policies. He said that EU PPPs should be developed in line with World Trade Organization (WTO) obligations and EU procurement directives, which require that the criteria for the selection of suppliers is non discriminatory and that the same rules apply irrespective of point of origin. This means that if a government agency decides that the timber to be purchased from a given country must be traceable to the forest of origin to prove 'sustainability', then this requirement must be applied equally to timber from other sources. The European Commission has provided legal advice that criteria for 'sustainable timber' may refer to direct environmental and sustained-yield aspects of timber production but not to broader social issues such as the rights of labour and indigenous people.

Mr Oliver said that procurement policy is often driven by public perception and the media rather than objective assessment, and that ENGO grassroots activism is a key influence. He said that a fair PPP should not incorporate an exclusive commitment to any particular certification brand.

Mr Oliver pointed out that some EU member governments (UK, Belgium, Netherlands, France, Germany and Denmark) are developing their own PPPs with little evidence of coordination, let alone harmonization. This could be a major problem for timber suppliers, given that the EU has 25 member countries: Mr Oliver considered it unrealistic to expect suppliers to adapt operations to ensure conformity with 25 different sets of procurement criteria.

Formal efforts to develop PPPs are only being undertaken at the level of national governments, which buy less timber than local and regional governments (of which there are an estimated 200 000 across the EU). Mr Oliver said that procurement policy is often driven by public perception and the media rather than objective assessment, and that ENGO grassroots activism is a key influence. He said that a fair PPP should not incorporate an exclusive commitment to any particular certification brand. However, the Forest Stewardship Council (FSC) benefits from ENGO recognition, mass-marketing and on-product brand promotion by large retailers and is therefore becoming the de facto certification standard. The industry is often shy about tackling authorities

Timber depot: the procurement policies of large retailers such as Home Depot and Lowe's have a huge influence on the certified wood industry in the US. *Photo: H. Rubin*

with FSC-only policies, despite these clearly contravening EU procurement directives.

Mr Oliver identified several opportunities and threats arising from PPPs in the EU.

Opportunities:

- they create stronger demand for certified wood;
- they have the potential to improve returns from investment in certification;
- they reduce unfair competition from illegal wood; and
- they counter ENGO efforts to promote an FSC-only agenda through the development of public procurement policies based on WTO rules.

Threats:

- inconsistent policies at the national level create a barrier to trade;
- the major beneficiaries are likely to be forest owners in rich western countries;
- single-issue ENGO campaigns lead to an uneven approach;
- procurement requirements reflect a media-inspired perception of forestry issues, not the sustainable development needs of supplying countries;
- goalposts are constantly shifting to satisfy ENGOs; and
- green requirements on timber are not matched by equivalent requirements on substitutes.

Mr Oliver recommended that producers engage themselves in the process of PPP development to avoid being excluded from the market.

Phasing in French procurement

Jean Marc Roda (French Agricultural Research Centre for International Development—CIRAD) described the ongoing development of France's public timber policy from a researcher's perspective. The French government has issued a set of rules for public procurements which:

- applies equally to temperate and tropical timbers;
- accepts all existing eco-certificates, or even proofs of legality or of effective management plans endorsed by independent third bodies;
- carefully avoids potential contradiction with WTO agreements; and
- will be enforced gradually: 50% of public procurement by 2007 and 100% by 2010.

According to Dr Roda, public procurement accounts for about 25% of the tropical timber imported by France. Problems that he foresees include the lack of availability of products meeting the requirements, the difficulty of correctly identifying the origin (temperate or tropical) of 70% of the products, and difficulty in monitoring the actual effects of the policy. The lack of availability of certified tropical wood compared to certified temperate wood will likely create market distortions for tropical wood products. However, the ongoing trend among European countries to increase the level of their environmental requirements for tropical forest products is a reality that he expects to persist.

Policy will favour rich producers

Dr Roda discussed the broader implications of PPPs for the tropical timber economy. Timber procurement policies could create an indirect segregation between some temperate and tropical producers or, more precisely, between producers with a high level of economic stability and those with low economic stability. A factorial analysis of FSC-certified areas against more than 200 economic and development indicators shows a very strong relationship between certified forest area and the country's welfare. This helps to explain why only 5% of certified forests are in tropical developing countries. He concluded that an increase in European environmental requirements for tropical forest products should be accompanied by the development of side-measures to tackle poverty and the comparative disadvantages faced by producing countries.

Danish procurement policy expands

Christian L. Jensen (Danish Ministry of Environment) provided an overview of the Danish PPP, which since 2003 has comprised voluntary guidelines for the purchase of tropical timber. In February 2006, the Danish Minister for the Environment proposed a nine-point plan that would expand the government's procurement policy to all kinds of timber. An evaluation of the PPP showed that, among other things, many buyers do not know about the guidelines or follow them incorrectly and that they need to focus more on the specific needs of different user groups (eg harbour engineers, institutions, central procurement officers, etc).

Mr Jensen said that the evaluation revealed differences with the PPPs of other EU countries with regards to criteria for legality, sustainability and documentation, most notably on the inclusion or otherwise of social criteria. The initial exclusive focus of the policy on tropical timber conflicted with WTO rules. There has also been an attempt to evaluate the impact of the Danish PPPs on tropical forests and the tropical timber trade; Mr Jensen noted, for example, that the area of certified tropical forests has increased since 2003 but accepted that the Danish PPP was probably only a small factor in this, given the country's low levels of tropical timber imports. There has also been some minor—but probably not significant—changes in the volume of Danish tropical timber imports.

Little pressure on US suppliers

Brigid Shea (International Wood Products Association—IWPA, USA) said that although there have been some high-profile, city-led campaigns in San Francisco, New York and elsewhere, the bulk of procurement policies in the US are driven by industry, with variations by industry (paper or solid wood products) and timber type (softwood or hardwood). The IWPA represents 221 companies, but most are small businesses and even the largest importers have less than 1% of the total market share of a given product. This means that no company has significant supply-chain leverage for forcing requirements upon suppliers. Moreover, very strict US antitrust rules mean that wood procurement decisions must be made voluntarily.

According to Ms Shea, these two features make US procurement policies different from those in other countries. US companies respect the sovereignty of supplying countries and accept export certificates or licences as proof of legality. Few US consumers have procurement policies and most do not exert pressure on suppliers for any kind of proof of origin. Nonetheless, the IWPA regularly visits suppliers to assure quality, legality and high standards of professional and market conduct. In 1992, the IWPA endorsed two voluntary policies—*Environment policies for wood* and *Purchasing policies for wood and wood products*—that are used widely by members.

Market positioning

Ms Shea reported that downstream industries vary in the degree to which they push suppliers on wood procurement policies. Big retailers like Home Depot and Lowe's, which import directly or use large importers, take one approach, whereas the thousands of custom cabinet shops that buy from US distributors take another. An IWPA review of corporate procurement policies in different segments of the wood products industry found that the majority of the market was not placing procurement policy demands on importers. Several IWPA members participate in the WWF Global Forest and Trade Network as a way of positioning themselves proactively in the marketplace or in an attempt to garner a greater share of ultra-competitive markets. However, price, availability, quality and consistency tend to dominate business discussions in the US, and procurement policies have less weight.

Nevertheless, Home Depot and Lowe's do pay attention to environmental issues, and have posted environmental policies on their websites. While they tend not to pay a premium for certified products, their tremendous appetite for wood plays a strong role in supporting the development of the certified wood industry. Most softwood lumber imports come from Canada, although an increasing volume is entering from Europe. Softwood plywood from Brazil has also captured a significant share of the US market and its high quality and modest price helps manufacturers produce quality homes at competitive prices. In the domestic furniture market, manufacturing is moving increasingly offshore to China, where decisions on wood-purchasing are not being made on the basis of environmental considerations.

Projections on the future of wood procurement policies vary throughout the US industry. Success will depend on market demand and competitive prices because in a mostly commodity market everyone sells the same product at the same price. Those companies that choose to sell certified products do so because they feel it benefits their shareholders—either through market positioning, by assuring supply, or in response to negative environmental campaigns. Few companies have chosen to pursue certification solely on the basis of projected profit. However, Ms Shea agreed with other speakers that producer countries should engage in the procurement policy process to avoid being excluded from the market.

Scepticism on the role of procurement policies

In the discussions following the above presentations, the Malaysian timber industry delivered a statement on its views regarding the international development of timber procurement policies, indicating that it remained uncertain as to whether the principle of responsible purchasing would have a positive impact on tropical timber-producing countries. It contended that the impact of procurement policies on the price of certified timber was negligible and the resulting cost disincentive would work against the ultimate goal of achieving sustainable forest management.

Those companies that choose to sell certified products do so because they feel it benefits their shareholders—either through market positioning, by assuring supply, or in response to negative environmental campaigns. Few companies have chosen to pursue certification solely on the basis of projected profit.

The delegate of Norway informed the audience that his country was in the process of developing its own PPP and requested guidance from members. The delegate of Australia questioned the effectiveness of PPPs in enhancing sustainability and legality and referred to the need to harmonize the various PPPs. It was pointed out that there is no adequate evidence of the impact of PPPs on the management of forests. The delegate of Congo underscored the need for financial assistance to address the lack of progress in certification in the tropics.

This summary of the 2006 Annual Market Discussion, which was held on 31 May 2006, was compiled by the ITTO Secretariat.

Timber on the high seas

ITTO and partners are investigating ways to reduce illegality in the transportation of timber

FOR SOME TIME, ITTO members and other stakeholders have been concerned with issues of legality in the global timber trade. In July 2004, a meeting between the Organization's Trade Advisory Group and Civil Society Advisory Group recommended that ITTO convene an international conference on the transportation of timber products, involving representatives of financial institutions and the customs, shipping and transport sectors, with the aim of identifying weaknesses that have allowed the illegal trading of timber.

In July 2006, a small scoping consultation attended by representatives of key interests in the tropical timber trade *(see box)* was held in the Cabinet War Rooms in London, England. This two-day consultation explored the many complexities associated with the maritime transport of tropical timber with the aim of preparing the ground for a larger international conference on the issue at a later date. On the basis of this meeting, the ITTO Secretariat will prepare terms of reference for further work, including a draft program for an international conference on the transportation of timber products, for the consideration of the ITTO Committee on Forest Industry at its next session in November 2006.

Loaded: a log ship en route to China from Papua New Guinea.
Photo: Jay Directo/AFP/Getty Images

... the wide interpretation of 'illegality' in the forest sector and an acknowledgement that importing countries have no legal basis or framework for making imports of 'illegally' produced timber an offence.

Presentations made during the two-day meeting focused on the international shipping of tropical timber products and addressed three basic questions:

- what are the complexities of tropical timber shipping from producers to consumers?
- what weaknesses allow the shipping of illegally produced timber products? and
- what international actions can be taken to ensure legal shipments?

Participants at the meeting were also asked to make recommendations for the consideration of ITTO and others to help reduce illegalities associated with the tropical timber trade.

Part of the discussion focused on changing trends in the transport business and tropical timber trade, including the use of containerized shipping, the increasing trade in processed timber products, and issues related to chain of custody and certification. Participants recognized the wide interpretation of 'illegality' in the forest sector and

acknowledged that importing countries have no legal basis or framework for making imports of 'illegally' produced timber an offence.

Participants sought clarification on the issue of shipping documentation and procedures. In particular, participants debated which entity—shippers, traders or customs—is responsible for checking the accuracy, authenticity and legality of shipping documents, including bills of lading, certificates of origin, packaging lists and descriptions of goods. Issues unclear to participants included: what happens when a bill of lading is switched during the timber shipping process; which country's laws and procedures prevail; and how electronic trading arrangements might assist in preparing shipping documentation and how they could help prevent fraud. Participants also sought clarification on the role of banks in the process, how to create incentives for 'good players', and other issues such as licensing, chain of custody, 'self-policing' and corporate codes of conduct for responsible timber purchasing.

Photo: M. Adams/ITTO

Building capacity

Participants discussed the need for capacity-building and awareness-raising to improve law enforcement. They suggested that this would be especially relevant at the national level to increase the ability of government agencies from exporting and importing countries to ensure respect of law and legality and the authenticity of shipping documentation and procedures. Attention was drawn to the role of importing countries, which could be more proactive by, for example, ensuring that customs authorities check for legal documentation. Participants also explored the impact and role of ongoing and emerging initiatives in combating fraud, such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), forest law enforcement and governance processes, voluntary partnership agreements, the G8 group of industrialized nations, national procurement policies (see article page 9) and specific producer-country legislation and initiatives such as the Indonesian Forest Products Revitalization Body (BRIK).

Meeting participants provided several recommendations for ITTO's consideration when preparing the terms of reference for the international conference, including for the conference's draft agenda. ITTO should:

- increase cooperation with the International Maritime Organization on shipping documentation and other relevant substantive matters;
- consider future policy work on customs issues and capacity-building;
- strengthen regional cooperation;
- consider establishing a system to minimize smuggling (eg by prior notification of export);
- engage bankers, shipowners and shipping companies; and
- consider information-gathering on the documentation required for tropical timber shipping.

For more information contact: Lauren Flejzor, Division of Forest Industry, ITTO; flejzor@itto.or.jp

Who was there?

The following organizations, agencies and governments were represented in the workshop:

APKINDO – The Indonesian Wood Panel Association;

Ang & Partners, a law firm specializing in maritime and transport issues;

Arpeni Pratama Ocean Line, an Indonesian shipping company;

UK Chamber of Shipping, on behalf of the **Baltic and International Maritime Council (BIMCO)**, an association comprising more than 2550 shipping companies;

Danzer, a group of companies involved in the timber trade;

Chatham House, also known as the **Royal Institute of International Affairs**, an international affairs think-tank whose mission is to analyse and promote understanding of major international issues and current affairs;

UK Timber Trade Federation, which represents the interests of the UK wood and wood products industry;

Ministry of Environment and Forests, a ministry of the Government of India;

TRAFFIC International, a wildlife trade monitoring network;

Environmental Investigation Agency, an environmental non-governmental organization;

Her Majesty's Revenue and Customs, a department of the British government;

International Maritime Organization, a specialized agency of the United Nations responsible for improving maritime safety and other technical matters affecting shipping engaged in international trade;

International Maritime Bureau, a bureau of the International Chamber of Commerce charged with fighting crimes related to maritime trade and transportation;

ITTO Trade Advisory Group, a group of timber-trade-related organizations set up to provide advice to the International Tropical Timber Council;

ITTO Civil Society Advisory Group, a group of civil-society organizations set up to provide advice to the International Tropical Timber Council;

Malaysian Timber Council, an initiative of the Malaysian timber industry to promote the development of the timber-based industry in Malaysia;

Commercial Section, **Embassy of Brazil**, London; and

ITTO Secretariat.

What next for Asia-Pacific?

An FAO study has been launched to help understand the changes taking place in the Asia-Pacific forestry sector and the options available for the future

by
CTS Nair

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THE ASIA-PACIFIC forest sector is undergoing unprecedented change, as economies grow rapidly and the demands on forests for goods and services accelerate. Already the impact of this change is being felt within and outside the region, undermining long-term sustainability. A better understanding of what is likely to happen in the sector in the face of larger societal changes is imperative to identify the options available to it. The future is arriving more quickly than ever, and the decisions and compromises we make during the next decade will determine the course of forestry in the coming century.

Likely paths of development

The key question facing forestry stakeholders in the region is how to steer the sector along a path that is relevant and appropriate to emerging needs. It was a question that was much discussed at the Asia-Pacific Forestry Commission meeting held at Dehradun, India, in April 2006. There, the Commission endorsed a proposal to undertake a second Asia-Pacific Forestry Sector Outlook Study (APFSOS II), with the aim of updating and expanding work done in a 1998 assessment. The main objectives of the study are to:

- identify the emerging social changes and trends that are driving people's demands and expectations of forestry, and the ways they interact with forests;
- assess changes in the state of forests and forestry in Asia and the Pacific since the earlier outlook study, and analyse actual developments in comparison with what was predicted;
- analyse probable scenarios for developments in the forestry sector in the region to the year 2020, specifically taking into account overall changes in the global forestry situation; and
- identify priorities and strategies for the forest sector, and improve the strategic planning capacity at various levels, in order to respond effectively to emerging opportunities and challenges.

Some key questions on the future of Asia-Pacific forests

How are people's demands on forests, and expectations of forestry, changing?

What will be the future role of forests and forestry in the rapidly changing Asia-Pacific region?

What will be the progress towards accomplishing sustainable forest management?

How will forestry respond to increasing affluence in Asia-Pacific populations—and associated changes in demands on forests?

How will future demands for wood and other forest products be met?

How will relationships between forestry and other sectors of the economy change?

What will be the role of forests and forestry in improving social and economic conditions, especially in alleviating poverty?

What is the future of the forest industry in the region?

How can forestry respond most effectively to environmental concerns, including those related to climate change?

How will forestry be affected by increasing concern for protection of the environment?

How will the forest sector address the potential conflicts in dealing with multiple objectives?

APFSOS II is intended to strengthen national forest programs by providing a larger picture of forestry development in the region. It will considerably increase the knowledge base on forestry and sharpen the process of prioritizing interventions in the sector. The box lists some of the key questions that need to be answered.

The process

The outlook study will be implemented through a highly participative approach involving all the countries of the region and other stakeholders, especially bilateral and multilateral development agencies, international organizations, civil-society organizations, industry, and academic and research institutions. Already, several key institutions are supporting the study, including FAO (the Food and Agriculture Organization of the United Nations), ITTO, the Asian Development Bank and the United Kingdom Department for International Development. The process will involve the preparation of country outlook papers and thematic studies on cross-cutting topical issues. Workshops will be organized to facilitate the exchange of information and to develop coherent scenarios of forestry development. An expert advisory committee will be established to provide guidance and technical oversight. Special emphasis will be placed on:

- drawing on expertise in forestry and social and economic development through networks of institutions and experts;
- synthesizing the wealth of information in the region; and
- strengthening capacities within countries for analysing future scenarios and strategic planning for addressing anticipated challenges.

Outputs

The major outputs of the outlook study will be:

- a regional report that provides a systematic assessment of the current situation of forests and forestry, the key drivers of change to the year 2020, the probable paths of forestry development in the region, and the options available to the various stakeholders in improving the situation;
- sub-regional reports that capture the specificities of sub-regions or clusters of countries;
- a series of policy briefs indicating priorities and strategies that may be pursued at different levels;
- working papers analysing the current status of and trends in key issues; and
- a major international conference to discuss perspectives, outcomes and strategies.

The study is expected to be completed by December 2008.

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Developing a sustainable trade

An ITTO project in the Brazilian Amazon succeeded in its aim of increasing trade in sustainably produced timber, but it could have done better

by
Enrique Toledo

Independent evaluator

ITTO PROJECT PD 7/94 REV.3 (M, I): 'Information and technical assistance for production and trade of tropical timber' was submitted to ITTO by the Government of Brazil in 1994 and, after revisions, was approved and financed in 1997. It set out to increase the trade in sustainably produced timber between companies in Brazil and consumers in selected countries, thereby contributing to socioeconomic development in the Amazonian state of Para. Actual implementation started in January 1999 and was completed in June 2002.

This article summarizes the findings of an ex-post evaluation of the project that was carried out by the author in 2005.

Basic methodology

The project was implemented by the Timber Industries Association of Belem, Ananindeua and Marituba (SINDIMAD) in cooperation with the Brazilian Institute for the Environment (IBAMA). ITTO's financial contribution was US$1.03 million, while the contribution of the Government of Brazil was US$127 000.

On the basis of the project document, SINDIMAD prepared a work plan, which it submitted to ITTO in June 1998. Following feedback from the ITTO Secretariat, the work plan was revised to include a detailed schedule of activities, the identification of responsibilities, and annual budgets. Tenders were then called for a company to implement the planned activities and the company STCP (*Engenharia de Projetos Ltda*) was eventually selected.

Selection of participating companies

The project developed basic criteria for the evaluation, classification and selection of five companies that would participate in project activities. Companies should:

- be affiliated with SINDIMAD and/or the Association of Industrial Timber Exporters of Para (*Associação das Indústrias Exportadoras de Madeiras do Estado do Pará*—AIMEX);
- be an exporter of sawnwood;
- have a sustainable forest management plan approved by IBAMA with a minimum duration of three years;
- be willing to implement the recommendations of the project team;
- provide logistical support during field data-gathering activities; and
- join the project through a commitment agreement.

Technical assistance

Table 1: Number of participants in technical assistance and training

COMPANY	Management & control system	Band saw doctoring & sharpening	Maintenance & operation of wood-drying kilns	Forest operations	TOTAL
CEMEX	–	4	3	28	35
CIKEL	–	5	9	22	36
Juruá	–	6	2	–	8
MADESA	3	6	5	22	36
Porto de Moz	5	9	4	–	18
TOTAL	**8**	**30**	**23**	**72**	**133**

The companies eventually selected to participate in the project were: CIKEL—*Brasil Verde Ltda*; CEMEX—*Commercial Madeiras Exportaçao SA*; MADESA—*Madeiras Santarém Ltda*; *Porto de Moz Ltda*; and *Juruá Forestal Ltda*.

Technical assistance and training

STCP designed and applied a technical assistance and training program that was implemented by the five selected companies in the areas of management planning, the identification of species, low impact logging, log yards, industrial technology, wood drying, value-added processing equipment, the development of new products, and international trade.

Each thematic area was developed on the basis of a business assessment, and the contents and field and industrial work methodologies were developed after consultations with each of the five companies. *Table 1* shows the training courses that were held, the technical assistance provided and the number of participants from each company. *Table 2* shows the studies undertaken to support industrial processing technologies and the development of innovative approaches for four of the five companies.

Marketing

STCP produced a website and newsletters on the industry and markets, including statistics on the trade of timber through the ports of Belem, Santarem and Breves. Trade missions were undertaken to key markets. A mission to the US coincided with the 44th International Wood Products Association Conference which was held in Tucson, Arizona, in April 2000. Four representatives of each timber company attended this event as well as a representative of SINDIMAD and a market consultant. As a result of the mission, CEMEX sold 980 m^3 of kiln-dried surfaced-four-sides (S4S) flooring and decking products with a total value of US$500 000. A mission was also undertaken to Europe in May 2002. Finally, the project convened an international conference on tropical timber in Belem in October 2002, with the participation of 252 timber trade executives and forest management experts from eleven countries. The conference provided an excellent opportunity to discuss achievements and lessons learned through the project.

Impacts on participating companies

CEMEX

CEMEX operates in the Tapajós National Forest (see *TFU* 15/4) and in 14 000 hectares of community forests. The project assisted it as it reorganized its personnel and carried out operational planning, road opening and tree-marking activities.

At the industry level, the company was able to improve its bandsaw sharpening techniques, tune bandsaw pulleys and lower the angles to reduce undulations, thereby increasing efficiency and reducing waste. It improved its sawmilling process by using tooth locks and saw-setting and by tensioning and sharpening blades.

The company did not get involved in the development of new species or value-added products, nor did it participate in marketing aspects of the project.

From 1980 to 1994, 90% of the company's work involved sawnwood production, but it has now moved to the production of finished products, particularly flooring, decking and sheathing boards (tongued and grooved). Currently, the value-added given to flooring involves the application of seven coats of lacquer using Italian technology. Previously, a total of 15 000 m³/year was produced in four 6-hour shifts. Today the company only works at 33% of this capacity, producing 5000 m³/year, but the price of these value-added products has risen to US$1100–1600/m³ free on board (FOB). The company's main markets are the US and Canada.

CIKEL

This company achieved FSC certification in 2001 for 240 000 hectares of its forests. The cutting cycle is 25 years and the yield 20–25 m³/hectare, with a transport distance of 60–100 km along its privately owned road. Timber is sawn on-site in the forest.

Certification has produced a 20–30% increase in the price obtained by the company for sawnwood products in the markets of Belgium and the Netherlands, but certified timber does not command a price premium in the UK or the US. About 90% of its sawnwood is exported to Belgium and the Netherlands, with the remaining 10% going to the US.

Juruá Madeiras Ltda

This company was certified by the FSC between 1999 and 2003 as a result of the implementation of another ITTO-financed project. Today, 60% of the timber it exports is certified. The company owns 42 000 hectares of forest under a 25-year management plan; they yield an average of 22 m³/hectare. The company works with 50 species, 25 of which are exported as decking, flooring and kiln-dried panels. About 90% of its production is processed timber with an average FOB price of US$666/m³.

MADESA

This company, which has a 50 000-hectare forest, benefited a great deal from the project in terms of forest management. Felling techniques were greatly improved, and the practical knowledge transferred in planning, harvesting and technical field assistance was well targeted.

The company works with 17 species, including ipe, jatoba, masaranduba and angelim vermelho. It was previously producing 45 000 m³ of timber per year, but under the sustainable forest management regime this has been cut to 25 000 m³/year, 80% of which is processed into products such as kiln-dried S4S boards and decking.

Porto de Moz Ltda

This company started forestry operations in 1976; it has 205 000 hectares of forest and harvests 19 800 m³/year using 8–9 species. It previously harvested an average 22 m³/hectare, but this has increased to 30–42 m³/hectare as new species have been marketed, with the net result of increasing profitability. The company produces sawnwood, decking and flooring, which it exports to the US, Europe and the Caribbean.

The company received training in road planning and building techniques. It incorporated a greater number of species into its production process and prepared the technical documents required to obtain approval for its management plans.

At the industrial level, the company received assistance in sawmilling and wood-drying techniques, and production controls and cost structures were improved; it also addressed technological problems associated mainly with *Vochisia* species. In 2005, the company was selling decking and flooring for US$850/m³ and US$1200/m³, respectively.

Analysis

The selection process for participating companies was adequate because it gave favourable consideration to those companies that had the best integration of forest management, value-added processing industries and presence in international markets. However, a greater

Added intelligence

Table 2: Studies undertaken in four of the five companies

COMPANY	PROJECT
CEMEX	Study on the production of edge glue panels Data for the production of activated carbon Study on the generation of energy from biomass gasification Data on thermoelectricity costs and investments
CIKEL	Study on the economic viability of thermoelectricity Technical data for the production of activated carbon Technical information for the 3-ply flooring production unit
Juruá	Basic sawmilling project Study on the generation of energy from biomass gasification Data on thermoelectricity costs and investments Information on support programs for tourism and financing sources
Porto de Moz	Basic project for the implementation of a new sawmill Study on the generation of energy from biomass gasification

effort should have been made to ensure the participation of a larger number of industrial companies in the project's training program.

The capacity of SINDIMAD to implement the project was hindered by a lack of integration among the different business groups and because it did not clearly define a wider participation strategy. Many companies chose to keep away from the project.

Because the selected companies did not have direct co-financing obligations, they did not show great interest in being active partners in project implementation and were rather the recipients of technical assistance, training and the development of studies. Therefore, the project should not be replicated in the future without major modifications (see below).

Impacts and effects

The overall project objective was achieved, as more than 30 000 m^3 of timber were traded, a significant percentage of which was certified by the FSC as from responsibly managed forests.

However, SINDIMAD did not manage to secure the wide support of its membership and therefore the project beneficiaries were limited to the companies selected. The project was unable to reach a greater number of companies, thus limiting the impact of the technical assistance and training services provided.

Market information should have been more detailed and more and better business rounds should have been organized. There was a lack of interest among timber importers in participating in the project, thus losing a valuable opportunity to consolidate the trade of lesser-known species in international markets.

The project did not manage to implement a market information system for the identification of business opportunities.

The training and technical assistance program developed by STCP was well designed and implemented. The program directly benefited the five selected companies in the areas of: management plans, identification of species, low impact logging, log yards, industrial technology, timber drying, value-added processing equipment, the development of new products, and international trade.

The studies undertaken on the development of technologies for value-added timber products, the generation of energy from biomass, and production costs were all relevant and helped improve business efficiency.

Project design

The original project design was not well conceived, as the expected project outputs had a very wide scope in relation to forest management, the timber industry and the promotion of international trade, and also because the initial emphasis was on mahogany (later changed to a range of lesser-known species). The project should have focused on achieving the technological development of industrial companies associated with SINDIMAD by providing direct technical assistance to the industry, promoting higher-value-added products, and conducting business meetings between producers and buyers directly linked to the international trade. The project should have ensured the involvement of a greater number of companies, even those not participating directly in the forest management activities of the selected companies.

The selected timber companies did not contribute significantly to the costs associated with the project. A greater financial commitment from participating companies would have ensured greater 'buy-in' from them and a firm and steady commitment to achieving the project's goals.

The project's logical framework should have established verifiable indicators more clearly and included improved means of verification and assumptions. Moreover, the project should have established closer contacts with other ITTO-supported sustainable forest management projects implemented in the region to avoid the duplication of effort. In particular, it could have better integrated the production chains of timber from well-managed forests that was being exported to international markets.

What could have been done better

The project should have provided more technical assistance and less personnel training, as this would have been more suitable for the development of production activities at the managerial, supervisor and machine-operator levels. The project did not establish a sustainability strategy, particularly in the areas of marketing, technical assistance and training.

In addition to its work plan, the project should have developed an internal methodology for the follow-up and evaluation of the technological and trade promotion services provided to producers.

An integrated business rounds strategy should have been developed to boost the share of timber from Para in international markets.

The selected timber companies did not contribute significantly to the costs associated with the project. A greater financial commitment from participating companies would have ensured greater 'buy-in' from them and a firm and steady commitment to achieving the project's goals.

Building the capacity for SFM

An ITTO project has initiated a process to provide more information and training on sustainable forest management in the Peruvian Amazon

by
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and
Carlos Linares[2]

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ITTO project PD 178/02 (F)

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IIAP

Informed: stakeholders living on the banks of the Amazon and its tributaries should be better equipped to support and implement SFM after training and information provided by an ITTO project.

PERU'S FOREST LAW, which was passed by the country's national congress in 2000, is designed to improve the sustainability of forest management as well as its profitability. One of its key elements is the introduction of forest concessions, which involves the granting of harvesting rights over forests up to 50 000 hectares in size to forest producers for renewable periods of up to 40 years (see *TFU* 13/3 for a detailed examination of the law).

The concession system has been implemented progressively in the Amazon since 2002, with calls for tender having been made in the departments of Madre de Dios, Ucayali, San Martin, Huanuco and, more recently (2004), Loreto. To date, 560 concessions have been granted, covering about 7.5 million hectares.

... the country still has much work to do to ensure the availability of people with the required education and training to implement SFM according to standards and guidelines established by law.

However, the process of concession allocation and the subsequent implementation of sustainable forest management (SFM) lacks mechanisms by which users can obtain reliable information on an ongoing basis. Although efforts have been made throughout the country to disseminate and systematize statistical information about the sector through, for example, the Strategic Forest Information Centre (*Centro de Información Estratégico*—CIEF), which was created under INRENA/ITTO PROJECT 27/95 (M), accessibility is still insufficient. Similarly, the country still has much work to do to ensure the availability of people with the required education and training to implement SFM according to standards and guidelines established by law.

Building an information system

ITTO PROJECT PD 178/02 (F): 'Information and training program for sustainable forest management in the Peruvian Amazon region', dubbed SIMFOS, was implemented by the Peruvian Amazon Research Institute (*Instituto de Investigaciones de la Amazonia Peruana*—IIAP). Its aim was to increase the availability of information and training on SFM in the Peruvian Amazon. Specifically, it was to provide specialized tools and information to facilitate the exchange of experiences among key forest stakeholders in the region, and to strengthen human resource capacity in the administration and operation of SFM in Amazonian forests.

The project's organizational structure was based on two major components: forest information and forest training.

SIFORESTAL

The main output of the project's forest information component was the design and implementation of the Peruvian Amazon Forest Information System (*Sistema de Información Forestal de la Amazonia Peruana*—SIFORESTAL), with the cooperation of other institutions, including the European Union and Innovation and Competitiveness for

Agriculture Peru (*Innovación y Competitividad para el Agro Peruano*). The objective of this system is to promote, foster and meet the information needs of the forest sector at the national and international levels through the integration of information systems and sources.

The system comprises three information components—SIFORESTAL itself, SFM, and marketing. Each of these components contains several thematic areas: SIFORESTAL addresses forest resources, diversity and natural heritage, the protection and environmental functions of forests, production function, economic contribution, social dimensions, SFM policies and methods, and SFM processes. The SFM component addresses the potential of the Amazon region, markets and marketing, basic forest management principles, legal aspects, SFM consultants and advisors, national and international organizations, SFM criteria and indicators, and voluntary forest certification; and the markets component contains information on companies, legal requirements, markets, prices, products, publications and human resources.

During the initial phase, the system is promoting forest management via the worldwide web. As it is extended to the Loreto region it will use other methods to disseminate market-related information, including radio broadcasting, noticeboards, publications in newspapers and specialized journals, and posters or bulletins. In subsequent project phases, the aim is to reach the whole of the Amazon region through the use of all available media. SIFORESTAL's website can be accessed at www.siforestal.org.pe.

Software for forest surveys and inventories

The project has developed a free software package known as AMAZON FOREST to help forest professionals to process their forest survey and inventory data. The versatility of this program allows statistical information to be transferred to the Arc View software program, which has applications in geographic information systems. It is expected that the system will save a lot of time and money in the processing of statistical information and that these benefits will flow on to users requiring these services.

Training in SFM

The project organized training events that benefited a total of 203 individuals. The first workshop/course on SFM administration was divided into two training modules and held on 24–29 May 2004 in Jenaro Herrera, Iquitos. The target beneficiaries of this workshop were 135 forest managers, concessionaires and forest permit- and contract-holders, and 36 forest professionals responsible for the formulation of forest management plans. The second event was a one-week workshop on reduced impact logging held in Pucallpa. This was attended by 32 forest professionals, concessionaires and mid-level technicians (operators, tractor drivers and chainsaw operators). The topics covered included forest harvest planning, the opening of roads and tracks, directional felling techniques, log skidding, recording systems, yields, costs, the maintenance of logging equipment and machinery, and work safety procedures. One of the important outputs of these events has been the identification of unsatisfied training needs and the lack of institutions with the capacity to provide training courses on an ongoing basis and, in particular, to monitor the impacts of such activities.

Technical mission to Bolivia

Another project output was the implementation of a technical mission to Bolivia on 4–8 October 2004, with the participation of 15 entrepreneurs (concessionaires) and professionals from the private and public sectors from five Amazonian departments. The aim of the mission was to observe the achievements and progress made in the forest concessions of Bolivia—several of which are independently certified—and to use these as a benchmark to consolidate the concessions process in Peru. The result of this visit was the submission of proposals aimed at improving the management of Peru's forest administration.

Technical publications

The project produced several technical documents that will be very useful to the managers of our Amazonian forests. These have been distributed in print form and can also be obtained from the SIFORESTAL website.

The target beneficiaries of this workshop were 135 forest managers, concessionaires and forest permit- and contract-holders and 36 forest professionals responsible for the formulation of forest management plans.

The immediate agenda

The project has made a start in meeting the great demand for information on and training in the management and utilization of forest resources in the Peruvian Amazon. However, these efforts are not sufficient for achieving SFM throughout the Amazon. The project implementing agency—IIAP—has undertaken to ensure the sustainability of the forest information system developed by the project, and this will be further strengthened by the establishment and operationalization of the Forest Training and Research Centre of the Peruvian Amazon Region (*Centro de Investigación y Capacitación Forestal de la Amazonia Peruana*—CICAFOR). It is hoped that the Peruvian forest sector can thus establish the basis for achieving sustainable development in the medium and long terms. However, the continued support of responsive financing bodies such as ITTO is essential to ensure the sustainability of forest management in the Peruvian Amazon.

How to handle a hotspot

An ITTO project has initiated processes for the conservation and sustainable development of a transboundary conservation area on the border between Bolivia and Peru

by
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and
Clea Paz[2]

[1]Peru Coordinator
ITTO project PD 17/00 Rev.3

[2]Bolivia Coordinator
ITTO project PD 17/00 Rev.3

Photo: L. Benites

TOGETHER, the southeastern corner of Peru and an adjoining remote area of northern Bolivia comprise what is possibly the most biodiverse region on the planet. It is known to contain more than 850 bird species, 103 amphibians, 1200 butterflies, more than 150 tree species per hectare and about 4700 vascular plant species. However, the region has been under pressure in recent years; a number of (unsustainable) activities such as mining, illegal logging and unplanned road construction, among others, has led to environmental degradation and forest loss.

... the southeastern corner of Peru and an adjoining remote area of northern Bolivia comprise what is possibly the most biodiverse region on the planet.

The bi-national ITTO PROJECT PD 17/00 REV. 3 (F): *Conservation and development in the natural protected areas system of Tambopata (Peru)-Madidi (Bolivia)* is financed by ITTO and implemented by Conservation International in cooperation with the National Institute for Natural Resources (INRENA) of Peru and the National Service for Protected Areas (SERNAP) of Bolivia. Its focus is the System of State-Protected Natural Areas (SPNA) of Tambopata-Madidi, which comprises the Tambopata Candamo Reserved Zone (RNT) and the Bahuaja Sonene National Park (PNBS) in Peru and the Madidi National Park and Integrated Management Area (PNANMIM) in Bolivia; it has a total area of influence of about 2.85 million hectares. The overall objective of the project is to help achieve a balance between the utilization and conservation of the SPNA's natural resources.

Peru actions

In Peru, the project collated geo-spatial coverage metadata for the RNT and the PNBS to establish an information base, and information was collected for the micro-zoning of a sustainable harvesting area in the RNT.

Based on this information, research was conducted to identify sustainable development options. This included the analysis and development of a management plan for palmiche (*Geonoma deversa*), which is used as a roofing material (see article in *TFU* 16/2). A study on tourism potential in the Malinowsky River area was also carried out to find ways of discouraging mining activities there. At the same time, a site-specific plan was developed for the upper Tambopata River, which has special significance because it flows through both protected areas. In addition, an optimal road network was developed for the harvesting of Brazil nut (*Bertollethia excelsa*) in order to minimize the impact of these operations.

The project also strengthened INRENA in the development and implementation of training programs for its staff, identifying existing needs and developing specific educational modules. All of this has been included in the framework of a management monitoring plan for the area so that it can be used to adjust strategies and improve efficiency in all activities.

Bolivian actions

In Bolivia, the project helped consolidate the protected areas system by supporting protection activities and developing

management instruments, including a management plan for the adjacent high-altitude Apolobamba National Natural Area of Integrated Management, a communications strategy, and specific regulations for the PNANMIM. The project strengthened the management committees of both areas. These committees are important for ensuring the participation of local communities in the management of protected areas.

To assist the sustainable development of the communities living in the area of influence of the PNANMIM, a number of forest products with market potential were identified, a management plan and business plan were developed, and studies were undertaken to improve the processing of majo (*Oenocarpus bataua*; see *TFU* 16/2), the milk and oil of which are now being marketed locally. A birdwatching station was built for the viewing of macaws and other parrots; this will be used for ecotourism by the Tacana communities in the area of influence of the PNANMIM in coordination with park personnel.

Binational cooperation

At the binational level, workshops were organized with the participation of regional authorities, SERNAP and INRENA authorities, diplomats and other relevant stakeholders. These workshops led to the development of a transboundary conservation strategy, which sets out the priority actions to be taken to ensure the conservation of the Tambopata-Madidi system.

In addition, a proposal was developed for administrative and criminal sanctions that penalize illegal activities by tourism operators in the transboundary protected areas. A proposal was also developed on a process to clarify access rights to the resources in protected areas by native Esse'ejas communities living in the area. Moreover, the administrative basis was established for a public tender process to grant access to a tourism concession in the transboundary region, while terms of reference and administrative procedures were proposed for the issuing of operational contracts for binational tourist routes.

Forest product overheads: palmiche is used for thatching roofs. *Photo: C. Arellano*

Given that it contains biodiversity of global significance, the SPNA warrants sustained international support. ITTO has provided generous financial backing, and a process for conservation and sustainable development involving governments, local communities and civil-society institutions is well under way. The first phase of the project is over; support for the next phase is now needed.

Photo: L. Benites

Fellowship report

How well do mangroves planted on ex-agricultural land in Myanmar's Ayeyarwady Delta survive and grow?

by
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Yukira Mochida
and
Motohiko Kogo

*FREDA@mptmail.net.mm

Assessors: ITTO fellow Maung Maung Than (centre) and his measurement team.

MYANMAR has about 380 000 hectares of mangrove forests distributed in the Rakhine Division, the Taninthayi Division and the Ayeyarwady Delta, with almost 50% in the latter (Pe Thein 1989). Forty years ago, the density of mangrove forests of the Delta was high. However, an increasing human population has led to over-cutting and the encroachment of forestland for agricultural purposes in the Delta. The estimated rate of mangrove deforestation in the Delta for the period 1984–1991 was 7775 hectares per year (Sit Bo 1992). Because of a decline in productivity, some of the cultivated land that replaced the mangrove forest was abandoned after 10–20 years. Most of the mangrove plantations established by the Myanmar Forest Department and local communities were in these abandoned paddy fields.

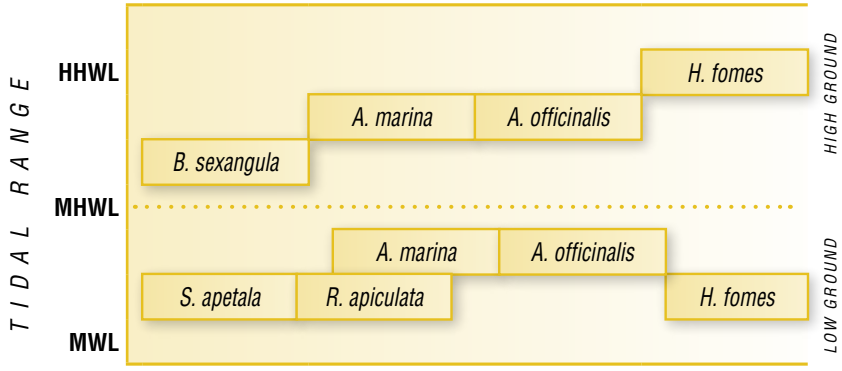
Objective

The aim of this study was to clarify the survival and growth of six native mangrove species (*Avicennia officinalis*, *A. marina*, *Bruguiera sexangula*, *Heritiera fomes*, *Rhizophora apiculata* and *Sonneratia apetala*) that were planted on abandoned paddy fields in the Delta where natural mangroves once existed.

The Delta is located in the southern part of Myanmar between latitudes 15° and 18° north and longitudes 94° and 96° east. The climate of the Delta is characterized by three seasons: a rainy season from the middle of May to October, a winter season from November to February, and a dry season from March to the middle of May. Average rainfall is over 3000 mm annually. Semi-diurnal tides occur in the Delta.

Highs and lows

Figure 1: Locations of sample plots across the tidal levels and species investigated



HHWL = highest high water level; MHWL = mean high water level; MWL = mean water level

Plot establishment

Nine permanent sample plots with a dimension of 18 × 18 m were set up in the reforestation sites. Daily tidal amplitudes were collected during 2004 at Byone Mwe Island in Bogalay Township, Ayeyarwady Delta. Based on tidal amplitudes, tidal levels were classified as highest high water level, mean high water level, mean water level, mean low water level or lowest low water level. Ground levels corresponding to water levels were then defined to identify the levels of sample plots. The salinity of the study area varied in the range 0.2–2.4% over the year, depending on tidal and seasonal conditions. In the rainy season, the salinity of river water was almost zero. Soil pH varied from 4 to 6.4, depending on the site. The soils were mainly silty clay or clay. The locations of sample plots and their ground levels as well as the species investigated are illustrated in *Figure 1*. For each species, 100 individuals were examined monthly to record survival and growth rates and any site disturbances.

Survival and growth

High ground

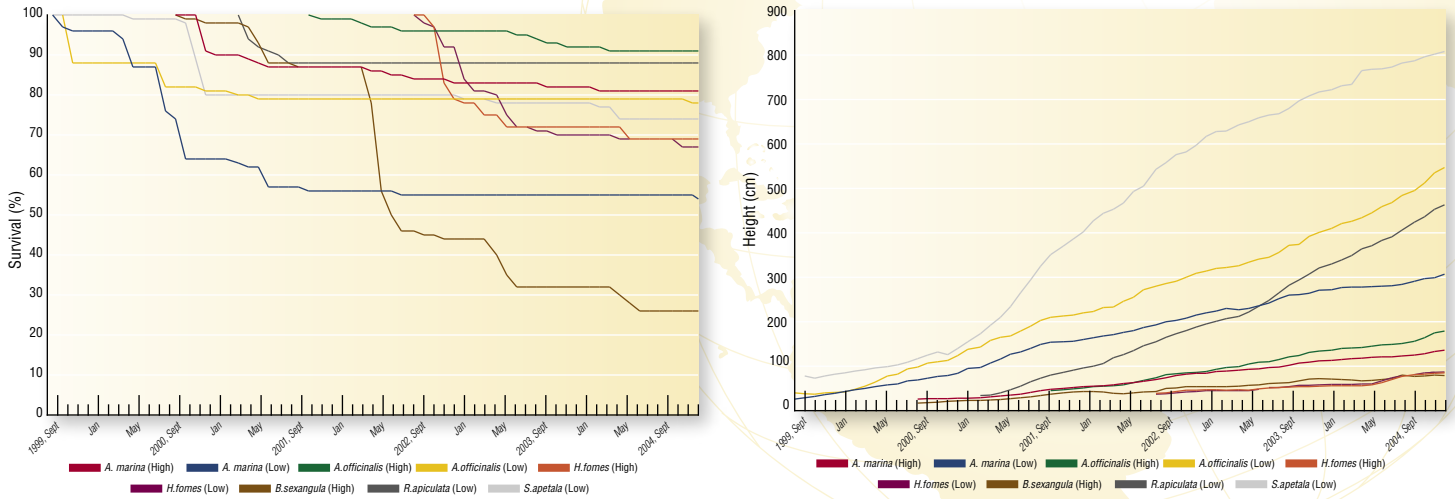
After three years and two months, the survival rate and mean height of *A. officinalis* were 91% and 1.8 m, respectively. After four years and three months the survival rate was 81% for *A. marina* and 26% for *B. sexangula*. Their mean heights were 1.4 m and 0.8 m, respectively. The survival rate for *H. fomes* was 69% after two years and four months and its mean height was 0.9 m *(Figure 2)*.

Low ground

The survival rate and mean height of *R. apiculata* were 88% and 4.6 m after three years and nine months. The survival rates of *A. officinalis*, *S. apetala* and *A. marina* were 78%, 74% and 54%, respectively, after five years and three months; mean heights were 5.5 m, 8.1 m and 3.1 m. After two years

Mangrove performance

Figure 2: Survival *(left)* and height growth *(right)* of mangrove species planted on high and low ground in the Ayeyarwady Delta



and four months, the survival rate of *H. fomes* was 67% and its mean height was 0.9 m.

Disturbances

Caterpillars, crabs, rodents and stem borers were the major biotic disturbances in the plantations. On the other hand, desiccation was the most important abiotic disturbance, especially for plantings on high ground.

Conclusion

The findings indicate that low survival rates and poor growth can be attributed to both ground-level and biotic disturbances. Tree growth was significantly better on low ground than on high ground. On low ground, *S. apetala* demonstrated the best growth and *R. apiculata* had the highest survival rate. On high ground, the survival and growth rates of *A. officinalis* were highest among the species assessed.

References

Pe Thein 1989. *Note on mangrove forests of Myanmar*. Myanmar Forest Department, Yangon, Myanmar.

Sit Bo 1992. *Report on assessment of change of mangrove forests in Ayeyarwady Delta Using Remote Sensing Data*. Myanmar Forest Department, Yangon, Myanmar.

This work was carried out with the assistance of an ITTO fellowship grant.

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 **3 March 2007** for activities that will begin no sooner than 1 August 2007. Applications will be appraised in May 2007.

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

Commercial forestry can make a difference

Scoping dialogue on poverty reduction through commercial forestry

19–21 June 2006
Richards Bay, South Africa

This meeting of The Forest Dialogue (TFD) brought together 27 experts to discuss approaches to maximizing forestry's potential for reducing poverty. Representing forest companies, non-governmental organizations (NGOs), intergovernmental organizations, labour, development agencies and research institutions, participants shared knowledge and experience to highlight some of the key challenges to and opportunities for pursuing commercial wood production (hereafter called 'commercial forestry') as a mechanism for lifting people out of poverty. While the meeting was global in scope, South Africa featured prominently through field visits and presentations. Local initiatives such as outgrower schemes in rural communities enriched discussions by offering pragmatic examples of 'pro-poor' forestry which participants could discuss, challenge and assess.

The meeting aimed to:

- examine illustrative cases and identify obstacles to replication elsewhere;
- clarify the stakeholder roles, commitments and actions necessary to realize the potential of commercial forestry to reduce poverty; and
- advise TFD's full dialogue on this topic in early 2007.

Participants explored the potential and drivers of pro-poor commercial forestry, and barriers to scaling up. The first day was spent in the field, visiting and discussing the small-grower schemes and community development initiatives of two forestry companies operating in South Africa—Mondi and SAPPI—as examples of pro-poor forestry. The second and third days consisted of presentations, discussions and working groups to further distil key issues and obstacles and to frame the scope of the full dialogue. Presentations commenced with a review of the meeting's background paper, *Poverty reduction through commercial forestry: what evidence? what prospects?* by James Mayers. Subsequent presentations featured reflections on pro-poor forestry from the forest industry (Peter Gardiner and Sakhile Ngcobo, Mondi, and Rosanne Monteiro Borges, Aracruz), labour (Inviolata Chinyangarara, Building and Woodworkers International), an NGO (Dale Dore, Shanduko), government (John Cantrill, South African Department of Public Enterprise) and investment (Gerhard Dieterle, World Bank). The discussion that followed shared lessons from several approaches to pro-poor commercial forestry and identified challenges and mechanisms for assessing the potential of pro-poor forestry.

Main conclusions

Commercial forestry has real potential to produce wealth: the potential of forestry to produce wealth for poor people through timber or fibre production and processing has been under-emphasized compared to the safety-net functions of forests, which reduce poverty through the provision of fuelwood, grazing and non-timber forest products (such as fruits). However, commercial forestry can also offer safety nets and address other non-income environmental deprivations facing the poor, as well as deprivations in terms of rights, skills and connections. But this is not automatic: the way that commercial forestry is operated is key. Factors such as efficiency and effectiveness are important, but careful consideration of equity in structuring, corporate-community partnerships and formal/informal employment relationships is also necessary.

Pro-poor commercial forestry can take many different forms: models of pro-poor commercial forestry may include: the effective management of public forests, efficient revenue capture, and expenditure of this revenue on a variety of pro-poor developments; small and medium-sized enterprises run by, and/or employing, poor people; and large enterprises that engage directly in equitable partnerships with poor people. However, the precise economics and social implications of such models are not yet entirely clear. For instance, the discussion highlighted the complexities of out-sourcing silvicultural treatments and harvesting and hauling functions, as well as the conflicting role of technology that increases productivity but reduces employment. Clearly, finding a balance between profit optimization and equitable benefit-sharing between poor people and forest companies will be essential for realizing pro-poor forestry.

Enabling conditions and key drivers steering commercial forestry towards poverty reduction: through discussions and working groups, participants identified a number of enabling conditions and key drivers that are helping to realize forestry's potential for reducing poverty. Significant progress could be made when several of these conditions and drivers are more strongly linked.

Extracted from the co-chairs' summary by Steve Bass, Peter Gardiner and Bill Street, which—along with all presentations—is available at http://research.yale.edu/gisf/tfd

Whoa on Doha

Informal meeting of the World Trade Organization Trade Negotiations Committee

24 July 2006
Geneva, Switzerland

The Doha Round of trade negotiations has been put on hold after a meeting of ministers from six key trading

nations collapsed over divisions on how to cut farm subsidies and tariffs. It is not clear when—or if—the talks, which started nearly five years ago, will resume. Kamal Nath, India's Commerce Minister, said that the round, though not dead, was "between intensive care and the crematorium". While some civil-society groups lamented the breakdown as a missed opportunity for balancing the multilateral trade system, others welcomed it as a chance to completely revise the approach to multilateral trade.

"It will not be possible to finish the round by the end of 2006," WTO Director-General Pascal Lamy told an informal meeting of all member delegations the day after ministers from the European Union, the US, Australia, Brazil, India and Japan—the so-called G6—failed once again to bridge their differences. Saying that "the gaps remain too wide", he recommended suspending all negotiations currently under way at the WTO indefinitely. This time-out, Lamy suggested, would be an opportunity for members to examine what was at stake and to reconsider their positions. The WTO's General Council did not take a formal decision to suspend the talks; this means that another formal decision will not be necessary to restart the negotiations.

Lamy has long held that unblocking the negotiations would require parallel progress on a 'triangle' of issues: the US would have to agree to deeper cuts to domestic farm support, the EU to increased agricultural market access, and developing countries such as Brazil and India to lower industrial tariffs. Each group has been urging the others to budge first.

Furious recriminations have followed the breakdown, particularly between the EU and the US. Brussels blames Washington for refusing to offer any new cuts to farm subsidies; the latter counters that the EU gave too little on market access to make any such movement possible. Many of the ministers maintained that the divisions were not insurmountable. Brazilian Foreign Minister Celso Amorim attributed the collapse to a lack of "political will". Nath said that the notion that subsidy cuts should be paid for in market access represented a "gap in mindset" that would need to be transcended for the round to succeed.

The reaction of civil-society groups to the breakdown has been mixed. Some development groups pointed to the missed opportunity to address unfair trade rules. Oxfam warned that the suspension would continue to allow rich countries to dominate multilateral trade, deny better market access to developing countries and open other countries' markets to their exports through bilateral trade arrangements. "The cost of delay is too big and the potential for development too great for these talks to be left to wither on the vine," said Celine Charveriat of Oxfam's Make Trade Fair campaign. Some environmental groups, however, were more upbeat, hailing the collapse as an opportune moment for a complete overhaul of the multilateral trade system.

Some trade analysts believe that the negotiations might be able to resume after the US elections this fall. Others think that the round may be frozen until 2009.

Adapted from BRIDGES Trade BioRes, *Vol 6 No. 14, 28 July 2006, which is published by the International Centre for Trade and Sustainable Development in collaboration with IUCN—The World Conservation Union*

ITTO and FAO team up on forest law enforcement

Application of Forest Law Enforcement in the Amazon

29–31 August 2006
Sao Paolo, Brazil

ITTO and FAO joined the Amazon Cooperation Treaty Organization (ACTO) and the Government of Brazil in hosting this meeting, which brought together over 50 legal and forestry experts from the eight ACTO members (Bolivia, Brazil, Colombia, Ecuador, Guyana, Suriname, Peru and Venezuela—all also ITTO members) as well as representatives of intergovernmental organizations such as the World Bank and IUCN. The meeting was the first of four planned by ITTO with FAO under ITTO's 2006–2007 Work Programme to promote awareness and uptake of the joint 2005 FAO/ITTO publication *Best practices for improving law compliance in the forestry sector*.

The meeting, one of the first such gatherings of technical experts from the Amazon region, heard detailed summaries of the status of forest law enforcement (FLE) in each of the eight countries, and examined opportunities to further improve the development and enforcement of forest laws. Several countries have relatively new forest legislation and/or forest administrations in place (eg Bolivia and Brazil) and there was substantial discussion on the implications of such developments on FLE. Group work focused on the themes covered in the *Best practices* publication, which were the political and legal framework, institutional structure and opportunities for social participation, and technology and information.

The report of the meeting will include recommendations for national and regional action, including better coordination on monitoring and controlling frontier areas as appropriate. The report should be available prior to the 41st session of the International Tropical Timber Council in November this year and will be posted on the ITTO and FAO websites.

The remaining workshops under this work program element are scheduled to be convened in December this year (for Central African countries) and in the first and second halves of 2007 (Central America in the first half, Southeast Asia in the second half). In Africa and Asia, the workshops will be convened in close cooperation with existing regional forest law enforcement and governance processes. For more information contact the ITTO Secretariat (johnson@itto.or.jp).

Reported by Steve Johnson

ITTO & CITES work on improving mahogany management

CITES Bigleaf Mahogany Working Group meeting

29 June–1 July 2006
Lima, Peru

ITTO provided financial and technical support to this third meeting of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Bigleaf Mahogany Working Group (MWG), which was convened immediately prior to the 16th Session of the CITES Plants Committee. ITTO has a long history of working with CITES, originally through its Timber Working Group and more recently to improve management of mahogany, ramin and other tropical species listed in the CITES appendices. This meeting was attended by representatives of Bolivia, Brazil, Chile, the Dominican Republic, Ecuador, the European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, Spain, the UK, the US and the secretariats of CITES, ITTO and the Amazon Cooperation Treaty Organization, as well as invitees from several trade and environmental NGOs.

The MWG heard reports from all range states on progress in implementing earlier CITES recommendations on mahogany, namely to implement management plans, undertake forest inventories, improve capacity to oversee and secure CITES paperwork, and to establish national working groups (as necessary) for mahogany. Members of the MWG also exchanged information on recent trade trends and statistical discrepancies. For example, the Dominican Republic reports mahogany sawnwood imports of hundreds of thousands of cubic metres from Fiji, a country that exports at most a few thousand cubic metres of plantation-grown mahogany per year; it also reports imports from Brazil, which bans exports. Nicaragua reported that it had recently imposed an export ban on mahogany.

The MWG had a substantive discussion on the Peruvian export quota (Peru is the largest mahogany exporter by far) and its efforts to undertake non-detriment findings (NDFs—scientific assessments showing that trade in the species is not detrimental to the species' long-term survival). A representative of the University of Molina, the CITES scientific authority in Peru, informed the MWG that an ITTO project (PD 251/03 REV. 3 (F)) to establish mahogany stocking levels was improving the ability to undertake NDFs in Peru. Some importers and environmental NGOs urged Peru to show more progress in implementing the CITES listing requirements on mahogany, with one influential NGO calling for a moratorium on trade. Many countries noted that they had difficulties in carrying out NDFs on mahogany.

ITTO and CITES made a presentation to the MWG on a multi-million dollar, multi-year collaborative project that would provide region-specific assistance to countries throughout the tropics to design forest management plans/inventories, provide guidelines and case studies for making NDFs, and develop and disseminate timber identification tools, etc. This project, which could play an important role in implementing several of the recommendations of the MWG and CITES Plants Committee on mahogany and other timber species in CITES appendices, is scheduled to commence in 2007.

In its consideration of the MWG report at its meeting the following week, the CITES Plants Committee recommended that by the end of the year:

- the Plants Committee support development of further guidance on non-detriment findings for timber species and the organization of a workshop on this matter;
- parties should report on implementation of CITES Decision 13.58 by 30 November 2006, ensure that no mahogany exports take place without NDFs and verification of legal origin of the timber, and refuse to import mahogany accompanied by a CITES permit issued under a court order, unless NDFs have been confirmed by the Scientific Authority of the country of origin (the latter at the request of Brazil); and
- the CITES secretariat report mahogany enforcement and compliance problems to the CITES Standing Committee and investigate the high volume of mahogany imports reported by the Dominican Republic.

Despite calls from environmental NGOs and some importers for mahogany to be subject to the CITES Review of Significant Trade procedure (which can lead to recommendations for remedial actions when CITES requirements are not being met, including uplisting to the more restrictive Appendix I and trade moratoria), the Plants Committee decided not to call for such a step at this time.

In other developments relevant to ITTO at the Plants Committee meeting, the Netherlands proposed that *Cedrela odorata* (cedrela), *Dalbergia retusa* (cocobolo) and *Dalbergia stevensonii* (Honduras rosewood) be considered for inclusion in Appendix II. The chair of the Plants Committee requested members to compile information on these species to inform any future discussions. Italy presented a proposal on standardizing measurements for appendices II- and III-listed timber species, noting existing discrepancies in measuring shipment volumes and weights, particularly due to varying water content.

Reported by Steve Johnson

Recent editions

Edited by Hana Rubin

World Bank 2006. **Strengthening forest law enforcement and governance: addressing a systemic constraint to sustainable development.** ***World Bank, Washington, DC, USA.***

Available from: *The World Bank Environment and Agriculture and Rural Development Departments, 1818 H Street, NW, Washington, DC 20433 USA; Tel 1–202–473–1000; Fax 1–202–477–6391; www.worldbank.org/forests*

The World Bank has been engaged in forest law enforcement and governance (FLEG) processes since the first Ministerial FLEG Conference for East Asia in 2001. This report takes stock of the World Bank's approaches in promoting FLEG as well as those of the broader community involved in FLEG, and outlines a forward-looking approach for combating illegal logging and other types of forest crime. The report notes that "as recently as five years ago, illegal logging and forest crime were politically charged topics rarely discussed in country-level or international forums", but this has changed. The report describes the numerous initiatives and actions, including those of ITTO, that are being implemented on all levels. It proposes that forest crime be addressed through multifaceted approaches that address, among other things, key drivers both within and outside the forest sector.

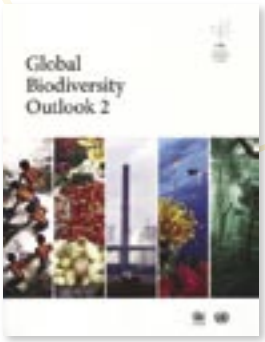
Colchester, M. et al. 2006. **Justice in the forest: rural livelihoods and forest law enforcement.** ***Center for International Forestry Research (CIFOR), Bogor, Indonesia. ISBN 979 24 4618 4.***

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

This report is the result of exploratory studies in six countries—Bolivia, Cameroon, Canada, Honduras, Indonesia and Nicaragua—into the implications of forest law enforcement measures on the livelihoods of forest-dependent communities. It concludes that "in many countries, forest-related laws offer relatively little security to poor rural communities and indigenous peoples" and offers numerous recommendations and suggestions for ways forward. The report emphasizes that the lessons learned through the exploratory studies could help ensure that future approaches do not reinforce social injustice or further limit rural livelihoods.

CBD 2006. **Global biodiversity outlook 2.** ***Secretariat of the Convention on Biological Diversity (CBD), Montreal, Canada. ISBN 92 9225 040 X.***

Available from: *Secretariat of the Convention on Biological Diversity, World Trade Centre, 413 Jacques Street, Suite 800, Montreal, Quebec, Canada H2Y 1N9; Tel 1–514–288–2220; Fax 1–514–288–6588; secretariat@biodiv.org; www.biodiv.org*



The 2010 Biodiversity Target commits parties to the CBD to achieving "a significant reduction of the current rate of biodiversity loss at the global, regional and national levels" by 2010. This report presents current trends in biodiversity and reviews the progress to date of parties to the Convention in achieving the 2010 target. While most indicators infer a decline in biodiversity at all levels, the report notes that "targeted response options—whether it be the creation of protected areas, or resource management and pollution prevention programmes—can reverse this trend for specific habitats or species". It concludes by naming key actions needed to achieve the 2010 target and encourages all parties to act immediately and to put these actions into widespread use.

Siqueira, J., Ferreira, A. & Lange, F. 2005. **Increasing the efficiency in the tropical timber conversion and utilization of residues from sustainable sources.** ***ITTO and Federal University of Paraná Foundation for the Development of Science, Technology and Culture (FUNPAR), Yokohama, Japan and Curitiba, Brazil.***

Available from: *Federal University of Paraná Foundation for the Development of Science, Technology and Culture (FUNPAR), Rua João Negrão, 280 – Centro, CEP 80010-200 Curitiba – Paraná, Brazil; Tel 41–3360–7400; Fax 41–3323–1633*

This is the final report of ITTO PROJECT PD 61/99, which was implemented by FUNPAR. The specific objective of the project was to "demonstrate that the traditional forest product industry, together with a non-traditional consumer (energy generation industry) can contribute to the implementation of industrial operations, making the sustainable forest product industry a feasible operation in selected locations". Surveys were undertaken in four regions (Rio Branco, Itacoatiara, Rio Jari and Alto Solimões) and data collected on biomass volume and energy generation to explore the feasibility of biomass energy generation plants in areas that rely on high-cost diesel fuel to meet their energy needs.

Topical and tropical

News from ITTO's Tropical Timber Market Report

Edited by Alastair Sarre

Illegal loggers imprisoned

A township-level court in Chin state, western Myanmar, has sentenced 20 Indian nationals, arrested in May for illegal logging, to long prison terms. One of the detainees charged with poaching was sentenced to 15 years while the other 19 received twelve years each for illegal logging.

TTMR 11:17, 1–15 September 2006

Rising domestic prices boost imports of MDF

The growing domestic demand for medium-density fibreboard (MDF) has pushed up prices by 20% in the Brazilian market during 2006. MDF is increasingly used as a substitute for particleboard and plywood in the manufacturing of wooden furniture. According to the Brazilian Association of the Wood Panel Industry, domestic MDF production is expected to grow 20% to 1.68 million m^3 this year.

TTMR 11:17, 1–15 September 2006

Agreement reached for emissions offsets market

The Chicago Climate Exchange (CCX) and India's Energy and Resources Institute (TERI) have agreed to develop a greenhouse gas emissions offset market in India. TERI is a think-tank involved in environmental and energy policies. TERI will facilitate the registration of offset projects, primarily on the Indian subcontinent. The CCX's project-based emission offsets portfolio includes agricultural soil sequestration, methane capture and destruction, forestry and renewable energy, and energy efficiency offsets.

TTMR 11:17, 1–15 September 2006

Brazil proposes fund to slow rainforest destruction

Brazil has proposed establishing a fund to compensate developing countries for slowing the destruction of their rainforests and thereby reducing greenhouse gas emissions. Most such emissions come from oil and coal burning, but deforestation is responsible for an estimated 20% of global emissions. The Brazilian initiative, presented at a planning meeting for the next round of global climate talks in Rome in November, calls for the creation of a fund for countries that bring deforestation below the estimated average rate in the 1990s. The Kyoto Protocol's Clean Development Mechanism (CDM) allows carbon credits for planting trees where forests have already been cleared but currently offers no incentives for preventing deforestation in areas like the Amazon.

Meanwhile, Japan's Sumitomo Mitsui Banking Corporation and the Bank of Brazil have agreed to cooperate on CDM projects, with the aim of identifying and generating emissions reductions in Brazil and selling the carbon credits to Japanese buyers.

TTMR 11:18, 16–20 September 2006

Malaysian prices beat 1997

With the exception of plywood and other panel products, prices of most Malaysian timber products are stabilizing after strong increases in preceding months. Meranti and kapur logs reached 13- and ten-year highs, respectively, in the first half of 2006, exceeding 1997 pre-Asian financial crisis levels, while dark red meranti sawnwood prices are at their highest in US dollar terms since ITTO started to track this product in 1998, although they are only at six-year highs in euros and UK pounds. Meanwhile, prices for dark red meranti plywood (excluding 9-mm ply) are at ten-year highs.

TTMR 11:16, 16–31 August 2006 and 11:17, 1–15 September 2006

Demand for mahogany eases

The demand for mahogany (*Swietenia macrophylla*) sawnwood in international markets has reportedly declined by as much as 15% in recent months compared to the same period in 2005, causing some loggers in Peru, the main exporting country, to halt activities in production zones. The price of mahogany at Peruvian sawmill yards has also fallen—by 13% since early June. Exporters of mahogany products indicated that customers were looking for substitutes such as Spanish cedar (*Cedrela odorata*) as a result of problems associated with the issuing of CITES certificates for mahogany.

TTMR 11:16, 16–31 August 2006

The ITTO Tropical Timber Market Report *is published every two weeks and distributed by email. In addition to news affecting the tropical timber trade, the report contains prices for a wide range of tropical timber products. For a free subscription contact Dr Jairo Castaño at itto-mis@itto.or.jp*

Two new protected areas for Congo

The Republic of Congo recently announced plans to create two new protected areas spanning nearly a million hectares. "The Republic of Congo depends on forest resource use for economic development, but it is also deeply committed to biodiversity conservation and sustainable forest management," said Henri Djombo, Congo's Minister of Forestry Economy, speaking at United Nations headquarters in New York, USA, in September 2006. "Congo has already set aside an estimated 11% of its land area as protected areas. Establishing these new protected areas reinforces the protected area network portfolio and affirms this commitment," he said.

The first new protected area, called Ougoue-Lekiti National Park, lies in the western part of the country adjoining Bateke National Park in Gabon.This transboundary protected area will cover a total of 600 000 hectares. The northern half of Ougoue-Leketi contains an ancient sand-dune system covered by large grass and wooded savanna patches separated by lines of dense gallery forest, along with many small lakes and river valleys. The south and west of the new park supports an intact block of Chaillu forest and the Ougue River basin, along which a series of natural clearings are used by forest elephants and other large mammals. The second protected area, to be called Ntokou-Pikounda, will be created in the next year. It lies southeast of Odzala Kokoua National Park, which is well known for one of the highest gorilla populations in the world.

Short courses in global forestry trends and challenges

Executives learning about forestry

25–30 March 2007

Foresters becoming executives

15–20 April 2007

Cost: US$7500

These two courses are designed for experienced executives needing to learn more about the forestry sector, and successful forest managers stepping into executive-level positions.

Effective decisions about forests, forest products and forestry need to be based on valid information and the most comprehensive understanding of this information at all scales—from the global to the local. Our understanding of forests and the information upon which this understanding is based has changed dramatically during the past few years.

These courses have been designed to meet the needs of busy executives who require access to the most up-to-date understanding of forest management: successful executives with little background in forestry who find themselves in organizations involving forests and forest products, and experienced forest managers who are stepping into executive-level positions with little training in business.

Participants will gain information, material and access to global ideas and thinkers in an academic environment, and develop contacts with fellow participants, graduate students, Yale faculty and other instructors, that can serve them well beyond the course.

Classes will include a primary instructor and a changing array of expert discussants and expert panels drawn from both the Yale School of Forestry & Environmental Studies faculty and outside expertise across the field. The courses cover similar material, but the emphasis in *Executives learning about forestry* will be on understanding forests, forestry and forest products, and in *Foresters becoming executives* on building executive skills.

Contact: *Global Institute of Sustainable Forestry, 360 Prospect Street, New Haven, CT 06511 USA; 1–203–432 5117*

Tropical birding in Costa Rica: introduction to field ornithology

August 2007 (dates to be determined)

Cost: US$1800

This course in offered in four biogeographic regions in Costa Rica: Central Valley (tropical moist forest), Monteverde cloud forests, Guanacaste dry forests and the Northern Atlantic region (tropical wet forests). This way, the course offers opportunities for both birding and getting to know a great deal of Costa Rica. It is also a unique way to have first contact with tropical environments. It is designed for professionals and lay persons in biology, forestry, biodiversity, ecology and other areas in the natural resources field. The ideal participants will be persons who do not have formal training in ornithology but who want to become proficient bird-watchers in a short time.

The course is both practical and theoretical. Field practices are devoted mostly to observation and identification, including bird calls. Field practices on identification are complemented by lectures and group discussions on other subjects such as morphology, feeding, nesting, breeding, habits, behaviour, distribution, migration, use of habitat, conservation, and photography techniques. However, the emphasis of the course is on the techniques of field identification.

Contact: *Dr Humberto Jiménez-Saa, PO Box 8-3870-1000, San Jose, Costa Rica; Tel 506–253 3267; Fax 506–253 4963; hjimenezsaa@racsa.co.cr*

GIS and remote sensing for natural resource management

3 January 2007–23 March 2007

ITC, Enschede, the Netherlands

Cost: €2500

This 12-week course is designed for natural resource managers who already have a good working knowledge of basic geographic information systems (GIS) and remote sensing and who seek to develop specialist knowledge and skills in particular fields of application. On completion of the course, participants can take up roles as natural resource geo-information specialists working at the interface of natural resource management (NRM), natural resource data acquisition and analysis, and geo-information technology. During the first two weeks, participants will review their experience in NRM and examine the importance of GIS and remote sensing in NRM. Participants will then join the three specialization modules of the International Institute for Geo-Information Science and Earth Observation (ITC)'s regular NRM degree program for a period of nine weeks. Depending on their background and requirements, participants can follow the Forestry for Sustainable Development specialization out of six other fields of specialization. In the final week, participants will come together to report on their work, share experiences and compile back-to-office reports.

Contact: *ITC, Bureau MPS, PO Box 6, 7500 AA Enschede, the Netherlands; www.itc.nl; education@itc.nl*

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.

New member for ITTO

The Government of Madagascar recently acceded to the International Tropical Timber Agreement, 1994, thus becoming ITTO's 60th member. Madagascar has a population of about 16 million people and contains some of the world's most biodiverse rainforests. Lemurs, a primitive and diverse class of primate, are endemic to Madagascar and some small surrounding islands.

Meetings

30–31 October 2006. **6th Dialogue on Forest Certification**. Washington, DC, USA. ***Contact:*** *The Forest Dialogue, New Haven, USA; Tel 1–203–432 5966; info@theforestsdialogue.org; www.theforestsdialogue.org*

1–3 November 2006. **International Seminar on Forests, Forest Products and Services: Research, Development and Challenges Ahead**. Srinagar (Garhwal), Uttaranchal, India. ***Contact:*** *Seminar Secretariat, International Seminar on Forests, Forest Products and Services: Research, Development and Challenges Ahead, Department of Forestry HNB Garhwal University, Srinagar (Garhwal) – 246174, Uttaranchal, India; Tel/fax 91–1370–267529; forestseminar@rediffmail.com; www.uttara.in*

6–11 November 2006. 41st Session of the International Tropical Timber Council and Associated Sessions of the Committees. Yokohama, Japan. *Contact: Information Officer (Mr Collins Ahadome), ITTO Secretariat; Tel 81–45–223 1110; Fax 81–45–223 1111; itto@itto.or.jp; www.itto.or.jp*

6–17 November 2006. **12th Conference of the Parties to the United Nations Framework Convention on Climate Change and 2nd Meeting of the Parties to the Kyoto Protocol**. Nairobi, Kenya. ***Contact:*** *UNFCCC Secretariat; Tel 49–228–815 1000; Fax 49–228–815 1999; secretariat@unfccc.int; www.unfccc.int*

7–10 November 2006. **2nd Congreso para la Prevención y Combate de Incendios Forestales y Pastizales en el MERCOSUR**. Malargüe, Argentina. ***Contact:*** *Diligencia Viajes SA, Av Pte Roque Sáenz Peña 616, piso 8, Of 812, CP 1036, Ciudad Autónoma de Buenos Aires, Argentina; Tel 54–11–4342 9331/2057; Fax 54–11–4342 9546; viajesd@infovia.com.ar*

23–24 November 2006. Latin American Tropical Forest Investment Forum: Issues and Opportunities for Investment in Natural Tropical Forests. Curitiba, Brazil. Organized by ITTO. *Contact: Division of Forest Industry, ITTO Secretariat; Tel 81–45–223 1110; Fax 81–45–223 1111; fi@itto.or.jp; www.itto.or.jp/live/PageDisplayHandler?pageId=223&id=1643*

27 November–1 December 2006. Community Forest Management and Enterprises: Global Issues and Opportunities. Conference organized by ITTO and The Rights and Resources Initiative. ***Contact: ITTO Secretariat; Tel 81–45–223 1110; Fax 81–45–223 1111; itto@itto.or.jp***

28–30 November 2006. **2nd International Conference on Estuaries and Coasts**. Guangzhou, China. ***Contact:*** *ICEC-2006 Secretariat; Tel 86–20–8711 7249; Fax 86–20–3849 1316; icec2006@prwri.com.cn; www.prwri.com.cn/icec2006-eindex.htm*

30 November–1 December 2006. **International Symposium on Water Resources and Renewable Energy Development in Asia**. Bangkok, Thailand. ***Contact:*** *Margaret Bourke, Aqua-Media International; Tel 44–208–643 4727; Fax 44–208–643 8200; mb@hydropower-dams.com; www.hydropower-dams.com*

3–6 December 2006. **I Congreso Iberoamericano de Protección de la Madera**. Merida, Venezuela. ***Contact:*** *Secretaría del Congreso, Conjunto Forestal, Vía Chorros de Milla, Mérida 5101-A, Venezuela; Tel 58–274–240 1684; Fax 58–274–240 1691; osenbla@gmail.com, ripmamerida@hotmail.com*

11–15 December 2006. **UNFF Open-Ended Ad Hoc Working Group**. New York, USA. ***Contact:*** *UNFF Secretariat; Tel 1–212–963 3160/3401; Fax 1–917–367 3186; unff@un.org; www.un.org/esa/forests/n-mayjuno6.html#art1*

12–16 December 2006. **The East Asian Seas (EAS) Congress 2006**. Haikou City, China. ***Contact:*** *The EAS Congress Secretariat; Tel 632–9–202211; Fax 632–9–269712; congress@pemsea.org; www.pemsea.org/eascongress*

4–7 January 2007. **3rd International Conference on Environmental, Cultural, Economic and Social Sustainability**. Chennai, India. ***Contact:*** *Conference Organizers; Tel 61–2–9519 0303; Fax 61–2–9519 2203; info+So7@commongroundconferences.com; www.SustainabilityConference.com*

23–27 January 2007. **International Dialogue on Science and Practice in Sustainable Development: Linking Knowledge with Action**. Chiang Mai, Thailand. ***Contact:*** *Jill Jäger, Sustainable Europe Research Institute (SERI), Austria; Tel 43–1–263 2104; Fax 43–1–263 2104; jill.jaeger@seri.at; www.scidev.net/events/index.cfm?fuseaction=readevents&itemid=672&language=1*

13–16 February 2007. **Country-Led Initiative in Support of the Multi-Year Programme of Work of the UNFF: Charting the Way Forward 2015**. Bali, Indonesia. ***Contact:*** *Tri Tharyat, Permanent Mission of Indonesia to the UN; tri_tharyat@yahoo.com*

4–11 March 2007. **2nd International Agarwood Conference**. Bangkok, Thailand. ***Contact:*** *Rainforest Project Foundation; Tel 31–20–624 8508; Fax 31–20–624 0588; trp@euronet.nl; www.therainforestproject.net/conf2.htm*

16–22 April 2007. **II International Symposium on Ecological Restoration**. Ciudad de Santa Clara, Cuba. ***Contact:*** *Grécia Montalvo Fernández* ***or*** *Alberto torres Bilbao; sisre@ccb.vcl.cu*

16–27 April 2007. **7th Session of the United Nations Forum on Forests**. New York, USA. ***Contact:*** *UNFF Secretariat; Tel 1–212–963 3160; Fax 1–917–367 3186; unff@un.org; www.un.org/esa/forests*

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

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

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

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

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

1 November 2007. **8th Session of the Conference of the Parties to the UN Convention to Combat Desertification (COP-8)**. Spain. ***Contact:*** *UNCCD Secretariat; Tel 49–228–815 2800; Fax 49–228–815 2898; secretariat@unccd.int; www.unccd.int*

 continued from page 32

to avert whatever disaster their disappearance will bring.

However, even if the precautionary reason is accepted it does not follow that the sustainable management of the tropical forests for their timber potential is required, unless utilization of that potential is a necessary financial requirement for their conservation. There is no ecological reason why that should be so but there could be political and socio-economic ones. Unless the conserved forest is visibly a big income generator, the pressures could be irresistible for conversion to some non-forest land-use. The lack of data on the management of totally protected areas cited in *SFM Tropics* does not inspire confidence that simply putting all remaining tropical forests into national parks will do much to conserve the resource.

Concerned: this Guyanese otter wants a precautionary approach. *Photo: Iwokrama*

But SFM has to be more than just an income generator. Not only must it generate more income than any non-forest land-use, it also has to produce enough to cover the additional extra cost of SFM. The conundrum persists—how to provide for that additional cost and how to get that extra income to those who have to incur or carry the costs.

So far this has proved to be an insoluble problem. And it will stay that way for as long as the only agreement is that somebody else should pay for it. Again, the dilemma is not peculiar to the tropical forests. Rather, it is the general one of getting the private sector to foot the bill for the adequate provision of public goods. But the problem is aggravated in the case of the tropical forests. First, the bill for tropical SFM is likely to be large—US$2 billion a year has been estimated by at least three separate ITTO studies—and continuing. It will be there for as long as there are tropical forests to conserve or until the attempt is abandoned. Second, the public good benefits are much more global than national and there is no global equivalent of national taxation to extract payment from everybody. Third, even if a payment system could be devised, there is no one body to distribute the load, collect and distribute the proceeds and monitor their use. Instead there are several—and a growing number of—organizations, international and national, official and private, competing to get their hands on the cash. And, fourth, time is running out fast; at current rates, perhaps half the existing tropical forest estate will be lost within 50 years.

So the conundrum of SFM comes down to one simple question: how to devise a system for funding tropical forest management that does not depend entirely, or even largely, on higher prices for tropical timber and/or voluntary donations. Higher prices are out—most tropical timber is in competition with non-tropical timber which, with the growing plantation resource and increasing temperate and boreal forest areas, are in increasingly ample supply. Voluntary donations are also out—they are so wide open to the temptation of free-riding on the donations of a handful, that few will be forthcoming, as well-demonstrated by the Bali Partnership Fund. (This is not to say they shouldn't continue, even at the current low level: *SFM Tropics* makes it clear that international assistance, including from ITTO, has had a major impact on increasing the area of tropical forest under SFM.)

The only point about continuing to talk about SFM is to find a way around the conundrum that everybody says they want SFM but nobody wants to pay for it. If there is no answer, further talk won't find one. But talk serves a useful purpose for some: it creates the illusion that something is being done. Hence, in a world where illusion so often counts for more than reality, the combination of talk and inaction seems set to have a guaranteed future.

ITTO's definition of SFM

SFM is the process of managing permanent forest land to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services without undue reduction in its inherent values and future productivity and without undue undesirable effects on the physical and social environment.

Out on a limb

The SFM conundrum

by Alf Leslie

THE RECENT ITTO REPORT on the status of tropical forest management (summary report, *TFU* 2006/1, hereafter referred to as *SFM Tropics*) shows that some progress has been and is being made in the sustainable management of tropical forests. Of the estimated 353 million hectares of permanent forest estate designated for timber harvesting, 25.2 million hectares (7.1%) are thought to be under sustainable forest management (SFM). This is a significant improvement on the status in 1988, when the first survey found almost no area of tropical forest under what was then considered to be sustainable management.

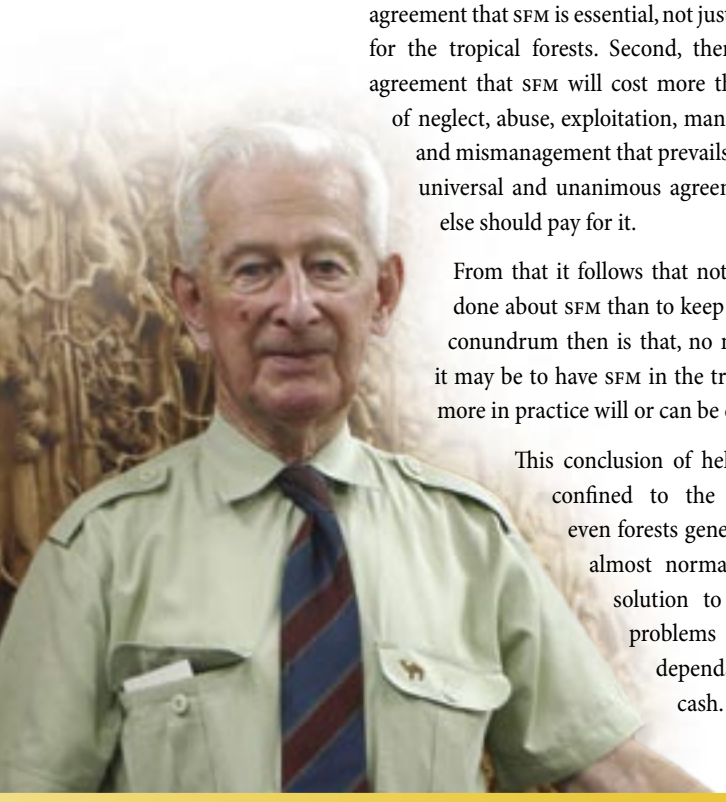
However, SFM remains a controversial issue. The fact that it is easy to find over sixty definitions of it in the literature is evidence enough of that. Most of the disputation is over what exactly SFM means and then, whatever it means, over how to carry it out. The ITTO definition (see box on page 31), which is as good as any and better than most, shows that controversy is an inherent characteristic: how much reduction in values and productivity, and how many undesirable physical and social effects, are too much ("undue"), and who says so?

We don't know that the tropical forests are essential for the future welfare of mankind but we suspect that they could be. Hence, since we won't know until there are none left, we should conserve them now whilst we can …

Nevertheless, there is a high degree of unanimity about at least three aspects of SFM. First, there is virtually total agreement that SFM is essential, not just desirable, especially for the tropical forests. Second, there is nearly general agreement that SFM will cost more than the present mix of neglect, abuse, exploitation, management, conversion and mismanagement that prevails. Third, there is total, universal and unanimous agreement that somebody else should pay for it.

From that it follows that not much more will be done about SFM than to keep talking about it. The conundrum then is that, no matter how essential it may be to have SFM in the tropics, nothing much more in practice will or can be done about it.

This conclusion of helpless despair is not confined to the tropical forests or even forests generally. It is, in fact, an almost normal, collective human solution to global or national problems whose solution depends on big injections of cash. Global warming is a classic example.



But is there really anything to worry about? The conundrum disappears if the premise about the essential nature of tropical forests is dropped. So the first question to be resolved is: how essential is it that the world's tropical forests be managed sustainably? What happens if they aren't? All sorts of dire consequences are predicted, including the only one of ultimate significance—the extinction or degradation of mankind. Judging by the mess we habitually make of things, it can be questioned whether this would really be any great loss. But assuming that the extinction of our species is not a desirable outcome, what is the evidence that SFM in the tropics will help avert it?

Actually it is not all that good. Most of it is speculative: often highly authoritative in origin but not well authenticated. The loss of as-yet-undiscovered silvichemicals or medicinal precursors is a popular and appealing idea but still a "maybe". Undoubted and substantial loss of biodiversity would occur but would that be fatal rather than just regrettable? Some people might, in fact, regard the extinction of some species of wildlife as more of a benefit than a loss. Others argue that the biodiversity contained in tropical forests is important for buffering production systems against environmental change, but no one really knows how vital this role actually is, or how much biodiversity is needed to play it. We do know that tropical forests are important in the global carbon cycle and there is increasing scientific consensus that high emissions of greenhouse gases are causing global warming, which could have major health and environmental effects. But tropical deforestation is by no means the largest contributor to greenhouse gas emissions and the role it plays could be offset by tree plantations or other carbon sequestration schemes.

The sad truth is that there is very little concrete evidence for the essentiality of natural tropical forests. Perhaps, then, the only valid argument is a precautionary one. We don't know that the tropical forests are essential for the future welfare of mankind but we suspect that they could be. Hence, since we won't know until there are none left, we should conserve them now whilst we can, just in case it eventually turns out that they were essential, by which time it would be too late to do anything

Continued on page 31

ITTO