

# ITTO Tropical Forest UPDATE

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



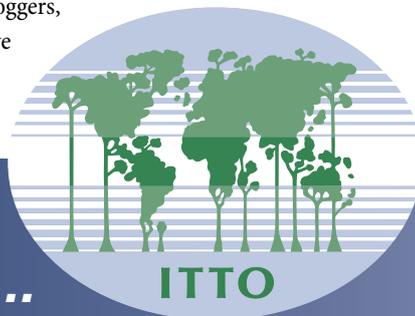
## How to win their trust

**T**RUST is a rare and precious resource, tough to win, easy to lose and difficult to give. It has a pretty low currency in these restive times, many of us not daring to trust our politicians, our generals, our accountants or even, sometimes, our neighbours. Can we trust our foresters?

In this edition of the *TFU* we present several articles that show how to encourage an answer of yes to that question. Mario Loayza (page 3) describes in some detail the process by which an ITTO project is gaining trust among indigenous Ashaninka communities in the Peruvian Amazon.

The Ashaninka, he writes, "are a very peaceable but highly suspicious people; therefore, it is best to establish a horizontal or participatory relationship". Project officers are long-term residents in the communities, where they "have become friends and partners and a trusted link to the outside world".

The forests in which the Ashaninka live is subject to intense logging activity. In many cases, the loggers, known as *aguaneros*, have gained illegal access to the resource by developing



**Inside** ▶ *indigenous communities and forestry*  
▶ *small-enterprise training* ▶ *ecosystem services ...*

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**Cover image** Ashaninka villagers in the Peruvian Amazon.  
Photo: R. Guevara

strong relationships with community leaders, and they too have viewed the project with suspicion. According to Loayza, “At the beginning the aguaneros believed the project was against them, even those who were dealing more openly with the communities. This was not true: the aguaneros provide a link to the market and are therefore an essential partner in the achievement of sustainable forest management”. The project has encouraged aguaneros to become involved in the process of legalising timber production in the region, which requires the development of management plans; this is being done, with assistance from the project, in a way that allows the communities themselves to take an increasingly central role.

Peltonen and Leppänen (page 7) bring to our attention another relationship where trust-building is often needed: that between forestry training institutions and small-to-medium-sized enterprises (SMEs). In Honduras, such SMEs viewed the National School of Forestry Sciences (ESNACIFOR) as a competitor because it operates its own sawmills and carpentry shops and owns 4000 hectares of forest; in any case, its courses were insufficiently oriented to the needs of small business to be attractive to them. With the help of an ITTO project, ESNACIFOR has started to break down the barriers between it and small-scale entrepreneurs, offering training that is more relevant to the sector and more flexible in its structure, and facilitating the creation of a cooperative, among other things.

The project also helped a similar process of trust-building between the Wood Industries Training Centre and local entrepreneurs in Ghana. At the start of the project, entrepreneurs were distrustful of the centre and hesitant about formal training; by its completion, they were requesting a continuation of the program.

Trust is something that must be earned, and the best way to earn it is through consistent, honest and transparent behaviour. This is one reason why it is at such a premium in the forestry sector—transparency has rarely been a strong point—and also why it is so important. Forestry is a long process, which increasingly is conducted on the

basis of negotiations among a colourful crowd of stakeholders. Such negotiations will produce best results in an atmosphere of mutual respect and trust, which can take years to establish.

In addition to time and patience, agencies and development projects can try other things: Nguingiri (page 32), for example, recommends the use of a mediator during negotiations over forest management plans. Perhaps more importantly, he also suggests that local people be intimately involved in preparatory work (such as surveys, inventories, etc) for the development of management plans, because this will help prepare them for subsequent negotiations—and provide an opportunity for relationship-building.

Trust is needed at the international level as well. As this edition of the newsletter goes to press, the negotiations for a successor agreement to the International Tropical Timber Agreement, 1994 are about to get under way. A decade ago, at the completion of negotiations for the 1994 agreement, one delegate (the UK’s Andrew Bennett) remarked in the *TFU* (Vol 5 No 3) that the negotiation process had “opened some rifts and created some tensions in the Organization. The last session [of negotiations] was particularly bruising and left a lot of people feeling unhappy. We must rebuild some bridges; we’ve got to strengthen the consensus and learn to trust each other again”.

Most delegates would agree that this trust has indeed been rebuilt over the last few years; Council sessions are notable for both their harmony and the way they have carried forward the Organization’s bold agenda.

This bodes well for the negotiations, but it won’t be enough on its own. To meet the challenges of the future, ITTO will need to be stronger and more creative and dynamic than ever before. The negotiators face a tough job: to fashion such an agreement—which will require some innovative thinking—without destroying the bond of trust that its members have established.

**Alastair Sarre**

**Indigenous communities in the Peruvian Amazon can be empowered to pursue their own concepts of sustainable development**

by **Mario Loayza Villegas**

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**High value:** Ashaninka women, members of a mothers' association, examine a cedar (*Cedrela odorata*) seedling produced in their community nursery. Photo: R. Guevara

**T**HIS REPORT is based on the experience gained in working with seven indigenous communities of the Ashaninka ethnic group living mostly along riverbanks in the Pichis River Valley in the Central Rainforest Region of Peru.

Deforestation has been increasing in the valley as the agricultural frontier expands on lands not always suitable for agriculture. Colonisation by landless, immigrant farmers and the establishment of settlements close to roads and ports have had major effects on traditional communities and their economies. These new population centres are the targets of intermediary trading in all sorts of (legal and illegal) goods and services. Such intermediaries buy timber and other forest products, fish and domestic animals, sometimes take part in international drug trafficking, and sell products from other regions.

*These loggers use highly selective methods, extracting only the best trees, and their logging techniques cause a high degree of damage to the soil and remaining vegetation ... The truth is that poverty forces the indigenous communities to allow and even encourage these practices*

Timber loggers, known locally as *aguaneros*, first harvested all available stocks of mahogany (*Swietenia macrophylla*, known locally as *aguano*) in the valley before turning to cedar (*Cedrela odorata*). More recently, they have extracted *ishpingo* (*Amburana cearensis*) and are currently logging

the last few *tornillo* (*Cedrelinga catenaeformis*) trees in the area. These loggers use highly selective methods, extracting only the best trees, and their logging techniques cause a high degree of damage to the soil and remaining vegetation.

The truth is that poverty forces the indigenous communities to allow and even encourage these practices. It is a vicious circle in which human need and environmental degradation feed each other. To escape this trap the communities need to acquire the technical capacity to take control of their forest resources and, for this, external assistance can help—and may indeed be essential.

To this end, ITTO PROJECT PD 14/98 REV.1 (F): 'Sustainable use and reforestation of Amazon forests by indigenous communities' was initiated in June 2002 with the financial support of the Common Fund for Commodities; it aims to integrate traditional indigenous forest practice with modern systems of production to capture more of the value of forest use at the local level and to maintain the integrity of the forest ecosystem. The project is a follow-up to an earlier ITTO project (PD 16/94 REV.1(F)), which worked mostly with the community in El Milagro (see *TFU* 6/4 for a report on this project). The current project was developed at the request of the indigenous communities in the region, who are now working with staff at EDMAR (Ecodesarrollo, Medio Ambiente y Reforestacion)—a non-profit, non-governmental organisation that is the official implementing agency of the project (in cooperation with Peru's National



**Sheltered:** families typically live in dwellings such as this in the Divisoria Ashaninka community.  
Photo: R. Guevara

Institute for Natural Resources—INRENA—to incorporate traditional economic activities into the framework of a sustainable forest management plan.

For this process of change to take place, the families must make themselves available to the project so that they can be trained in aspects of forest management, processing and marketing. There is a risk, however, that this will actually increase household poverty in the short term because the selected family members will not be able to perform their usual productive functions; in a subsistence economy, a training program of this nature would undoubtedly become increasingly difficult and its objectives unattainable. Thus, the project includes an economic incentive program promoting reforestation with high-value species and the introduction of agroforestry techniques to compensate participating families for the time invested in training.

### **The start-up environment**

Towards the end of the last decade, in a pre-election period, the incumbent national government initiated a number of projects to introduce cattle-raising activities in Amazonian communities for which there was only one selection criterion: the availability of land. Undoubtedly, the main forest 'predator' in the Pichis River Valley during that decade was the Pichis Palcazu Special Project of the Ministry of Agriculture, which promoted a change in land-use from forests to pasturelands along the stretch of road serving the project's area of influence.

The native communities still wish to bring cattle-raising to their territories. Indeed, this is only prevented by a lack of financing, as the above-mentioned program is no longer in force. However, cattle-raising is not always an appropriate land-use in the area: pasturelands have recently been established on lands that should be used for agricultural crops, for example, and even along riverbanks. Moreover, cattle-raising has not always led to an improvement in the farmers' economic circumstances: cattle-raising fosters a relatively low level of employment in the field, except during establishment, and requires expensive technicians and technical assistance from outside.

### **The welfare culture**

Another negative factor hindering the promotion of sustainable forest management was the welfare culture that had taken root among the communities due to government efforts during the election period in the late 1990s. This was strongest among those communities more closely linked to the western Peruvian economy, to the point that some community members thought that the purpose of the project was to solve everyday problems and that no local counterpart contribution was required. This flawed understanding of the concept of a development project is still firmly entrenched in the minds of some community leaders, some of whom attempt to maintain or recover influence in the community and the benefits associated with community leadership by way of the administration of project assets and resources. Thus, project staff must continually stress the real purpose of the project: to facilitate a process by which the communities will find their own solutions to the planned use of their communal lands, including forests, and will maximise the benefits of harvesting the valuable products available from these resources.

### **Political climate**

The political climate prevailing at the beginning of the project was another important factor that to a certain extent hampered the promotion of sustainable forest management among the communities. The Ashaninka Peoples' Association of Pichis (Asociación de Nacionalidades Asháninkas del Pichis—ANAP) had committed its support to local and regional authorities for the regional and municipal elections of the Puerto Bermudez district. The then incumbent mayor of the district wanted to be re-elected; he was one of ANAP's leaders but acted without the endorsement of the Association. His campaigners and supporters were looking for allies for their political campaign and used project discussions—the purpose of which was to coordinate forest management planning and participation—to promote their own electoral campaigns. This placed a certain strain on relationships. The situation is now being redressed through meetings between the seven participating Ashaninka communities and their leadership and through the participation of EDMAR in the ANAP Congress.

### **Illegal forest logging**

According to Peru's Forestry Law, all logging permits must be supported by a forest management plan approved by INRENA. Even though none of the 108 Ashaninka communities in the Pichis River Valley has an approved forest management plan, trucks transporting timber along the roads can be seen on a daily basis.

Loggers negotiate business deals for the sale of logs or standing trees with community leaders or directly with the heads of families whose farms contain desirable trees. In either case, the price paid is insignificant. Moreover, loggers have various ways of reducing the payment of even these small amounts. For example, more timber than the agreed

(and paid-for) volume may be extracted—because the communities do not have the skills to measure the volume of timber leaving their lands. Moreover, loggers commonly penalise the communities or their members by discarding felled trees with defects or by reducing the amount paid per board foot due to defects in the timber; they also often insist on paying the same amount per board foot of timber for all species, including high-value species that are now rare.

There have also been cases of collusion between timber loggers and community leaders in illegal logging activities. Timber loggers have been prepared to make advance payments for future extractions and are usually very kind to community leaders. Contracts signed without the approval of the community have had an impact on the effective implementation of the project.

### **From friendship to co-existence**

The Ashaninka are a very peaceable but highly suspicious people; therefore, it is best to establish a horizontal or participatory relationship so that the communities can identify with the objectives of the proposed action and can feel that they are conducting the activities for their own benefit. Ideally they will perceive outsiders as supporters who are promoting the interests of the community.

At the beginning of the project, the problem of distrust was quite clear in five of the seven communities. EDMAR had worked with the other two for some years, which had enabled its staff to understand traditional values and customs and also to observe changes in some of these values and customs among the younger generation. As part of the trust-building exercise, participatory workshops on forest development planning were conducted in each of the seven communities. It was assumed that everybody had the right to influence the decisions affecting them. Therefore, if a sustainable forest management project was to be implemented, there should be a forum where all stakeholders could have the opportunity to negotiate their own vision of the plan and the commitments needed to achieve the objectives.

These workshops highlighted the knowledge of the communities regarding the forest, the socioeconomic issues affecting them, their own weaknesses in terms of forest management, and the potential benefits of their actions for their children and grandchildren. The Ashaninka communities know their mountains very well, their paths, gullies and rivers. They know their *purmas* (or secondary forests), the ores where forest animals get their salted soil, their bathing and watering places, the seasons for fruit collection, the times for resin tapping and the best days for bamboo and tree felling. They know which herbs will cure their diseases or heal their wounds, and how to counteract the effects of the poisons of animals that share their environment. During the course of the project they realised that they knew just as much or even more about forest management than the foresters assisting them; they



**Beginnings of a plan:** community and project workers plan an inventory of the community forestry in the Ashaninka community of Belén. This forest comprises more than 7000 hectares of mostly unlogged forest. *Photo: R. Guevara*

also saw that the success of the project depended on them and that they should therefore make it their own.

### **The role of facilitators**

Participatory forest management planning is a complex but viable process if it is under the responsibility of a mestizo technician who lives and works side by side with the local people in their environment, and not of a visiting technician, who has to say goodbye soon after his arrival at the community because he is needed in the city. A technician is more likely to succeed in facilitating a participatory process if he knows many of the community's children and elders by name even if they do not work with him and if he has earned the trust of community members so that they feel free to express their knowledge and expectations.

*A technician is more likely to succeed in facilitating a participatory process if he knows many of the community's children and elders by name even if they do not work with him and if he has earned the trust of community members*

EDMAR's officers live with the communities, leaving to visit their families in the city once a month for a week. They work with the willing members of the communities, who increasingly comprise women and youth. They talk constantly about forest management and reforestation and share the people's aspirations and problems. As most of the community elders and women do not speak Spanish well, communication must be done in the Ashaninka language. The extent to which project officers master this language is an essential factor in determining the success of the project. Now, they are no longer strangers. They have become friends and partners, and a trusted link to the outside world and the project's resources.

### **The organisation of women**

The project identified an acute weakness in the organisation of community women, as there was only the Mothers' Club of Mankaretoiteri in the community of El Milagro; none of the other communities had managed to achieve any level of organisation among women. Women in all of

the communities have expressed a need to have their own mothers' clubs, but they are limited in this endeavour because very few of them have the minimum level of knowledge needed to secure legal recognition for their organisation. EDMAR officers are providing the necessary assistance and are participating in the formulation of a project proposal to promote ecotourism—the management of which would be a major task for mothers' groups—that would complement and strengthen the sustainable management of forests in the territories of these indigenous communities.

### **Planning the future**

The main centres for attracting the participation of young people are the two schools in the communities of El Milagro and Belén. The former, attended by young students from El Milagro and neighbouring communities, has already seen the graduation of its first high-school class, while the latter, which opened only in 2002 for basic secondary-level studies, has faced a number of problems that led to the dropout of 16 of its 21 registered students.

A number of teacher and student meetings were held at the El Milagro school to discuss the development of school activities, a process that will hopefully lead to changes such as the incorporation of forestry and forest management into the curriculum. Teachers and students have also indicated a desire for the early establishment of a carpentry workshop that was originally envisaged for a later stage of the project; this would make it possible to apply to the Ministry of Education for the assignment of a teacher in carpentry and joinery while project activities are still under way.

The work with the young people of the communities has exceeded all expectations. At present, the most able 45 young men and women as selected by their communities are actively involved in project activities; of these, at least 21 have the potential to eventually be entrusted with the implementation of forest management plans in their respective communities. This number will undoubtedly increase in the next few months and years, but for now it is encouraging to see that there is a core of potential community leaders that link their development to the future of the forests.

### **Legalising logging**

The poor deals offered by aguaneros to the Ashaninka people have been discussed at meetings held with the seven participating communities and steps have been taken to redress the situation. Each community now has people trained in scaling by the project. A minimum price of US\$0.065/bd ft for standing timber and US\$0.075/bd ft for precious species such as cedar, mahogany, ishpingo and tornillo has been set. Two of the communities have agreed not to sell their timber at all until they have obtained their forest logging permits.

In one case, a young man from the community was commissioned to visit the families to inform them of the implications of the project for logging contracts. Once

aware of the situation, the community in question replaced its leaders, who were colluding with aguaneros in logging agreements, and only agreed to honour the advance payments already received with timber from its forest.

At the beginning the aguaneros believed the project was against them, even those who were dealing more openly with the communities. This was not true; the aguaneros provide a link to the market and are therefore an essential partner in the achievement of sustainable forest management. Many aguaneros have been brought into the process initiated by the project: they now know that the development and approval of management plans will greatly facilitate their trade, making it legal and therefore reducing the need to circumvent enforcement efforts or to attempt to bribe authorities for the transport of their timber.

### **The changing community landscape**

In the past, many in the communities have seen the forest as a free asset waiting to be harvested, and they didn't realise their resources were being depleted and impoverished. Even now the oldest members of the communities believe that if a tree can be sold then it should be sold, regardless of where it is located or whether it is the last specimen remaining in the area.

Young people, on the other hand, are aware that the forests they will one day inherit are being depleted and their destruction must be arrested. They seek changes that will enable them to participate in the developments that are constantly taking place in the world around them. They know that the reckless depletion of natural resources is not in their long-term interests. Thus, they encourage the adult members of their communities to introduce changes in their routines, and this can be used by the project to create a sustainable forest management culture.

The curbing of illegal logging has been set by INRENA's local authorities as a short-term goal, and the project is helping in this. It can be achieved in cooperation with ANAP, if this organisation agrees to apply and enforce a policy to that effect among its member communities. This we consider to be quite likely, because many people in the communities are starting to realise that with each illegally logged tree they lose a little bit more of their territory, their culture, their landscape, their history and their future. Deforestation and forest degradation won't be stopped overnight, because the economic forces that are driving it are too powerful. Nor will the project achieve instant success in organising and training the communities; it will probably be many years before communities are able to claim genuine ownership of the process and to decide the role of sustainable forest management among the range of land-use options available to them. Nevertheless, putting effective community development processes in place will increase the ability of the communities to capture more of the value of their resources and to make their own informed choices on how those resources are used.

*Translated from the Spanish by Claudia Adan.*

# Enticing small operators out of the woodwork

**Gaining the trust of entrepreneurs is one of the main challenges facing training institutes in the forest and woodworking sectors**

**by Jorma Peltonen and Kari Leppänen**

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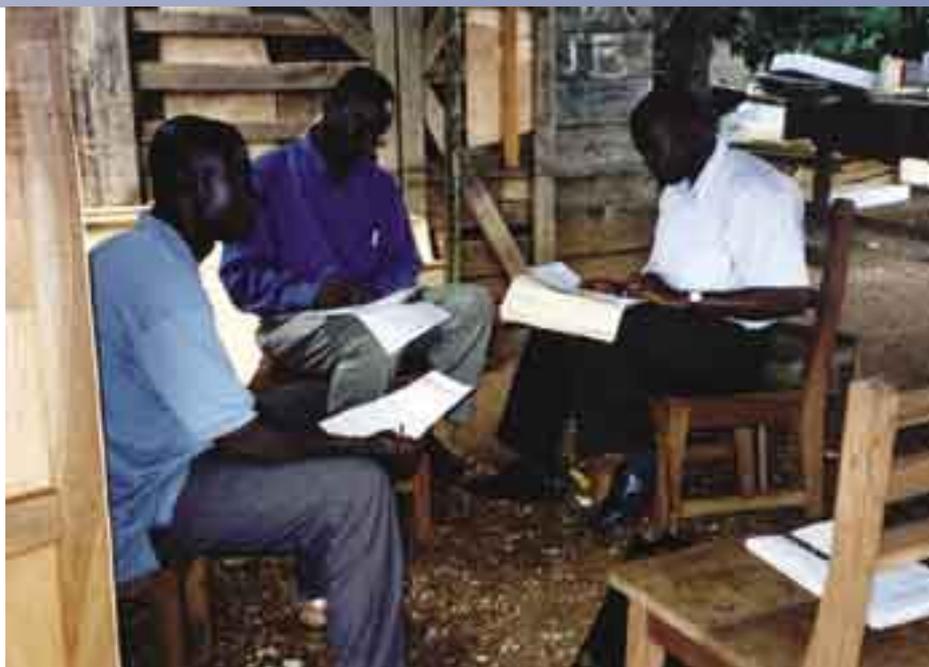
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ONE of the primary aims of ITTO's action program is to strengthen the capacity of government departments, the private sector and non-governmental and local organisations to manage the forests and the resources derived from them. Human resource development and institutional strengthening via training activities are therefore cross-cutting issues that facilitate progress in all areas of ITTO's work.

The ITTO project 'Capacity building in training in planning and management of forest industries in ITTO producer member countries' (PD 13/95 REV. 3 (1)), which was implemented by FTP International Ltd (now part of HCG Environment) based in Helsinki, was designed to help strengthen the capacities of training institutes in tropical countries in the planning and implementation of training for forest-industry companies. It had the following specific objectives:

- to develop the curricula of selected training institutes in ITTO producer member countries for ongoing training in the planning and management of appropriate forest industries;
- to improve the capacity of resource persons in participating ITTO producer member countries in the planning and management of appropriate forest industries and in the planning and management of training courses in these fields; and
- to produce the materials necessary for the implementation of training courses on the planning and management of appropriate forest industries.

The first phase of the project was implemented in 1998–99 and the second in two stages during 2000–2001 and 2003 (14+7 months). In the first phase, an inquiry was sent to forest industry training institutes in ITTO producer member countries. Those that responded were requested to prepare an institutional analysis of their own organisation and to make a training needs' assessment. Two orientation workshops were then organised: one in Honduras for Spanish-speaking countries (participants from Peru, Bolivia, Ecuador, Honduras, Colombia and Panama), and another in Malaysia for English-speaking countries (participants from Papua New Guinea, the Philippines, Fiji, Ghana, Indonesia, Malaysia and Thailand). Training was given on topics such as the management of forest industries, with special emphasis on small-to-medium-scale enterprise



**Survey:** instructors from the Wood Industries Training Centre collect data on small-to-medium-sized enterprises in Kumasi, Ghana. *Photo: J. Kiuru*

(SME) development, and project cycle management. During these workshops and with the support of project staff, trainees prepared their own project proposals on how they could organise and develop further training for the forest industry in their own countries. Based on the quality and appropriateness of these plans, two institutes were selected for further development: Universidad Nacional Agraria La Molina in Lima, Peru and the University of the Philippines in Los Baños, the Philippines.

In Peru, the project designed and implemented further training in the planning and management of SMEs for the furniture manufacturers of the Villa El Salvador industrial park in Lima. The training particularly emphasised aspects related to financial management, production planning, quality control, design and the marketing of SME furniture products.

In the Philippines, the aim was to develop the capacity of forest-based communities to establish SMEs in selected pilot sites in the Philippines. Emphasis was given particularly to the identification of appropriate business projects such as furniture manufacture and rattan processing, the assessment of the entrepreneurial capabilities of the communities, financial aspects, the development of business plans, the identification of markets, and the possibilities for operating in clusters.

The implementation of the Peru and Philippine projects was carried out as planned. However, neither of the national implementing agencies could find financing for the continuation of the activities at the national level and therefore weren't able to continue activities after the formal end of the project. The projects could not therefore be considered sustainable, and they had less impact than expected. This lesson influenced the development of plans for the project's next phase, and emphasis was given to



**Workers' workshop:** a group of entrepreneurs from Siguatepeque pose with ESNACIFOR instructors during a training exercise. *Photo: J. Peltonen*

actions that would help guarantee the continuation of the activities after the formal termination of the project.

### **Honduran and Ghanaian experiences**

In the project's second phase, national projects were selected in Honduras and Ghana. In Honduras, the project was centred in the National School of Forestry Sciences (Escuela Nacional de Ciencias Forestales—ESNACIFOR) in Siguatepeque and was titled 'Formación de los recursos humanos en planificación y gerencia de las industrias forestales de Honduras' ('Human resources capacity-building in planning and management of forest industries in Honduras'). In Ghana, a project titled 'Wood village for small-scale furniture makers in Kumasi, Ghana' was chosen, based at the Wood Industries Training Centre (WITC), an institution under the authority of the Ghana Forestry Commission. The creation of the wood village in Kumasi also benefited from another ITTO project (PD 46/96 REV.2 (1)).

In both the Honduran and Ghanaian projects, the aim was to support the formation of small-to-medium-scale forest-industry clusters to promote the collaboration of entrepreneurs. Both institutes were rather inexperienced in providing services for entrepreneurs and the whole exercise had to start by building trust and confidence between the training institutes and the entrepreneurs. The role of the team implementing ITTO PROJECT PD 13/95 REV. 3 (1) was to facilitate and advise the two institutes, provide them with adequate support for capacity-building (such as in curriculum development, the production of training materials, and training in pedagogical and technical skills), and monitor the implementation of the national projects.

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### **Honduras**

ESNACIFOR was established in 1969. In spite of its name, the school is truly international today: in recent years more than

half the students of its three-year 'dasonomo' or four-year forest engineer courses have come from outside Honduras, mainly from neighbouring Central American countries but also from the Caribbean (especially Dominican Republic), South America and even Africa. There has also been strong international participation in ESNACIFOR short-course training courses.

The international reputation of ESNACIFOR is due mainly to the practical approach it takes to forestry education and training, which is in strong contrast to most of the universities in the region. ESNACIFOR also enjoys extraordinary respect at the national level, indicated by the fact that it is portrayed on a Honduran bank note (the 100-lempira bill)—perhaps the only forestry school in the world to be thus featured. ESNACIFOR also plays an important role in the small town of Siguatepeque, its home base. For example, it participates actively in the environmental projects of the municipality and in its cultural life.

### **Creating the confidence**

There is, however, one group of the population in Siguatepeque that has not fully appreciated ESNACIFOR—the forestry entrepreneurs. As ESNACIFOR possesses both sawmills and carpentry workshops, and owns 4000 hectares of forest, many entrepreneurs have considered the school to be an (unfair) competitor. Moreover, entrepreneurs felt that the education and training provided by ESNACIFOR was not sufficiently business-oriented to serve their needs.

The tense relationship between the school and the entrepreneurs was illustrated by the fact that very few entrepreneurs participated in the project's early workshops. An indicator of distrust was that some of those who did participate did not want to sign the enrolment form; many entrepreneurs also had reservations about cooperating and sharing information with each other. Nevertheless, through the efforts of personnel at the ESNACIFOR training centre (Centro Integrado de Capacitación Forestal—CICAFOR) and with the assistance of project facilitators, these relationships improved significantly over the course of the project. In the last year of implementation, an increasing number of entrepreneurs participated in the training courses, and the training course evaluation feedback was very positive.

The other group focused on by the project was ECASUL, a cooperative of five forestry SMEs in San Pedro Sula. The members of ECASUL had had some unhappy experiences with project-driven cooperation in the past, and such cooperation was in decline at the start of the project.

### **Results**

In the final internal monitoring workshop of the project, the following results were listed:

- the establishment for the first time of formal cooperation among forest-industry SMEs with the creation of the cooperative COTRAMASIL, which at the

moment of establishment comprised 25 SMEs but was also open for new members;

- better quality of design and finish of the products of SMEs within COTRAMASIL due to the training received;
- the strengthening of cooperation among the SMEs in ECASUL through the construction of a solar drying kiln. Drying kilns are a very natural focus of increased cooperation because they encourage joint purchases of timber; this kiln was constructed with a simple design using local materials and the project and entrepreneurs shared the costs;
- better quality of SME products within ECASUL;
- the workplans for 2004 of both COTRAMASIL and ECASUL include the joint purchase of raw materials. In the case of timber this is a big step towards sustainable forest management, as many of the SMEs in Honduras using tropical hardwoods are presently operating with illegal timber;
- ESNACIFOR significantly improved its image as a provider of technical assistance and training for SMEs. The entrepreneurs now visit the school regularly in search of information and contacts, and some of them are putting their products on display there;
- ESNACIFOR instructors learned new skills and gained valuable experience and confidence in the training of entrepreneurs with very diverse educational backgrounds, including the entrepreneurs of San Pedro Sula, who are more demanding than their colleagues in Siguatepeque; and
- ESNACIFOR revised its programming to offer SME training courses outside official working hours. This is an indication of a positive change in attitude within the institution towards the servicing of clients.

## Ghana

Small-scale furniture manufacturers number about 6000 in Ghana, with the great bulk of them located in Kumasi; private family enterprises predominate in the industry. The skills needed in the furniture industry are usually learnt through apprenticeship, and workers with formal training are not very common.

### Cluster development

The formation and operation of cooperatives, or clusters, is becoming a key to building the technical and managerial capacity of micro-, small- and medium-scale furniture manufacturers in Ghana. This pilot project therefore set out to increase the capacity of WITC to offer training to entrepreneurs and entrepreneurial teams that would encourage the clustering of skills, products and marketing.

The development of the clusters took off in April 2000 with baseline studies conducted on existing SMEs. Of 57 companies surveyed, 24 satisfied the criteria for participation. Fourteen of these were selected to form two pilot clusters

of seven members each: the Furniture and Wood Products' Association of Ghana (FAWAG) Cluster and the Woodworkers' Cluster, both of which were inaugurated in June 2001.

WITC designed a detailed training course plan on the basis of a comprehensive training needs' assessment. Enterprises were found to suffer from a lack of both technical and marketing skills in areas such as lumber drying and preparation, finishing, furniture constructional techniques, designing and drawing, upholstery, quality control, costing and pricing, marketing and book-keeping, among others. These topics were addressed by the project via training courses planned and offered to the cluster member companies.

Like the Honduran project, a problem that WITC had first to overcome was distrust between the entrepreneurs and the school, and the doubtful and hesitant attitude of the industry towards formal training. Nevertheless, over the course of the project the relationship improved and the collaboration got better.

*This pilot project therefore set out to increase the capacity of WITC to offer training to entrepreneurs and entrepreneurial teams that would encourage the clustering of skills, products and marketing*

### Results

In the final internal monitoring workshop of the project the following results were listed:

- the capacity (skills, knowledge and attitudes) of WITC instructors had improved, as had internal communication between the staff. As a result, the WITC can now play its role more effectively within the Ghana Forestry Commission;
- cooperation between cluster members, trade associations and the WITC had improved;
- awareness of the concept of clustering had improved among the cluster members;
- the reputation of the WITC and its relationship with cluster members and other companies in the region had improved;
- the personnel of cluster member organisations were better skilled as a result of the training received. The



**Stitching a deal:** an upholsterer prepares coverings for furniture in Kumasi, Ghana. Photo: J. Kiuru



**Sunny perspective:** ESNACIFOR's Heidi Vides chats with a member of the San Pedro Sula cooperative next to a solar drying kiln under construction. *Photo: J. Peltonen*

staff morale of the cluster member companies had also improved as a result of the improved management practices adopted by enterprise management; and

- product quality had improved within participating woodworking enterprises.

The value of the WITC's work is demonstrated by the fact that beneficiary SMEs have requested a continuation of the project. As a result, the WITC has incorporated the necessary actions into its business plan, which has been endorsed by the Forestry Commission. The WITC is confident that the clusters will continue to develop and improve, because cluster members have shown their commitment to collaboration. Importantly, their attitude towards the training of their staff has changed, as illustrated by their greater readiness to send their staff for training.

### **Conclusions and recommendations**

The approach applied in the planning and implementation of ITTO PROJECT PD 13/95 REV. 3 (1) emphasised the role of the institute as the main actor in the project. This increased the commitment of institute staff and thus the sustainability of the project. Cooperation between the institute and the industry sector and within the industry sector (between entrepreneurs) has strengthened and both ESNACIFOR and WITC are confident that this cooperation will continue after project completion.

#### *From the beginning, the formation of clusters should emphasise the building of trust and confidence between the training institutes and the entrepreneurs*

From the beginning, the formation of clusters should emphasise the building of trust and confidence between the training institutes and the entrepreneurs. As fluent communication between the enterprises is crucial for the smooth functioning of the clusters, clusters should be formed on a local basis, and similarities in enterprise size and methods of functioning enable more active and operational cooperation. Criteria for the selection of enterprises for clusters and for participation in training should be established from the start. The approach of choosing the 'key enterprises' and letting them find other

suitable cluster members worked well in Honduras, strengthening cooperation and communication.

The project activities greatly assisted ESNACIFOR and WITC to establish and improve their relationship and reputation amongst the woodworking SMEs. The main reason was that the planning of the training activities within the two national projects was truly participatory and the SMEs therefore received exactly the type of technical assistance and training they needed. To gain the confidence of SMEs, it is essential that the objectives of institutions like ESNACIFOR and WITC in the provision of technical assistance and training are clear and realistic.

When actors that have operated individually in the past are taking their first steps in establishing cooperation, there is no way an outsider can rush the process: actions may be proposed but never imposed. The members of a group need time for discussions among themselves; it is best that even the invitations for the meetings and training events come from within the group itself.

When designing the training for cluster members it was found that questionnaires were not effective in identifying the needs of heterogeneous groups like small entrepreneurs. To gain a clear picture of training priorities, the matter has to be discussed in a plenary with the entrepreneurs.

The training institutes should emphasise the training needs of clients when planning the supply of services. Any institution intending to serve SMEs must show flexibility in the timing and duration of training courses, because a small entrepreneur may be in a situation in which he/she cannot afford to lose even one working day. Thus, the institutes should be ready to organise the training, for instance, in the evenings and on weekends. This requires the creation of a system that compensates the extra work for institute instructors.

**Tropical forests provide the planet with many valuable services. Are beneficiaries prepared to pay for them?**

**by Sara Scherr,  
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**At your service:** tropical forests are unequalled in their provision of biodiversity protection services. *Photo: Iwokrama International Centre for Rain Forest Conservation*

**T**HE many ecosystem services provided by forests—watershed protection, biodiversity conservation and carbon sequestration, for example (*see table*)—are gaining increasing attention from governments and the forest industry, as well as from private citizens. People are becoming aware of the dangers and costs of allowing forest services to be degraded or lost. Forest degradation and conversion can have local impacts, such as floods and landslides, as well as broader impacts, such as global climate change.

This growing awareness is drawing attention to the economic benefits of healthy forest ecosystems, benefits that until recently have often been taken for granted. Indeed, as human demands increase and natural resources become scarcer, those who bear the costs of degradation—such as downstream water utilities, local governments, private insurers and society as a whole—are exploring opportunities to reduce these costs.

For their part, forest owners are beginning to seek compensation for the costs of maintaining healthy forests. The legal tropical timber industry is searching for new ways to increase financial returns from their forests so as to remain viable enterprises. Some environmental groups hope that markets for ecosystem services will provide forestry with sufficient additional income to compete more effectively with alternative land-uses—such as soybean farms in the Brazilian Amazon or oil palm plantations in Malaysia—and to finance the large-scale restoration of degraded forest lands.

At a global scale, several recent reviews (eg Landell-Mills & Porras 2002) indicate that these payments for ecosystem services are nascent and still limited in scope and scale, but that they may have the potential to be scaled up to regional, river-basin or national levels with further development. Most of the activity to date to test such schemes has been in developed countries, where biophysical science tends to be stronger and legal frameworks and institutions exist that permit the development of more sophisticated markets.

A powerful case can be made, however, that the need for ecosystem service payments is strongest in developing countries, including in the tropics. Accordingly, producer countries are starting to investigate their interests and options in these markets. What is in it for tropical developing countries? Can they design and influence markets so that they can benefit fairly? Will these markets be a significant source of new financing—or will this pass as another fad, distracting from more fundamental obligations?

Industrialised-country governments are also beginning to assess their own interests and exposure. Will they be expected to finance the costs of protecting globally significant biodiversity? Will their industry remain competitive if producer country industry rights itself? Will they be expected to finance the costs of building legal and regulatory environments in developing countries to permit fair market trade?

Indigenous communities and other low-income forest people have their own interests and concerns. Will these markets be used as wedges to further alienate them from

their traditional lands? Or could perhaps these markets be a driver for increased tenure security and incomes?

The purpose of this article and the report on which it is based (Scherr et al. 2004) is to help policymakers assess these questions by providing a preliminary assessment of the status of markets for ecosystem services and their potential to contribute to tropical forest conservation. Data on these markets are difficult to attain, either because they are proprietary or because governments or intergovernmental organisations do not collect them. The analysis depends upon the limited available secondary literature and on information and materials provided by colleagues in the Katoomba Group, a network of global innovators in ecosystem service markets. A more substantive analysis will require an organised effort to collect new primary data.

*The trade in these product markets is booming, with medicinals derived from compounds originally found in forests worth tens of billions of US dollars a year alone; however, these benefits are rarely captured by forest peoples*

### Types of payment scheme

The many different types of market and payment schemes can be organised into four categories: (1) public payment schemes to private forest owners to maintain or enhance ecosystem services; (2) open trading under a regulatory cap or floor; (3) self-organised private deals; and (4) ecolabelling of forest or farm products, an indirect form of payment for ecosystem services. There are numerous examples of each type of scheme, which can be illustrated for the three main ecosystem services addressed here: watershed protection, biodiversity protection and carbon sequestration.

**Watershed protection services**—such as flow regulation, water quality, water supply and habitat protection—are well recognised and indeed are a primary motivation for

establishing many national parks and forests. Some 30% of the world's largest cities currently depend on forests for their water. Markets for watershed services are site- and user-specific and currently are limited to situations where the downstream beneficiaries such as hydroelectric power generators, irrigators, municipal water systems and industry are directly and significantly impacted by upstream land-use.

Public payment schemes predominate in scale (though not in number) for watershed protection

services; these payments can make a significant contribution to local incomes and provide sufficient incentives for maintaining forest cover. In Costa Rica, for example, landholders in critical watershed areas are paid between US\$30 and US\$50 per hectare per year, and similar levels of payment are planned in Mexico. In the US, government payments for ecosystem protection range from US\$25–US\$125 per hectare per year. Self-organised private deals appear to be limited—although information is largely proprietary and there has never been a full assessment of these types of transactions. Open trading schemes—such as wetland mitigation banking—are few, and limited primarily to developed countries.

The many different **biodiversity protection services**—such as habitat and species' conservation, genetic and chemical information, and ecosystem functions such as pollination—are increasingly recognised as critical to many economic sectors, such as commercial fisheries. Market mechanisms include land markets for high-biodiversity-value habitat, payments for private, non-consumptive uses such as ecotourism, tradable rights and credits within a regulatory cap on habitat conversion, and ecolabelled products such as shade-grown coffee, herbal medicines and other botanicals from natural forests. The trade in these product markets is booming, with medicinals derived from compounds originally found in forests worth tens of billions of US dollars a year alone; however, these benefits are rarely captured by forest peoples. Although the bioprospecting market is still evolving, it has not yet generated significant direct investment or payments to local people and other forest owners. A recent global survey found 72 cases of biodiversity markets in 33 countries, of which 63 were in 28 tropical countries. Over 70% of these markets were international. In the US alone, experts estimate that over US\$2 billion have been invested in easements for habitat conservation over the past several years.

Of all the forest ecosystem services, **carbon sequestration** has drawn arguably the greatest attention and enthusiasm in recent years. There is now scientific consensus that human activities have contributed to global warming and that forests play major roles in both overall global carbon emissions and the provision of sequestration and storage services. Market segments in which tropical forests can play a role include reforestation and afforestation within the Clean Development Mechanism (CDM) of the Kyoto Protocol (the global cap-and-trade scheme), a range of land-use options that are attractive to investors through non-Kyoto trading, and voluntary payments by emitters to achieve carbon neutrality. Given restrictions on forest carbon offsets and estimating a value of US\$10 per ton of carbon, the CDM is expected to raise at most US\$300 million per year for afforestation and reforestation in the first commitment period (2008–2012). Estimates of the dollar value of forest carbon trading vary widely and ultimately depend on the size of the market, which in turn depends on

### Forests at your service

Major functions performed by forest ecosystems

- Purification of air and water
- Regulation of water flow
- Detoxification and decomposition of wastes
- Generation and renewal of soil and soil fertility
- Pollination of crops and natural vegetation
- Control of agricultural pests
- Dispersal of seeds and translocation of nutrients
- Maintenance of biodiversity
- Partial climatic stabilisation
- Moderation of temperature extremes
- Windbreaks
- Support for diverse human cultures
- Aesthetic beauty and landscape enrichment

Source: Daily 1997

the final rules adopted under Kyoto, European trading rules and alternative schemes implemented by the us.

## Key findings

### Market characteristics

**The total value of direct ecosystem service payments in tropical countries is presently modest, but has grown dramatically over the past decade and is significant, particularly to low-income producers:** tropical ecosystem services are not yet commodities; rather, they behave as niche markets for products of special value to a narrow range of buyers.

**Markets for forest ecosystem services are expected to grow in both developed and developing countries over the next 20 years:** the potential for increased demand, and increased payment, for watershed services is immense. Water demand is projected to double, if not triple, over the next 50 years, and much of this growth will be in developing countries. Downstream users are learning that investments in watershed protection can be far more economical than investments in new treatment facilities. Growth in the carbon market could potentially be large but will depend on still unpredictable rules of international climate-change mitigation. Markets for ecolabelled products for export and for urban consumers in middle-income countries are likely to be the fastest-growing component of biodiversity markets.

**Governments play a critical role as the principal direct buyers of many ecosystem services, and catalysts for many private-sector direct payment schemes:** since many ecosystem services are public goods (*see box*), government intervention is usually required to make a market. This may entail directly paying for a service, establishing property rights, or establishing regulations that set caps and govern trading schemes. Since these markets are characterised by high transaction costs to link buyers and sellers and a lack of specialised market institutions, government intervention is usually required to assist in addressing these two major constraints to market development. Private buyers dominate indirect payments via certification schemes.

**Ecosystem service payments will in most cases cover only a modest—but potentially catalytic—share of the costs of good forest management:** prices for ecosystem services are generally not sufficient to justify forest conservation in areas where there are moderate to high opportunity costs for the land. However, evidence suggests that these payments can have a catalytic effect on forest establishment and management. Even modest payments, reliably paid over a number of years, can provide the increment to net income that makes forestry enterprises viable, justifying the restoration of degraded lands and enhancing the livelihoods of poor people.

### Strategic issues

Policymakers concerned with tropical forests are beginning to assess their strategic competitive positions in the markets

for ecosystem services. They are keen to understand if and when they should seek to compete in global markets, and what kinds of market approaches make sense in their own domestic contexts. Policymakers face a set of key issues when trying to adequately assess and develop these options:

*Water demand is projected to double, if not triple, over the next 50 years, and much of this growth will be in developing countries. Downstream users are learning that investments in watershed protection can be far more economical than investments in new treatment facilities*

- **property rights and national legal frameworks are necessary for ecosystem service markets to develop, yet these are poorly developed in most producer countries:** recognising property rights and reforming legal frameworks are often politically contentious and costly, yet are fundamental to establishing payment schemes of any type. Unfortunately, many forest areas in tropical countries are characterised by overlapping and conflicting claims to land and historic tensions over the rights of indigenous and other local communities. In most places it will be necessary to negotiate political support from key stakeholders in order to establish new markets;
- **these markets are not likely to contribute substantially to poverty alleviation unless proactive efforts are made to recognise rights and shape**

## The problem of public goods

Most ecosystem services are considered 'externalities' or 'public goods'—positive benefits resulting from good forest management that can be enjoyed by all. Under present property rights and institutions, those forest managers responsible for providing benefits cannot exclude the beneficiaries from enjoying the service ('non-excludable') and the beneficiaries are not in competition with one another ('non-rival'). This undermines the formation of markets, since beneficiaries have no incentive to pay suppliers. Thus, in most of the world, forest ecosystem services are not traded in markets and have no 'price'. The failure of forest owners and producers to capture financial benefits from the provision of ecosystem services leads to the over-exploitation of forest resources and the under-supply of ecosystem services.

Thus, forest will be cleared where the opportunity costs of forest land for agricultural enterprises, infrastructure and human settlements are higher than the use or income value of forest products. In some cases, deforestation occurs because of perverse policy and institutional incentives, such as credit, agricultural and logging subsidies, or land tenure rules (Nasi et al. 2001). But even in the absence of perverse public policies,

forest ecosystem services would still be under-supplied by the market, in most cases due to their nature as public goods. Forest owners and producers ignore the value of ecosystem services in making decisions about land-use and management because they receive little or no direct financial benefit from them.

Economists and others have argued that mechanisms are needed by which forest and other resource owners are rewarded for their roles as stewards in providing ecosystem services. Anticipation of such income flows would enhance the value of forest assets and thus encourage their conservation. Compared to previous approaches to forest conservation, market-based mechanisms promise increased efficiency and effectiveness, at least in some situations. Experience with market-based instruments in other sectors has shown that such mechanisms, if carefully designed and implemented, can achieve environmental goals at significantly less cost than conventional 'command-and-control' approaches, while creating positive incentives for continual innovation and improvement. Where the benefits and costs of conservation vary spatially, market-based instruments seek out and concentrate on higher-benefit cases (Pagiola et al. 2002).

**markets to provide equal access to low-income producers of tropical forest ecosystem services:** rules governing any new market tend to be set by those more powerful sectors of society who have the capital and capacity to invest in designing the rules. To some extent, this is already taking place in the global carbon market. The implications of new markets, regulations and ecolabelling standards for low-income producers need to be identified and addressed; and

- **new market institutions are needed to reduce transaction costs and financial risks:** a major challenge of ecosystem service market development is to ensure that critical institutions are established to reduce transaction costs and to provide intermediation between buyers, sellers, investors, certifiers and other key groups in the value chain. If there is not appropriate action to address this at both national and international levels, many market opportunities will simply fail to materialise, especially in poorer countries and for poorer forest producers.

### **Knowledge gaps**

Information about ecosystem service markets is scarce, the capacity to assess and develop markets is limited, and progress is hampered by a lack of understanding and political support from key stakeholders. To realise the potential of ecosystem service markets in tropical countries, leading organisations promoting forest stewardship will need to fill these knowledge gaps. In particular, policymakers and program leaders require:

*... rules governing any new market tend to be set by those more powerful sectors of society who have the capital and capacity to invest in designing the rules*

- objective technical assistance to identify the opportunities and risks of using different market instruments and to design them to be effective, efficient and equitable;
- opportunities to exchange experiences, perspectives and lessons with peers in other countries and regions about the most appropriate legal and regulatory frameworks;
- practical data on the costs of production, transactions, establishment and management for different market mechanisms; and
- capacity-building to develop sophisticated national expertise in analysing, designing and implementing ecosystem service markets in the public, private and civil sectors.

Ecosystem service markets offer a potentially powerful new set of incentives for tropical forest conservation and restoration, and new income opportunities for forest producers. However, it remains unclear which producers, consumers and types of forest resources will be the real beneficiaries of such market development. It is also

unclear as to the conditions under which the creation of ecosystem service markets will be the most effective policy instrument for achieving forest policy goals. Most markets are still incipient and their further development will require concerted government action. The decisions that will be taken over the next few years will shape market effectiveness, efficiency and equity for decades to come.

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*This article is based on a report commissioned by ITTO and published in July 2004 as ITTO Technical Series No 21. The full report can be requested from the ITTO Information Officer (ahadome@itto.or.jp; see postal address on page 2) or downloaded from the ITTO website (<http://www.itto.or.jp/live/PageDisplayHandler?pageId=203>).*

# Addressing fire management in the Philippines

**According to a recent ITTO-commissioned report, DENR should re-assume responsibility for forest fire suppression**

**A** LAW that removed responsibility for forest fire from the Philippines' Department of Environment and Natural Resources (DENR) has reduced the effectiveness of fire management in the country, according to an ITTO-commissioned report.

Written by a team of forest fire experts from the NSW Rural Fire Service (Australia) in close cooperation with DENR, the report reviews forest fire management in the Philippines and makes recommendations for improvement.

The review was undertaken under Decision 6 (XXXIII) of the International Tropical Timber Council, which makes the services of forest fire experts available to member countries to assist them in evaluating the country's forest fire prevention and management situation, identifying strategies and actions and developing project proposals.

Following a briefing and planning meeting at the DENR head office in Manila, the review team visited various sites in the Cordillera Autonomous Region and several other provinces in the northern Philippines' region of Luzon, and in Bukidnon Province in Mindanao.

Meetings were held with a wide variety of groups and individuals including:

- head-office staff of DENR, including the Undersecretary for Field Operations;
- indigenous people and officers from the National Commission for Indigenous People;
- people's organisations and non-governmental organisations;
- upland farmers, barangay captains and tribal elders;
- mayors, provincial governors, provincial board members and local government units;
- DENR Forest Management Bureau staff at the regional, provincial and community levels;
- DENR Training Academy staff;
- staff from the DENR/ITTO community forestry project (PD 221/97 REV.2 (F)) and from another community forestry project in Quirino Province;
- representatives of the Provincial Disaster Coordinating Council and the National Disaster Coordinating Council;
- staff from the Bureau of Meteorology in Manila;
- Bureau of Fire Protection (BFP) staff at both headquarters and in the regions; and
- miners, farmers, agroforestry farmers and holders of Integrated Forestry Management Agreements.

Following the field visits, a series of consultations were held with DENR and BFP officers in Manila prior to a presentation to the DENR Undersecretary.

The team noted that: "unwanted forest and grassland fires go unchecked (in the Philippines) and destroy forests, grasslands, plantations, agricultural areas and other assets". This has many severe consequences, including:

- increased rural poverty through a decrease in forest cover, loss of soil fertility and increased erosion;

- the loss of biodiversity, especially in mossy forests and dipterocarp forests;
- impaired water quality and quantity in watersheds, especially due to erosion and siltation;
- reduced commitment to community-based forest management by communities due to the loss of forests by fire;
- damage to agroforestry and agriculture, including financial losses; and
- threats to life and property.

The report identified four main constraints to improving forest fire management in the country:

- the limited organisational capability within DENR, the BFP and other government agencies, non-governmental organisations, peoples' organisations and the community at large to manage and prevent forest and grassland fires;
- the limited operational preparedness at all levels, with the possible exception of a few plantation enterprises;
- inadequate fire prevention capability at all levels, with the possible exception of a few plantation enterprises; and
- the often poor management of 'controlled' burning.

According to the review team, at the heart of these constraints is the fact that DENR's Forestry Management Bureau is unable to allocate sufficient resources to forest fire suppression. As a result of a change in law, in which responsibility for forest fires was assigned to the BFP within the Department of Industry and Local Government (DILG), DENR (which retains responsibility for forest protection) has reduced its emphasis on forest fire management and its professional capabilities in fire management have declined.

The review team suggested that rectifying this organisational arrangement was a precondition for effective progress in forest fire management in the Philippines. It proposed a short-term solution that would require DENR and the BFP (through the DILG) to agree that DENR should be the lead agency for forest fire suppression. Such an agreement could be added to the Memorandum of Agreement that currently exists between the two departments. The team also made a number of practical recommendations for addressing the main problems that were identified and established priorities for their implementation in view of the limited resources available. In the longer term, the team recommended a five-year plan over which the recommendations might be implemented as well as some suggestions for possible intervention projects.

**For more information contact:** Dr Eva Muller, Assistant Director of Reforestation and Forest Management ([rjm@itto.or.jp](mailto:rjm@itto.or.jp)). The full report, A review of forest fire management in the Philippines, by Duncan Sutherland, Bruce Arthur, Rosalio Goze and Sabado Batcagan, can be downloaded (in English) at [www.itto.or.jp/live/PageDisplayHandler?pageId=45](http://www.itto.or.jp/live/PageDisplayHandler?pageId=45)

# Exports turn a corner

**The immediate prospects for tropical timber exporters have brightened**

by Mike Adams

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**D**EMAND for tropical wood products has picked up, with both export volumes (with some exceptions) and prices holding onto recent gains.

In Ghana, manufacturers have increased their exports of processed wood products, with first-quarter furniture exports up 18%, mouldings up 11% and flooring up 10% (in contrast, first-quarter exports of sawnwood, plywood and rotary veneer all declined). While data are not yet available for Malaysia and Indonesia, the sentiment in the trade there is generally positive and most companies are reporting improved prices and increased export enquiries.

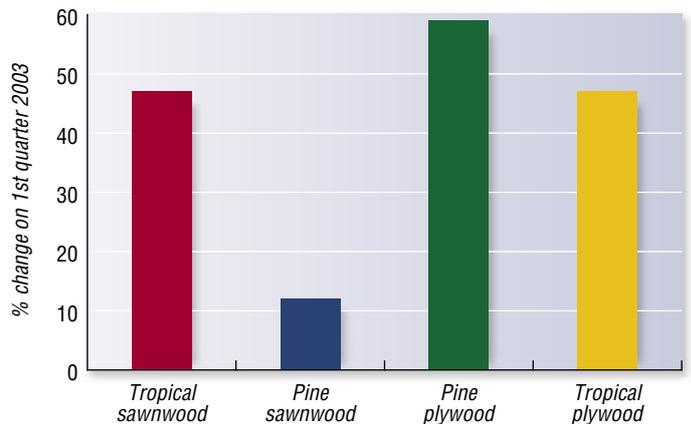
Figure 1 shows that the value of Brazilian tropical sawnwood exports increased by around 47% in the first quarter of 2004 over the same period last year (US\$46 million in 2004 compared to US\$31 million in 2003); pine plywood was another big climber. Prices for solid wood product exports also increased, pulled up by continuing high demand in the US. However, Brazilian producers complain that higher freight costs are eroding some of these gains. Indeed, freight charges are on the increase across the tropics as shippers face a chronic shortage of containers and shipping space. Freight rates to the main markets in Japan and Europe have increased by almost 75% over the six months up to May 2004. With all available shipping space being diverted to the China route and with oil prices well above US\$35 per barrel, further freight increases during 2004 seem inevitable. Exporters in Peru have been particularly hard hit (Figure 2).

## Log shortage bumps up prices

A shortage of log raw materials is having an impact on prices. Mahogany (*Swietenia macrophylla*) is in chronic short supply and many traders, especially in the UK, are saying that orders for cedar (*Cedrela* spp) are now difficult to fill because of the strong demand in the US. Prices for

## On the up

Figure 1: Brazilian timber exports, first quarter of 2004



dark red meranti and keruing have increased since the beginning of the year, the price of keruing up almost 25% compared to mid 2003.

Prices have also improved for African hardwoods, partly because of a supply shortage and partly because the prices for alternatives timbers from Southeast Asia or South America have been increasing. Both wawa/obeche and sapele prices have recorded gains, even though demand in Europe has been weak for the past 6–9 months. Prices for sapele have been given a boost by the stronger-than-expected demand in Spain and by steady demand in the US.

French buyers are now accepting the higher prices, having slightly misjudged the market earlier and, like China, refraining from purchasing at lower prices. Buyers for the Chinese market had at first fiercely resisted higher prices for okoume, but they are realising that the better prices are here for a while and are starting to increase orders.

Supply shortages have been attenuated in West Africa (notably in Gabon) by a later than usual start to the March–May rainy season; volumes extracted for this normally very quiet and wet period were 2–3 times the level usually achieved.

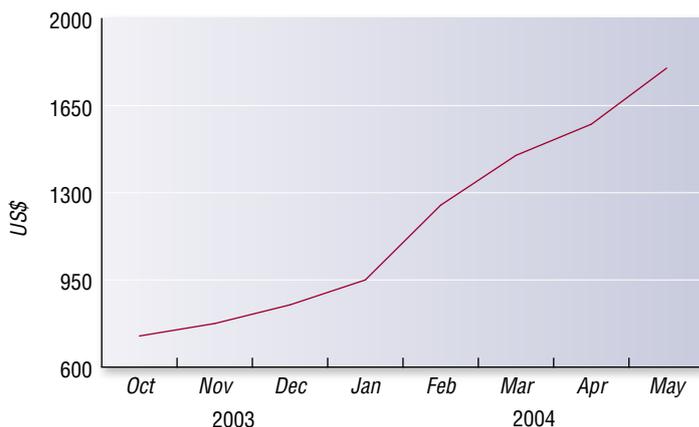
## Prospects

Prospects for the tropical timber trade in the medium term are looking positive, with prices for logs, lumber and plywood having all risen over the past 4–6 months. Trade volumes have picked up, too, and despite an overall concern about log availability, no immediate disruption of trade due to log shortages is foreseen at current levels of demand.

The Japanese market is poised for a possible strengthening in the third quarter, as building activity picks up, but all eyes remain on China, the market leader. Efforts by Chinese authorities to cool the rate of growth will have some impact on consumption, especially if interest rates are pushed higher.

## Surge in shipping costs

Figure 2: Cost of a 20-foot container from Callao, Peru to China



# Joining up to stop desertification

**The field-level implementation of the United Nations Convention to Combat Desertification could be within reach**

**By Hama Arba Diallo**

UNCCD Executive Secretary



**Receding?** Dry forests, such as this in northern Myanmar, sustain millions of people but are threatened by excessive extractive pressure. *Photo: H. O. Ma*

**“IF YOU** want to lean on a tree, first make sure it can hold you.”

—African proverb

Desertification is the degradation of land in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities. Dryland ecosystems, which cover more than one-third of the world's land area, are highly vulnerable to over-use and also to relatively minor climatic changes.

Desertification is at the root of many political and socioeconomic problems and poses a threat to the ecosystem stability of affected regions. The land's loss of productivity exacerbates poverty and can stimulate the large-scale movement of peoples. In the next 20 years, for example, some 60 million people are expected to move from the degraded areas of sub-Saharan Africa towards northern Africa and Europe. In fact, 135 million people—equivalent to the population of Germany and France combined—are at risk of being displaced as a consequence of desertification.

Desertification also has serious natural consequences. It can make land areas more flood-prone, cause soil salinisation and lead to the deterioration of water quality. Unsustainable irrigation practices can dry the rivers that feed large lakes; the Aral Sea and Lake Chad, for example, have both seen their shorelines shrink dramatically in recent years. Land degradation is also a leading source of land-based pollution in the oceans.

## **What is the Convention to Combat Desertification?**

The issue of desertification was first discussed at the global level at the United Nations Conference on Desertification held in Nairobi, Kenya in 1977, but attempts to tackle the problem at this level were hindered by a lack of both administrative and financial support. In 1992, the United Nations Conference on Environment and Development (UNCED) recommended the negotiation of a Convention to Combat Desertification (UNCCD), which was subsequently adopted in Paris on 17 June 1994. The treaty entered into force in December 1996 and has since been ratified by more than 190 countries, making it truly global in reach. It is the first and only internationally legally binding framework set up to address the problem of desertification. It is based on the principles of participation, partnership and decentralisation—the backbone of good governance. Its primary objective is to:

*combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements ... with a view to contributing to the achievement of sustainable development in affected areas.*

## **National action programs**

Countries affected by desertification are implementing the Convention by developing and carrying out national, sub-regional and regional action programs. National action programs (NAPs) are at the heart of the Convention and constitute the conceptual and legal framework for implementing it at the national and local levels. Their purpose is to identify the factors contributing to desertification and the practical measures necessary to combat it and to mitigate the effects of drought. Under the Convention, affected countries should elaborate and implement their NAPs with the full participation of local communities and all interested stakeholders and fully integrate them with other development programs.

Criteria for preparing NAPs are detailed in the treaty's five regional implementation annexes: Africa (considered a priority because that is where desertification is most severe); Asia; Latin America and the Caribbean; the northern Mediterranean; and Central and Eastern Europe. Drawing on past lessons, the Convention states that these action programs should adopt a democratic, bottom-up approach. They should emphasise popular participation and the creation of an enabling environment designed to allow local people to help themselves to reverse land degradation.

Governments remain responsible for creating such an enabling environment. They can do this by, for example, decentralising authority, improving land-tenure systems, and empowering women, farmers and pastoralists. They should also permit and encourage non-government organisations to play a strong role in preparing and implementing the NAPs. In contrast to many past efforts, NAPs should be fully integrated into other national policies for sustainable development. They should be flexible and modified as circumstances change.

## **Tropical dry-zone forests**

Dry-zone forests are the most fragile of all forest types and provide sustenance to millions of people in developing countries. Due to excessive pressure on extraction, the rate of forest degradation and deforestation in dry forests is alarmingly high, requiring urgent global action.

The dry tropical forests pose management challenges very different from those of the moist tropics. For example, most native tree species in such forests are slow-growing and drought-resistant, and fire can be a major hazard. Where rainfall is scarce but reliable, sustainable forest management and restoration projects are technically feasible; the drier the area or the more erratic the rainfall, the poorer the record of replacement-planting tends to be. In both theory and practice, the emphasis in drier areas is shifting towards regeneration management in existing forests and the afforestation with indigenous and endemic species of degraded or even completely barren areas. The ITTO

*Guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forests* provide a powerful framework under which to carry out this kind of forest restoration under the UNCCD NAPs.

## **Forest-based sustainable livelihoods**

Poverty can force people to over-exploit the land for food, energy, housing and as a source of income; desertification is thus both a cause and consequence of poverty. Any effective strategy for sustainable livelihoods must address poverty at its very centre.

A significant problem in implementing forest management schemes in many dry-zone forests is the intensity of existing land-use. Even in badly degraded areas, people rely on what is left of the forests for browse and fuel. Closing off areas for regeneration, even though this will produce long-term gains, can impose intolerable short-term burdens on people. Where lands are under common ownership, there may also be difficulties in finding satisfactory ways of sharing the various benefits and costs.

## **Marking the implementation phase**

The 6th Conference of the Parties (COP-6) to the UNCCD, which was held in Havana, Cuba, in September 2003, marked the transition from awareness-raising to implementation. Agreement on the role of the Global Environmental Facility (GEF) as a financial mechanism for the implementation of the Convention was clearly a highlight: the GEF will make available US\$500 million to land degradation and desertification programs over three years. Although this amount is much less than is available for the GEF's other four focal areas (climate change, biodiversity, international waters and ozone depletion), it will nonetheless make a considerable difference to the capacity of developing-country parties to implement the UNCCD.

In another decision taken at COP 6, the Conference of Parties requested the UNCCD Executive Secretary to collaborate with other UN conventions and the United Nations Forum on Forests to strengthen the capacity of low-forest-cover countries to combat desertification, land degradation and deforestation. In this regard, the adoption of Decision 12/COP6 provides an expanded framework of opportunities for strengthened cooperation between ITTO and UNCCD. The objective of strengthening the relationship by promoting synergistic approaches between the two organisations can be achieved by expanding the scope of ITTO's current project work in the restoration, management and rehabilitation of degraded and secondary tropical forests to include forests in the semi-arid dry zones of the tropical member countries of both ITTO and the UNCCD. Such projects could focus on disaster prevention, drought mitigation in low-forest-cover countries, and poverty alleviation through the rehabilitation of degraded dry forests in selected countries with the participation of the communities living in and around the forests.

Desertification can only be reversed through profound changes in local and international behaviour—in land-use, trade, greenhouse-gas emissions and participatory processes, to name a few. Step by step, these changes must lead ultimately to sustainable land-use and food security for a growing world population. Efforts to combat desertification, then, can benefit from and be part of a wider sustainable development agenda in affected countries.

## An ecological study of mangrove vegetation in the Ayeyarwady Delta, Myanmar

by Myint Aung\*, Kazue Fujiwara and Yukira Mochida

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THE total land area of Myanmar is 676 553 km<sup>2</sup>, about 51% of which was covered by forest in 1989 (1989 Landsat TM images, Myanmar Forest Department). Mangroves occur in three regions of the country, namely Rakhine, Taninthayi and Ayeyarwady, along the coast of the Bay of Bengal and the Andaman Sea. The Ayeyarwady Delta comprises very extensive mangrove areas that have considerable commercial value.

Several authors worldwide have evaluated the past and present distribution of mangroves (eg Ellison et al. 1999). The study presented in this article focuses on the distribution of mangrove species and communities in the eastern part of the Ayeyarwady Delta and is intended to assist in the more effective conservation, restoration and management of degraded mangrove forest in the region. It formed the basis of a doctoral thesis by the first-named author, which was funded partly by an ITTO Fellowship grant.

### Objectives

The objectives of the study were to: 1) identify the mangrove communities in the Ayeyarwady Delta; 2) clarify the relationship between mangrove vegetation and its environment in the delta; and 3) provide basic information for the future restoration and conservation of mangrove vegetation. A phytosociological survey (Braun-Blanquet 1964, Fujiwara 1987) using line transects and randomly chosen plots was carried out to identify the mangrove community in the study area. Line transects were also used to study the relationship between vegetation distribution and such variables as microtopography, frequency of inundation, water salinity, soil texture and soil nutrient contents.

The Ayeyarwady Division lies at the southern end of the central plains of Myanmar. On the southern and western

sides of the division are the Andaman Sea and the Bay of Bengal. The southern part has a tropical monsoon climate, while the northern part, with decreased rainfall, has a tropical savanna climate.

### Phytosociological results

The mangrove communities of the study areas can be classified into three categories:

- coastal and river-bank communities, characterised respectively by: 1) *Sonneratia alba-Avicennia alba*, 2) *Sonneratia apetala*, 3) *Avicennia alba-Avicennia officinalis*, 4) *Avicennia officinalis*, 5) *Sonneratia caseolaris*, 6) *Kandelia candel*, 7) *Rhizophora apiculata*, 8) *Sarcolobus globosus-Brownlowia tersa*, and 9) *Ipomoea tuba-Hibiscus tiliaceus*;
- the inland communities, characterised by: 1) *Amoro-Heritieretum fomes*, 2) *Aegiceras corniculatum-Ceriops decandra*, and 3) *Phoenix paludosa* (a pioneer species); and
- marsh, which contains a *Leptochloa filiformis* community.

### Distribution of mangrove vegetation

Four environmental zones can be delineated in the Ayeyarwady Delta that determine the distribution of the various mangrove vegetation communities (see Figure 1).

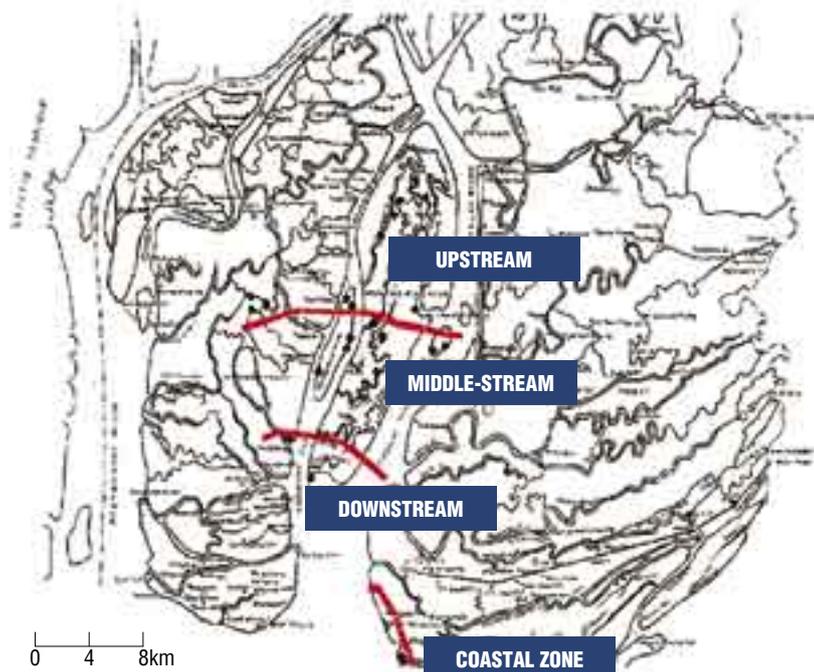
The coastal zone generally comprises low-ground, high-salinity (2.4–2.8‰ in the dry season) sites subject to strong winds and wave action; as a result the mangrove trees are generally of low height (5–9 m). The soil in this area is generally sandy clay loam or loamy sand. The typical mangrove community in the coastal fringe is made up of *Sonneratia alba-Avicennia alba* and, behind this, of *Rhizophora apiculata*. Human settlements start behind the *Rhizophora apiculata* community. The vegetation profile of this zone is shown in Figure 2.

Salinity levels in the 'downstream' zone are slightly lower than in the coastal zone (2.0–2.4‰ in the dry season). Riverbank soils are silty clay or silty clay loam. Figure 3 shows a characteristic vegetation profile for this zone; the characteristic communities are *Sonneratia apetala* and *Avicennia alba-Avicennia officinalis*.

Water salinity continues to decline further upstream, measuring 1.5–2.0‰ in the dry season in the 'middle-stream' zone. Soils in the lower riverbanks are generally silty clay or silty clay loam; they become more clayey further inland. In this zone, the *Leptochloa filiformis* community develops in newly accreted areas and the *Kandelia candel* community appears behind these; the characteristic mangrove community however is dominated by *Avicennia officinalis* and the understorey layer is generally filled with *Acanthus ilicifolius*. Figure 4 shows the vegetation profile of this zone.

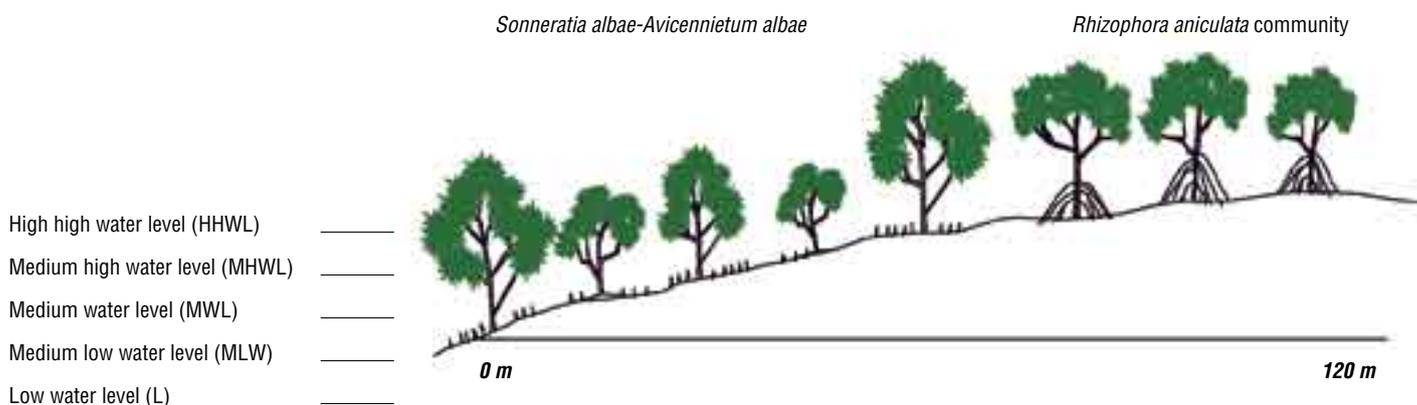
### Mangrove zones

Figure 1: Mangrove zonation in the Ayeyarwady Delta



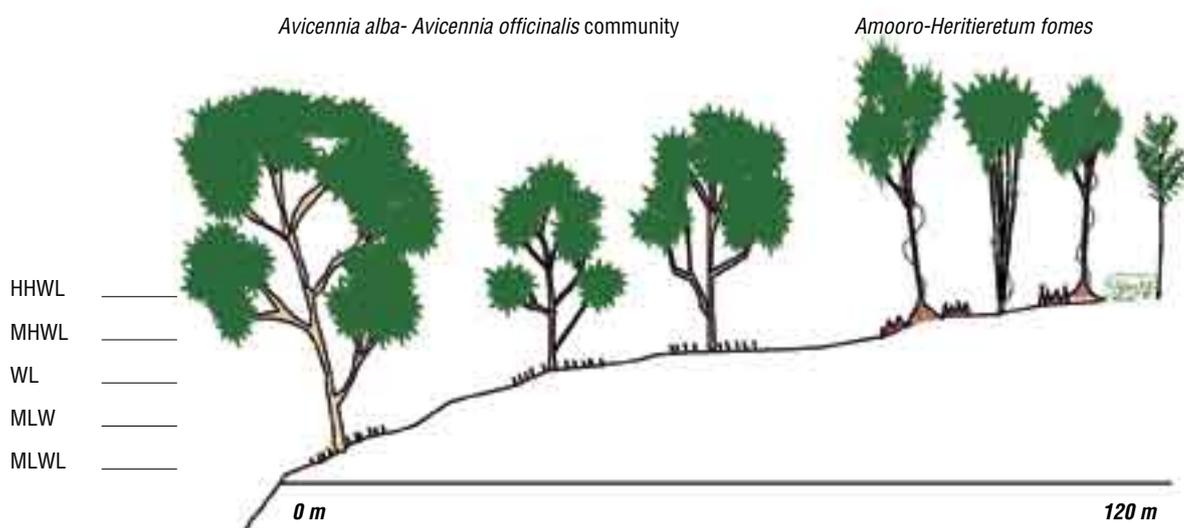
## Low profile

Figure 2: Schematic representation of vegetation profiles in the 'coastal' zone



## Downstream profile

Figure 3: Schematic representation of vegetation profiles in the 'downstream' zone



Water salinity in the 'upperstream' zone is much lower than in other zones; it peaks in March–April, reaching 0.8–1.2%, but river water is fresh (0.01% salinity) during the rainy

season. Soils are silty clay or silty clay loam in the lower riverbank. Large specimens of *Sonneratia caseolaris* grow along the accreted river sites in this zone. Communities characterised by *Amooro-Heritieretum fomes* may be found inland.

## Fellowship reports available

The following ITTO Fellowship reports are available on request from the authors:

**New and innovative approaches to the silvicultural treatments of teak-bearing forests and teak plantation establishment, best suited to Myanmar's changing forest situation.** *Contact: Prof Saw Kelvin Keh, Institute of Forestry, Forest Department, Ministry of Forestry, Yezin, Pyinmana Township, Myanmar; iof-yezin@bagan.net.mm*

**Economic efficiency and shadow prices of social and biological outputs of village-level organizations of joint forest management in Gujarat, India.** *Contact: Mr Dinesh Misra, Faculty of Forestry, University of Toronto, 33 Willcocks Street, Toronto ON M5S 3B3, Canada; Fax 1-416-978 3834; dinesh.misra@utoronto.ca*

**Investigation on shifting cultivation practices conducted by the hill tribes for the development of suitable agroforestry techniques in Myanmar.** *Contact: Dr San Win, Forest Department, Bayintnaung Road, Insein, Yangon, Myanmar; Fax 95-1-66 4459; TEAKNET@mptmail.net.mm*

**Sustainability of community forestry in terms of operational plant implementation.** *Contact: Mr Krishnahari Homagain, POB No 13810, Kathmandu Nepal; kbhom@hotmail.com*

**Rehabilitation of degraded tropical lowland forest using three indigenous timber species in Peninsular Malaysia.** *Contact: Dr Evelyn Varquez Bigas, College of Forestry, Mindanao State University, c/o PO Box 5448, Iligan City 9200, Philippines; eve1411@yahoo.com*

## Pioneers

The study revealed the wide extent of pioneer species such as *Hibiscus tiliaceus*, *Phoenix paludosa* and *Acrostichum aureum*, which colonise areas disturbed by human activities (eg abandoned paddy fields, fuelwood collection sites, etc) and tend to discourage the regeneration of other mangrove species. The dominance of such species in the delta indicates a relatively high level of human impact; restoring the original mangrove communities, however, may be hindered by the high soil acidity in these areas.

## Conclusion

Mangroves perform many important ecosystem services, protecting coastal assets and providing breeding grounds for thousands of species of fish and other species; their conservation and management, therefore, are important parts of sustainable development. The study has clearly

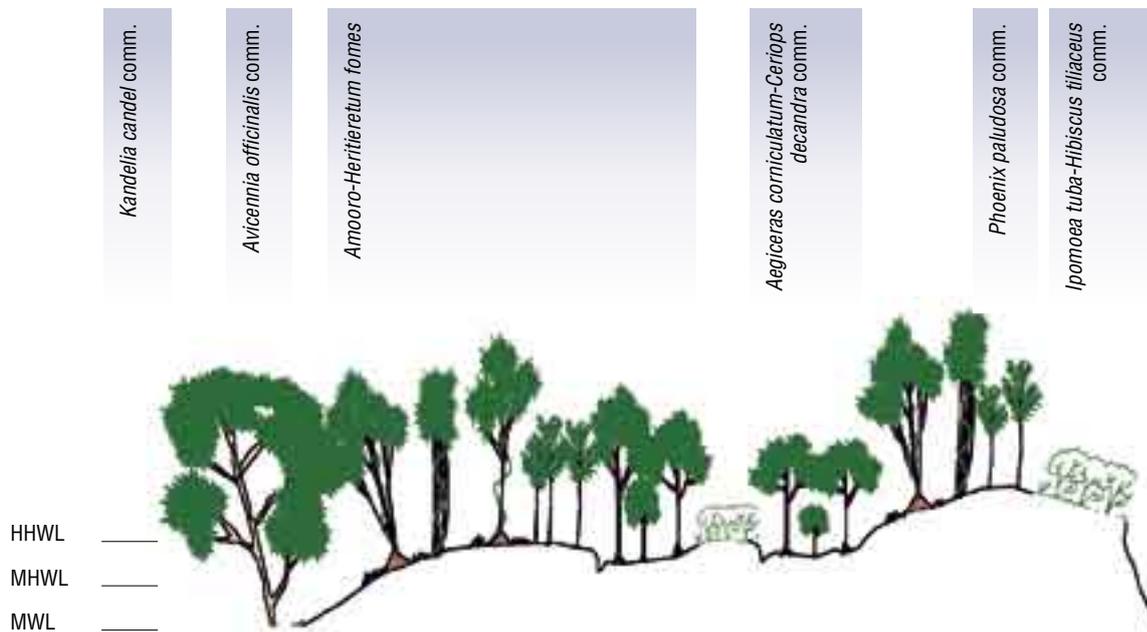
identified and characterised a number of species-site relationships in the mangrove ecosystems of the Ayeyarwady Delta and has proposed four zones, findings that could be applied in future efforts towards the restoration, conservation and management of Myanmar's mangrove ecosystems. On the basis of the study we have proposed a systematic land-use scheme, details of which are available from the author; the crucial element is the establishment and maintenance of buffer-zone forests in which local people continue to extract resources on the basis of their needs and the capacity of the ecosystem to provide such resources on a sustainable basis.

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## Midstream profile

Figure 4: Schematic representation of vegetation profiles in the 'middle-stream' zone



## 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 **18 October 2004** for activities that will begin no sooner than February 2005. Applications will be appraised in December 2004.

*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*

## **Leading companies show that sustainable forest management is possible**

### **International conference on sustainable management of tropical forests: private-sector experiences**

13–15 April 2004

Kuala Lumpur, Malaysia

This conference was a joint initiative of the Forestry Department of Peninsular Malaysia and ITTO. It brought together about 150 people representing logging companies, community organisations, governments and the environmental movement to review private-sector experiences in sustainable forest management in the tropics and to discuss ways in which such success stories could be promoted among other companies and community groups.

The conference was the culmination of a three-year, ITTO-funded project (PD 48/99) in search of private-sector success stories in the three tropical regions (Africa, Asia and the Pacific, and Latin America and the Caribbean).

The project, which was implemented by the Forestry Department of Peninsular Malaysia, sent questionnaires to 1766 concession-holders and other timber-harvesting entities to gauge their awareness of, commitment to and success in implementing sustainable forest management. A total of 206 responses were received, the results of which were compiled at the regional level.

This process was complemented by 14 detailed case-studies, which closely examined efforts by companies towards sustainable forest management and helped identify the conditions that enable and constrain such efforts at the local level.

For example, CIB (Congolaise Industrielle du Bois), a logging company operating in large forest concessions in the Congo, identified a range of factors that had led to the improvement of forest management there, including the adoption by the Government of Congo of new guidelines for the sustainable management of forest ecosystems, and a partnership with an international non-governmental organisation, which was facilitated by a substantial ITTO project. Since 2000, the company has improved logging practices, assisted local people to benefit more from the timber operations and to adopt new farming practices, and designed a program to manage, monitor and protect local wildlife.

Pt Sari Bumi Kusuma, a logging company in Indonesia, also identified cooperation with and support from international organisations (including ITTO) as an important factor in moving towards sustainable forest management. Other factors include an entrepreneurial vision of management, linkages with processing facilities, and a good relationship with the local communities and local government forged through effective consultative processes.

A third company, Guavirá Industrial e Agroflorestal Ltda in the Brazilian Amazon, has adopted and is implementing a 27-year forest management plan consistent with the ITTO *Guidelines for the sustainable management of natural tropical forests* and is certified by the Forest Stewardship Council. The company reported that an unusually homogenous mix of species in

its 58 000 hectares of production forest had been an important factor in ensuring the financial feasibility of its operation: of the 24 potentially commercial species in these forests, one highly marketable species (cedrinho) is present in volumes of 10–15 m<sup>3</sup> per hectare. Moreover, harvesting is possible all year round (in contrast to most of the Amazon, where logging is possible for only 6–8 months per year), as the terrain is flat and population density low.

In 1998, in partnership with the Sarawak Forestry Department and with technical support from a Malaysian-German cooperation project, Samling Corporation in Malaysia introduced sustainable forest management practices in a 100 000-hectare area in Ulu Baram, Sarawak. Pre-assessment for forest certification of this pilot area was conducted in September 2003 and the final assessment is scheduled for this year.

Despite these and other success stories it is evident that many obstacles must be overcome before sustainable forest management becomes widespread in the tropics.

For example, while many companies identified international assistance as an essential element for improvement, donor agencies are tending to decrease their contributions to sustainable forest management. No company indicated that the pursuit of sustainable forest management made their operations more profitable, although one suggested that employing best practices reduced risk and therefore increased the company's value in the market.

Several companies identified illegal logging and illegal trade of timber products as threats, not least because they undermine the market for sustainably produced timber. Some noted that unnecessary bureaucratic procedures, such as the overlapping of regulations between state, federal and other government levels, were also obstacles to the adoption of sustainable forest management, as were corruption and the generally short-term nature of timber concessions.

Meeting the social demands of sustainable forest management is also a challenging task. It requires effective consultation and participation processes, which take time to establish, and new skills both in the company and the community, and can be complex and costly.

*Regional summaries and the 14 case-studies will be published later this year. For more information contact Mr Amha bin Buang in the ITTO Secretariat (eimi@itto.or.jp).*

## **Trade/environment alliances forged at ITTO mahogany workshop**

### **Workshop on capacity-building for implementation of CITES Appendix II listing of mahogany (*Swietenia macrophylla*)**

18–21 May 2004

Pucallpa, Peru

Traders and environmental non-governmental organisations will work more closely together to ensure the supply of legal mahogany (*Swietenia macrophylla*) following this ITTO workshop, which was held recently in Peru with the assistance of the Peruvian National Institute for Natural Resources (INRENA).

Mahogany was included in Appendix II by decision of the 12th Conference of the Parties to the Convention on International Trade of Endangered Species of Wild Flora and Fauna (CITES), with the implementation becoming effective on 15 November 2003 (see *TFU 13/4*). The workshop was designed to address concerns by both exporting and importing countries surrounding the Appendix-II requirement for 'non-detriment findings' (stating that export of a specimen is not detrimental to the sustainability of the species) to accompany all shipments of mahogany.

Over 80 participants attended the workshop, including representatives of CITES' scientific and management authorities from the three main range states (Bolivia, Brazil and Peru), management authorities and other government representatives from four major importing countries (Canada, Spain, UK and USA), representatives of four international organisations (ITTO, CITES, FAO and CIFOR), and representatives of six trade and six non-governmental groups from around the world. Several local processors and loggers also participated in the workshop, contributing a unique perspective on the problems that Peru, now the largest mahogany exporter, is facing as it tries to comply with the Appendix-II listing and ensure that mahogany exports are legal and sustainable.

The workshop endorsed the finding of the CITES Mahogany Working Group that non-detriment findings should only be made for mahogany arising from areas with an approved management plan. It made several more specific recommendations for countries to consider when implementing monitoring and control systems for mahogany production and trade, for technical assistance, and regarding the role of the private sector and regional/inter-agency cooperation. Two resolutions were tabled and endorsed at the conclusion of the workshop: one from the three main range countries pledging to implement the workshop recommendations and proposing establishment of a three-country working group to address issues of common concern in implementing the Appendix-II listing; and a second from the trade, recognising the commitment of the three main range countries to sustainably manage their mahogany resources.

A significant outcome of the workshop was the close relationships forged between some of the participating NGOs and trade representatives, with several individual traders in discussions to join buyers' groups that would help to ensure supplies of sustainable and legal mahogany. Some members of the trade also offered to provide financial assistance to undertake inventories of mahogany resources and to offset other management costs.

The report of the workshop is currently being finalised and will be available in Spanish and English. It will contain all papers and presentations made at the workshop, the conclusions and recommendations agreed to, and the two resolutions referred to above. The report will be available on the ITTO website ([www.itto.or.jp](http://www.itto.or.jp)) and in hard copy.

*For further information or to request a copy of the report, contact Steve Johnson in the ITTO Secretariat ([johnson@itto.or.jp](mailto:johnson@itto.or.jp)).*

## **Moving away from the centre**

### ***The Interlaken workshop on decentralisation, federal systems in forestry and national forest programmes***

**27–30 April 2004**

Interlaken, Switzerland

This workshop, which was co-sponsored by ITTO, was a country-led initiative in support of the United Nations Forum on Forests (UNFF). It was attended by about 160 representatives of developing, developed and transition countries, international organisations, local, provincial, state and national governments, community and indigenous peoples' organisations, non-governmental organisations and the private sector with the aims of:

- analysing the implications of decentralisation in key aspects of forest management for the development of national forest programmes;
- deriving lessons learnt from countries that have implemented decentralisation for use, where suitable, in other countries in the process of decentralisation; and
- preparing reflections and proposals for consideration by UNFF at its 4th session.

Six working groups were established to discuss critical areas relevant to the objectives of the workshop. These were: allocation of roles and responsibilities and coordination at different levels and across sectors; policy, regulatory frameworks and equitable benefit-sharing; participation, conflict and multi-stakeholder processes; financial incentives; promoting investment and private-sector partnership; capacity-building, technical skills and information; and maintaining ecosystem functions, sustaining forest productivity, and appropriate application of knowledge and technology.

The working group addressing the last of these areas concluded, among other things, that in order to exploit the potential environmental benefits of decentralised systems and guard against the potential negative impacts, a number of principles should be observed:

- whenever possible, traditional communal forest management systems should provide the basis for decentralisation. Such systems are likely to be effective in meeting local needs and will be adapted to local conditions and resilient to external influences;
- markets need to be developed for environmental services (particularly water protection, climate change and biodiversity), based on secure property rights in order to provide the revenue support for the provision of those services and as a more equitable way for (global) society to exert influence over the delivery of such services;
- centralised approaches to protected areas should target sites of national importance and any local opportunity costs of such areas should be compensated in an adequate way;
- central institutions should use participatory approaches in establishing the limits within which decentralised systems operate. They will need to provide the spatial planning context, define the permanent forest estate and otherwise support regulatory and incentive frameworks; and
- economies of scale tend to favour uniform approaches in large-scale centralised schemes for the restoration of degraded lands. With the right framework of incentives and property rights, decentralised

systems will often favour more biologically diverse and locally adapted approaches to restoration.

Workshop participants made twelve recommendations for the consideration of the UNFF. These included:

- develop a common understanding of the relevant concepts, terms and definitions to facilitate future dialogue on decentralisation in the forest sector;
- promote the dissemination of appropriate information to enhance the understanding of various aspects of decentralisation in the forestry sector;
- formulate appropriate approaches to maintain protected areas while enabling traditional use by the indigenous/local people and forest dwellers; and
- promote partnership among various stakeholders and sectors, including south-south, north-north, north-south and south-north-south cooperation for institutional and human capacity-building.

*The draft unedited report can be downloaded at: [www.intercooperation.ch/interlaken-2004/InterlakenUneditedDraftReport.pdf](http://www.intercooperation.ch/interlaken-2004/InterlakenUneditedDraftReport.pdf)*

## **Asia-Pacific forum meets in Fiji**

### **20th Session of the Asia-Pacific Forestry Commission (APFC)**

**19–23 April 2004**

Nadi, Fiji

This meeting, which was chaired by the Fiji Minister for Fisheries and Forestry, was attended by about 100 people representing 27 member countries in the region, two observer countries (Timor-Leste and Tonga), and international organisations such as ITTO, the Asia Forest Partnership, the Asia-Pacific Association of Forestry Research Institutes, and the Secretariat of the Pacific Community. During the meeting, many APFC members presented country reports on the state of forestry. FAO activities in the region were also outlined, including the development (in cooperation with other partners) of a forest conservation strategy for Asia and the progress being made in the implementation of the National Forest Programme Facility.

The Commission received a report on 'In search of excellence', an initiative of FAO and the Regional Community Forestry Training Centre. About 170 submissions were received from 20 countries in the Asia-Pacific region and 30 case-studies—ranging from community forests to large-scale commercial operations—conducted.

The outgoing APFC chair outlined her view of the strengths and weaknesses of the Commission. Its strengths included: neutrality and flexibility; a motivated Secretariat and strong support from FAO; and wide representation from the region. Weaknesses included: its low profile; the limited participation of countries in shaping the Commission's agenda; a lack of finance; an unclear vision about its future role; and weak involvement of NGOs and the private sector.

*For more information and a copy of the session report contact: Mr Patrick Durst, [Patrick.Durst@fao.org](mailto:Patrick.Durst@fao.org)*

## **Synergizing the Rio conventions**

### **Workshop on forests and forest ecosystems: promoting synergy in the implementation of the three Rio conventions**

**5–7 April 2004**

Viterbo, Italy

This workshop was organised by the secretariats of the UN Convention to Combat Desertification (UNCCD) and the UN Convention on Biological Diversity (UNCBD) in cooperation with the secretariat of the UN Framework Convention on Climate Change (UNFCCC). Approximately 150 participants were encouraged to implement specific actions at the local level on forests and forest ecosystems and their use and conservation and further develop synergistic processes in this sector in order to contribute to a more effective implementation of the Rio conventions.

UNCCD Executive Secretary Hama Arba Diallo said the workshop provided an opportunity to explore how synergies can support implementation in the best interests of the local, national, regional and global communities. He suggested prioritising actions that accommodate the concerns of all three conventions in the development of national biodiversity strategies and action plans, the UNFCCC national adaptation programs of action (NAPAs) and national action programs (NAPs) to combat desertification.

UNCBD Executive Secretary Hamdallah Zedan outlined decisions taken by the 7th UNCBD Conference of the Parties on collaboration among the Rio conventions and stressed the need to overcome self-imposed boundaries and to learn from each other. He recommended that the workshop be guided by the concepts of integration and collaboration underlying the UNCBD ecosystem approach, and that the Rio conventions' secretariats not only facilitate but also participate in this process.

Through the working groups, participants discussed how the Rio conventions shared a common concern for many environmental and sustainable development issues related to forest ecosystems. The workshop recommendations contained in the Chairman's summary paper addressed a number of cross-cutting issues in terms of standard obligations, implementation measures and the need for capacity-building.

*Reported by Douglas Pattie, UNCCD Secretariat*

## **Combating illegal forestry practices**

### **1st National forum on illegal logging and illegal timber trade**

**26 March 2004**

Lima, Peru

This forum, which was organised by the Mesa Nacional de Diálogo y Concertación Forestal National (National Roundtable of Dialogue and Consensus on Forestry), through the Asociación Bosques, Sociedad y Desarrollo, was attended by 161 people, including congressmen, representatives of international cooperation agencies, local and sub-national governments, public and private institutions and non-governmental organisations.

The forum made a series of proposals that will be presented to national authorities for possible action including in a work plan to combat illegal logging in Peru. Some of the proposals are:

- the creation of a multi-sectoral executive commission against illegal logging in Peru under the presidency of the Ministry Council;
- the establishment of the previously proposed forest concessions supervisory body (OSINFOR) and the approval of its regulation and implementation; and
- the promotion of reforestation projects in coastal and highland areas to ease the pressure on natural forests and the promotion of the diversified use of the forest by local communities in order to obtain economical benefits without destroying the forests.

*Reported by Mauro Rios*

## **Preparations laid for the review of the international arrangement on forests**

### **4th Session of the United Nations Forum on Forests (UNFF)**

**3–14 May 2004**

Geneva, Switzerland

One of the four resolutions adopted at this session, Resolution 4/4, addressed the process to facilitate a review of the effectiveness of the International Arrangement on Forests (IAF).

Established in 2000, the IAF comprises the UNFF and the Collaborative Partnership on Forests (CPF) and has the main objective of promoting the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end. According to its multi-year work program (2001–2005), the UNFF will, at its 5th session in 2005, review the effectiveness of the IAF.

Although the review is to be undertaken next year, it dominated the scene at the 4th session. This is because the review will have a direct bearing on the future of the on-going post-United Nations Conference on Environment and Development (UNCED) forest process which, thus far, has passed through a number of stages from UNCED to the Commission on Sustainable Development (CSD), the Intergovernmental Panel on Forests (IPF), the Intergovernmental Forum on Forests (IFF) and the UNFF, all at a snail's pace. While it is generally felt that the status quo falls short of being adequate, there seems to be a plethora of ideas about the post-UNFF 5 scenario. The run-up to the review is rekindling the contentious debate on a forest convention, which, in the past, had ended in acrimony.

### **Process to facilitate the review**

Intense consultations took place during this session regarding the scope and modalities of the review and the preparatory process leading to it. The adopted resolution recommends that preparations for it should be open, transparent and comprehensive in scope. It requests the transmission to member states, CPF members (such as ITTO) and other relevant parties of guidelines for reports on the implementation of IPF/IFF proposals for action, a questionnaire for the review of the effectiveness of the IAF, and

baseline information relevant to the specific criteria for the assessment of the effectiveness of the IAF. Member states, CPF members and other relevant parties are invited to submit reports on the implementation of the IPF/IFF proposals for action and responses to the questionnaire. A Secretary-General report based on the information and responses will be prepared for consideration by the UNFF at its 5th session. A global overview of progress towards sustainable forest management (SFM) will also be tabled.

At its 4th session, the UNFF noted the progress in the preparations for the meeting of an Ad Hoc Expert Group on Consideration with a View to Recommending the Parameters of a Mandate for Developing a Legal Framework on All Types of Forests (AHEG PARAM), scheduled to take place at United Nations Headquarters, New York on 6–10 September 2004. The report of AHEG PARAM, together with a Secretary-General report on the subject, will be tabled for the consideration of the UNFF at its 5th session.

### **Other substantive items on the agenda**

Despite preoccupation with the review of the IAF, other items on the agenda were dealt with at the 4th session. These included progress in and means of implementation of the IPF/IFF proposals for action and the UNFF plan of action for the selected thematic elements of: traditional forest-related knowledge (TFRK); forest-related scientific knowledge; social and cultural aspects of forests; monitoring, assessment and reporting, concepts, terminology and definitions; and criteria and indicators of sustainable forest management (SFM). For each of these elements, common items covering multi-stakeholder dialogue (MSD), enhanced cooperation (EC), country experiences and lessons learned, emerging issues relevant to country implementation, intersessional work, monitoring, assessment and reporting, promoting public participation, national forest programs, trade, and enabling environment were also addressed. The MSD, EC and international work were deliberated upon as self-standing sub-items.

### **Unresolved items**

Consensus was not reached on the draft resolutions relating to TFRK and EC at this session. The deliberation on TFRK was fraught with difficulties arising from the complexity and contentious nature of the core issues involved, particularly the rights of indigenous peoples, access to and benefit-sharing of TFRK, and intellectual property rights. By the same token, differences in views on the appropriate relationship between SFM and the ecosystem approach under the CBD scuttled negotiations on the draft resolution on EC, at the cost of a number of agreed points including the linkage between SFM and the Millennium Development Goals.

While the outcomes of the 4th session of the UNFF may be regarded as mixed, all eyes are on the run-up to the 5th session, which many see as a watershed in defining the future of the multilateral forest process.

*Reported by Amha bin Buang, ITTO Secretariat, eimi@itto.or.jp*

Edited  
by  
Alastair  
Sarre

► **Superintendencia Forestal 2004. Atlas de derechos forestales. Two volumes. Superintendencia Forestal (Bolivia), ITTO & Sistema nacional de informacion forestal de Bolivia, La Paz, Bolivia and Yokohama, Japan.**

**Available from:** Superintendencia Forestal, Av 2 de agosto No 6 pasando el cuarto anillo, Santa Cruz de la Sierra, Bolivia; [sforestal@sforestal.gov.bo](mailto:sforestal@sforestal.gov.bo); [www.sforestal.gov.bo](http://www.sforestal.gov.bo)



The two volumes of this atlas set out the access rights and areas for local social groups (agrupaciones sociales del lugar—ASLs), long-term forest-use contracts, and forest concessions for timber companies, as well as use authorisations on native community lands in Bolivia.

► **Kueh Hong Siong 2003. Indigenous fruits of Sarawak. Forest Department of Sarawak and ITTO, Kuching, Malaysia and Yokohama, Japan.**

**Available from:** Information Officer, ITTO, [ahadome@itto.or.jp](mailto:ahadome@itto.or.jp) (full address details on page 2)



This attractive publication was prepared as an aid to the development of sustainable-use and genetic conservation strategies in Sarawak. According to the author, most of the fruits described within are of commercial potential because they were collected in local markets throughout Sarawak. With further cultivation, selective breeding and especially marketing, some fruits could achieve international recognition: *Canarium odontophyllum*, for example, known as 'dabai' among Iban and Malays, has been dubbed the Sibuan olive because of its physical appearance, its smooth texture and its rich flavour. It is also highly nutritious, being rich in energy, fat, protein, fibre and minerals such as phosphorous, potassium, calcium, magnesium and iron.

► **ISME/ITTO 2004. Introduction and some contents of the Global Mangrove Database and Information System (GLOMIS). ITTO & International Society for Mangrove Ecosystems, Yokohama, Japan and Okinawa, Japan. ISBN 4 906584 09 8.**

**Available from:** Information Officer, ITTO, [ahadome@itto.or.jp](mailto:ahadome@itto.or.jp) (full address details on page 2)



This publication contains a range of resource materials for the conservation and sustainable management of mangrove ecosystems, most of which were developed by the International Society for Mangrove Ecosystems under ITTO PROJECT PD 14/97 REV.1 (F). The work continues under ITTO PROJECT PD 194/03 REV.2 (M).

► **Akhmad 2004. Sistem permantauan kinerja internal pengelolaan hutan alam produksi lestari pada tingkat unit pengelolaan hutan (Guidelines for the internal monitoring of SFM performance by forest management units in Indonesia). Indonesian Forest Concession Holders Association and ITTO, Jakarta, Indonesia and Yokohama, Japan. ISBN 979 8381 09 2.**

**Available from:** Association of Indonesian Forest Concession Holders, Manggala Wanabakti Building, 9th Floor, Block IV, Jl. Jend. Gatot Subroto, Senayan, Jakarta 10270, Indonesia; Tel 62-21-570 1154; Fax 6221-573 2564; [aphijkt@cbn.net.id](mailto:aphijkt@cbn.net.id); [www.aphi-pusat.com](http://www.aphi-pusat.com)



This publication, which is also available in English, is the final technical output of ITTO PROJECT PD 42/00 REV.1 (F): 'Training of trainers for the application of the national and ITTO criteria and indicators of sustainable forest management at the forest management unit level'. Among other things, the project adapted ITTO's *Criteria and indicators for sustainable management of natural tropical forests* to Indonesian conditions using the results of field tests in more than 77 forest management units. This report is aimed at forest concessionaires who want to monitor their own performance in sustainable forest management; it contains the revised set of criteria and indicators, a typology of forest management by which indicators are weighted in the assessment process, and an action plan for addressing areas where indicators show weak performance.

► **Anon. 2004. Improvement of processing efficiency of tropical timber from sustainable sources in Indonesia. ITTO/ISWA Pre-project PPD 57/02 Rev. 1 (I) technical report. Indonesian Sawmilling and Woodworking Association and ITTO, Jakarta, Indonesia and Yokohama, Japan.**

**Available from:** Information Officer, ITTO, [ahadome@itto.or.jp](mailto:ahadome@itto.or.jp) (full address details on page 2)



This report presents an overview of the Indonesian wood-based industries, describes the methodologies used in the field observation of 13 selected mills, presents the findings of those field observations, and makes recommendations for improving what it finds are the currently low recovery rates of the Indonesian woodworking industry. In particular, concludes the report, there is an urgent need to improve national skills and capabilities in processing technologies and product quality management, and to identify the product standards, quality/grading requirements and technical regulations in international sawnwood product markets.

► **Sayer, J. & Campbell, B. 2004. The science of sustainable development: local livelihoods and the global environment. Cambridge University Press, Cambridge, UK. ISBN 0 521 53456 0.**

**Available from:** Cambridge University Press, The Edinburgh Building, Cambridge, CB2 2RU, UK; [www.cambridge.org](http://www.cambridge.org). £24.99



What is the role of scientific research in resolving natural resource management issues in tropical landscapes? In the preface to this book the authors write: “research, broadly defined, may be the only basis for solving many of the intransigent problems of the developing world”. How ‘broadly defined’ do they mean? Well, pretty broadly:

“The research that is needed is research that both mobilises existing knowledge and generates new knowledge. It is research that treats all management as experimental and that deals with real-life situations. It is research that enables scientists and farmers to experiment and learn together. It is action research but at a much larger scale than that usually practised.” The authors see a link between what they call the democratisation of science and the democratisation of societies, which, if encouraged, will lead eventually to better resource management. They advocate the ‘reinventing’ of development projects in which the following seven principles would be applied:

- set general goals but recognise that adaptability and learning will be required to reach them;

- there must be a fundamental commitment to an equitable relationship with local interest groups;
- outside interest groups must bring something to the table;
- all parties must commit to the process for as long as it takes;
- all must move at the pace of the slowest;
- everyone’s expectations must be realistic; and
- funding must follow process.

► **Christy P., Jaffré R., Ntougou O. & Wilks C. 2003. La Forêt et la filière bois au Gabon. La forêt du Gabon au début du troisième millénaire. Libreville, Ministry of Forest Economics (Gabon) and Ministry for Foreign Affairs (France).**



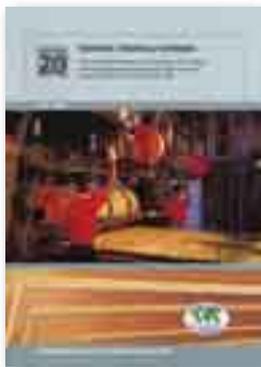
This work summarises the major points of information on the forest and timber industry of Gabon. It contains nine chapters: general information on Gabonese forests; the forest as a resource; forest research; forest management; the protection of forests; institutions; forest development; the marketing of forest products; and

the timber industry. This work will serve as valuable reference to all those who are interested in the Gabonese forest sector.

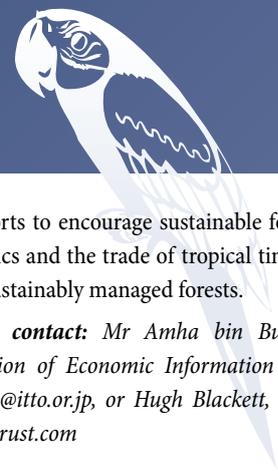
*Adapted from the publishers’ notes.*

► **Rutten, L. & Tan, S.H. 2004. Reviving tropical plywood. ITTO Technical Series No 20. ITTO, Yokohama, Japan. ISBN 4 902045 09 5**

**Available from:** Information Officer, ITTO, [ahadome@itto.or.jp](mailto:ahadome@itto.or.jp) (full address details on page 2)



This report identifies measures to bring increased transparency to the tropical hardwood plywood trade and analyses the causes of market fluctuations and price volatility.



Edited  
by  
Alastair  
Sarre

## **ITTO-backed community group wins award**

A 3000-hectare, community-based forest management project funded by ITTO in Buenavista, Bayombong, Nueva Viscaya, the Philippines has been hailed as a model in forest management.

The area is managed by the Federation of Vista Hills Kalongkong Upland Farmers Associations, Inc, with assistance from the Department of Environment and Natural Resources, local government units and other members of the Buenavista Upland Development Advisory Council.

Through community participation and with financial support, significant parts of the once marginal portion of the project site have been developed into plantations and agroforestry farms. Natural and secondary forests in the area are being better protected from illegal entry and poaching and enrichment planting is being carried out to assist the restoration of degraded forests.

Last year the project won the Model Sustainable Development Project Award offered by the Nueva Viscaya's Provincial Council for Sustainable Development and now it has also won a similar award from the Regional Council for Sustainable Development. The Federation received the award at a ceremony last March.

The ITTO project that supported the process (ITTO PROJECT PD 21/97 REV.2 (F)) started in 1998 and management was turned over to the Federation in 2002. This model of community forestry in action has now become an important tool for communicating sustainable development experiences and lessons learned with the wider community.

*Text based on an article by Benny G. Enriquez in The Philippine Star. For more information contact: Dr Eva Muller, Assistant Director of Reforestation and Forest Management (muller@itto.or.jp)*

## **ITTO awards grant to civil-society/private-sector partnership**

A partnership between the Tropical Forest Trust (TFT), a non-governmental organisation based in Switzerland, and PT Hutanindo, an Indonesian logging company, is the first beneficiary of an innovative ITTO small-grants program.

The grant of US\$45 000 will be used by the TFT to train logging teams in the PT Hutanindo logging concession in reduced impact logging and to provide them with the technical support they need to improve forest management planning. The overall aim of the partnership is to enable the PT Hutanindo operation to be certified as well managed—with benefits for the local community in terms of social infrastructure, training, employment and environmental conservation.

ITTO is offering grants to facilitate and support partnerships between timber producers and civil society organisations with a view to promoting progress towards sustainable forest management, certification and access to markets for tropical timber products. The initiative forms part of the

Organization's wider efforts to encourage sustainable forest management in the tropics and the trade of tropical timber products derived from sustainably managed forests.

*For more information contact: Mr Amha bin Buang, Assistant Director, Division of Economic Information and Market Intelligence, eimi@itto.or.jp, or Hugh Blackett, TFT, h.blackett@tropicalforesttrust.com*

## **New certification website**

The Peruvian Council for Voluntary Forest Certification (Consejo Peruano para la certificación forestal voluntaria), has launched a website ([www.cp-cfv.org](http://www.cp-cfv.org)) containing, among other things, information on standards for the certification of forest management in the production of 'castaña' (*Bertolletia excelsa*) in Peru.

## **Online forum for funding**

An online forum has been set-up by the Collaborative Partnership on Forests and the National Forest Programme Facility to allow people to share information, ideas and experiences on funding for forest-related projects. The forum aims to assist fund-seekers in soliciting funding for their projects. Representatives of grant-making bodies are also invited to post news and advice for potential applicants. Visit the forum at [www.fao.org/forestry/site/17261/en](http://www.fao.org/forestry/site/17261/en)

## **Indonesian government revises forestry law**

In 1999, the Government of Indonesia enacted a new Forestry Law (No 41/1999) which, among other things, banned open-pit mining in protected forests. Last March, however, the government issued Government Regulation in Lieu of Law (or perpu) No 1/2004, which according to the *Jakarta Post* stipulates that all licenses and contracts on mining in forests made before the enactment of the Forestry Law are valid for the remainder of the original term of the license or contract. The issuance of the perpu was followed in May by a Presidential decree specifying the 13 mining companies that would be permitted to resume mining activities. Environmental activists condemned the measure for the destruction it would cause to Indonesian forests, while mining and business interests praised it, saying that it showed that Indonesia honoured its contracts and would also limit the government's exposure to potentially massive legal challenges. The total area of mining concessions released under the law change is about 928 000 hectares.

The government has drafted but not issued (by June 2004) another perpu, which would prescribe penalties for illegal logging and establish a special agency comprising divisions of the Indonesian military, the national police, the Attorney General's office and other institutions with the authority to investigate, apprehend and prosecute illegal logging activities.

*Sources: Jakarta Post, Tempointeraktif.com; reported by Budhita Kismati.*

## **Quantitative assessment of tree resources outside forests using remote sensing (RS), geographical information systems (GIS) and field-based surveys**

18 April–13 May 2005

Enschede, the Netherlands

Cost: €1500

Language: English

This course will explore both qualitative and particularly quantitative aspects of the assessment of tree resources outside forests (TROF). Hands-on fieldwork will be part of the course, which is designed for professionals working in the broad field of rural development and involved and interested in planning and decision-making related to the management of tree resources in rural areas.

After the course, participants should be able to:

- define TROF and describe the role and importance of TROF for various stakeholders at different levels;
- describe the how and why and the dynamics of TROF management in farmers' livelihood strategies;
- identify and use the relevant applications of remote sensing and geographic information systems for the assessment and monitoring of TROF;
- describe the problems and difficulties of field-based TROF surveys and the advantages and disadvantages of the various types of surveys currently used; and
- design a (simple) field-based TROF survey.

**Contact:** Education Affairs Department, ITC, PO Box 6, 7500 AA Enschede, the Netherlands; [www.itc.nl](http://www.itc.nl); [education@itc.nl](mailto:education@itc.nl)

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

11 October–19 November 2004

Wageningen, the Netherlands

Cost: €4800

Language: English

The course offers participants the opportunity to reflect on current work approaches and develop skills and practices supporting collaborative forest management with active stakeholder participation. In particular, the course should enable participants:

- to build an awareness of their own skills and competencies for leading innovations in multi-disciplinary work approaches;
- to practice a broad range of participatory methods and adaptive management tools;
- to understand and assess the implications of up-scaling participation to working with diverse stakeholder groups at various levels;
- to design, plan and implement change processes with small teams to support decentralised management practices in natural resource management; and
- to assess the impact of their own values and personal learning styles and to further develop their competence as a team leader.

The application deadline is 1 September 2004.

**Contact:** International Agricultural Centre, PO Box 88, 6700 AB Wageningen, the Netherlands; Tel 31-317-495 495; Fax 31-317-495 395; [training.iac@wur.nl](mailto:training.iac@wur.nl)

## **MSc agroforestry**

This 12-month MSc Degree or Postgraduate Diploma course is designed for holders of BSc-level qualifications or their equivalent in the natural sciences and to broaden the competence of forestry and agricultural graduates. The principal aim of the course is to provide specialised education and training in agroforestry as an approach to land-use to meet human needs from farming and forestry systems through an integrated consideration of the ecological, economic and social complexities required to understand the functioning of these systems.

The course is taught by seven agroforestry specialists who are full-time academic members of the school. It comprises two parts: a formally taught element which runs from September to April, and a period of approximately four months during which students research a specific area of interest to them and produce a dissertation.

**Contact:** Dr Zewge Teklehaimanot, Course Director, MSc Agroforestry, School of Agricultural and Forest Sciences, University of Wales, Bangor, Gwynedd, LL57 2UW, UK; Tel 44-1248-382639; Fax 44-1248-354997; [z.teklehaimanot@bangor.ac.uk](mailto:z.teklehaimanot@bangor.ac.uk)

## **MSc/Dipoma in Environmental Forestry (Tropical)**

This 12-month course is designed for holders of BSc-level qualifications (or equivalent combinations of qualifications and experience) in the natural or social sciences, forestry or agriculture. It has run successfully since 1978 and is taught by a team of 16 academic staff with direct up-to-date experience of environmental forestry in the tropics. Over the past 20 years, 182 students from 43 tropical and sub-tropical countries have taken the degree. The course provides interdisciplinary education and training in subjects of current and future importance for forest management in the tropics. It combines the strengths of traditional forestry methodologies with detailed coverage of modern approaches to: the assessment and protection of biodiversity, fixed carbon and other environmental values; sustainable production; participatory forest management; forest policy, including certification; agroforestry; forest restoration; and non-timber forest products. The course comprises two parts: the formally taught element runs from September to April, followed by five months during which students research a specific area of interest to produce a dissertation.

**Contact:** Dr Jeremy Williams, Course Director, MSc Environmental Forestry, School of Agricultural and Forest Sciences, University of Wales, Bangor, Gwynedd, LL57 2UW, UK; Tel 44-1248-382289; Fax 44-1248-354997; [j.h.williams@bangor.ac.uk](mailto:j.h.williams@bangor.ac.uk)

## **Participatory approaches in forestry and natural resources development projects**

19 October–29 November 2004

18 October–28 November 2005

Los Baños, the Philippines

Cost: US\$3,780

This course enables participants to: appreciate the need for participation of affected sectors, especially local communities, in natural resource development projects; acquire the necessary knowledge and skills to appropriately apply the different participatory principles and techniques in all aspects of the project cycle; and formulate an action plan that integrates the participatory concepts, strategies and techniques in their own work situation.

**Contact:** Training Officer, College of Forestry and Natural Resources, University of the Philippines at los Baños, TREES, PO Box 434, 4031 College, Laguna, the Philippines; Tel 63-49-536 2268; Fax 63-49-536 3340; [trees@laguna.net](mailto:trees@laguna.net); [www.uplb.edu.ph/cf/](http://www.uplb.edu.ph/cf/)

▶ 20–23 July 2004. **36th Session of the International Tropical Timber Council and Associated Sessions of the Committees.** Interlaken, Switzerland. **Contact:** Collins Ahadome; Tel 81-45-223 1110; Fax 81-45-223 1111; [itto@itto.or.jp](mailto:itto@itto.or.jp); [www.itto.or.jp](http://www.itto.or.jp)

▶ 26–30 July 2004. **UN Conference (1st Part) for the Negotiation of a Successor Agreement to the ITTA, 1994.** Geneva, Switzerland. **Contact:** Collins Ahadome; Tel 81-45-223 1110; Fax 81-45-223 1111; [itto@itto.or.jp](mailto:itto@itto.or.jp); [www.itto.or.jp](http://www.itto.or.jp)

▶ 1–10 August 2004. **2nd Worldwide Symposium on Gender and Forestry.** Arusha, Tanzania. IUFRO 6.18.00. **Contact:** Ann-Merete Furuberg, Department of Forestry and Natural Resources, Hedmark College, N-2256 Grue Finnskog, Norway; Tel 47-9016 3092; Fax 47-6294 5753; [merete.furuberg@hedmark-f.kommune.no](mailto:merete.furuberg@hedmark-f.kommune.no)

▶ 8–10 August 2004. **XIII Seminario de Actualización sobre Sistemas de Cosecha de Madera y transporte Forestal.** Curitiba, Paraná, Brazil. IUFRO 3.05.00. **Contact:** Jorge Roberto Malinowski, Coordenação do Evento, Rua: Lothário Meissner, 3.400 - CEP 80.210-170, Curitiba, Paraná, Brazil; Tel 55-41-360 4222; Fax 55-41-360 4221; [www.floresta.ufpr.br/seminario](http://www.floresta.ufpr.br/seminario); [colheita@floresta.ufpr.br](mailto:colheita@floresta.ufpr.br)

▶ 15–20 August 2004. **Forest Diversity and Resistance to Native and Exotic Pest Insects.** IUFRO 7.03.07. Hammer Springs, New Zealand. **Contact:** Andrew Liebhold, Northeastern Research Station, USDA Forest Service, 180 Canfield St, Morgantown, WV 26505, USA; Fax 1-304-285 1505; [aliebhold@fs.fed.us](mailto:aliebhold@fs.fed.us); <http://iufro.boku.ac.at/iufro/>

▶ 15–21 August 2004. **XII International Congress of Entomology.** Brisbane, Australia. **Contact:** Ashley Gordon, Congress Director; [Ashley@ccm.com.au](mailto:Ashley@ccm.com.au);

[www.ccm.com.au/icoe/index.html](http://www.ccm.com.au/icoe/index.html)

▶ 24–26 August 2004. **World Conference on Ecological Restoration.** Victoria, Canada. **Contact:** R. Seaton, Conference Chair, Silvicultural analyst, Brinkman & Associates Reforestation Ltd; 520 Sharpe St, New Westminster BC, Canada; Fax 1-604-520 1968; [Robert\\_Seaton@brinkman.ca](mailto:Robert_Seaton@brinkman.ca)

▶ 1–2 September 2004. **Forest Information Technology Congress and Exhibition.** Jyväskylä, Finland. **Contact:** Finpro Marketing Oy, Porkkalankatu 1, FIN-00181 Helsinki, Finland; [forestit@finpro.fi](mailto:forestit@finpro.fi); [www.forestit.net](http://www.forestit.net)

▶ 6–10 September 2004. **Ad hoc Expert Group on Consideration with a View to Recommending the Parameters of a Mandate for Developing a Legal Framework on all Types of Forests.** New York, USA. **Contact:** Ms Luz Aragon, United Nations Forum on Forests; Tel 1-212-963 1393; Fax 1-212-963 4260; [www.un.org/esa/forests](http://www.un.org/esa/forests)

▶ 14–16 September 2004. **International Workshop on the Clean Development Mechanism: Opportunities for the Forest Sector in the Tropics.** Seoul, Republic of Korea. Sponsored by ITTO. **Contact:** Professor Dr Yeou-Chang Youn, Seoul National University, Department of Forest Resources; Silim-dong san 56-1, Gwanak-ku, 151-742, Seoul, Republic of Korea; Tel 82-2-88 4754; Fax 82-2-875 476; [youn@snu.ac.kr](mailto:youn@snu.ac.kr)

▶ 27–30 September 2004. **The Economics and Management of High Productivity Plantations.** Lugo, Galicia, Spain. IUFRO 4.04.06. **Contact:** Juan Gabriel Alvarez; Tel 34-982-252303; or Chris Goulding, New Zealand Forest Research Institute, Private Bag 3020, Sala Street, Rotorua, New Zealand; Tel 64-7-343 5641; Fax 64-7-348 0952; [www.lugo.usc.es/iufro/](http://www.lugo.usc.es/iufro/)

▶ 2–14 October 2004. **13th Meeting of the Conference of the Parties to CITES.** Bangkok, Thailand. **Contact:** Willem Wijnstekers, Convention on International Trade in Endangered Species of Wild Fauna and Flora; Tel 41-22-917 8139; or 41-22-797 3417; [cites@unep.ch](mailto:cites@unep.ch); [www.cites.org](http://www.cites.org)

▶ 11–15 October 2004. **Eucalyptus in a Changing World.** Aveiro, Portugal. IUFRO 2.08.03. **Contact:** Nuno Borralho, RAIZ-Instituto de Investigação da Floresta e Papel, Herdade da Torre Bela, Ap. 15, P-2065 Alcoentre, Portugal; Tel 351-263-480035; Fax 351-234-931359; [www.aveiroiufro.com](http://www.aveiroiufro.com); [conference@aveiroiufro.com](mailto:conference@aveiroiufro.com)

▶ 17–22 October 2004. **Towards Better Management Practices in Tropical Humid Forests: Developing Principles and Recommendations for the Amazon Basin.** Belem, Brazil. IUFRO 3.05.00. **Contact:** Plinio Sist, CIRAD-Forêt, Convênio Cirad Forêt EMBRAPA, Projeto Ecosilva, EMBRAPA Amazonia Oriental, Travessa Dr. Eneas Pinheiro, 66095-100 Belem, PA, Brazil; Tel 55-91-299 45; Fax 55-91-276 7939; [plinio@cpatu.embrapa.br](mailto:plinio@cpatu.embrapa.br)

▶ 24–29 October 2004. **International Symposium on Wood Sciences.** Montpellier, France. IUFRO 5.00.00. **Contact:** Département Forêts du Cirad, ISWS, TA 10/16 73 Rue JF Breton, 34398, Montpellier Cedex 5, France; Fax 33-4-6761 5725; [iawa-iaws-symposium@cirad.fr](http://iawa-iaws-symposium@cirad.fr)

▶ 31 October–3 November 2004. **VIII Congreso Latinoamericano de Estudiantes de Ciencias Forestales.** La Molina, Peru. **Contact:** Mariana Ibárcena Escudero (Organizing committee president), Av. La Molina s/n La Molina-Perú; [alecif\\_peru@universia.edu.pe](mailto:alecif_peru@universia.edu.pe); [www.lamolina.edu.pe/eventos/forestales/congresolatforest/](http://www.lamolina.edu.pe/eventos/forestales/congresolatforest/)

▶ 17–21 November 2004. **International Symposium on Ecological Restoration.** Santa Clara City, Cuba. **Contact:** Grecia Montalvo, Empresa

Nacional para la Protección de la Flora y la Fauna, Carretera Central km 306, Banda Placetas, Santa Clara, Villa Clara, Cuba Cp: 50 100; Fax 53-42-208430; [sisre@ccb.civc.inf.cu](mailto:sisre@ccb.civc.inf.cu) or [grecia\\_montalvo@yahoo.es](mailto:grecia_montalvo@yahoo.es)

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USA. **Contact:** International Wood Products Association (IWPA), 4214 King Street West, Alexandria, Virginia, USA; Tel 1-703-820 6696; Fax 1-703-820 8550; [info@iwpa.wood.org](mailto:info@iwpa.wood.org); [www.iwpawood.org](http://www.iwpawood.org)

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## Becoming more participative

Main development stages of a forest management plan (social aspects) and associated current and desired actions

STAGE	IMPLIED ACTION	
	CURRENT	DESIRED
<b>Analysis</b>	Socioeconomic surveys	Participative diagnosis (representations, appropriation and access norms, usage, prospects, etc)
<b>Formulation of management rules</b>	Procedure for the participation of local actors	Negotiations of agreements; agreement mechanisms; conflict management; role distribution; cost- and benefit-sharing; local development plan
<b>Dissemination and approval of plan</b>	Information meeting, posters; ministerial order or decree enforceable by law	Campaign of local communication; recognition of agreements written in the management plan, both socially and in writing (ministerial order), etc
<b>Implementation of plan</b>	Development and implementation of social projects, support for access to community forests, forest taxes, employment	Instituted dialogue platform (forum) and monitoring structure (participative monitoring, conflict prevention/ resolution processes, mutual control)

plan development into four stages and shows associated actions, both current and desired; the latter are based on lessons learned from the participative management of protected areas in the region. During the first stage, ‘analysis’, socioeconomic investigations should be conducted in a participative manner in order to prepare the actors for negotiation. The pivotal stage is the one in which ‘management rules’—which, incidentally, warrant a more neutral name—are developed. This should be tackled within a paradigm of negotiation and the resulting specific agreements on rules and processes should be included in the management plan; the use of a facilitator (or mediator), particularly during this stage, would be highly advantageous. The last stage, the implementation of the plan, should allow as much scope as possible for actors to ‘learn by doing’, because this will help in the participatory, adaptive management process that will continue on.

### Mixed model

The lessons learned from the participatory management of protected areas can certainly help forest managers to advance the development of management plans for forest concessions through genuine negotiation, but it is important to be realistic. If industrial-level forestry is to be successful and sustainable it must be profitable; the management planning process should not place insurmountable obstacles in the way of that. What is needed is a workable and efficient process that both empowers and benefits local stakeholders and delivers profitability to the concessionaire. An approach similar to that proposed by Buttoud and Samyn (1999), in which certain elements of the plan (eg forest access, benefit-sharing, etc) are fully negotiated while others (eg road engineering standards, allowable cut, etc) are set in accordance with regulatory or industrial norms, might work best; each process would need to define those measures that would be prescribed and those eligible for a negotiated approach.

### Concluding remarks

The time has come to conceptualise and then operationalise a practical approach to the social component of sustainable

forest management. Outsiders—both prospective concessionaires and those calling for boycotts against tropical timber—will need to be patient, because participatory processes do not happen overnight and nor are they ever perfect. Moreover, the task of realising a truly sustainable social setting for timber production is not one reserved for foresters only; all actors will need to have a say.

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## Space should be made for the genuine negotiation of forest management plans in Africa

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**F**OREST management planning has been promoted strongly in the Congo Basin forests of Central Africa over the last ten years or so. This approach deviates from the traditional mining practices used in timber operations and aims to integrate socially equitable, ecologically sustainable and economically viable practices using the forest management plan as its basic tool. Although significant progress has been made, many obstacles still stand in the way of this approach. The social component, for example, is far from being incorporated satisfactorily.

It is now commonly acknowledged that the establishment of sustainable management in Central Africa requires a consensus between the main partners involved (Estève 2001); decisions should no longer be at the exclusive discretion of the forest manager, who strives to develop the forest on the basis of technical and scientific knowledge (Bertrand et al. 1999). Therefore, the contents of the management plan should be the result of negotiation between the various stakeholders.

As noted by Buttoud (2003), planning methodologies are available that combine decision-making, communication and negotiation processes—they just need to be adapted to tropical forests. Today, experts in forest management find themselves in the same labyrinth as experts in protected areas were in ten years ago. The involvement of local populations and other stakeholders and the development of a partnership culture in the management of protected areas were a black box that was only decoded after a great deal of conceptualising and field-testing. The results obtained may not yet be entirely successful, but the lessons learned can be very useful at the methodological level.

### Socialising forest management

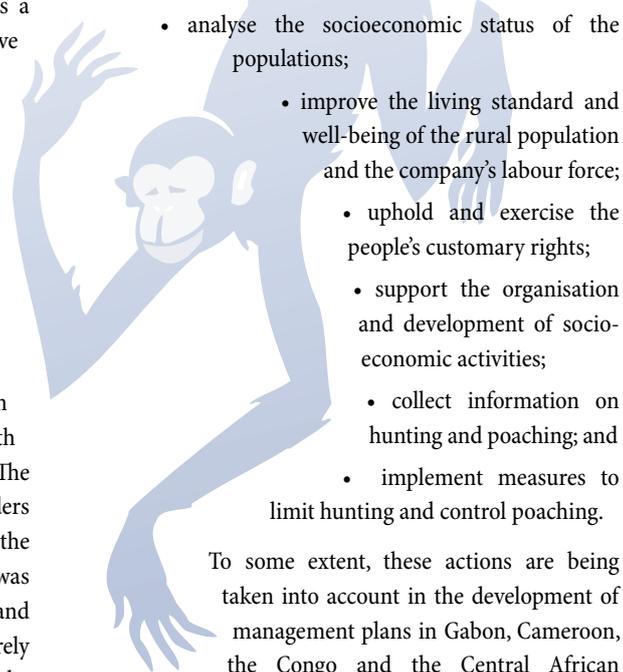
The social component of forest management is certainly present in efforts to identify principles, criteria and indicators of sustainable forest management. In the *ATO/ITTO Principles, criteria and indicators for the sustainable management of African natural tropical forests* (ATO/ITTO 2003), for example, social sustainability is addressed by Principle 4, which emphasises the quality of relations between the forest concession manager, forest workers and the community in general. The principle's associated

criteria and indicators aim to promote a culture of dialogue, participation and negotiation in the choice of management objectives and to maximise the contribution of concessionaires towards basic social infrastructure such as for health and education.

### Status

This is much easier said than done. *The practical management plan for African natural production forests* published by the International Technical Tropical Timber Association (ATIBT) in 2001 lists the following actions related to the social component of forest management:

- analyse the socioeconomic status of the populations;
- improve the living standard and well-being of the rural population and the company's labour force;
- uphold and exercise the people's customary rights;
- support the organisation and development of socio-economic activities;
- collect information on hunting and poaching; and
- implement measures to limit hunting and control poaching.



To some extent, these actions are being taken into account in the development of management plans in Gabon, Cameroon, the Congo and the Central African Republic. However, many foresters remain dissatisfied. What is missing in the above list is any action aimed at the genuine participation of local stakeholders in the making of decisions related to the establishment and management of the forest concession itself.

### Lessons learned from protected-area approaches

In Africa at least, the present approach to social issues taken by concessionaires cannot be said to be fully participatory. There are many reasons for this, as explained by Pierre (in prep). One of them is that, in general, the social dimension of forest management still seems to be an abstract and fuzzy concept that is interpreted diversely according to the representations and interests of the various parties involved. This problem of understanding is compounded by the lack of a methodology suitable for the complex social environments we find in Africa.

The *table* (next page) divides the process of forest management

Tough negotiators: Photo: CIB

