

ITTO Tropical Forest UPDATE

A newsletter from the International Tropical Timber Organization to promote the conservation and sustainable development of tropical forests

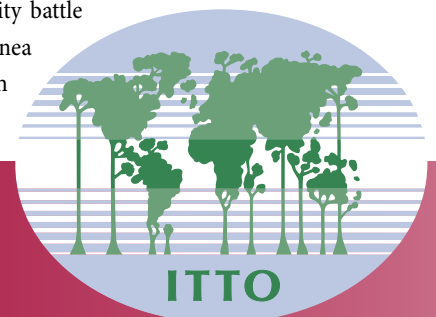


A legal matter

FOR MOST OF ITTO's first two decades, the Organization has been occupied with defining what is meant by sustainable forest management (SFM), figuring out ways to measure progress towards it, and taking measures to overcome obstacles to achieving it. One of the most serious obstacles to SFM in many ITTO member countries is illegality in the extraction of forest resources and the trade of forest products. With the international community as close to consensus on the meaning of SFM as it is ever likely to be (all active SFM criteria-and-indicators processes now use the same seven thematic areas), attention has shifted to defining an equally contentious concept: the legality of forestry operations. The rapid

evolution of timber procurement policies by several major importers and other schemes to ensure that wood products are sourced legally has moved this issue from the academic to the commercial arena. Unfortunately, it has not been spared the often shrill rhetoric and shaky statistics that have characterized many recent debates in international forestry.

The latest front in the legality battle appears to be Papua New Guinea (PNG), a country blessed with more than 60% forest cover,



Inside ▶ *monitoring PNG's log exports* ▶
Thailand's mission ▶ *log tracking* ▶ *and more ...*

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almost all of which is held as communal or clan commons. As the article by Asumadu (page 3) points out, PNG has come a long way since the Bartlett report found evidence of significant transfer pricing and other illegalities in the export log trade of the 1980s. The country has, at significant expense, retained a private company to oversee log exports and ensure that smuggling, under-invoicing and other problems are stamped out. The response to this article from a group of PNG non-governmental organizations (page 5) indicates, however, that focusing on the export log trade has not resolved all concerns regarding legality in the country's forest sector. Specifically, community rights over forest resources and community involvement in decisions regarding the exploitation of their resources are still major issues in PNG, as they are in many other countries—articles by Simula *et al.* (page 6) and Silva *et al.* (page 10), for example, identify a lack of local community involvement as impediments to SFM in Thailand and Brazil, respectively.

So what can be done? Forest laws, like any legislation, are a compact between a country's government and its citizens. It is therefore essential that such laws take into account the concerns and needs of those living closest to the resource. They should also prescribe the minimum level of bureaucracy necessary to ensure efficient and sustainable resource use; dispense too much red tape and forest operators will seek (sometimes illegal) ways of side-stepping it. And forest law enforcement must be adequately resourced and backed by appropriate technology, so that operators are properly monitored and held to account for breaches of the law.

ITTO can assist member countries to put in place some of these elements, through, for example, support for the establishment of log-tracking systems (see page 14) and the review and revision of forest legislation. Country missions (such as that undertaken recently in Thailand—page 6) can also assist in identifying problems and catalyzing change. The very act of requesting such an independent mission to investigate obstacles to SFM is an indication of a country's willingness to accept constructive criticism and undertake required changes.

The next such independent mission will be dispatched by ITTO to PNG in early 2007.

Despite these and many other avenues of international assistance, most conflicts over forest resources will be resolved domestically. While it can be difficult and frustrating, one of the key messages arising from the work of ITTO and others in this field is the necessity of involving all stakeholders, including local community groups, in decisions over forest resources. Conflicts will be best resolved by processes that give equal access to all stakeholders, even to the extent of assisting marginalized parties to make their cases.

One of the other prerequisites for effective conflict resolution is transparency. We know from experience how difficult it can be to obtain reliable information on what is happening in the forest, the mill and the market, yet it is imperative that the claims and counter-claims of all stakeholders should be backed as much as possible by primary data. All stakeholders can contribute to the pool of information, and such contributions will always be more credible when they are made in a transparent way.

Any international process for defining legality in the context of the international timber trade is unlikely to fare well: sovereign nations are understandably touchy about the involvement of outsiders in domestic law. Each nation must provide its own definition—through its legislative processes—and convince markets that its laws are being adhered to.

Countries that undertake wide-ranging, all-inclusive and well-informed consultations on issues of forest legality are most likely to find, if not consensus, at least solutions that are equally acceptable (or unacceptable) to all. And, ultimately, they are most likely to gain purchase in the rapidly evolving international timber market.

**Steven Johnson
and
Alastair Sarre**

Cover image Logs marked for export in PNG. *Photo: SGS*

Papua New Guinea – the other side of the story

Papua New Guinea has made progress in monitoring log exports

by
Kwame Asumadu

Consultant to the
Government of Papua New Guinea



To market: log loading dock in PNG. *Photo: SGS*

IN RECENT YEARS, several Papua New Guinea (PNG) and international environmental non-governmental organizations (ENGOS) have spearheaded an aggressive campaign to stop commercial harvesting of timber in Papua New Guinea. The ENGOS have argued consistently that all commercial harvesting of timber in PNG is both illegal and unsustainable. As a result of these campaigns, market access for PNG's wood products, especially in the United Kingdom and Australia, is threatened.

The purpose of this article is to tell the other side of the story by describing the independent monitoring system in place in PNG for exporting logs. The objective is to correct some of the misinformation, which creates the impression that all commercial timber harvesting activity in PNG is illegal, and that nearly all the logs exported from PNG to overseas markets are smuggled.

In the 1980s, persistent reports about malpractices in PNG's forest industry resulted in the Barnett Forest Industry Inquiry of 1989 and the World Bank Review of 1990. Following these inquiries, the PNG government developed the new Forestry Act in 1991. It also developed a new forestry policy to address the shortcomings of the previous Forest Policy, which was developed in 1979.

As part of the implementation of the recommendations of the Barnett Inquiry, the PNG government created the Papua New Guinea Forest Authority (PNGFA). The PNGFA is therefore the mandated authority with the responsibility for implementing the Forestry Act 1991 and the Forest Policy 1991.

The government also contracted Société Générale de Surveillance (SGS) in May 1994 to provide an independent,

arm's length monitoring of all log exports from PNG, to ensure that logs exported are sold at the prevailing market prices. SGS' monitoring was also to ensure that export shipments were correctly declared with respect to log volume and species.

Founded in 1878, and with its present headquarters in Geneva, Switzerland, SGS provides services in over 140 countries globally and directly monitors over 5% of all world trade. To ensure its independence, SGS does not have any manufacturing, trading or financial interests in countries it operates or entities it monitors.

Since 1994, the PNGFA and the SGS have developed and implemented a very robust monitoring system for all round logs exported from PNG. SGS' monitoring activities in PNG do not cover processed wood products such as sawn timber or veneer. The quantities of sawnwood and veneer exported annually from PNG are small (15 000 m³ and 65 000 m³ respectively) compared with over 2 million m³ of round wood exported annually. Neither does it cover forestry operations.

The log monitoring system currently in place in PNG involves the following:

- provision of log tags to be affixed to the end of each log by producers at the time of scaling at the log landing as prescribed by the PNGFA;
- pre-shipment log inspections to check species identification and log scaling; and
- monitoring of ship loading to verify the species and volumes actually loaded.

Under the SGS monitoring system, no logs can be legally exported from PNG until all the prescribed procedures (involving 22 steps) have been followed. Checks and balances built into the system ensure that the next step cannot be completed until the preceding procedure has been fully certified by both the PNGFA and the SGS that all requirements have been duly complied with.

According to SGS' PNG General Manager, Mr Bruce Telfer, in the last 12 years, SGS has not uncovered large-scale log smuggling in the log export trade in PNG. SGS also provides monthly statistical reports to the relevant PNG government agencies on all log shipments. These statistical reports as well as records available at the SGS office in Port Moresby can be verified independently, and they indicate that since 1995, SGS had inspected more than 25 million m³ of logs from 80 logging camps with an FOB value of more than 4.450 billion Kina. For these shipments, the PNGFA has certified that duties and taxes were paid, which has resulted in the PNG Internal Revenue Commission collecting a total of 1.362 billion Kina in revenue.

Effective as it has been in minimising log smuggling, it cannot be said that the SGS monitoring system provides a guarantee that all forestry activities in PNG are legal. However, it is important to note that PNG is one of the few tropical timber producer countries which has implemented such a system to enhance forest law compliance.

Over the same period, the PNG government earned additional foreign exchange totalling 354 million Kina, additional revenue of 265 million Kina and additional payments totalling 27 million Kina to landowners.

Effective as it has been in minimising log smuggling, it cannot be said that the SGS monitoring system provides a guarantee that all forestry activities in PNG are legal. However, it is important to note that PNG is one of the few tropical timber producer countries which has implemented such a system to enhance forest law compliance. To the knowledge of the writer, the only other tropical timber producer countries that have implemented log-tracking systems are Ghana, Ecuador, Congo DRC, Cameroon, Guyana, Brazil and Peninsular Malaysia. The PNG and Cameroon systems appear to be the only ones implemented and managed by an independently appointed body, at arm's length from the government or the forest agency.

Certainly, the SGS monitoring system in PNG provides verifiable proof that allegations of rampant log smuggling are highly questionable. The ITTO's *Annual Review* of the international tropical timber trade and trade discrepancies in 2005 indicated that the difference between the log export volumes reported by PNG authorities and Chinese importers was only 2%. China is the largest importer of PNG round logs.

According to the ITTO, this discrepancy could be due to a number of factors including measurement and/or conversion errors, data entry errors, differences in custom

classifications and differences in timing between the date of export compared with the date of import. The ITTO *Annual Review* also found that between 5 and 10% of trade discrepancies can be explained by FOB/CIF value. In any case, by themselves, trade discrepancies are not reliable indicators of illegal activity as discrepancies occur commonly in legitimate trade flows.

The World Bank claim that up to 70% of logs harvested in PNG is illegal was challenged by the PNGFA and the industry at a Regional Workshop of Forest Law Enforcement and Governance held in Port Moresby from 11–12 October 2006. The resident World Bank country manager in PNG has undertaken to seek verification of this claim from the Bank's headquarters in New York.

The effectiveness of the SGS monitoring system in PNG therefore questions the basis for the UK Timber Trade Federation's advice to its members to boycott Chinese plywood made of tropical roundwood from PNG. According to Mr Telfer, the unique numbering system of SGS tags affixed to exported logs provides sufficient information which can enable the origins of individual logs to be traced back to the concession from where they were harvested. UK and other overseas buyers who doubt the legality of the source of PNG logs are therefore able to verify this information from the SGS in Port Moresby.

In relation to allegations that logs were being exported illegally from remote PNG islands, Mr Telfer indicated that this was highly unlikely. He explained that it is logistically impossible to secretly and fully load a ship either in the night or during the day without leaving some kind of evidence behind. In addition, it is logistically impossible to load a ship full of logs overnight.

SGS has officers stationed on concessions where commercial harvesting of logs for export occurs. Currently, there are about 42 active log export sites in PNG. According to the organization, it is able to verify expeditiously any reports of illegal activities relating to the export of logs. Such checks have been carried out in the past and have not shown illegal activities by log exporters.

PNG's forest resources represent an important renewable and natural asset, which can be utilised on a sustainable basis to generate wealth in support of socio-economic development. Indeed, export earnings from forestry contribute significantly to government revenue, which underpin and enable a very large percentage of national and provincial government spending.

In 1999, the World Bank estimated that the forestry sector in PNG contributed up to 8.6% to the country's GDP. This figure has declined since the Asian financial crisis in the late 1990s. Nevertheless, the sector's share of GDP has remained relatively constant since 1999, and has accounted for between 3 and 5% of GDP.

Continued on page 17 ►

Response from the PNG Eco-Forestry Forum

Dr Asumadu's article originally appeared in the PNG Post-Courier newspaper, written while he was engaged as a consultant by the PNG Forest Authority to assist with an ITTO-funded case study on illegal logging in the country. Subsequent to the publication of this newspaper article, the following response was sent to ITTO by the PNG Eco-Forestry Forum. The response is being reproduced in the TFU as part of ITTO's efforts to encourage ongoing dialogue on these issues.

On November 1, 2006 the Papua New Guinea Forest Authority published a short article written by Dr Kwame Asumadu titled 'Illegal Logging in Papua New Guinea – The Other Side of the Story'.

The PNG Forest Authority claims Dr Asumadu is an 'independent' consultant, but his article appears to be heavily biased towards the logging industry in PNG and is completely misleading.

The article assiduously avoids any mention of the serious legal failings and issues of non-compliance that have led others to characterise logging in PNG as largely illegal and does not consider the voluminous evidence from numerous sources that supports the analysis.

Instead, the article focuses mainly on the issue of export monitoring, which is largely non-controversial and which does not have any relation to the current debate about the issuing of logging permits and harvesting practices.

The article also contains a number of serious factual inaccuracies which are very misleading and all of which serve to enhance the image of the logging industry and marginalise its critics.

Overall, the article does nothing to promote a proper understanding of current forest management issues in PNG and appears to be part of a deliberate campaign to mislead the public.

Some of the misleading statements and factual inaccuracies contained in the article are highlighted below.

ARTICLE PARAGRAPH/TEXT	FACT	COMMENT
1: PNG and international non government organizations have spearheaded an aggressive campaign to stop commercial timber harvesting	The issue for the NGOs is illegal and unsustainable logging – they are not trying to stop commercial harvesting – as the article itself admits much later in Paragraph 22	The whole article is prefaced by a false statement that colours the rest of its content and calls into question the authors independence and intentions
2: One intention of the article is to correct the impression that nearly all the logs exported from PNG are smuggled	The issue of illegal logging in PNG is not premised on allegations of log smuggling and log smuggling is not an allegation made by critics of the logging industry	The statement sets up a false allegation and then disproves it at some length to create an impression that the real allegations (which are not mentioned) are also false
5: SGS ensure that logs exported are sold at prevailing market prices	SGS does not ensure logs are sold at prevailing market prices. PNGFA is the body that approves the log sale price and there is considerable evidence that logs from PNG are sold at below world prices	The author is either poorly informed or is deliberately misleading his audience
5–17: The article devotes 13 of its 26 paragraphs to the activities of SGS which monitors log export volumes and species	Allegations of illegal logging in PNG relate to the issuing of permits, logging practices and unsustainable harvesting rates – none of these issues has anything to do with log exporting monitoring or the activities of SGS	The article claims in its title to be addressing the issue of illegal logging and presenting another side to the debate – but half its content is devoted to non contentious or irrelevant matters
9: SGS has not uncovered any large-scale log smuggling	Allegations of illegal logging in PNG do not suggest there is large-scale log smuggling – this is not the issue	The article is misleading its audience by dealing with allegations that have not been made
12: SGS provides verifiable proof that allegations of rampant log smuggling are highly questionable	No one is making 'rampant allegations of log smuggling' and, anyway, SGS opinion is not 'verifiable proof'	The article misleads by dealing with allegations that have not been made and by stating opinion as fact
15: The SGS monitoring system questions the basis for UK Timber Trade Federation advice to boycott PNG timber	The UK TTF advice is based on the substantial independent evidence of illegal and unsustainable logging in PNG which is totally outside the ambit of the SGS monitoring system	The statement is completely illogical and seems to be deliberately misleading
15: Log tags allow UK buyers who doubt the legality of the source of PNG logs to verify this information with SGS	Log tags are of no use at all to UK buyers who purchase finished timber products from China that are made from PNG logs. In any event, SGS only monitors the log export value and species and cannot verify the 'legality of the source'	The statement is completely misleading
16: Allegations logs are being exported illegally from remote PNG islands are unlikely to be true	Any such allegations do not form any part of the case alleging illegal logging in PNG. Illegal logging is centred on the mainland and the main islands. Remote PNG islands are largely denuded	Another invented allegation is defeated to add to the false impression that export monitoring is controlling the problem
17: SGS is also to expeditiously verify any reports of illegal activities relating to the export of logs and such checks have not shown any illegal activities by log exporters	Again, SGS only monitors log exports shipments and has no role relating to the allegations of illegal logging in PNG which centre on the allocation of permits and logging practices	The statement appears to be intentionally misleading and gives the totally false impression that SGS can confirm there are no illegal activities by log exporters
18: Export earnings from forestry contribute significantly to government revenues which underpin and enable a very large percentage of national and provincial government spending	The forest industry contributes less than 3% of government expenditure and only 5% of the export value of major commodities	The statement is highly misleading and again, has nothing to do with the issues around illegal logging in PNG
20: Forestry is second only to mining and petroleum as an export earner	Agricultural export earnings are more than three times those of the forestry sector	Not only is the statement false, it is highly misleading to use positional rankings when the relative values are so hugely different
20: Forestry has, for over a decade, contributed an average of 30% of PNG's expenditure on development	The forest industry contributes less than 3% of government expenditure	The statement appears to be at best, grossly misleading
21: PNGFA estimates the sector directly employs 8000 people, mainly in rural areas	The jobs are mainly unskilled, low paid and employment conditions have been described by the Department of Labour as 'modern day slavery'	How many people are employed is not a defence against allegations of illegal logging and although the author claims to be 'independent' he only presents one side of the issue
24: The fact that PNG can improve its performance in sustainable forest management cannot be used to justify allegations that harvesting is illegal	There is NO commercial sustainable forest management in PNG and the fact that PNG can improve its performance is not being used to justify the allegations of illegal logging	The statement trivializes the very serious legal failings in the logging industry
25: At present there is no nationally agreed definition of illegal logging. The PNGFA generally uses the FAO/ITTO definition of "harvesting, processing, transportation and trade of forestry products in violation of national laws"	The FAO/ITTO definition is the one used by those making allegations of illegal logging and therefore there is no disagreement in PNG on the definition of illegal logging	The article in its penultimate paragraph is creating a false debate as a smokescreen to detract attention from the real issues
26: PNG is being judged on a much harsher Greenpeace definition of illegal logging	The definition used by those alleging illegal logging in PNG is the FAO/ITTO definition endorsed by the PNGFA	The statement is false and misleading and detracts from the real debate about illegal logging

A ban on logging in natural forests, which has been in place since 1989, may inadvertently have contributed to a decline in the quality of forest administration in the country. But SFM is still possible

by
**Markku Simula,
Takeshi Akaha,
Bipin Behari
and
Yam Malla**

Members of the ITTO mission to Thailand



Log jumble: the mission found that log yards are not organized to make best value of the raw material. *Photo: M. Simula*

THE ROYAL THAI GOVERNMENT requested ITTO to organize a technical mission to Thailand to identify those factors that limit the country's progress towards ITTO's Objective 2000 and sustainable forest management (SFM) and to recommend measures to overcome these constraints. The mission took place in March and April 2006; this article summarizes its findings.

Background

Four phases can be identified in Thai forestry: (i) early exploitation (from the mid-1890s to the early 1930s); (ii) expanding exploitation and management (from the 1930s to the early 1960s); (iii) forest exploitation and decline (from the 1960s to the late 1980s); and (iv) a struggle towards SFM under a logging ban in natural forests (from 1989 onwards). The current phase has had three main components: (i) an expansion of designated protected areas; (ii) an increase in the forest plantation resource base; and (iii) the development of community forestry.

The area of permanent forest estate (PFE) reported in 1991 was 23.5 million hectares, much of it already without forest cover; this had shrunk by almost 50% to 12.0 million hectares in 2001. About 1.15 million hectares of the original PFE had been converted to agriculture, 8.3 million hectares to settlements and infrastructure, and 1.1 million hectares to other uses. The balance now available comprises about 10 million hectares of protected areas and 1.9 million hectares of plantations. Practically all natural forests are owned by the state and managed by the Royal Forest Department (RFD), the Department of National Parks, Wildlife and Plant Conservation (DNP) or (in the case of mangroves) the Department of Marine and Coastal Resources.

Diagnosis Forest conservation

Thailand's aim is to have 25% of the country's total land area in protected areas; coverage is about 20% at present. The protected area system is comprehensive—one of the best in Southeast Asia—and includes 227 declared protected areas (11.3 million hectares) under the control of the DNP. Although extensive, the protected areas contain disproportionate amounts of upland forest and very little lowland evergreen forest.

Of the total 103 gazetted national parks, the government has prepared master plans for only 55, and valid management plans exist for only 15 gazetted parks. Another 45 areas have been proclaimed but not yet gazetted. Management plans are under preparation for only 25 of the 55 wildlife sanctuaries. This shows that the extension of the protected-area network has far exceeded the capacity of the administration to bring it under effective management. In any case, management plans do not always lead to improved protection because they often lack implementation.

The Thai conservation policy initially revolved around a 'wilderness' approach, which recommended the total exclusion of people from protected areas. Such an approach is no longer possible; 1.2–2 million people dependent on forest resources live inside protected areas. This is the key issue for the future of the protected-area network.

Forest reserves

The country's 1221 national forest reserves cover 23.4 million hectares and are managed by the RFD; less than half of the area is forested. Combined, the reserves and protected areas

cover about 63.2% of the total area of the country. Thailand has never had a long-term silvicultural management system, despite the successful experiences of neighbouring countries with similar forest types. There are no records of national-level forest inventories.

The 1985 forest policy was unsuccessful and attempts to improve it in 1992 through the Forest Sector Master Plan were incomplete. The management of forest reserves is therefore hindered by something of a policy vacuum. Since the 1989 logging ban, the main policy goal has been protection. However, large areas of forest reserves without forest cover have become de facto common public lands that are encroached by expanding agricultural activity. Many reserves need management interventions to guarantee their health and vitality, but the logging ban impedes any silvicultural improvements.

Community forestry

In addition to the people living in and around protected areas, another 20–25 million people live nearby to forest reserves and harvest them for non-wood forest products, which constitute an important part of many local livelihoods. Community (or village) forestry was introduced as early as the 1970s as a way of improving forest management. Some 11 400 villages (or 15.5% of all villages) are now involved in managing community forests, of which about half have formally registered their community forests. These cover only 200 000 hectares, or 1.2 % of the total forest area.

The RFD has developed a variety of ways to support local communities in managing their forests, albeit only at a pilot scale. However, the future of these community forests is in doubt because the government cannot guarantee their long-term status. In any case, the area under community forestry is so small and the speed at which such forests are established so slow that the practice has not had a nationally significant impact on poverty reduction or the status of forest management.

The main reason for the slow progress and lack of security is an inadequate legal framework. Several versions of legislation called the Community Forestry Bill have been drafted, but adoption has been delayed by a lack of consensus, particularly on a clause that would allow community forests in protected areas and also on a proposed expansion of community forestry beyond degraded sites in forest reserves. There is deep mistrust among civil servants and some non-governmental organizations (NGOs) about the capacity of local communities to manage forests.

Combating deforestation

The available data on deforestation in Thailand suggest that it continues at an unacceptable rate, particularly at forest margins. Public policies on combating deforestation have focused on measures to maintain forest cover through the rehabilitation of degraded areas and the reintroduction

of trees to deforested marginal lands. Rural poverty, the main root cause of deforestation, has not been adequately addressed, and the impacts on forests of policies in other sectors have not been duly considered.

Illegal logging and logging ban

The 1989 logging ban has had mixed effects. It needed to be supported by complementary measures but these came late, were inadequate and did not have the desired effect. The ban also transmitted part of the problem of illegal logging to neighbouring countries because local supply could not respond to demand.

The ban also provoked a surge in illegal operations; there has since been a tightening of control, although it is questionable whether this has been truly effective. According to some stakeholders, illegal logging, which in the past was carried out on a large scale, has become a more small-scale activity. Authorities admit that corruption can be a problem but its importance is difficult to quantify.

Rubberwood

Existing rubber plantations could theoretically supply the market with about 21 million m³ of timber per year. However, there is little coordination between the latex and timber production sectors, with the result that this potential is under-used.

Teak

The area of natural teak forest in Thailand decreased from 2.3 million hectares in 1954 to about 150 000 hectares in 2000. During the same period, the private and public sectors established 836 000 hectares of teak plantations and their thinnings are now being sold. Apart from genetic improvement, practically no research has been done regarding teak, even though the species was the mainstay of the forestry sector for more than a hundred years.

The RFD has developed a variety of ways to support local communities in managing their forests, albeit only at a pilot scale. However, the future of these community forests is in doubt because the government cannot guarantee their long-term status.

Eucalypts

Eucalyptus plantations cover about 480 000 hectares, of which 10% is in paddy fields; wood production from these plantations is estimated to be about 7 million m³ per year. Most (70–80%) of the harvest is used by the paper and pulp industry, while 10–15% goes for charcoal and 5% for construction poles; eucalypts are also starting to be used in the manufacture of medium-density fibreboard, hardboard and particleboard. The substantial potential of *Eucalyptus* for sawnwood and plywood still remains to be tapped.

Markets

Market transparency is limited in the log trade; small-scale producers often do not have a clear understanding of the value of their timber crops and have limited negotiating

power with buyers. Wood measurement practices cannot be controlled effectively by sellers and therefore provide opportunities for misuse. The establishment of producer cooperatives or associations would help protect the interests of growers.

Furniture industry

Without a concerted effort by government, Thailand's thriving furniture industry—a significant source of export earnings—is likely to become stagnant due to heavy competitive pressure. The industry has not taken a strategic approach to resource management, sector-wide research and development, marketing support, standardization and quality control systems, or specialist technical training. The key problem is a shortage of competent supervisors and middle managers who can improve operations on the mill floor and implement effective quality control systems. In addition, there is only limited domestic capacity for furniture design.

The Thai export industry has already taken some action to respond to increasing market demands for certified and legally produced products. However, the Thai furniture and wood-based panels industries cannot yet meet these demands due to obstacles in certifying rubber plantations for timber.

Public administration

Since 2002, the RFD has been stripped of some of its key functions and lacks a clear vision on its mission, role and resources, and there is no proper line of command. This is a serious bottleneck for making progress towards SFM. The duplication of extension work confuses farmers because different agencies often provide conflicting advice. For proper forestry development, RFD extension efforts need to be augmented and better coordinated with other field offices and NGOs. The higher and middle management levels in the RFD headquarters are over-staffed, but there is a shortage of manpower at the field level.

Thailand has accumulated a wealth of knowledge and has a strong cadre of well-trained natural resource management professionals, providing a basis for further progress towards the SFM goal. But a lack of a coherent policy towards forests at the higher levels of government has created confusion at lower levels and in the community at large.

Decentralization

The legal provisions for local government at *tambon* (subdistrict) and village level provide a suitable administrative structure for transferring the responsibility of forest resource management to villages and villagers' groups. A paradigm shift in the role of the public administration of forests is taking place in Thailand. However, this shift, involving a transfer of management responsibility towards the local level, will be a long learning process.

Forestry education and extension

There appears to be no capacity in the country for technical and vocational forest-related training, and concerned organizations and companies have taken on the responsibility of developing their own human resources. However, there is a particular need to provide further training for supervisors and other middle managers of wood and specifically the furniture industry. This is one of the key constraints in industrial development.

The Ministry of Natural Resources and Environment, which has overall responsibility for forests, appears to have no plan for developing a forestry extension program. This is unfortunate, given that the management of forest resources and production is shifting to the private sector and communities. Most RFD funds go towards maintaining infrastructure and paying staff salaries, with little left over for training or other outreach activities.

Information system

The present statistical reporting in the forestry sector in Thailand is far from satisfactory. Information is a powerful tool in managing the sector but it has been neglected in the past. There is no overall strategy for information management. The purpose of data collection is unclear to middle-level staff, which tends to perceive it as an administrative burden rather than a management tool. The entire forest statistical system needs to be reviewed.

Organization of the private sector

Membership in tree farmers' associations is still limited in Thailand; the organizational development of smallholders will not happen without the catalytic support of RFD or other public agencies. International experience in setting up cooperatives for groups of community forests is mixed, but this option could be viable in Thailand, particularly where community forests are small and stakeholders cannot develop downstream activities on their own.

Civil society

Past suspicions between NGOs and authorities have been diminishing gradually, partly as a result of the opening-up of the policy processes to broader participation, but access to information still needs to be improved. From the government's perspective, the fragmentation of the NGO community makes dealing with them cumbersome. Government continues to receive mixed messages on how policies related to forest-dependent people should be designed and implemented.

Constraints and opportunities

The diagnosis of the mission has shown many gaps and weaknesses in the current situation, but SFM is still possible if corrective action is taken. Thailand has accumulated a wealth of knowledge and has a strong cadre of well-trained

natural resource management professionals, providing a basis for further progress towards the SFM goal. But a lack of a coherent policy towards forests at the higher levels of government has created confusion at lower levels and in the community at large.

Future vision

The following elements constitute a possible strategic vision of SFM in Thailand: (i) net deforestation is arrested; (ii) most degraded areas are rehabilitated; (iii) community forests are established with secure tenure; (iv) most industrial wood is obtained from plantations, with reduced dependence on rubberwood; (v) the wood-based industry has an active role in the development of its raw-material supply; (vi) all timber harvesting operations are verifiably legal and certifiable according to a national SFM standard; (vii) tree resources outside forests are substantially expanded; (viii) there is an efficient forest product market with adequate transparency; (ix) the Thai forest-based industry is internationally competitive; (x) bamboo and rattan resources are under systematic management and utilized sustainably; (xi) protected areas are managed in a way that helps improve the livelihoods of the people living in and around them; (xii) a firmly grounded forest policy process is in place; (xiii) decision-making is based on adequate information; (xvi) the Forest Industry Organization—currently state-owned—is privatized; (xv) forest communities and forest owners are organized effectively; (xvi) civil society is well organized and educated in forestry; and (xvii) the private sector promotes its common interests through strengthened associations.

Main constraints

The most critical constraints impeding progress towards SFM in Thailand are: (i) bottlenecks in the regulatory framework; (ii) a lack of coherence in public policies; (iii) people's widely varying perceptions about how Thailand's forests should be conserved and managed; (iv) a lack of support to communities and the private sector to sustainably manage forest resources; (v) institutional uncertainty related to public forest administration; (vi) deficient information systems; and (vii) a lack of strategies for human resource development and extension, including in the processing industries.

Opportunities

Despite the constraints highlighted above, the sustainable management of Thailand's forests would offer a number of significant opportunities: (i) the potential of community forestry to contribute to poverty alleviation; (ii) a major expansion of commercial tree-planting on marginal lands; (iii) improved forest-based environmental services through payment mechanisms to forest managers and owners; and (iv) the expansion of the production of non-timber forest products in high demand both in the domestic and export markets.

Recommendations

The mission made a total of 45 recommendations identified by stakeholder groups. The following are among the priority actions that should be taken:

- the Community Forestry Bill should be approved without delay and its implementation supported. Community forestry should be allowed in national forest reserves;

ITTO should build partnerships with education and training institutes in Thailand to design and deliver capacity-building products and services aimed at implementing the mission's recommendations.

- the government should promote private-sector plantation investment by, among other things, arranging adequate credit facilities, improving market transparency, supporting the organization of producers, and promoting landowner-industry partnerships;
- a national ecotourism development strategy should be developed;
- the forest policy should be updated through an inclusive and structured process (eg the national forest program). Conflicting policy goals related to land-use should be removed;
- national criteria and indicators for SFM should be developed with ITTO assistance;
- a detailed assessment should be carried out on options for the institutional structures of the RFD and the DNP. The RFD needs to establish a proper line of command;
- a human resource development plan and extension strategy should be prepared for the forestry sector;
- the forest industry should take a stronger role in the development of its raw-material supply and wood procurement;
- NGOs should improve their dialogue to avoid mixed messages on policy adjustment. An NGO forest network should be established;
- all stakeholders should identify and assess options for the development of forest certification in Thailand;
- ITTO should support a project to strengthen the national forest information system; and
- ITTO should build partnerships with education and training institutes in Thailand to design and deliver capacity-building products and services aimed at implementing the mission's recommendations.

The comprehensive list of recommendations are contained in the full report, which can be obtained from the ITTO Information Officer (itto@itto.or.jp)

Partnership for good forest management

A joint initiative of researchers and timber industries in the Brazilian Amazon

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Low-impact cut: workers prepare to fell a tree in the project area. Photo: IFT

REDUCED IMPACT LOGGING (RIL) practices play a key role in achieving sustainable management of tropical forests. Cost-benefit studies (Barreto *et al.* 1998; Holmes *et al.* 2000) have shown that RIL can be financially competitive because improved planning guarantees the effective use of machines and reduces timber waste. In the Brazilian Amazon, demonstration areas were established during the 1990s by the Brazilian Organization for Agricultural Research (EMBRAPA), Amazon Institute of People and the Environment (IMAZON) and the Tropical Forest Foundation (Portuguese acronym FFT, now known as the Tropical Forest Institute or IFT). In recent years, the Forest Stewardship Council (FSC) certification program has also made considerable inroads into the Brazilian Amazon.

Nevertheless, more than ten years after the Rio Summit, timber harvesting in the Brazilian Amazon is still regarded by many as predatory (Greenpeace 2001; Amigos da Terra 2002). Timber enterprises interested in implementing RIL and other good forest management practices suffer from numerous barriers outside their scope of influence, such as ineffective law enforcement, poor infrastructure, deficiencies in education, corruption and land tenure conflicts (Embrapa 1997; Johns *et al.* 1996; Blate *et al.* 2001; Sabogal *et al.* 2005). In addition, they are confronted with a lack of adequate silvicultural and managerial tools (eg FFT 1998; Amaral *et al.* 1998; Silva 2001). Timber companies tend to consider available scientific knowledge as too theoretical and not relevant.

With the aim of addressing some of these problems, ITTO PROJECT PD 57/99 REV. (2) F: 'Sustainable forest management at the commercial scale in the Brazilian Amazon', has promoted scientific cooperation between EMBRAPA and

the Center for International Forestry Research (CIFOR). The main objective of this project is to stimulate the adoption of good management practices among timber enterprises in the region. The project also involves IFT, the leading organization for forest management training in the Amazon, and two Brazilian timber companies, *Juruá Florestal Ltda.* and *Cikel Brasil Verde Ltda.*

This article describes progress to date under this project. It provides an outlook on the prospects for widespread adoption of good forest management practices by Amazonian timber enterprises, including the tools generated by the project, in particular: operational guidelines for RIL, monitoring of forest dynamics, volume equations, post-harvest silviculture, monitoring of enterprises' operational performance, control of production and costs, and governmental auditing of forest management projects.

Operational guidelines for RIL

The project commenced in 2000 with an international expert workshop to discuss guidelines for sustainable forest management (SFM) in the Brazilian Amazon. Based on a thorough review of existing codes of practice, the project partners published a set of technical guidelines for RIL in *terra firme* forests of the Brazilian Amazon (Sabogal *et al.* 2000), then used these in training courses for hundreds of forest managers and operators in the region. The timber enterprise partners in the project also used these guidelines to improve their forest operations, resulting in FSC certification of both companies in 2001. The degree to which the two project partner enterprises were able to comply with the RIL guidelines was assessed to learn the reasons contributing to or constraining the adoption of

the RIL guidelines, and also to identify specific areas for improvement (Pokorny *et al.* 2005). The results of this process led to a final comprehensive set of RIL guidelines (including aspects of planning, monitoring and social management), which have served as an essential input for the recent review of forest management in Brazil.

Monitoring forest dynamics

Until the beginning of the 1980s, little was known about growth and yield of tropical rainforests in the Brazilian Amazon. In 1981, EMBRAPA launched guidelines for establishing and measuring permanent sample plots of *terra firme* forests in the Eastern Amazon and developed software to process and analyse the collected data (Silva and Lopes 1984). Taking into account experiences gained with this system, the project created a simple tool for monitoring forest dynamics to be used by timber companies, as well as communities and researchers, consisting of guidelines (Silva *et al.* 2006) and corresponding computer software. The software, besides generating growth, mortality and recruitment information, also allows the user to carry out phytosociological studies and analyse data from temporary forest inventories. Currently, the Brazilian Institute for Environment and Renewable Natural Resources (IBAMA) is leading a consortium of ten organizations to establish a network of permanent sample plots in the Brazilian Amazon using a subset of this tool. Nearly all FSC-certified timber companies in the Amazon are already using the tool. The project also managed to re-measure more than 200 permanent sample plots established by EMBRAPA since 1981 in various regions in Pará and Amapá states. The analysis of these data and information from newly established permanent sample plots will significantly increase knowledge of forest dynamics in the Amazon.

Volume equations

Heinsdijk and Bastos (1963) determined a general form factor of 0.7 for the Brazilian Amazon to calculate the timber volume of trees to be harvested. Despite its general nature and many changes in harvested species, this form factor is still used today. This factor, together with errors from visual estimates of stem heights, leads to overestimation of volumes in forest inventories and consequently in the logging permits issued by IBAMA to timber producers. As a result, authorized harvest volumes normally exceed the companies' actual requirements and the surpluses are frequently commercialized in the black market, thereby 'legalizing' timber extracted in non-authorized forest areas. To overcome this problem, IBAMA has issued a regulation requiring all timber companies to develop local volume equations for harvested species, which resulted in an urgent demand for tools to support foresters and enterprises in this endeavour. To help meet this demand, the project team developed field guidelines to collect data during harvesting operations from sample trees and software (SMALIAN) to calculate stem volumes using the Smalian procedure. This



How it's done: forest management trainees learning about RIL in the forest. Photo: IFT

tool calculates individual tree volumes by species, and allows data export to Excel worksheets to simplify derivation of local volume equations for different forest types and species. Better estimates of harvestable volumes are expected from enterprises using this tool.

Post-harvest silviculture

Silvicultural treatments such as climber cutting and crown liberation thinning can improve the growth rates of potential crop trees in tropical forests (eg Silva 2001), while enrichment planting increases the general productivity and quality of the forests. Yet Amazonian timber enterprises still ignore these management options because existing knowledge about the specific effects of silvicultural interventions is still limited. In 2005, the project team established silvicultural experiments covering 2100 hectares of harvested *terra firme* primary forests in order to learn more about the ecological and financial aspects of silvicultural treatments. Seven treatment options are currently being tested, involving climber cutting, crown liberation thinning, enrichment planting and management of natural regeneration in gaps. The results of these experiments are expected to provide a basis for enterprises to decide on investments in silvicultural treatments and will allow the development of guidelines for post-harvest silviculture in *terra firme* forests of the Brazilian Amazon.

Monitoring enterprises' operational performance

Systematic, objective and continuous monitoring of forest operations is crucial to assure that the standards required by the forestry authority (or an independent certifier) are met. Such monitoring provides feedback on achievement



Roaded: proper construction of roads and skid trails is an essential component of RIL. *Photo: IFT*

of enterprise objectives, helps detect problems and can be used to identify underutilized production potential. However, while most existing codes of practice point out the importance of regular monitoring, little information is given about how to do this effectively. To address this lack of adequate methodological guidance, the project developed a tool to monitor the operational performance of forest management operations based on a set of criteria and indicators (c&i) which were developed through national and international workshops, field tests and expert consultations. Software was developed to enable timber enterprises to adapt this c&i template to their specific requirements, generate field forms, process captured data and generate monitoring reports.

People living inside or near harvesting areas are also affected by forest operations, and their well-being, in the long run, is essential to guarantee the integrity of forest management areas.

Monitoring production and costs

Many argue that only a demonstrated financial surplus from improved practices like RIL will motivate timber companies to move towards SFM. However, very few enterprises in the Amazon know how to correctly collect and analyse information on production and costs as a basis for investment decisions, selection of technologies, operational planning, detection of difficulties and possibilities to improve their performance. Existing information (most of which is deficient and incomplete) consists mainly of rough estimates of production, chronological documentation of income and expenses, and an annual balance for tax purposes. Thus, although highly interested, companies often do not have good financial data or simply do not know how to adequately analyse financial parameters. To generate financial information and to strengthen managerial capacity, the project developed software to systematically monitor production and costs of forest management operations (Pokorny and Steinbrenner 2005; Pokorny *et al.* 2006). The application of this tool by

the project's partner enterprises has already resulted in the first long-term financial analysis and documentation of commercial harvest operations in the Amazon. It is expected that monitoring their own forest management operations will increase the sensitivity and interest of forest companies in innovations necessary to increase operational efficiency and to reduce environmental damage. Such analyses also generate a unique source of empirical information on financial aspects of 'good forest management', which will facilitate a better understanding of the financial implications of implementing RIL and other SFM practices. Data generated by the project confirmed the competitiveness of RIL, and also the importance of effective utilization of heavy machines to compensate partly for lower productivities and additional costs for

planning when implementing RIL. However, it became obvious that the successful implementation of RIL by Amazonian enterprises depends on the professionalism/training of staff and improved administrative and organizational procedures. Support for enterprises interested in implementing RIL should therefore concentrate on improving management capacities as well as any requirements for additional financial resources.

Auditing forest management projects

The expression 'auditing' here refers to activities carried out by government institutions to ensure compliance by timber enterprises with legal regulations concerning forest management. Auditing provides governmental institutions with information to decide if there is a need to either sanction poorly performing timber enterprises or to provide incentives for good performance. Effective auditing helps to counter-balance competitive disadvantages caused by illegality and predatory logging. In Brazil, several studies on the quality of forest management revealed that almost no forest management projects follow the prescriptions set out in relevant regulations (Embrapa 1997; Sabogal *et al.* 2005), indicating that current auditing practices are not comprehensive. The project revealed that this failure is mainly due to audits concentrating on the revision of documents in the office, with subjective interpretation of parameters that are inadequately measured in the field. IBAMA asked for support from the project to more effectively respond to the challenge of guaranteeing legality and quality of harvesting operations in the Amazon. A task force was established to adapt the above-mentioned monitoring tool to the specific demands of auditing procedures, and the auditing system is now being used by IBAMA after review in a sequence of workshops and field tests.

Social management

The management of forests, although usually perceived as an economic activity with environmental impacts, also has strong social implications. Employees involved in forest operations are affected by the difficult working conditions of the sector. For enterprises, employee satisfaction with work and working conditions directly influences motivation and, as a consequence, operational performance. People living inside or near harvesting areas are also affected by forest operations, and their well-being, in the long run, is essential to guarantee the integrity of forest management areas. The project has developed social indicators and methods to enable forest enterprises to better understand the social dimension of their activities and to demonstrate options for contributing to the well-being of forest workers and communities.

Outlook

The present status of forest management in the Brazilian Amazon is rather chaotic. It is estimated that only about 4% of the roughly 28 million m³ currently harvested in the Amazon every year comes from well-managed forests. Many government initiatives are on course to change this situation and promote the adoption of good forest management practices. This project supports government efforts to promote the adoption of good forest management in the Amazon in two ways: through a better understanding of how timber industries work and through a set of tools tailored to respond to the demands and capacities of the sector. Even though RIL is not necessarily cheaper than conventional logging, a number of factors may convince timber enterprises to adopt it, such as higher economic value of residual stands, market options for certified timber, social benefits (eg compliance with labour and forestry regulations, higher security standards, and regional employment) and improved public image. The silvicultural and managerial tools developed by the project will help interested enterprises make the transition to good forest management. But long-term success will depend principally on effective strategies to protect managed stands, including the establishment of working relationships with nearby communities. A second phase of this project will seek to build on the achievements outlined here, including effective transfer and implementation mechanisms for RIL/SFM practices, and intensive collaboration with interested timber enterprises throughout the Amazon, relevant non-governmental organizations, the government and communities.

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To the mill: logs produced using RIL under the project are transported out of the forest. Photo: IFT

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Tracking the wood

Many tropical countries need help to improve their timber-tracking systems

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Tracked and sawn: processing tracked logs in Douala, Cameroon. *Photo: J. Lounasvuori*

IN 2006, ITTO commissioned a study of recent experiences in the use of tracking systems in tropical forest industries using three case-studies and a literature review. This article summarizes some of its main findings.

The basics of log-tracking systems

Timber-tracking systems—also called chain-of-custody systems, particularly when associated with certification—are used to provide information on timber flows from the forest, through storage and transportation, to end users, and to verify that the raw materials of timber products originate from legal, sustainable or otherwise acceptable sources. Tracking systems are considered by some to be essential tools for combating illegal logging and trade in illegal timber.

Log-tracking and chain-of-custody systems are typically employed to assist forest law enforcement, ensure that all applicable government royalties and taxes are paid, and to demonstrate that labelled products originate from certified forests within the framework of voluntary forest certification schemes.

The basic elements of timber tracking include:

- (i) product identification;
- (ii) product separation;
- (iii) record keeping; and
- (iv) documented procedures for the above.

Verified timber can be segregated from unverified timber in two main ways: physical separation and inventory management. The physical separation of timber or products can be achieved by:

- physical marking;
- separate storage; and
- the processing of materials of different origin at different facilities or at different times.

Under inventory management, two systems can be applied—mainly under a forest certification scheme—to link the final product with the origin of the raw material:

- (i) the minimum average percentage system, which allows a certain percentage of uncertified wood material in the final product; and
- (ii) the volume credit system, which allows a proportion of products to be labelled as certified. In the volume credit system, the labelled output volume must be reconciled with the input volume of certified materials.

The role of timber tracking

Log-tracking and chain-of-custody systems are typically employed to assist forest law enforcement, ensure that all applicable government royalties and taxes are paid, and to demonstrate that labelled products originate from certified forests within the framework of voluntary forest certification schemes. Some sort of governmental oversight of the timber supply chain is needed so that authorities can determine the actual intensity of harvesting operations and ensure that the volumes harvested, traded and processed do not exceed the authorized amounts.

Log tracking is also becoming a requirement in some markets. The European Union (EU) recently introduced a licensing scheme as part of its forest law enforcement, governance and trade (FLEGT) initiative. Under the scheme, timber imports to the EU must demonstrably originate

from legal sources (as defined by the exporting country on the basis of its legislation in force). Thus, the supply chain of wood products from the forest through transportation, storage and processing must be known and verifiable until the border of the EU.

Current practice in tropical countries

Most tropical countries use conventional paper-based tracking systems with physical marks on the timber products, but more advanced systems have been developed recently to improve the efficiency and reliability of supply-chain control. These mostly commercial systems involve the use of computerized databases, barcodes, the internet and satellites for the management and transfer of data on timber flows between forests and final consumers. Of the three government tracking systems described below, Brazil's nascent system is the most sophisticated.

Brazil

The governmental control system used in Brazil to verify the legality and origin of timber and timber products is based on two official, obligatory documents:

- (i) *Authorization of Forest Exploitation* (AUTEX): this document specifies the volume of logs—by tree species—that a wood-harvesting enterprise is allowed to extract from an annual production unit. Prior to issuance of an AUTEX, the harvesting enterprise must prepare an annual production plan that is evaluated by the environmental authorities. The AUTEX operates as a credit, which is used up as the enterprise dispatches logs from its forest area; and
- (ii) *Authorization of Forest Products Transport* (ATPF): Serial-numbered ATPFs are issued for the transportation of logs and timber products. An ATPF includes the name and address of the company that has sent the timber consignment, the point of departure, the quantity and value of the consignment, and the destination. Each consignment must be accompanied by an ATPF.

ATPFs are applied to primary-processed timber for their transportation to further-processing facilities or to final consumers. ATPFs are also required for the transportation of goods from the further-processing plants to the domestic market and export ports. For the international trade, all exporters must be registered with the Foreign Trade Secretariat (SECEX). Each export shipment requires a timber export permit, a certificate of origin and a fiscal payment receipt.

The existing system has proved ineffective in controlling forest management, transportation and wood-processing activities. Government agencies have therefore initiated projects to develop improved control systems, one of which, the *Sistema documento de origem florestal* or DOF system, was introduced in autumn 2006. It builds on the existing

system but is fully transferred to a computer environment and makes use of modern communication technology. The main steps of the DOF system are as follows:

- the harvesting volume specified in the AUTEX is entered into an electronic database;
- prior to the transportation of logs or timber products, the producer accesses the system through the internet, fills out bar-coded transportation documents (DOFs) and prints out copies of the DOFs for trucks. The transportation volumes are debited from the producer's credit;

Most tropical countries use conventional paper-based tracking systems with physical marks on the timber products, but more advanced systems have been developed recently to improve the efficiency and reliability of supply-chain control.

- the road police check the trucks (eg volume and origin of timber) by comparing the data on the DOFs against an inspection of the loads and by verifying the authenticity of transportation documents; and
- upon the truck's arrival at the mill, the company communicates the received volume of logs to the DOF system, which are then credited back to the company.

The DOF system is likely to result in significant improvements in the control and monitoring of legal compliance. However, it requires computer literacy and reliable access to the internet, the lack of which may affect the functionality of the system, at least in the short term.

Cameroon

In Cameroon, pre-harvesting inventories, harvesting prospects and authorized cutting volumes provide the foundation for the existing government log-tracking system. In the forest, a logging company completes a field register (DF-10) and submits it to government agencies. The serial-numbered DF-10 specifies, among other things, the name of the company, the forest management unit, and data on individual logs such as tree species, diameter (top, bottom, average), length, volume and value.

Log-specific identification data given in the DF-10 is painted on one end of the log to facilitate physical traceability until

Call for expressions of interest in establishing log tracking systems

ITTO's 2006–2007 Work Programme includes the following activity:

“Work with the private sector in producer countries to study the feasibility of adopting timber tracking systems, including provision of support for five pilot schemes.”

ITTO is now seeking expressions of interest from companies in producer member countries interested in benefiting from this activity. Expressions of interest should be addressed to the Executive Director (itto@itto.or.jp) and include details of the nature of the company, area to be covered by the system, products to be covered by the system, annual production levels, current control mechanisms in place (if any) and information on the type of system desired (if known). Expressions of interest should be received by the ITTO Secretariat by **31 March 2007**.



Tracked and stamped: certified Brazilian sawnwood. *Photo: J. Lounasvuori*

arrival at the primary processing plant or export port, and waybills for the transportation of logs (*lettre de voiture le transport des bois d'œuvre*) are used for controlling the transfer of logs from the forest area to the transportation destination. The serial-numbered waybill specifies, among other things, the name of the company, the forest management unit, the destination, truck registration number, and data on individual logs such as log number (reference to DF-10), tree species, diameter (top, bottom), length and volume.

Truckloads of logs transported from the forest to the export port are checked at the port entrance by timber-yard officials (*brigade du parc à bois*), who scrutinize the transportation documents and conduct measurements or visual observations of the loads. After the checkpoint, the logs are stored in the port's timber yard before customs valuation and shipping. Customs valuation is outsourced to *Société Générale de Surveillance SA* (SGS) and aims to ensure that the government levies the correct amount of export taxes.

ITTO should continue to assist producer countries in finding innovative ways of ensuring legal compliance. In many countries, the business environments in which the forest and timber-processing sectors operate could be developed to favour those companies complying with relevant legislation and voluntary requirements for sustainable forest management.

If the logs are transported to a sawmill or other processing plant, the company receives the logs together with the waybills. The origin of individual logs must remain identifiable at the timber yard but is not required during and after processing. The company needs a waybill for the transportation of the processed products (*lettre de voiture le transport des bois débités*). The serial-numbered waybill specifies, among other things, the name of the producing company and the transportation company, the truck registration number, the transportation destination, and product data such as the nature of the product, tree species,

thickness, width, length, volume and number of pieces.

At the export port, the inspection and customs declaration procedures for processed timber products are similar to those for logs, except that SGS is not contracted to carry out the customs valuation.

The current governmental control system is based on paper forms and records, from which data are transferred to electronic databases for analysis and the generation of reports on individual phases of the production chain. However, the databases are not interactive and the whole production chain from the forest to export port can only be analysed by combining information from various data sources on an ad hoc basis.

A database called *Commercialisation du bois au Cameroun* (COMCAM) was launched recently with ITTO support to improve transparency in the foreign trade of logs and timber products. COMCAM is a software application that can draw data from different sources among the country's various administrative units of government. It can generate a wide range of reports on the wood products trade, including trade volumes by exporting company, tree species, export destination, export port and type of transportation. The database provides an excellent basis for the development of a comprehensive information management system for the Cameroonian forestry and wood-processing sector, and its enlargement to include forest operations and the transportation of logs to processing plants should be explored.

Malaysia

All the permanent reserved forests in Peninsular Malaysia and certain concessions in Sabah and Sarawak have been certified, mainly by the Malaysian Timber Certification Council. For certified areas, it is possible to trace logs to the stump; in other forests, logs can be traced to the licenced area in which they were harvested.

The areas licensed for logging are clearly demarcated on the ground (to prevent harvesting beyond their boundaries) and an inventory is conducted to determine stocking and species composition. From this information, the harvesting volume allowable in that area is computed and provides a check on the actual out-take. The trees to be felled and retained are marked and tagged to provide another means of checking out-take. In certified areas, tree stumps are numbered so that logs can be traced to the stump.

At the felling site, the logs are incised at both ends with a property mark to denote ownership and a classification mark indicating the licence area. The logs may then be moved to a designated forest checking station for the assessment of royalty and other statutory charges, which are

deducted from the licence-holder's account at the Forestry Department. At this point, a government revenue hammer mark is made on both ends of the log and a removal pass issued to enable the logs to be transported to mills or the point of export. At the mill the logs are recorded in a log intake book and checked with the accompanying removal pass; if in order, the removal pass is cancelled and the logs may be processed.

Further controls and documentation are in place for both the export and import of timber, including checks by customs officials. The strict control measures and documentation in place in Malaysia enable log tracking to the forest of origin or even to the tree of origin in an effective and transparent manner.

Recommendations

ITTO should continue to assist producer countries in finding innovative ways of ensuring legal compliance. In many countries, the business environments in which the forest and timber-processing sectors operate could be developed to favour those companies complying with relevant legislation and voluntary requirements for sustainable

forest management. Incentive programs (such as priority positions and tax releases) could also be created to support companies that have responsible internal governance.

Timber companies should be encouraged to introduce their own tracking systems, but this still requires governments to establish or improve structures for control and monitoring. These may include databases in which companies enter data on their harvesting and trade in timber products, which would be useful for reconciling the authorized cuttings, actual cuttings and trade in timber products. A governmental inspection service would be needed to verify the company-provided data through random samples or some other basis. The results of third-party certification could also be integrated into the control system to contribute to the reliability and credibility of the internal control systems of the private companies.

The full report on which this article is based ('Report on the auditing of existing tracking systems in tropical forest industries') can be found on www.itto.or.jp and is available on request from eimi@itto.or.jp

► ... continued from page 4

Over the last six years, annual foreign exchange earnings from forestry have averaged US\$156 million or 361 million Kina. In 2005, foreign exchange earnings alone were US\$173 million or 541 million Kina, which was 5% of the total merchandise exports. This makes forestry second only to the mining and petroleum sector as an export earner. It also generated an average of 115 million Kina in log exports taxes over the past six years. The sector generates around 5% of PNG's export, and for over a decade, it has contributed an average of 30% of PNG's expenditure on development.

PNGFA estimates that the sector directly employs 9000 people, mainly in the rural areas. This represents about 4% of formal national employment. The sector's contribution to national employment has declined by about 28% from its 1990s level, when it employed directly around 13 000 people. In addition, the sector is a major contributor to rural infrastructure development—roads, airfields, air services, health clinics, services and schools.

While eco-forestry has a place in PNG, the majority of the key local NGOs agree that commercial timber harvesting is important for the PNG economy and should continue albeit on a sustainable basis. This view was confirmed to the writer at a meeting held with key representatives of the local ENGOS in Port Moresby on 17 October 2006.

PNG now has a framework in place, which can assist in achieving sustainable forest management, as well as enhanced forest law enforcement and governance. It has a Forest Act, a Forest Policy and a Code of Forest Harvesting. Like many tropical timber producing countries, the major challenge facing PNG is effective implementation of its forest law and policies, as well as monitoring to ensure continuous improvement. ITTO's recent study into the progress made in sustainable forest management in tropical timber producing countries concluded that while progress had been made overall, there was still room for improvement in almost all the member producer countries.

The fact that PNG can further improve its performance in sustainable forest management cannot be used to justify allegations that all commercial harvesting activities in the country are illegal. In the writer's view, there has been a tendency to confuse "illegality" with "effective implementation" of the Forest Act and related policies and guidelines in the commercial timber harvesting debate in PNG.

One area definitely requiring immediate action is the definition of illegal harvesting activities in the context of PNG's forestry law and policy. At present, there is no agreed national definition of illegal harvesting activities in PNG. The PNGFA generally uses the FAO/ITTO definition, which is the "harvesting, transporting, processing, and trading of forest products in violation of national laws." It would be useful if this definition can further be expanded in the context of PNG to identify specific activities which would constitute illegality in the context of PNG's Forestry Act 1991 and the Forest Policy 1991.

In the absence of an agreed national definition of illegality, commercial timber harvesting activities in PNG are being judged based on Greenpeace's definition, which has been adopted by the local ENGOS. Under Greenpeace's definition, commercial timber harvesting activities are not legal unless the operations have met all laws and regulations and international treaties including labour rights, indigenous people's rights and the payment of all taxes and fees. This is a much broader definition and encompasses areas of responsibility, which are beyond the mandate of the PNGFA. Based on this definition, it would be fair to conclude that commercial timber harvesting activities in almost all timber producing countries in the world—both developed and developing—can be said to be illegal in one aspect or the other. This being the case, is there any justification in singling out PNG?

ITTO's recently funded projects

The projects and pre-projects summarized below were financed at the forty-first session of the International Tropical Timber Council, which was held in November 2006. A total of US\$5.4 million was committed for approved projects, pre-projects and activities at the session

Projects

Utilization of lesser used wood species in Guyana (PD 344/05 Rev.2 (I))

Budget	ITTO:	US\$95 040
	Government of Guyana:	US\$36 885
	Total	US\$131 925

Implementing agency Guyana Forestry Commission

Funding source Japan

This project will increase the overall contribution of the forest sector to the national economy by improving the awareness and use of lesser used species. The project will focus on gathering technological information on lesser used species, increasing promotion of current and potential lesser used species, and training in processing techniques of these species. It is also expected that the capacity building aspect of the project will not only improve processing techniques used for these species but will also improve the quality of timber products.

Promotion of the sustainable management of tropical planted forest in Congo's tropical forest plantations (Republic of Congo; PD 367/05 Rev.2 (F))

Budget	ITTO:	US\$143 856
	UR2PI:	US\$34 370
	ECO Corp:	US\$9000
	Total	US\$187 226

Implementing agencies Research Unit on the Productivity of Industrial Plantations (UR2PI) in collaboration with the General Directorate for Forest Economy (DGEF)

Funding sources Japan, France

For the past 40 years, eucalyptus forest plantations have been established in the Republic of Congo. These currently extend to 40 000 hectares of high yield clone plantations, with further extension projects to be implemented under a private or public framework being negotiated. *Eucalyptus* plantations, as well as those with indigenous species like *Terminalia*, are a significant component of the national forest program, helping to reduce pressure on natural forests.

The objective of this project is to contribute to the sustainable management of forest resources and the reduction of poverty through the application of basic management principles in Congo's planted forests. Specifically, it intends to develop a set of sustainable management criteria and indicators appropriate to forest plantations in Congo based on the ITTO *Guidelines for the Establishment and Sustainable Management of Planted Tropical Forests*.

Community forest development in Gabon (PD 383/05 Rev.2 (F))

Budget	ITTO:	US\$594 432
	Government of Gabon:	US\$305 400
	Total	US\$899 832

Implementing agency General Directorate for Water and Forest Management

Funding sources Japan, France, Norway

Since the promulgation of Gabon's Forest Code Law 016/01 in 2001 no community forest has been created, despite the inclusion of social provisions in the law to promote the involvement of rural communities in the management of forest resources through the establishment of community forests. The purpose of these provisions is therefore far from being achieved, as the lack of resources does not allow for the initiation and establishment of pilot/model community forests in Gabon.

This project will contribute to the sustainable management of the rural forest estate, organizing the village estates, and combating poverty in the communities established in rural areas through the development of community forests. The specific objectives of the project are: (i) establishment of three pilot community forests; and (ii) development of SFM guidelines for community forests from the model community forest experiment.

Testing laboratory for the development of quality standards for Mexican primary and processed tropical forest products (Mexico; PD 384/05 Rev.3 (I))

Budget	ITTO:	US\$463 670
	Institute of Ecology AC:	US\$292 600
	Total	US\$756 270

Implementing agency Institute of Ecology AC

Funding sources Japan, USA, Finland

Currently, Mexico's tropical forest products are not produced on the basis of quality criteria, putting them at a disadvantage both in domestic and international markets when compared to tropical timber products from other countries. This in turn contributes to the deficit in the Mexican timber trade balance. The lack of an accredited testing laboratory meeting industrial requirements to develop quality standards for tropical timber, and the lack of industrialists' and producers' awareness of the benefits that this kind of facility would provide further aggravates the trade imbalance.

This project will establish a tropical timber laboratory accredited by an internationally recognized body, and will inform and train timber producers on the benefits of ensuring that their products meet quality standards for national and international markets.

Promoting and creating market demand for certified tropical wood and verified legal tropical wood (Japan; PD 391/06 Rev.2 (M))

Budget	ITTO:	US\$257 472
	Implementing agencies:	US\$45 000
	Total	US\$302 472

Implementing agencies Friends of the Earth Japan and Global Environment Forum
Funding source Japan

A major obstacle to promoting certified tropical wood and verified legal tropical wood (C/VL wood) as a means to achieving sustainable forest management in tropical countries is inadequate market demand. Promoting and creating demand for C/VL wood are urgent tasks for Asia because Asia produces and consumes more tropical wood than any other region. To create such demand is especially important in Japan, one of the world's largest importers of tropical wood.

This project will establish a center to act as a clearinghouse and a point of expertise for C/VL wood. The center will support companies both on the demand and supply sides of trade in C/VL wood by providing attractive business-oriented environmental and social information and supporting phased approaches to boost supply.

Village-level reforestation plus nutrition promotion by self-motivated community women's groups (Ghana; PD 393/06 Rev.1 (F))

Budget	ITTO:	US\$165 335
	Agency/Government of Ghana:	US\$52 531
	Total	US\$217 866

Implementing agency Pitris Consult

Funding sources Japan, USA

This project will promote the introduction, participation and widespread adoption of rural women group-based reforestation know-how, using proven fast-growing timber species in conjunction with the multiple nutrient-providing *Moringa oleifera* plant. It will benefit disadvantaged indigenous forest dwelling people, especially young breast-feeding women. Specifically, the project aims to: (i) establish a demonstration plantation made up of a minimum of five acres (2.02 hectares) of *Moringa oleifera* and ten acres (4.05 hectares) of proven fast-growing timber species in each of the four targeted rural communities owned and managed by the respective young mothers' groups; (ii) create, through training, practical action and capacity building of efficient local and affordable networks for seeds of *Moringa oleifera*, as well as seedlings of fast-growing timber species.

Strategy for developing plantation forest: a conflict resolution approach in Indonesia (PD 396/06 Rev.2 (F))

Budget	ITTO:	US\$508 234
	Government of Indonesia:	US\$137 460
	Total	US\$645 694

Implementing agencies Directorate of Plantation Forest Management, Ministry of Forestry in collaboration with Provincial Forest Service of Jambi and Provincial Forest Services of South Kalimantan

Funding sources Japan, Norway

This project is a follow-up to ITTO PRE-PROJECT PPD 56/02 REV.1 (F): 'Strengthening central and sub-national institutions to enhance plantation forest development in Jambi and South Kalimantan, Indonesia'. The pre-project documented two critical problems facing plantation forest development in the two provinces of concern, namely: (i) land-use conflicts between communities dwelling around the plantation forest areas with the forest companies who own the plantations; and (ii) the high cost of obtaining truly conflict-free lands for commercial tree planting.

This project will increase wood production from plantation forests to meet growing domestic and export demand for wood products, thereby reducing reliance on natural forests. Its specific objectives are to: (i) develop a collaborative plantation forest management approach; and (ii) establish conditions for the adoption of the approach by stakeholders.

Establishment of a national forest and timber marketing statistics systems (Ecuador; PD 406/06 Rev.1 (M))

Budget	ITTO:	US\$454 148
	Government of Ecuador:	US\$115 253
	Total	US\$569 401

Implementing agency National Directorate of Forests under the Ministry of Environment

Funding sources Japan, USA

This project is an outcome of ITTO PRE-PROJECT PPD 8/98 REV.1 (M): 'Establishment of a national forest and timber marketing statistics system'. The purpose of this project is to implement a forest information and statistics system, including the generation of data, the development of monitoring skills, economic/statistical analysis, and the decentralisation of processes and collection of data from primary information sources. This project will also strengthen the National Forest Directorate's management and monitoring capacity through an Operational Information System for Forest Management and Monitoring.

Systematisation and modelling of economic and technical information to train professionals related to the production, processing and marketing of timber products (Colombia; PD 415/06 Rev.2 (M)—Phase II)

Budget	ITTO:	US\$225 500
	University of Tolima:	US\$157 800
	Total	US\$383 300

Implementing agency University of Tolima

Funding sources Japan, USA

This project is a follow-up to ITTO PROJECT PD 203/03 REV.3 (M) of the same name. It seeks to develop economic, technical and scientific information on 20 potential forest species, including information on the production, processing and marketing of their timber products, with a view to developing user-friendly, online training tools to guide the optimal selection of species for commercial plantations and production processes. These tools will be applied and used to

train some 50 professionals from various phases of the production chain in commercial forest companies of four major forest regions of the country. This project will strengthen national capacity to implement the National Forest Development Plan (*Plan Nacional de Desarrollo Forestal – PNDF*) through specific programs and subprograms approved by the National Council for Economic and Social Policy (*Consejo Nacional de Política Económica y Social – CONPES*).

The prevention of further loss and the promotion of rehabilitation and plantation of *Gonystylus* spp. (ramin) in Sumatra and Kalimantan (Indonesia; PD 426/06 Rev.1 (F))

Budget	ITTO:	US\$507 903
	Government of Indonesia:	US\$174 639
	Total	US\$682 542

Implementing agencies Forestry Research and Development Agency (FORDA) in collaboration with Regional Forestry Research Centers in Sumatra and Kalimantan

Funding sources Japan, USA, Republic of Korea, Australia

This project is a follow-up to ITTO PRE-PROJECT PPD 87/03 REV.2 (F): 'Identification of *Gonystylus* spp. (ramin) potency, distribution, conservation and plantation barrier'. The pre-project reported that the key problems facing the ramin forests in Sumatra and Kalimantan are unsustainable methods of harvesting, rampant illegal logging, slow progress in rehabilitation and plantation establishment, insufficient natural regeneration, poor implementation of the requirements of Appendix III of CITES, poor land-use planning and frequent forest fires.

This project will contribute to the prevention of further loss and enhancement of sustainable management of ramin forests in Indonesia. Its specific objectives are to: (i) improve silvicultural techniques for ramin conservation and plantation development; and (ii) enhance institutional capacity to implement CITES rules and procedures.

Processing and utilization of trees on farmlands and logging residues through collaboration with local communities (Ghana; PD 431/06 Rev.1 (I))

Budget	ITTO:	US\$458 752
	Government of Ghana:	US\$ 64 937
	Total	US\$523 689

Implementing agency Forestry Research Institute of Ghana (FORIG)

Funding sources Japan, Switzerland

This project will make lumber available to local communities that live close to the forests in Ghana, enabling them to benefit from timber on farmlands and forest logging residues. This, among other things, will prevent local communities from collaborating or cooperating with illegal chain saw operators whose activities are leading to forest degradation in Ghana.

Pre-projects

Study on utilization of plantation teak (Myanmar; PPD 68/03 Rev.2 (I))

Budget	ITTO:	US\$80 000
	Government of Myanmar:	Kyat 459 000
	Total	US\$80 000 + Kyat 459 000

Implementing agency Forest Department, Myanmar

Funding source Common Fund for Commodities

This pre-project will assess the opportunities for the utilization of plantation teak (*Tectona grandis*) at different ages and sizes with a view to formulating a project proposal for the promotion of downstream processing and utilization of plantation teak. It has been reported that quality products are being made from plantation teak in many tropical countries such as Brazil, Costa Rica, Ghana, India, Indonesia, Malaysia and Thailand. There is a need to promote downstream processing of plantation teak in Myanmar so as to increase the contribution to the national economy of plantation teak product exports. The pre-project will also organize and convene a regional workshop to disseminate the results of the pre-project and define a project proposal for promotion of value-added products of plantation teak in key teak-producing countries in the ASEAN region.

Sustainable and multipurpose forestry to settle the tribal shifting cultivators of Tripura State in India by providing viable economic activities (PPD 111/05 Rev. 1 (F))

Budget	ITTO:	US\$48 114
	Government of India:	US\$10 000
	Total	US\$58 114

Implementing agencies Tripura Forest Development and Plantation Corporation Ltd, a Government of Tripura Undertaking, India

Funding source Japan

This pre-project will help rehabilitate and sustainably manage forest areas affected by shifting cultivation, which affects 70–80 000 hectares of forests every year in Tripura State, India, and improve the socio-economic condition of the affected communities. Its specific objectives are to: (i) formulate a full-fledged project proposal to support sustainable management and rehabilitation of degraded forests, and (ii) collect information on the socio-economic situation of shifting cultivator communities and the nature and extent of shifting cultivation in Tripura State.

Development of value-adding processes for short-rotation, small-diameter community teak plantations in Java and Eastern Indonesia (PPD 121/06 Rev.2 (I))

Budget	ITTO:	US\$48 060
	Government of Indonesia:	US\$6000
	Total	US\$54 060

Implementing agency Gadjah Mada University

Funding sources USA, Australia

This pre-project seeks to promote the development of value-adding processes for small-diameter teak logs harvested from community forests. A study on teak plantations managed by local communities showed the major shortcomings of these plantations, including inadequate rotation (no more than 20 years) and lack of proper silviculture practices. Teak logs produced by local communities have shorter stems, inferior mechanical properties, and lower durability due to the absence and/or lower proportion of heartwood. In order to address these technical constraints, this pre-project will collect baseline data and relevant information on community-based teak plantations and utilization of community-based plantation teak in Java and eastern Indonesia. Based on the results of this study, a full project proposal to develop value-adding processes for short-rotation, small-diameter community teak plantations will be formulated.

Reforestation of tropical savannah grassland with high valued teak in Papua New Guinea (PPD 124/06 Rev.2 (F))

Budget	ITTO:	US\$79 920
	Government of PNG:	US\$10 000
	Total	US\$89 920

Implementing agency Papua New Guinea Forest Authority

Funding sources Japan, Australia

Much of the Central Province of PNG is covered by natural eucalyptus savannah forests. Over the years, the contributing effects of fires, human encroachment, fuel wood and timber exploitation have reduced these forests to grassland and barren areas of little economic benefits to the local people. This pre-project will develop forest plantations on degraded grassland areas to supply timber and relieve pressure on remaining natural forests.

National training program to promote the adoption of reduced impact logging (RIL) in Papua New Guinea (PPD 125/06 Rev.2 (I))

Budget	ITTO:	US\$58 806
	Government of PNG:	US\$14 429
	Total	US\$73 235

Implementing agency Papua New Guinea Forest Authority

Funding sources Japan, Australia

This pre-project will facilitate the development of a full ITTO project proposal for a national promotion, training, and demonstration program for reduced impact logging (RIL), aimed at improving the capacity and performance of the country's medium- to large-scale forest companies.

Strengthening capacity of forest law enforcement and governance in Cambodia (PPD 128/06 Rev.1 (F))

Budget	ITTO:	US\$66 636
	Government of Cambodia:	US\$10 180
	Total	US\$76 816

Implementing agency Forest Administration of Cambodia

Funding source Japan

The objective of this pre-project is to formulate strategies for human resource development and for upgrading the technology for law enforcement and governance in Cambodia. Its expected main outputs are: (i) collection and analysis of available information on capacity building of human resources, upgrading technology and other relevant aspects for supporting forest law enforcement and governance; and (ii) formulation of a project proposal on the implementation of the National Forest Law Enforcement and Governance (FLiG) Action Plan.

Identification of a project for the regeneration and management of mangrove forests surrounding the Douala/Edea Reserve, Department of Sanaga Maritime, Cameroon (PPD 130/06 Rev.1 (F))

Budget	ITTO:	US\$79 164
	Cam-Eco:	US\$22 545
	Total	US\$101 709

Implementing agency Cameroon Ecology (Cam-Eco)

Funding sources Japan, Norway

This pre-project will contribute to the conservation and sustainable management of mangrove forests in the Department of Sanaga Maritime in view of promoting an integrated local forestry economy within the framework of poverty reduction. It specifically intends to review the status of mangroves around the Fauna Reserve of Douala/Edea in order to formulate a project proposal for the sustainable management of this ecosystem.

Producers

Africa

- Cameroon
- Central African Republic
- Congo
- Côte d'Ivoire
- Democratic Republic of the Congo
- Gabon
- Ghana
- Liberia
- Nigeria
- Togo

Asia & Pacific

- Cambodia
- Fiji
- India
- Indonesia
- Malaysia
- Myanmar
- Papua New Guinea
- Philippines
- Thailand
- Vanuatu

Latin America

- Bolivia
- Brazil
- Colombia
- Ecuador
- Guatemala
- Guyana
- Honduras
- Mexico
- Panama
- Peru
- Suriname
- Trinidad and Tobago
- Venezuela

Consumers

- Australia
- Canada
- China
- Egypt
- European Community
 - Austria
 - Belgium/Luxembourg
 - Denmark
 - Finland
 - France
 - Germany
 - Greece
 - Ireland
 - Italy
 - Netherlands
 - Portugal
 - Spain
 - Sweden
 - United Kingdom
- Japan
- Nepal
- New Zealand
- Norway
- Republic of Korea
- Switzerland
- United States of America

The TFU's regular look at tropical timber markets: bullish market in 2006

by
Jairo Castaño

ITTO Secretariat

Ask anybody in the trade and they would agree on the recovery of primary tropical timber products prices in 2006. Prices for many of these products matched or exceeded levels seen before the Asian financial crisis of 1997–1998. Higher prices are a reflection of tighter availability of raw materials in tropical producer countries, added costs of implementing sustainable forest management plans and greater control of illegal logging that, if unchecked, exerts downward pressure on prices. Other factors behind the recovery in prices include the emergence of China, India and the Middle East as alternatives to traditional markets in Japan, the EU and the US; a weaker US currency; and rising energy and oil-based raw material costs.

Southeast Asian producers benefited the most

Southeast Asian producers were the worst hit by the 1997–1998 financial crisis when prices for many primary timber products more than halved and remained depressed for several years. Prices recovered gradually from 2001 due to shrinking supply and growing demand from China, India and the Middle East, and picked up sharply in 2005. Acute log shortages were exacerbated by actions in Malaysia to stop the issuance or renewal of licenses for timber concessions and the announcement in Indonesia of a ban on the use of natural forest species for pulp and paper production by 2009 and for wood processing by 2014.

Prices for Southeast Asian products continued to advance throughout 2006 even during holiday seasons in traditional export markets as supply remained restricted. Japan, which imports most of its tropical logs from Southeast Asia, has in recent years lost its position as log and lumber price leader in the region to China and India. Japanese buyers are now regularly outbid by Chinese and Indian buyers. Meranti and keruing logs reached 13 and ten-year highs, respectively, exceeding 1997 Asian pre-crisis levels, while dark red meranti sawnwood prices were at an all-time high in US dollars (six-year high in euros or UK pounds) since ITTO started to track this product in 1998. Meanwhile, prices for dark red meranti plywood were at ten-year highs,

also exceeding 1997 Asian pre-crisis levels, except 9 mm thicknesses which remain depressed. Log and sawnwood prices were beginning to level off in late 2006 as building activities in main markets slowed down as the winter approached, although monsoon rains pushed some prices up as logging operations were hampered. Prices for panels continued to surge in the second half of 2006 as demand picked up in Japan with some plywood products reaching new record highs.

Rubberwood jumps

Rubberwood, once deemed a readily available and relatively cheap material, was also affected by shortages. Latex prices soared to 20-year highs early in 2006, encouraging rubber tapping and undercutting the profitability of rubberwood production. This drove prices of rubberwood up sharply, affecting Southeast Asian furniture manufacturers who depend on this material for 80% or more of their output. Malaysia extended its rubberwood export ban to finger-jointed sawnwood in mid-2006 as harvesting of the species outpaced replenishment, but supply remained tight. Malaysian and Thai furniture producers were seeking rubberwood supplies from Indonesia and Myanmar for their furniture industries.

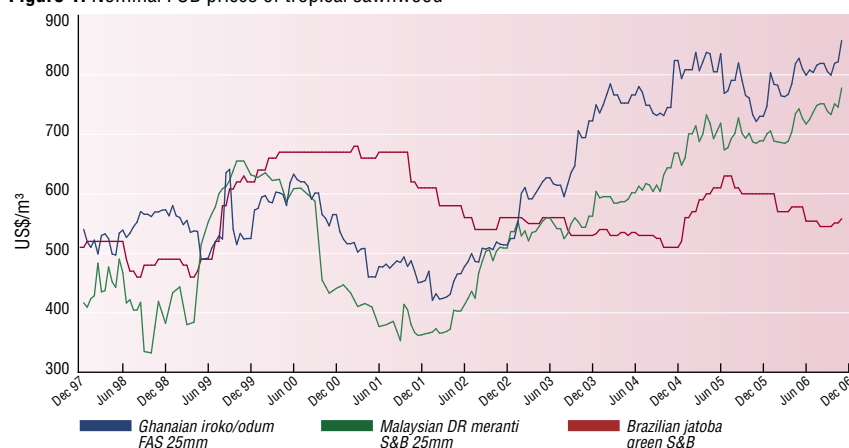
Malaysia consolidates itself as the largest plywood exporter

Malaysia overtook Indonesia as the world's largest tropical plywood exporter in 2004 and as the largest exporter to the key Japanese market in 2005. Malaysia, where plywood mills are technologically better equipped, also assumed price leadership in the export market. Malaysian exporters received another boost on 1 January 2006 with the EU's reduction of import duty on its plywood from 7% to 3.5%. In addition to stimulating import demand, the reduction gave Malaysia a competitive edge over Indonesian and Chinese plywood, on which a 7% import duty is still levied by the EU.

Indonesian panels have failed to benefit from the same price hikes seen in Malaysian panels as buyers have lost confidence in the supply. Several Indonesian panel manufacturers have been unable to fulfil orders amid mill closures, layoffs and declining exports. Additionally, Indonesia's export ban on logs and rough sawnwood brought about an additional level of bureaucracy, hindering the operations of legal exporters. Facing declining plywood supply from Indonesia, European and Japanese buyers have turned to Malaysia to replenish stocks. However, Malaysian mills were reported to be producing almost at top capacity, which has driven prices further up. In late 2006, importing countries took a second look at Indonesia due to worries about the tight supply situation in Malaysia. Chinese plywood also continued to gain market share in Japan and Europe at the expense of Malaysia and particularly Indonesia.

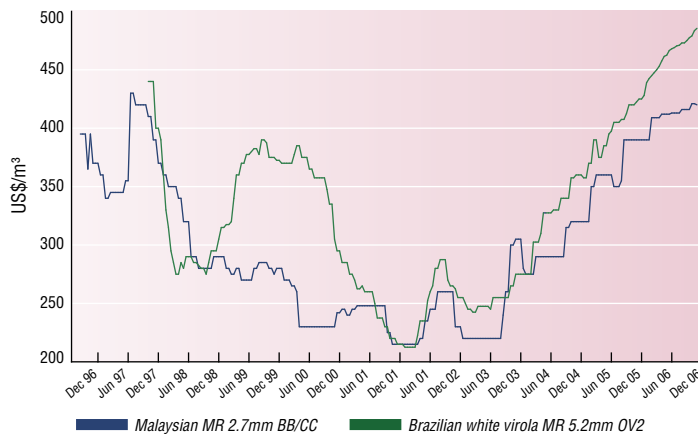
Sawn up

Figure 1: Nominal FOB prices of tropical sawnwood



Ply bounce

Figure 2: Nominal FOB prices of tropical plywood



Asia takes price leadership from Europe in Africa

After initially failing to follow the upward trend in Asian prices, West and Central African timber product prices began edging up from March 2006. Demand from India has been particularly strong as the country faces a huge timber supply deficit, estimated by the World Bank at a record 39 million m³ in 2006. Strong demand from Asia resulted in prices for Asian markets moving ahead of those for Europe, with fewer timber offers for Europe. Over the course of the year, Asian buyers took price leadership from Europe in West and Central Africa. Prices for sapele, which weakened in 2005 after Chinese buyers stepped back from the market, rose in 2006 as these buyers returned. Even during the summer vacation when prices tend to ease as demand slows, prices in West and Central Africa held firm at high levels and prospects for future demand look promising. Although African sawnwood prices were under downward pressure in Europe in late 2006, stable demand from India and China, and the very tight supply for Asian species will probably hold the African market steady through 2007.

Log exports restricted

Cameroon's three-year old policy of phasing out log exports of major species and quickly developing further processing was implemented at exactly the right time given recent market developments. Despite some initial resistance, the new policy has proven highly successful and is now being emulated by Gabon. Chinese demand for African sawnwood has given domestic processing policies in these countries a significant boost. China has been much more active in the sawnwood market with uptake of large volumes of sawn okan and other hard species in strips and squares at Douala and other ports.

Gabon began the establishment of a log export quota system in June 2006, similar to that in Cameroon. The log export quota covers certain premium species and depends on the proportion of sawn/processed volume that the mills produce. The quota system will be implemented in stages, much like the implementation of the free market for okoume and ozigo which was due to come into effect last January. Gabon's SNBG still held a monopoly on okoume and ozigo log sales at the end of 2006.

There has been some speculation on the eventual resumption of Liberian timber exports. After the revocation of all forest concessions and the establishment a Forestry Reform Monitoring Committee (FRMC) in February this year, a new forestry law was approved in October, paving the way for the re-assignment of forest concessions. In June, the UN Security Council lifted

the three-year log import ban from Liberia, conditional on the passing of appropriate forestry legislation. However, the reactivation of logistics and infrastructure was expected to require time before full log harvesting could be resumed in the country. Liberian niangon is certain to reclaim its niche as a favourite species for French buyers.

Brazilian timber sector undergoes sharp slide in exports

Undermined by the sustained strengthening of the *real* and suspension in the approval of forest management plans (FMP), Brazilian exports of solid wood products fell in 2005 and 2006. The suspension of FMPs was due to a crackdown on illegal logging and institutional changes in the forest authority. The 2005 forest law created the Brazilian Forest Service, which assumed some of IBAMA's functions and is responsible for the implementation of the law. Other developments included the September launching of an online timber transport tracking system that replaced the paper-based method of log transport permits to crack down on illegal logging. Strikes by IBAMA and customs workers also hindered exports in 2006.

The plywood and furniture sectors have been hardest hit by declining exports, leading to widespread layoffs. Brazilian exports of plywood plunged in the first half of 2006 as prices fell in the US and Europe and the exchange rate remained unfavourable. The country's furniture sector resorted to imports of cheaper raw materials to mitigate the unfavourable exchange rate and rising production costs in order to compete with Asian producers. In the second half of 2006, the Brazilian plywood and furniture sectors were further affected by the slowdown in the US housing market, pushing prices down further. Although export volumes of tropical plywood declined through 2006, the product was benefiting from higher prices due to low supply in foreign markets.

Mahogany sawnwood prices reach new highs

In Peru, export prices for mahogany sawnwood maintained record highs through the year due to delays in the issuance of CITES certificates and resulting supply disruptions. Peru's INRENA established a 2006 quota for mahogany exports of 23 239.6 m³ and continued its crackdown on illegal logging. Some exporters indicated that as a result of problems associated with the issuing of CITES certificates, customers were looking for mahogany substitutes such as Spanish cedar (*Cedrela odorata*). Peruvian and Bolivian exporters were concerned as their US trade preferences under the Andean Trade Promotion and Drug Eradication Act (ATPDEA) expired at the end of the year. This was compounded by delays in the ratification of the US-Peru free trade agreement by the US Congress.

Prospects for 2007

At the time of writing, markets were heading into the Christmas holidays, bringing to an end the building activity for 2006. The New Year holds promises for tropical timber exporters in terms of continued demand in Chinese, Indian and Middle Eastern markets. This should help prices remain firm. However, concerns about log availability, rising fuel costs, a weakening of the US dollar and the ongoing correction in the US housing sector will likely remain.

In many tropical countries, manufacturers relying on timber from their own forest plantations or concessions are expected to be in a better position to take advantage of market opportunities amid tightening roundwood supply. China will likely continue expanding exports of (semi-) processed products and gaining market share in key export markets, particularly for plywood, solid flooring and furniture.

ITTO Fellowship Programme: contributing to capacity-building in sustainable tropical forest management

by
Chisato Aoki

ITTO Secretariat

THE ITTO FELLOWSHIP PROGRAMME recently conducted a survey of its fellows. This article presents the results and other information on the Programme.

History and current status

The ITTO Fellowship Programme began in 1989, and has gone through three phases to date: the first phase under ITTO PROJECT PD 60/89 (M,F,I) between 1989 and 1992, the second phase under ITTO PROJECT PD 1/93 REV.1 (M,F,I) between 1993 and 1999 and the current phase under the Freezailah Fellowship Fund since 2000. Over the last 17 years, ITTO has funded 911 fellows from 44 member countries. The total amount of awards has now reached more than US\$5.2 million.

The objective of the Programme is to develop human resources and enhance professional expertise in member

countries in tropical forestry, tropical timber industries and related disciplines, with a view to promoting sustainable management of tropical forests, efficient utilization and processing of tropical timber, and better economic information on the international trade in tropical timber. The Programme supports a wide range of activities, including short training courses, seminars, conferences, study tours, the publication of technical documents, and post-graduate degrees. The Programme aims to support young and middle-level professionals.

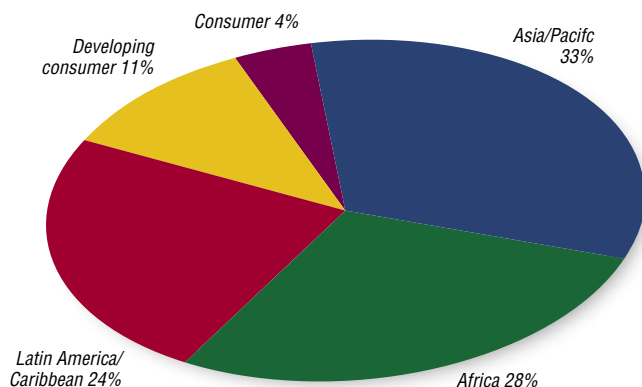
ITTO awards fellowships twice a year, normally in May and November in conjunction with meetings of the International Tropical Timber Council. Currently, the maximum value of an individual award is US\$10 000, and the average amount is around US\$5600. A total amount of US\$300 000 is awarded to 50 to 60 people per year taking into consideration geographic and gender balance and balance among the ITTO priority work areas.

The fellows

ITTO fellowships are awarded mainly to nationals of ITTO producer member countries and developing consumer member countries. In fact, 96% of all awards have been to these countries (Figure 1). Efforts have been made to distribute fellowships equitably to the Asia/Pacific, Africa and Latin America/Caribbean regions. Under the Freezailah Fellowship Fund, the distribution of the awards among the three geographic regions is now almost equal (Figure 2). Developed consumer country nationals are awarded fellowships only when activities are carried out in tropical countries and benefit producer countries. In terms of

Where 1

Figure 1: Geographic distribution, 1989–2006



NOTE – Rounded percentages in all figures may not sum to 100%

Sample of fellows reveals strong support

A recent sample-survey of ITTO fellows showed that the Programme is making a significant contribution to professional development and promotion of sustainable forest management in the tropics. The survey was undertaken in commemoration of the 20th anniversary of ITTO, and covered 33 fellows randomly selected from 313 former fellows who carried out their fellowship activities between 2000 and 2005. All respondents rated the Fellowship Programme very highly, as it strengthens capacity building in sustainable forest management in their countries, and considered the Programme to be efficient, transparent and flexible. The following testimonials show that fellows appreciate the wide range of activities that the ITTO Fellowship Programme supports.

“I rate the ITTO Fellowship Programme excellent. I really liked it as I find it efficient and it provides support for different types of activities, such as seminars, publications and post-graduate courses. The ITTO Fellowship Programme is the only international program of this nature that promotes studies related to tropical forests without making any distinction in terms of area, age, gender or nationality.” *Ms Sandra Rodríguez-Piñeros, Colombian PhD student, Oklahoma State University*

“The ITTO Fellowship has opened up new horizons and breathed a new life in the areas of forest resource management as far as I am concerned. It has had a catalytic, spurring role for the promotion of sustainable forest management. In the sustainable development of my country, this Fellowship Programme has had a driving role because there could not be development without adequately trained human resources.” *Mr Appolinaire Nankam, GIS Officer, Ministry of Forestry and Wildlife, Cameroon*

“The ITTO Fellowship Programme is a tool that enables us—the forest professionals—to realize our dream of becoming ever more competent in our profession.” *Mr Fernando Carrera, Peruvian researcher, CATIE, Costa Rica*

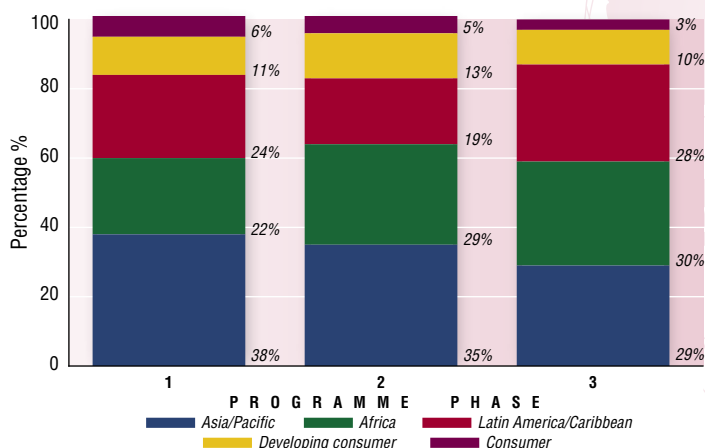
“I would rate this program as extremely useful because it is based on expedient and streamlined approval and implementation procedures. It provides many benefits to young professionals interested in continuing their training in forest management.” *Ms Gabriela Gutiérrez, Forest Technician, Community Forest Management Plan, Chiquiaca, Bolivia*

“Through the ITTO Fellowship Programme I have earned a PhD in Forest Economics from the University of Toronto and have contributed to science and better understanding of Joint Forest Management in India. I have returned to my job and have reached the policy planning level. The knowledge gained will help me in formulating better policies for the development of forestry sector in India.” *Dr Dinesh Misra, Chief General Manager, Gujarat Mineral Development Corporation, Ministry of Industry and Mines of Government of Gujarat, India*

“Through the fellowship activities, I learned advanced sawing and drying technologies for tropical plantation wood utilization and Eucalyptus wood processing technologies through visiting wood utilization companies in Australia. The Fellowship Programme is great, just like opening a window in a wall. I can communicate with the outside world through a new channel and get more related information. It can enhance the exchange of experiences in promoting sustainable forest management and sustainable development all over the world.” *Mr Yongdong Zhou, Associate Professor, Chinese Academy of Forestry*

Where 2

Figure 2: Geographic distribution by Programme phase, 1989–2006



educational background, the majority of ITTO fellows have higher degrees, including bachelor's (24%), master's (34%), phd (15%) and forest engineering qualifications (17%). The Box details the strong support for the Programme among recipients.

Figure 3 shows the main nationalities of ITTO fellows, revealing that 70% of the Fellowships have been distributed to ten countries (Ghana 12%, Philippines 8%, Nepal 7%, Indonesia 7%, India 7%, Cameroon 6%, Brazil 6%, Colombia 6%, Malaysia 5%, and China 4%). To achieve a more balanced distribution of fellowships among ITTO member countries, a mechanism to encourage applications from other countries may be needed.

ITTO has also made efforts to promote gender equality, with 26% of the fellowships awarded to women during the last 17 years. Figure 4 shows that the percentage of women fellows has more than doubled over the life of the Programme, with 46% of ITTO fellowships awarded to women in 2006.

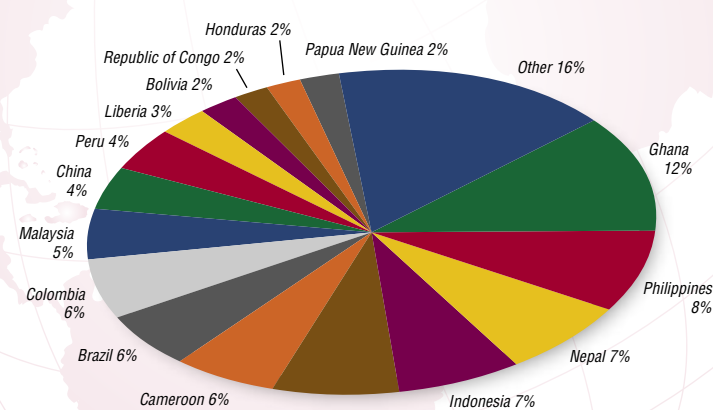
Activities and locations

The majority (64%) of fellowship activities are in the field of Reforestation and Forest Management (RFM). This trend is more evident in the current phase of the Programme as shown in Figure 5. The proportion of RFM awards has increased from 42% to 78% over the course of the Programme while that of Forest Industry has declined from 39% to 15% and that of Economic Information and Market Intelligence has decreased from 19% to 8%.

Under the current phase, the top ten host countries for fellowship activities are Costa Rica (14%), US (9%), Nepal (6%), Malaysia (5%), France (5%), Australia (5%), UK (5%), Canada (5%) and Indonesia (4%). While North-South cooperation was more evident previously, South-South cooperation has increased to 61% of fellowship activities between 2000 and 2005 (for example, African fellows have been trained in other African countries or in Asia, and many Latin American and Asian fellows have received training in neighboring countries). South-South cooperation is advantageous, as it is cost effective and fellows can gain

Where 3

Figure 3: Nationalities of fellows, 1989–2006



practical experience in a similar environment to their own countries.

Changes in length of activities and fellow backgrounds

The ITTO Fellowship Programme supports both short-term and long-term activities. There has been a change in the types of fellowship activities over the three phases of the ITTO Fellowship Programme. The first phase of the Programme mainly supported short-term activities of less than three months, such as short training courses, conferences, study tours and attachments to institutions, which accounted for about 80% of all activities. However, this trend has changed. The current phase supports more long-term activities, such as post-graduate degree studies and technical document

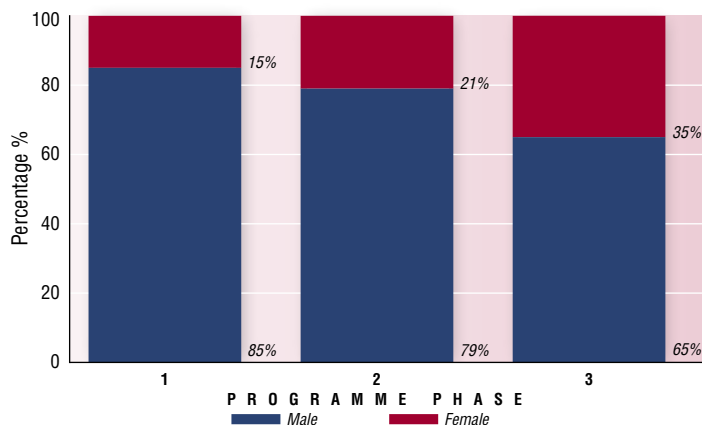
Fellowships awarded

Twenty-one fellowships worth US\$150 100 were awarded at the 41st session of the International Tropical Timber Council in November 2006. Awardees were:

Koffi Efanam Adadji (Togo) and **Donatien N'Zala** (Congo), to attend a training course on new approaches to governance and management of tropical forests in Africa; **Jose Franco Alvis Gordo** (Colombia), to undertake a masters program in forestry and forest resource management; **Wilberforce Kwaku Asare** (Ghana), to attend a training course on physiological and genetic responses to ozone in trees; **Axelle Boulay** (France), to prepare a PhD thesis on economics of smallholder-industry cooperation for wood supply in developing countries; **Gusua Roseline Caspa** (Cameroon), to attend a training course on tree improvement; **Sunita Chaudhary** (Nepal) and **Balachandra L. Hegde** (India), to attend a training course on biodiversity assessment and monitoring; **Temilola Elisabeth Fatoyinbo** (Nigeria), to do PhD research on mangrove forest growth, biomass and structure estimations; **Juan Frontanilla Yañez** (Bolivia), to attend a special program in forest engineering; **Anna Nil Mohase** (Guyana), to undertake a study tour on improving the collection and interpretation of statistics in Guyana's forest and wood products industry; **Norwati Muhammad** (Malaysia), to participate in IUFRO Tree Biotechnology 2007; **Radhika Murti** (Fiji), to participate in the 7th Session of the United Nations Forum on Forests (UNFF); **Yvonne Nadège Nkolo Meze'e** (Cameroon), to complete a training internship at CIRAD; **Vivian Akweley Norley Nuhu** (Ghana), to attend a training course on revealing the future of conservation; **Joseph Angelus Fraga Palomar** (Philippines), to do masters research on the application of geographic information systems in the conservation of endemic tropical tree species; **Argelia Emelina Rascón Ramos** (Mexico), to undertake a masters program in integrated management of watersheds; **Milton Rivera Rojas** (Colombia), to undertake a masters program in management and conservation of tropical forests and biodiversity; **Elmer Velasco Sayre** (Philippines), to prepare, reproduce and disseminate a technical document on nursery management and tree planting; **Edison Hidalgo Solano Apuntes** (Ecuador), to undertake a masters program in conservation and sustainable use of forest systems; **Memel Serge Charles Yedmel** (Cote d'Ivoire), to complete a training internship at the University of Brussels.

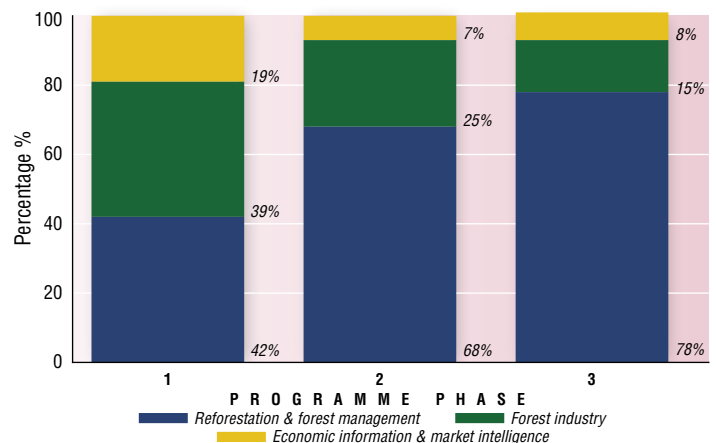
Who

Figure 4: Gender distribution, 1989–2006



What 1

Figure 5: Field of activities, 1989–2006



preparation, which often take longer than one year. These activities account for 54% of fellowship activities in the current phase (Figure 6).

Figure 7 shows the changes of the length of fellowship activities over the years. The percentage of short-term activities of less than three months has declined from 84% to 45%, while that of long-term activities (more than 12 months) has increased from 1% to 22%.

The employment background of the ITTO fellows has also changed over the years. In the first phase, about 80% of fellows came from public services and government research institutes, with none from NGOs. However, in the current phase, the first two categories declined to 57% while NGO fellows increased to 18% (Figure 8). In contrast, the number of fellows from research institutes has declined from 45% to 27%. This is partially because the current Programme no longer supports research activities unless they are related to a post-graduate degree program. However, researchers are still encouraged to publish technical documents or deliver papers with fellowship assistance.

Funding

The ITTO Fellowship Programme receives voluntary contributions of around US\$400 000 annually from donors.

Contributions to date total more than US\$6.5 million. The major donor is Japan at around US\$4.8 million. Other significant donors are the US, the Netherlands and Australia (Figure 9). Increased contributions from a broader range of donors are needed due to growing demand for fellowships and recent increases in administration costs.

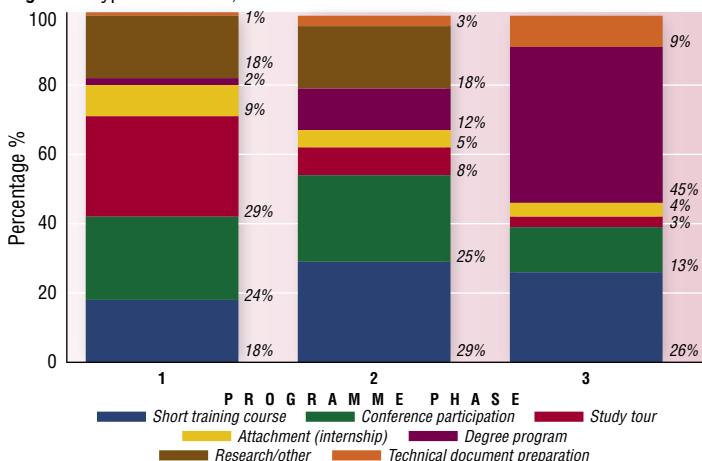
Challenges and future direction

Many fellows have requested ITTO to create a network among ITTO fellows for sharing experience and information. This could be achieved with a mailing list, an electronic newsletter or regional workshops. Perhaps the time has come to establish an alumni association to exchange knowledge and skills on sustainable forest management and related issues among ITTO fellows who are working in public services, NGOs, universities, research institutions, trade and industry and international organizations in various countries. This could be accomplished only with the assistance of former ITTO fellows in each country or geographic region and additional funding due to the limited resources of the Programme.

Another challenge could be to create new cost-sharing partnership programs with universities and training institutions. Almost half of current fellowship activities are

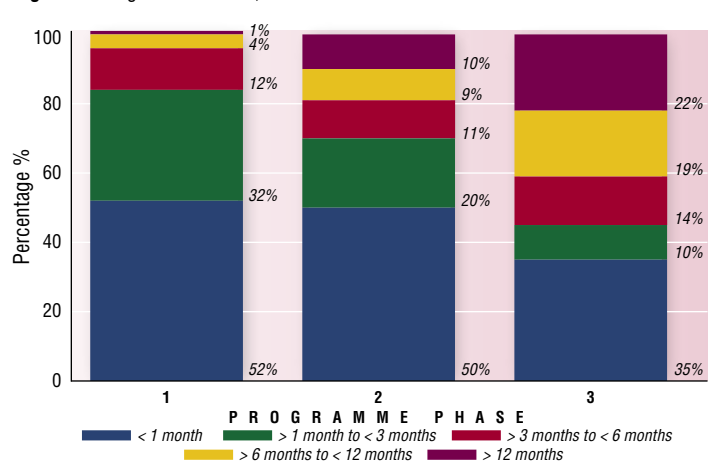
What 2

Figure 6: Type of activities, 1989–2006



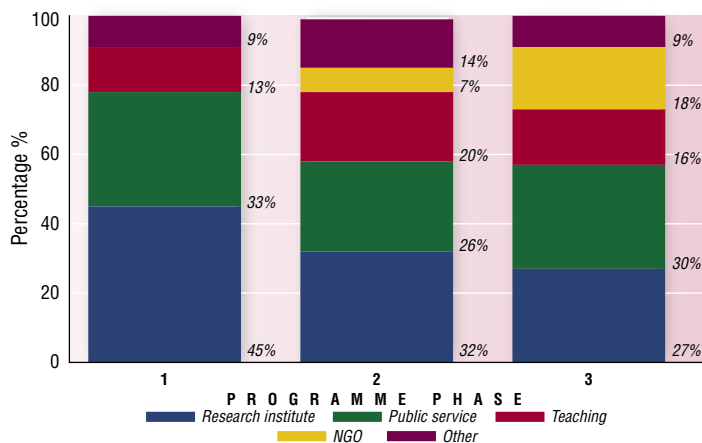
When

Figure 7: Length of activities, 1989–2006



Work

Figure 8: Employment background, 1989–2006



to undertake master's and PhD studies. This has sometimes created challenges for ITTO, universities, and fellows as the maximum fellowship of US\$10 000 is not sufficient to support the whole period of post-graduate study. Fellows are required to search for additional funding to cover all their costs, but they sometimes face difficulties. ITTO could consider establishing a partnership program where, for example, a host institution could waive the tuition fees while ITTO pays travel and living expenses for fellows.

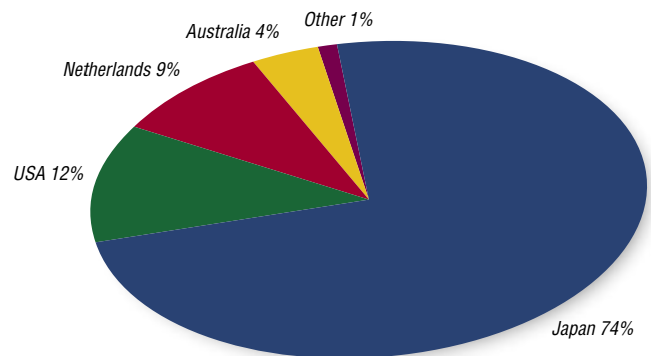
Another possible future extension of the ITTO Fellowship Programme is group training. The current Programme supports only individual training, which allows fellows to be trained in many topics at various institutions. However, ITTO often receives several applications for a particular training course. With almost two decades of cooperation

with many training institutions, it may be possible to identify the centers of excellence on various topics related to sustainable forest management and establish annual group training programs in each tropical region. This would be cost effective, and fellows could maintain an international network after the group training, which has a tremendous value for their future professional careers.

By addressing these challenges and opportunities as it approaches its third decade, the ITTO Fellowship Programme will further enhance its contribution to building capacity for sustainable forest management in tropical countries.

Funds

Figure 9: Contributions from donors, 1989–2006



ITTO fellowships offered

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

Eligible activities include:

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

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

- improving transparency of the international tropical timber market;

- promoting tropical timber from sustainably managed sources;
- supporting activities to secure tropical timber resources;
- promoting sustainable management of tropical forest resources;
- promoting increased and further processing of tropical timber from sustainable sources; and
- improving industry's efficiency in the processing and 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
- reasonableness of costs in relation to the proposed fellowship activity.

The maximum amount for a fellowship grant is US\$10 000. Only nationals of ITTO member countries are eligible to apply. The next deadline for applications is **8 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

US\$5.4 million in new funds for tropical forests

41st Session of the International Tropical Timber Council

6–11 November 2006

Yokohama, Japan

At its 41st session, the International Tropical Timber Council committed over US\$5.4 million for new projects and activities for the conservation and sustainable management, use and trade of tropical forest resources. The funds pledged at the session are in addition to the US\$6.1 million committed in June at the 40th Council session, bringing the total pledged in 2006 to over US\$11.5 million.

The Council financed eleven projects and seven pre-projects at this session (see page 18 for descriptions). Additional funds were also allocated to help improve the capacity of ITTO member countries to implement CITES listings of timber species, including a US\$3 million grant from the European Community. This CITES work was one of the many activities included in the Council's review of progress in implementation of ITTO's 2006–2007 Work Programme. Another activity under the Work Programme, to monitor the relationship between climate change and tropical forests, received additional funds to allow for preparation of a report on recent developments in climate change negotiations and the implications for tropical forests. The Freezailah Fellowship Fund was also topped up by Council (see page 23 for a list of fellowship awardees), to allow this valuable program to continue offering awards to deserving candidates.

The Council extended its governing treaty, the ITTA, 1994, and decided to regularly review the status of ratification of the successor agreement (ITTA, 2006) by members at its upcoming Sessions. The Council also finalized the procedure for selection of a new Executive Director, as the position will become vacant in November 2007 (see page 32 for ITTO vacancy listings).

The major donors at this session were the governments of Japan, Switzerland, the United States and France, while the Common Fund for Commodities and the governments of Finland, Norway, Australia, the Republic of Korea and the Netherlands also pledged funds. In addition, funds were mobilized from the Organization's unearmarked resources, including the Bali Partnership Sub-account B.

Fellow cooperation

16th Meeting of Senior Fellowships Officers of the United Nations System and Host Country Agencies

6–8 November 2006

Paris, France

The Senior Fellowships Officers (SFOs) of the United Nations System and representatives of National Placement and Supervising Agencies meet biennially to exchange views on the operational and administrative aspects of their fellowship programs, harmonize practices and procedures in fellowship administration and discuss common challenges of the fellowship programs. The 16th Meeting of SFOs was organized by the UN Department of Economic and Social Affairs (UN/DESA) as the Focal Point for Inter-Agency

Fellowship Coordination and hosted by UNESCO. About 40 representatives from organizations attended the meeting.

Participants discussed various issues, such as (i) south-south cooperation and its impact on training and fellowships, (ii) the role of national placement and supervising agencies in implementation of fellowship programs of UN agencies, (iii) the UN fellowship website and new global newsletter, (iv) new partnership programs with academic institutions, foundations, NGOs and the private sector, and (v) fellowship evaluation.

South-south cooperation: WHO reported that a comparable environment for fellows, cost-effectiveness and building capacity in training institutions in the South are added values of such cooperation. It was noted, however, that South-South cooperation does not replace North-South cooperation; it adds a new dimension of triangular cooperation (south-south collaboration supported by development partners in the North).

The role of national placement and supervising agencies: These agencies in the North can serve as liaisons among training institutions in the North and South in addition to their traditional role of placing UN fellows in their respective countries. UN agencies were encouraged to share information on training institutions and centers of excellence in the South for posting on the common UN/DESA fellowship website.

UN fellowship website and new global newsletter: UN/DESA informed participants that they have updated their fellowship website so that now all UN system fellowship programs are linked, and a new global newsletter for the UN fellowship program can be accessed from the website (<http://esa.un.org/techcoop/fellowship.asp>). UN agencies were also encouraged to use the e-forum designed by UN/DESA to conduct e-conferences on issues of common interest.

New partnership programs: Partnerships in training have become an integral part of the work of the UN systems. Partnerships are designed to promote the sharing and coordination of resources and expertise. UNESCO presented its successful experiences of establishing co-sponsored fellowship programs funded by extra-budgetary resources with governments, non-governmental organizations and private partners. The World Bank also presented a successful partnership programs with academic institutions in various countries funded by the government of Japan and reported the importance of its alumni association of former fellows to establish long-term links with development practitioners.

Fellowship evaluation: the meeting recognized that needs of developing countries are shifting from capacity building to capacity enhancement. Therefore, their training programs must be designed to take into account local situations and meet the needs of beneficiaries. Consequently, fellowship evaluation has become a very important issue. The meeting recommended the creation of a task force on impact assessment of fellowships to be chaired by WHO with the support of other organizations. The task force will indicate how to measure success of fellowship programs, identify appropriate indicators for proper evaluation, develop an evaluation framework and evaluation methodology according to result-based budgeting or equivalent principles, and propose an enhanced format for fellow's final reports. The results will be presented at the 17th meeting to be held in Rome in 2008.

Reported by Chisato Aoki, ITTO Secretariat

CDM opportunities for Africa

Workshop on creating awareness in Africa on Clean Development Mechanism (CDM) forestry projects

2–5 October 2006

Accra, Ghana

This workshop was approved in November 2005 by the International Tropical Timber Council and financed as ITTO PROJECT PD 337/05 REV.3 (F) submitted by the Government of Ghana, to be executed by the Ghana Forestry Commission (GFC). The workshop was attended by over 80 delegates from ITTO producer and consumer member countries from Africa, Common Fund for Commodities (CFC) member countries in Africa and representatives from Guyana, Suriname and Trinidad and Tobago. Delegates were drawn from forestry agencies and Designated National Authorities (DNAs) for CDM. In all, 42 African countries were represented at the Workshop. Speakers were drawn from the Joannuem Institute, CIFOR, Intercooperation, UNDP, COMIFAC, Corporacion Ecovera (Colombia), FAO, UNFCC, EcoSecurities, ITTO and the African Development Bank.

The workshop aimed to:

- create awareness of CDM opportunities for Africa;
- identify current trends and potential impacts of carbon forestry on the global forest sector, with an emphasis on Sub-Saharan African tropical timber producing countries;
- explore opportunities and challenges for the effective participation of Sub-Saharan African tropical timber producing countries in CDM projects and other carbon forestry activities;
- develop carbon accounting models for sub-Saharan African tropical forest ecosystems and other carbon credits verification and certification systems;
- explore the potential for establishing carbon emissions trading markets for Africa; and
- consider emerging issues such as reducing carbon emissions from deforestation.

The major outcome of the workshop was enhanced appreciation of the significant opportunities available to Africa under the Kyoto Protocol's CDM in attracting new and additional investments in support of forestry and renewable energy projects. The role of forestry and renewable energy projects in contributing to the mitigation of global warming was thoroughly explained, as well as the methodologies for identifying and developing eligible projects.

The main recommendation from the workshop was the need to urgently increase Africa's capacity in the identification and preparation of CDM projects. Participants recommended that ITTO urgently consider follow-up work on capacity building in CDM project formulation by taking advantage of the momentum generated by the workshop.

Other key workshop recommendations were as follows:

- Donor countries and multilateral institutions are encouraged to fund a pre-COP 12 meeting between African negotiators and representatives of EU, Japan and other Annex 1 countries on African specific issues for the coming negotiations.

- ITTO is encouraged to explore the possibility of a side event at COP 12 to report on the recommendations of this workshop so as to further elevate African priorities, issues and concerns related to CDM.
- ITTO is encouraged to facilitate regional workshops aimed at increasing the capacities in producer countries for the appropriate use of the CDM in the forest sector.
- Public awareness of the value of CDM in the forest sector should be enhanced.
- African countries should be supported to build capacity and to enhance their knowledge of forestry issues in the climate change negotiations, especially on reducing emissions from deforestation and forest degradation and afforestation and reforestation in the CDM to ensure that their priorities and needs are addressed.
- Multilateral institutions should give priority to the role forest ecosystems and the forest sector play in adapting to climate change.
- Multilateral institutions should jointly explore with national partners the potential that Programmatic CDM can offer in facilitating and reducing transaction costs for afforestation and reforestation (A/R) CDM projects in Africa. Programmatic CDM allows non-Annex 1 countries to formulate national level programs that include CDM activities in specific sectors.
- African countries should address the issue of land tenure and property rights so as to facilitate CDM investments in Africa, including trading certified emission reduction certificates (CERs) from forestry projects.
- African countries need support in building up capacities in the appropriate use of approved methodologies and other tools with regard to A/R CDM project activities.
- Multilateral institutions should simplify procedures for accessing funding for the preparation of A/R CDM project activities
- The European Union is encouraged to consider the inclusion of forestry CERs in the EU's Emissions Trading Scheme post 2012.
- Multilateral institutions are encouraged to explore options for facilitating the participation of the African francophone communities in the preparation of A/R CDM projects, starting with translating the approved methodologies and tools into French.
- Serious consideration should be given to developing further the concept of 'committed forests as carbon reservoir' and the inclusion of CERs from committed forests in carbon trading.
- Multilateral institutions and potential CER buyers are strongly encouraged to organize a workshop to consider potential project ideas from African countries.

The report of the workshop will be available from the ITTO Secretariat when published.

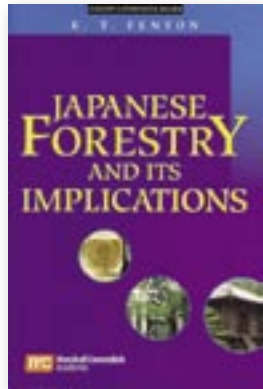
Reported by Kwame Asumadu, Consultant to the government of Ghana for Project PD 337/05 Rev.3 (F)

Reviews and information on new publications

Compiled by
Hana Rubin

► **Fenton, R.T. 2005. Japanese forestry and its implications. Marshall Cavendish Academic, Singapore. ISBN 981 210 424 0.**

Available from: Marshall Cavendish International (S) Pte Ltd, Academic Publishing Times Centre, 1 New Industrial Road, Singapore; mca@sg.marshallcavendish.com; www.marshallcavendish.com/academic



This book, the result of several years of research in Japan by the author, presents a comprehensive picture of forests and forestry in ITTO's host nation. Despite a recent drop in overall consumption due to a declining population and a slow growing economy, Japan remains one of the biggest importers of wood

and wood products in the world, with only the US and Germany eclipsing its \$17 billion worth of primary and secondary wood products imports in 2005. While production from its domestic forests has fallen dramatically from close to 50 million m³ per year in the early 1960s to current levels of under 17 million m³ per year (accounting for less than 15% of total roundwood equivalent consumption), wood from these forests still plays a key role in shaping Japanese wood products demand, including consumer taste and fashions. This publication provides a fact-filled guide to anyone interested in Japan's forest sector, be they exporter, researcher or interested layperson.

The book commences with interesting sections on the impact of Japan's unique geography on its forests and forest sector, and on the long history of forestry in the country, including descriptions of the use of wood in many historical shrines and pagodas, some of which are still standing and may be among the oldest wooden structures in the world. Fenton then provides detailed introductions to the main softwood and hardwood tree species, with particular emphasis on the endemic softwoods sugi (*Cryptomeria japonica*) and hinoki (*Chamaecyparis obtusa*). Chapters on the natural and plantation forest resource follow, with detailed statistics on, for example, growing stock, silviculture operations, growth, production and (for plantations) age classes and planting rates provided. The author is from New Zealand, and his frustration with Japan's inability to maintain its extensive plantations through regular thinning and pruning interventions is evident in a chapter titled 'The Thinning Problem'. According to Fenton, prescribed thinning are not being carried out on at least 50% of plantation areas, leading to gross overstocking and loss of merchantable timber. Anyone who has ever hiked through the darkness of an unthinned sugi or hinoki plantation on the lower slopes of one of Japan's many mountain-sides will know what he is talking about. The problem has a number of

causes, including low prices for wood from thinnings, shortage and aging of the labour force (resulting in increased labour costs) and limited markets for wood from thinnings. The chapter concludes by proposing several options for overcoming the problem, including focusing efforts only on high value species (eg sugi and hinoki), thinning to waste, and transferring productive plantations in environmentally sensitive areas to protected area status.

The final chapters of the book focus on conservation issues (protected forests, plus Japan's significant national and international efforts towards forest conservation/sustainability), forest labour (availability, wages, accident rates, etc.), roading, transport and forest machinery, and plantation/forest economics (including information on subsidies). The concluding chapter summarizes the author's recommendations for dealing with Japan's overstocked plantations and concludes that despite the establishment of 20–40 billion trees in plantations over the past 60 years, Japan will have insufficient wood to supply its domestic needs for the foreseeable future, a situation he deems "a management failure on a grand scale".

Bob Fenton is one of the rare individuals who reads statistical reports religiously and finds meaning (and often errors) in them, even when those reports are, in the case of most of the materials reviewed for this book, in Japanese. Although some of the statistics presented in *Japanese forestry and its implications* are slightly dated, all of the trends identified remain accurate. If you are interested in Japanese forestry, read this book.

Reviewed by Steve Johnson, ITTO Secretariat

► **Humphreys, D. 2006. Logjam: deforestation and the crisis of global governance. Earthscan, London, UK. ISBN 1 84407 301 7.**

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



Why and how have global forest mechanisms failed to collectively address deforestation problems? David Humphreys explains existing global forest processes and their failure to prevent ongoing deforestation in his new book, *Logjam: Deforestation and the crisis of global governance*. Humphreys analyses

the global public goods literature and offers new insights on saving the world's forests by proposing a new model of democratic governance.

Humphreys develops the central argument that "neoliberalism drive[s] excessive exploitation of forests [and] also

establishes the parameters of policies that set out to arrest deforestation". He elaborates on this argument by using a comparative case study methodology to explain how, over the period 1995 to early 2006, global processes such as the Intergovernmental Panel on Forests, the World Commission on Forests and Sustainable Development, the UN Forum on Forests, certification, and criteria and indicators have attempted to curb deforestation. While Humphreys clearly explains the history and limitations of these approaches, he notes that "governmental and intergovernmental politics, far from being abandoned, should be reclaimed, revitalized and democratized".

Humphreys also notes that "neoliberalism is still a powerful ideological framework that plays an essential role in framing international policy". He discusses how forest processes have been polarized by "business-based constitutionalism" and those promoting the global principles of human rights. The ideological battle that exists between these two driving principles in the forest debate, Humphreys argues, has created the central void in forming a global governance mechanism. As a result, a variety of *ad hoc* approaches exist to address deforestation.

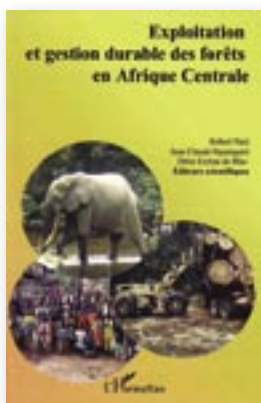
Until this void is addressed, Humphreys notes that social practices that "place severe pressure on forest spaces" will be left uncontrolled. To promote the protection of global public goods such as forests, Humphreys calls for "a new body of international law [to] ... regulate corporations rather than states". He further suggests that a new form of public accountability combine elements of an enforceable "Transnational Convention on Corporations" and a legal mechanism to ensure compliance with it. Such a mechanism would work in collaboration with greater decentralized decision-making, to promote and utilize local participation in such decision-making procedures. This, he argues, would help promote more equitable and long-term global mechanisms to address global public goods problems.

David Humphreys' well researched and timely book is a valuable resource to all involved or interested in international forest policy; Humphreys' theoretical framework using a global public goods approach is particularly useful. *Logjam* offers readers a new perspective on the causes of fragmentation in global forest policy, a discussion of the current challenges at hand to solving political and technical forest issues, and the possibility that new governance mechanisms can help save the world's forests.

Reviewed by Lauren Flejzor, ITTO Secretariat

► **Nasi, R., Nguinguiri, J-C., and Ezzine de Blas, D. (eds) 2006. *Exploitation et gestion durable des forêts en Afrique Centrale*. L'Harmattan, Paris France. ISBN 2 296 01617 0.**

Available from: L'Harmattan, 5-7 rue de l'Ecole-Polytechnique, 75005 Paris, France; diffusion.harmattan@wanadoo.fr; www.librairieharmattan.com

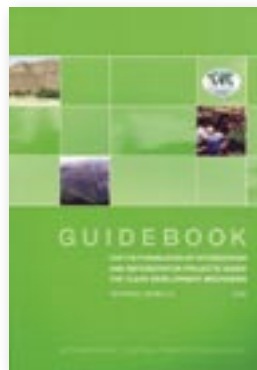


This report derives from the implementation of ITTO Council Decision 10(XXXII) on the promotion of sustainable forest management in the Congo Basin. With 35 contributors as well as input from 20 national institutions in Central Africa, this volume focuses on promoting SFM in the Congo Basin, but has relevance to SFM in tropical forests in general. The focus of the study is on forest concessions in five countries of the Congo Basin—Cameroon, Central

African Republic, Democratic Republic of Congo, Gabon and Republic of Congo. The volume is divided into three sections: (i) context, objectives and institutional reforms; (ii) regional and country monographs; and (iii) cross-cutting issues.

► **Pearson, T., Walker, S. and Brown, S. 2006. *Guidebook for the formulation of afforestation and reforestation projects under the Clean Development Mechanism*. ITTO, Yokohama, Japan. ISBN 4 902045 30 3.**

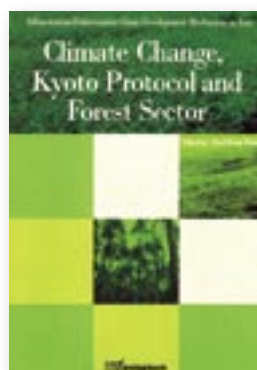
Available from: International Tropical Timber Organization, International Organizations Center, 5th Floor, Pacifico-Yokohama, 1-1-1, Minato-Mirai, Nishi-ku, Yokohama, 220-0012, Japan; Tel 81-45-223 1110; Fax 81-45-223 1111; itto@itto.or.jp; www.itto.or.jp



This guidebook, developed by Winrock International in collaboration with ITTO, is a result of ITTO PROJECT PD 359/05 REV.1 (F), 'Building capacity to develop and implement afforestation and reforestation projects under the Clean Development Mechanism (A/R CDM) of the Kyoto Protocol in the tropical forestry sector'. It gives an introduction to the Kyoto Protocol and CDM, and provides recommendations for how to develop afforestation and reforestation projects through a step-by-step practical guide, which outlines each of the steps in the CDM project cycle. Finally, the guidebook gives an overview of the global carbon market and the potential sources of financing for A/R CDM projects. It also includes as an annex the CDM Project Design Document form with comments by the guidebook authors and the A/R Working Group of the CDM Executive Board under the Kyoto Protocol.

► **Youn, Y. (ed) 2006. *Climate Change, Kyoto Protocol and Forest Sector*. Korean Studies Information Co., Ltd, Paju, Korea. ISBN 89 534 5534 0.**

Available from: Korean Studies Information Co., Ltd, Gyoha-Ep Munbal-Ri Paju Bookcity 526-2, Paju-Si, Gyunggi-Do, Korea; Tel 82-31-908 3181; Fax 82-31-908-3189; publish@kstudy.com; www.kstudy.com



This volume is a result of ITTO PROJECT PD 174/02 REV.1 (1), 'International workshop on Clean Development Mechanism - opportunities for the forest industry sector in the Asia-Pacific region'. The chapters in this book are a selection of papers presented during three international symposia and workshops organized by Seoul National University

Continued on page 30 ►

Post graduate diploma in managing for sustainable forestry in the tropics in Sarawak, Malaysia

Forest management is becoming increasingly complex as forest industries move towards sustainable management practices and the need to meet multiple objectives from their forestry activities. This is especially so in the tropics.

Forest and logging managers are now being called on to deal not only with profitable forest operations, but as well, to deal with difficult environmental and social issues.

As a result, developing the appropriate skills to successfully manage logging operations that meet the goals of sustainable tropical forestry, which includes social and environment elements, has become an important requirement for managers in the forest sector.

To meet the skill needs of logging managers, the Sarawak Timber Association and Lincoln University in New Zealand, with cooperation from the Sarawak Forestry Corporation and the Sarawak Forest Department, have developed a Post Graduate Diploma for managers in Sarawak's logging industry.

The Post Graduate Diploma consists of six subjects offered by Lincoln University. The subjects are taught using a mixture of Lincoln University lecturers and local Sarawak forestry specialists. The Post Graduate Diploma will take two years to complete, with three subjects being offered each year.

The six subjects that make up the Diploma cover a wide range of topics: Forestry in Sarawak; Forest Economics and Policy; Forest Harvesting and Planning; Forest Sustainability—Theory and Practice; Forest Utilisation; and Silviculture. The teaching format of the Post Graduate Diploma is designed around the needs of working managers. All subjects will be taught in Sarawak and offered as intensive block courses.

Contact: Hugh Bigsby, Associate Professor, Lincoln University, Canterbury, New Zealand; Tel 64-3-325 2811; Fax 64-3-325 3847; bigsbyh@lincoln.ac.nz or Barney Chan, General Manager, Sarawak Timber Association, Kuching, Malaysia; Tel 60-82-332 222; Fax 60-82-487 888; sta@sta.org.my

Online graduate certificate in sustainable natural resources

This 18-credit online certificate offered through Oregon State University, USA, is designed for all students, especially company, industry, or agency employees who desire more training in assessing and solving complex sustainability problems. Students complete an integrated course of study in a dynamic learning community under the mentorship of professionals, to design workable solutions for complex natural resource issues of local, state, regional, national and international importance.

Students should have a bachelor's degree in arts, humanities or science, and preferably have two years experience working in a natural resources-related field.

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.

► ... continued from page 29

and supported by ITTO, the Korea Forest Service and the Northeast Asian Forest Forum. The main sections of the book give a background on the United Nations Framework Convention on Climate Change, the Kyoto Protocol and its relevance to forestry; information on designing and implementing CDM forestry projects in developing countries; and case studies of five Asian countries (Bangladesh, Indonesia, Nepal, the Philippines and China).

► **Price, W., Rana, N. and Sample, V.A. (eds) 2006. Plantations and protected areas in sustainable forestry. Food Products Press, Binghamton, NY, USA. ISBN 978 1 56022 138 8.**

Available from: Food Products Press, 10 Alice Street, Binghamton, NY 13904 USA; 1-607-722 5857; orders@haworthpress.com; www.haworthpress.com

Certificate overview and benefits:

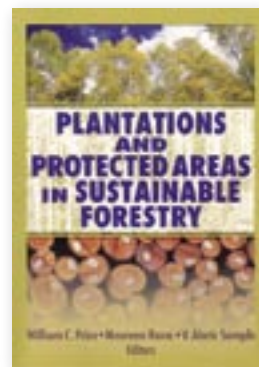
- enhance leadership skills and scientific expertise to meet the global demand for effective sustainable natural resource management;
- earn 18 graduate credits in integrated, diverse disciplines, including forestry, sociology, economics, ecology and philosophy;
- engage and network with university instructors, scientists and natural resource professionals;
- while completing coursework and under the guidance of OSU faculty, design and complete a capstone project that addresses a specific sustainability problem unique to your region or organization;
- work with an assigned mentor throughout the certificate program; and
- enjoy the flexibility of online delivery—study at times that fit your work schedule and personal life

Contact: Steve Radosevich, Professor and Program Director, Graduate Certificate in Sustainable Natural Resources, Department of Forest Science, Oregon State University; Steve.Radosevich@oregonstate.edu; campus.oregonstate.edu/online-degrees/graduate/sustainability

Erasmus Mundus Masters Course in Sustainable Tropical Forestry (SUTROFOR)

This MSc course is a two-year integrated program aimed at qualifying graduates to deal with the huge challenges in contemporary tropical forestry. The SUTROFOR Course is offered by a consortium of five European universities: (i) The Royal Veterinary and Agricultural University, Centre for Forest, Landscape and Planning, Copenhagen, Denmark, (ii) University of Wales, School of Agricultural and Forest Sciences, Bangor, Wales, UK, (iii) Dresden University of Technology, Institute of International Forestry and Forest Products, Tharandt, Germany, (iv) Institute of Forestry, Agricultural and Environmental Engineering, Training and Research Group 'Environmental Management of Ecosystems & Tropical Forests', Montpellier, France, and (v) University of Padova, College of Agriculture, Padova, Italy.

The Course consists of a first study year at one of three institutions (Bangor, Copenhagen, Dresden) and a specialising second study year with different topics offered by each of the five institutions. The students are required to spend the second year at a different university than the first one. Consortium fees per year are €4500 for EU/EEA-EFTA students and €8000 for other students. Around 20–30 Erasmus Mundus scholarships (€21 000 per year per student) are expected to be available for other students. Non-EU/EEA-EFTA students must submit applications no later than 1 February 2007. EU/EEA-EFTA students must apply no later than 17 August 2007. The next academic year starts around 1 September 2007 (depending on first year institution). The application form and more detailed information are available at www.sutrofor.net.



The chapters in this book reflect the discussion that took place during a two-day symposium convened by the Pinchot Institute, which explored the potential for a broader consensus on forest management in the US and discussed the continuous evolution of forestry concepts to fit changing needs and reflect new scientific knowledge. Also published simultaneously in the *Journal of sustainable forestry* (Vol 21, No 4, 2005), this volume explores several timely topics, including: the integration of protected areas, plantations and certification; the positive and negative socio-economic impacts on communities located near intensively managed plantations; and the mitigation of environmental and social impacts of intensive plantation forestry.

▶ 26–27 January 2007. **9th International Wildlife Law Conference.** Stetson University College of Law, Gulfport, Florida, USA. **Contact:** Wil Burns; Tel 1-650-281 9126; Fax 1-510-217 7060; jwlp@internationalwildlifelaw.org; www.internationalwildlifelaw.org/programs2.shtml

▶ 13–15 February 2007. **3rd Forest Vegetation Simulator Conference.** Fort Collins, USA. **Contact:** Robert Havis; rhavis@fs.fed.us; www.fs.fed.us/fmcs/fvs/fvs_conference.shtml

▶ 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

▶ 26–27 February 2007. **International Seminar on the Promotion of Measures Against Illegal Logging.** Tokyo, Japan. **Contact:** Takashi Fujiwara, The Council for Tackling Illegal Logging Issues, Nagatacho Bldg. 6F, 2-4-3 Nagatacho, Chiyoda-ku, Tokyo, Japan, 100-0014; Tel 81-3-3580 3215; Fax 81-3-3580 3226; info@goho-wood.jp

▶ 26 February–2 March 2007. **CSD-15 Intergovernmental Preparatory Meeting.** New York, USA. **Contact:** Division for Sustainable Development, Department of Economic and Social Affairs; Tel 1-212-963 8102; Fax 1-212-963 4260; dsd@un.org; www.un.org/esa/sustdev/csd/policy.htm

▶ 2–3 March 2007. **Financing of Forest Conservation: Payments for Environmental Services in the Tropics.** New Haven, USA. **Contact:** Yale ISTF Conference, c/o Tropical Resource Institute, Yale School of Forestry and Environmental Studies, 210 Prospect Street, New Haven, CT 06511 USA; istf@yale.edu

▶ 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

▶ 5–6 March 2007. **International Experts Meeting on Illegal Logging: Possible Way Forward towards More Sustainable Forest Management.** Tokyo, Japan. **Contact:** Yuko Yaguchi or Yukihiko Takeya, Global Environment Division, Ministry of Foreign Affairs; Tel 81-3-5501 8245; Fax 81-3-5501 8244; yuko.yaguchi@mofa.go.jp or yukihiro.takeya@mofa.go.jp

▶ 12–16 March 2007. **18th Session of the FAO Committee on Forestry.** Rome, Italy. **Contact:** Douglas Kneeland, FAO; douglas.kneeland@fao.org; www.fao.org/forestry/site/2962/en/

▶ 12–21 March 2007. **5th Session of the Committee for the Review of the UN Convention to Combat Desertification (CRIC-5).** Buenos Aires, Argentina. **Contact:** UNCCD Secretariat; Tel 49-228-815 2800; Fax 49-228-815 2898; secretariat@unccd.int; www.unccd.int

▶ 22–23 March 2007. **International Congress on Pedagogic Work in Forests.** Gmunden, Austria. **Contact:** Albert Botka, Federal Research and Training Centre for Forests; Tel 43-664 92614 85; Fax 43-7612 64419 34; albert.botka@bfw.gv.at; bfw.ac.at/rz/bfwcms.web?dok=5927

▶ 28–30 March 2007. **IWPA's 51st Annual Convention: World of Wood.** San Diego, USA. **Contact:** International Wood Products Association; Tel 1-877-332 5185; Fax 1-877-332 5186; iwpa@letsmeet.net; www.iwpa.org/convention.asp

▶ 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

▶ 18–20 April 2007. **Forest Research Management in an Era of Globalization.** Washington DC, USA. **Contact:** Konstantin von Teuffel; Tel 49-761-4018 100; Fax 49-761-4018 355; Konstantin.teuffel@forst.bwl.de;

www.iufro.org/science/divisions/division-6/60000/60600/activities/

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

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

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

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

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

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

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

▶ June 2007 (dates TBA). **International Conference on**

Forests and Forest Industries Managed by Indigenous and Other Local Communities. Acre, Brazil. **Contact:** ITTO Secretariat, Forest Industry Division; Tel 81-45-223 1110; Fax 81-45-223 1111; fi@itto.or.jp; www.itto.or.jp

▶ 3–7 June 2007. **Growing Forest Values. Combined Conference of the Institute of Foresters of Australia and the New Zealand Institute of Forestry.** Coffs Harbour, Australia. **Contact:** Marilyn, 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

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

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

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

▶ 2–6 July 2007. **CBD SBSTTA-12.** Paris, France. **Contact:** CBD Secretariat;

Tel 1-514-288 2220; Fax 1-514-288 6588; secretariat@biodiv.org; www.biodiv.org/meetings/default.shtml

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

▶ 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

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

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

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

▶ 27 October–2 November 2007. **IUFRO – All Division 5 Conference.** Taipei, Taiwan. **Contact:** Susan Shiau, Local Conference Organizer, 53 Nan Hai Road, Taipei 10066, Taiwan; Tel 886-2-2314-7905; Fax 886-2-2389-0318; susanshiau@tfri.gov.tw; www.alldiviufro2007.org.tw/

Vacancy announcements

Executive Director of ITTO

The International Tropical Timber Organization (ITTO), a commodity organization headquartered in Yokohama, Japan is in the process of appointing a new Executive Director. The ITTO mission is to facilitate discussion, consultation and international cooperation on issues relating to the international trade and utilization of tropical timber and the sustainable management of its resource base.

The Executive Director is the chief administrative officer of the International Tropical Timber Organization and is responsible to the International Tropical Timber Council for the administration and operation of the International Tropical Timber Agreement, 1994, in accordance with decisions of the Council.

Candidates with the following qualifications may apply:

1. Professional experience

- i) **Managerial experience:** a proven track record in managing programs, staff and finances preferably in matters relevant to the work of the ITTO*;
- ii) **International experience:** previous governmental work and experience in dealing with international organizations.

2. Background

Advanced degree, preferably in matters relevant to the work of the ITTO.

3. Language

Proven ability in both oral and written communication in one or preferably more of the working languages (English, French and Spanish) of the ITTO.

4. Nationality

Candidates should be nationals of ITTO Member countries and should be endorsed by their respective governments. Only one candidate per country can be endorsed.

**Bearing in mind the mission of the Organization, the ability to seek additional financial resources is an advantage, although it is not a pre-requisite for qualification of candidates.*

Salary and emoluments

Salary is equivalent to that of an Assistant Secretary General (ASG) in the scale of the United Nations, including benefits such as removal expenses, home leave travel every 24 months, children's education grant, rental subsidies, etc.

Any national of an ITTO Member country (see list below) may apply. Interested persons must submit their applications for ITTO consideration accompanied by a letter of formal endorsement from the Government of their respective countries. A list of ITTO contact points in member countries can be obtained upon request from the ITTO Secretariat at:

International Tropical Timber Organization (ITTO)
International Organizations Center, 5th Floor
Pacifico-Yokohama, 1-1-1, Minato-Mirai
Nishi-ku, Yokohama, Japan 220-0012
Tel 81-45-223 1110
Fax 81-45-223 1111
Email itto@itto.or.jp

Applicants should seek Government endorsement by 16 February 2007. Government endorsed applications should be received at ITTO headquarters by 28 February 2007.

The following positions are being re-advertised:

Statistician

Level (Grade): P4/P5**

Duty station: Yokohama, Japan

Duration of assignment: Fixed term of two years (renewable)

Duties and responsibilities: under the direction of the Assistant Director of Economic Information and Market Intelligence, the Statistician will be responsible for the Organization's data collection, analysis, dissemination and training activities, with the objective of helping the Organization and its members meet the information sharing objectives enshrined in the International Tropical Timber Agreement. The Statistician will also be responsible for the preparation and publication of the ITTO *Review and Assessment of the World Timber Situation*.

Qualifications – essential: the applicant must be a national of an ITTO Member Country; possess a university degree in forest economics/statistics or a related field, preferably with post-graduate qualifications; have more than ten years of relevant professional experience, including in various aspects of tropical forestry economics; have a high level of computer and report-writing skills; be fluent in spoken and written English (knowledge of French and/or Spanish advantageous) and possess demonstrated ability to analyse figures and publish material to a high standard of excellence.

Qualifications – desirable: have interest in global environment, international forestry, conservation and development issues; have working experience in an international organization and have knowledge of web-based data systems.

***The Executive Director reserves the right to make this appointment at a lower level than advertised*

Salary

ITTO offers salaries and allowances based generally on the United Nations system. Appointments are subject to the Staff Regulations and Rules of the Organization.

Applications

United Nations Personal History form (form P.11) with a letter of interest indicating the position you are applying for should be sent to: The Executive Director, International Tropical Timber Organization (ITTO), International Organizations Center, 5th Floor, Pacifico-Yokohama, 1-1-1, Minato-Mirai, Nishi-ku, Yokohama, 220-0012 Japan; Tel 81-45-223 1110; Fax 81-45-223 1111; itto@itto.or.jp; more details are available at <http://www.itto.or.jp>

Systems/Market Analyst

Level (Grade): P3

Duty station: Yokohama, Japan

Duration of assignment: Fixed term of two years (renewable)

Duties and responsibilities: under the direction of the Assistant Director of Economic Information and Market Intelligence, the Systems/Market Analyst will assist in developing and maintaining ITTO's capabilities for compiling, collating, analyzing and publishing information of relevance to tropical forest products trade and markets. Specific responsibilities include: contributing to the preparation and further development of the ITTO's *Review and Assessment of the World Timber Situation*; maintaining and modifying systems and applications to assemble an integrated data base for forest products statistical and market analysis; documenting all programs developed or modified and contributing to the strengthening of ITTO's in-house capability in Economic Information and Market Intelligence; carrying out ad hoc analysis and data retrieval on request; undertaking certain tasks related to project activities and performing other duties as assigned from time to time.

Qualifications: the applicant must be a national of an ITTO Member Country; possess university degree or equivalent in forestry or a related field, preferably with post-graduate qualifications; have knowledge of forest products trade and markets and standard PC software (eg. Word, Excel, Access, PowerPoint, Visual Basic); have at least five years professional experience, including in positions involving systems and/or market analysis; be familiar with development/use of web-based data systems; have interest in and knowledge of tropical forestry issues; and be fluent in English (working knowledge of French and/or Spanish advantageous).

Member countries of ITTO

Australia, Austria, Belgium/Luxembourg, Bolivia, Brazil, Cambodia, Cameroon, Canada, Central African Republic, China, Colombia, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Denmark, Ecuador, Egypt, European Community, Fiji, Finland, France, Gabon, Germany, Ghana, Greece, Guatemala, Guyana, Honduras, India, Indonesia, Ireland, Italy, Japan, Liberia, Malaysia, Mexico, Myanmar, Nepal, Netherlands, New Zealand, Nigeria, Norway, Panama, Papua New Guinea, Peru, Philippines, Portugal, Republic of Korea, Spain, Suriname, Sweden, Switzerland, Thailand, Togo, Trinidad & Tobago, United Kingdom, United States of America, Vanuatu and Venezuela.

