

# Achieving sustainable forest management in Indonesia

**An ITTO mission to Indonesia identified corruption, illegal logging and illegal trade as major impediments to sustainable forest management and made sweeping recommendations for the reform of the Indonesian forestry sector**

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**A**N ITTO technical mission visited Indonesia between March and September 2001 to identify ways in which ITTO could support the formulation of plans to achieve sustainable forest management. The terms of reference of the Mission placed particular emphasis on actions to curb illegal logging and to address related issues, including the restructuring of the forest industries, improved forest plantations for resource creation, recalculation of timber values, and decentralisation in the forestry sector. This article summarises the main findings of the Mission, which were presented to the International Tropical Timber Council at its 31st session in November 2001.

## Curbing illegal activities

By definition, illegal activities are those carried out against the existing legal system. Legal systems involve a hierarchy of laws, rules, codes, regulations, decisions and so on, and function in tandem with institutional and judicial systems.

The existence of laws by itself is, of course, no guarantee that illegal activities will be prevented. Indeed, wrong actions are often carried out under the cover of spurious rules and regulations and fake documents. All actions against the principles enshrined in a country's constitution should, therefore, be considered illegal. The prevalence of illegal activities is generally an indication of weak governance.

Among the illegal practices in Indonesian forestry, the most serious and conspicuous is illegal logging. In Indonesia this takes the form of cutting outside the prescribed intensity and size classes and outside forest concession boundaries; unlicensed logging by small-scale operators; under-declaration of harvest volumes and value; transfer pricing; and other means of avoiding the payment of charges. Illegal logging takes place not only in production forests but has spread to protected areas and national parks. Most often it takes place with the collusion of law enforcement personnel.

***The strict enforcement of law including deterrent punishment, in tandem with a program to address corruption within enforcement agencies, is essential and urgent if illegal logging is to be controlled.***

Reports indicate that illegal logging in Indonesia far exceeds the legal production. In 1998, illegal log production amounted to an estimated 57 million m<sup>3</sup> compared to the



**Big tree to climb:** a fine specimen of *Shorea leprosula*, a high-value but increasingly scarce species in Indonesia's forests. Can the country reform its forest sector and bring about sustainable forest management?

Photo: © Gadjah Mada University

annual allowable cut of 20–22 million m<sup>3</sup> (Scotland et al. 1999; Dudley 2000). Estimates place the total annual economic loss to the country from illegal logging at about US\$3.5 billion (EIA 2001; World Bank 2001).

## Causes of illegal logging

The causes of illegal logging in Indonesia include:

- **unmet demand (and availability of ready market) for logs:** the unregulated expansion of wood processing capacity, established legally and illegally, far exceeds the capacity of the forest to produce wood raw material in a sustainable manner;
- **the high profitability and low risk of illegal operations:** the situation is made worse by, among other things, ambiguities in the laws, insufficient staff for crime detection, dereliction of duty and conflict of interest on the part of enforcement staff, inadequate cooperation among law enforcement agencies, and delays in judicial action; and
- **human greed promoted by skewed socio-political values:** investors are often prompted by greed to

embark on lucrative illegal activities and, in the process, to influence unscrupulous elements in the relevant government agencies through bribery.

Other contributory factors include: deficiencies in forest concession management; inefficiencies in wood processing; rural poverty and unemployment; tenurial anomalies; conflicting land-use policies; inadequate attention to the welfare of local communities; and distortionary incentives and a lack of involvement on the part of civil society.

### Implications

While some of the worst cases of illegal logging (including illegal clearing for conversion to other land uses such as oil palm plantation) result in a complete loss of forest cover, at the very least it is associated with accelerated forest degradation. An estimated 38% of national parks and conservation areas, 46% of protection forests and 30% of production forests in Indonesia have already been degraded (WFC 1997). The ecological fallout of illegal logging is reflected in the erosion of biodiversity and other environmental values. The financial cost to governments in foregone revenue is enormous.

### Measures to curb illegal logging

The strict enforcement of law including deterrent punishment, in tandem with a program to address corruption within enforcement agencies, is essential and urgent if illegal logging is to be controlled. The strategies needed include the establishment of an anti-illegal logging taskforce answerable directly to a high authority, the strengthening of institutions for handling forest offences, and measures to increase the level of surveillance and deterrence.

These strategies should be complemented with reforms to the existing systems of logging concessions, industrial licensing and subsidies; in addition, a temporary ban on log exports (already initiated in October 2001 in response to the Mission's preliminary findings) would facilitate short-term measures to control illegal logging. Once the situation is brought under reasonable control, it would then be possible to promote lawful behaviour through a system of timber certification and log auditing, an increased role for the Indonesian Ecolabelling Institute (LEI, an independent national certification body—see *TFU* 11/4, p 12), and the introduction of a system of performance bonds for concessionaires.

Additional measures required to curb illegal logging include: involving civil society and establishing a system of rewards; reducing demand for wood by improving processing efficiency; closing down illegal processing units and enforcing transparent timber accounting; controlling the conversion of natural forests (which serves as a cover for illegal logging); invoking international conventions to control log exports; arranging agreements on handling illegal log trade with receiving countries; strictly protecting conservation areas; and promoting alternative sources of

wood through people's participation in tree-planting and agroforestry (see the box for a summary of recommended measures).

The prime issue to be addressed in effectively controlling illegal logging is corruption, which in turn requires absolute political will. In addition, other longer-term reforms aimed at promoting a healthy and vigorous forestry sector will also assist in reducing illegal timber harvesting and trading. For example, a strong and sustainable forestry sector that helps reduce poverty and under-development—two insidious promoters of illegal forest activities—will also help combat forest crimes. Moreover, forest sector reforms will help to build a stronger institutional capacity to control forestry activities. Some of the reforms recommended by the Mission are described below.

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### Restructuring the forest industries

For 35 years Indonesia has witnessed phenomenal growth in wood production, processing and export. Industrial wood use increased from about 3.2 million m<sup>3</sup> in 1967 to over 70 million m<sup>3</sup> in 2000. Wood is obtained mainly (some 96% in 1998) from natural forests.

An ideally structured industry will be highly efficient. The structure of forest industries in Indonesia, however, exhibits weaknesses such as a predominance of primary processing, over-capacity and low capacity utilisation, a raw material supply deficit, unsustainable forest exploitation, low efficiency, high rates of raw material wastage, a large number of illegal processing units and increasing use of illegal logs, over-capitalisation, indebtedness due to financial mismanagement, a lack of coordination among related government agencies, social conflicts, and a lack of reliable and consistent information. Low administered charges on raw material along with other flaws in the logging concession system are fuelling these problems.

The situation is likely to prevail and assume larger

### Mission recommendations on illegal logging

Illegal logging and other related illegal activities in forestry should be addressed by appropriately invoking the provisions of laws and regulations supported and complemented by policy interventions and balanced incentives. Specific recommendations are to:

- impose a temporary ban on log exports, not exceeding three years;
- implement timber certification and log auditing;
- undertake measures to increase the level of deterrence;
- introduce/implement a system of performance bonds in forest concessions;
- establish an anti-illegal logging taskforce answerable directly to a high authority, either the President or Vice-president;
- attend to the socio-economic welfare of the local community and involve them as partners in fighting illegal logging;
- modify and restructure the HPH (forest concession rights) system; and
- introduce special measures to protect conservation areas.

proportions unless drastic action is taken immediately to restructure the sector. Inaction will have implications on raw material security, employment, income, government revenue, trade, operational efficiency, community welfare and conservation.

### ***Measures for structural improvement of forest industries***

Any measures to improve the situation must include reforming the structure and functioning of forest industries, limiting processing capacity to the sustainable raw material supply, and removing perverse subsidies that encourage malpractice and financial improprieties. Such reforms should be based on a well-designed master plan. This master plan would specify the processing units that are to be closed or replaced, repaired and retooled, and downsized and streamlined. It would also identify diversification options and the need or otherwise to establish new units for such diversification. It would contain proposals for improving and increasing industrial forest plantations and for promoting small-scale forest-based enterprises, downstream value-added production, wood waste reduction and waste utilisation, product research, and extension and incentives.

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An important incentive needed for increased efficiency in wood industries is higher log royalties and methods of pricing designed to apply scarcity value to raw material. This can be achieved by reducing log output to sustainable levels. In an open economy, price would equate demand with available supply. In Indonesia, a long history of government subsidies has muted market forces; hence there is a need for appropriate intervention.

### ***Recalculating timber value***

Timber value, expressed as royalty or stumpage, is the value of timber standing uncut as trees in the forest, and that is what the purchaser or concessionaire should pay the forest owner. Often, instead of collecting the amount as one fee it is divided into several. Indonesia's forest revenue system recognises 13 different fees on timber, of which timber royalty and a reforestation fee account for almost 96%.

Charges on the forest resource can be a powerful tool for ensuring proper management. The rent capture coefficient is an indication of the efficiency of logging concession management. In that regard, the calculation of the real value of timber assumes significance.

An ITTO-commissioned study (Haeruman 2001) shows that in 1997–98 the rent capture in Indonesian logging concessions was only about 30%, leaving a large windfall to the concessionaries. In contrast, Malaysia captures about 85% of the difference between FOB (free-on-board) price of logs and operating costs.

### ***Causes of low rent capture***

The causes leading to the present situation include the following:

- a lack of forest resource accounting and a system of estimating forest values;
- the pressure of vested interests and inefficiencies in public administration leading to under-valuation of the resource;
- a lack of competition in awarding logging concessions;
- log export bans of the past, which have prevented the flow of information on log prices in international markets to help estimate potential rent;
- ignorance on the part of the public and a lack of community participation in the social auditing of forestry activities;
- the multiplicity of charges and complicated collection procedures; and
- a lack of mandatory provision to periodically review royalties and charges.

### ***Impacts***

Low rent capture not only means a loss of government revenue. It perpetuates a concealed subsidy, negatively affects investment in forestry development and blocks the entry of potentially more efficient operators. It can also lead to other distortionary impacts caused by windfall gains through corruption, illegal activities and inappropriate resource allocation. Low rent capture encourages concessionaires to hold large tracts of forests and acts to prevent the needed paradigm shift in forestry—away from poorly controlled timber extraction and towards sustainable ecosystem management and from profit maximisation towards a greater emphasis on social welfare. The impact of low rent capture is exacerbated by losses through illegal and wasteful logging, since no rent accrues on these.

### ***Measures to improve rent capture***

It is important to streamline the valuation of natural forest products with a view to improving the capture of economic rent, removing concealed subsidies, limiting windfall profits and inducing efficiency in forest resource use. This would involve linking the charges on forest products to the estimated economic rent of the forest resource.

There is scope to immediately increase rent capture. Charges on logs need to be differentiated by species, location and quality to prevent the tendency for high-grading. It is necessary to introduce an element of competition in deciding royalties for timber and other forest products and to establish an improved framework for the forest revenue system. Also, a system of natural forest resource accounting, linked to the system of national accounts, needs to be introduced to instil improved accountability in the sector.



## Decentralising the forestry sector

The new spirit of decentralisation in Indonesia is captured in laws 22/1999 (on authority and accountability) and 25/1999 (on fiscal balance between centre and regions). The laws stipulate that districts (*kabupaten*) will be the main functional level of decentralised government; under the new laws, *kabupaten* are provided with wide-ranging authority on all matters except in certain, specified areas such as defence and security affairs, foreign affairs, fiscal and monetary affairs, justice, religion, strategic technologies, conservation and national standardisation. The decentralisation process in Indonesia, being hastily undertaken, did not adequately build capacity at the decentralised level, with subsequent implications for, among other things, forest management.

According to the decentralisation laws, only national parks and nature reserves are to be managed directly by the central government. All other forestry activities are to be under the supervision of the local government. Presently, however, the district governments are unprepared for and inexperienced in forest management.

### Problems

While laws 22/1999 and 25/1999 provide the legislative means for implementing decentralisation, the scenario is made ambiguous by a series of confusing and contradictory regulations, without clear indication as to which supersedes which. The Basic Forestry Law (41/1999) has not helped the situation, either. There are a number of areas where the existing vagueness could lead to serious problems, including in the following:

- redeployment of staff and the sharing of assets, roles and responsibilities;
- contracts, concessions and other activities spreading over several districts or more than one province;
- investment in forest plantations in districts devoid of, or deficient in, forests;
- the settling of land claims and tenurial disputes; and
- responsibility for curtailing illegal activities in forests.

The agonies of decentralisation often originate from misperceptions and unrealistic expectations on the part of stakeholders. Issues such as the lack of financial discipline, anomalies in revenue sharing, lack of resource security, the non-homogenous nature of decentralised units, institutional inadequacies and the lack of a clear decentralisation plan add to the pain and confusion. The task involved in preparing some 400 districts to implement decentralisation and leading them through the process of transition is of such a magnitude that it cannot be achieved effectively in the short term.

### Impacts

These problems lead to several negative impacts in forest-related areas. For example, they have exacerbated illegal logging, led to the degradation of conservation areas and unsustainable forest management and created conflicts and antagonism among different governance levels and players. Moreover, the confusion has meant that a large number of land claims and land disputes have not been able to be settled.

### Measures for decentralising the forestry sector

The forestry sector needs to be decentralised within the broad provisions of the decentralisation laws, appropriate to the sectoral needs and based on a well thought-out decentralisation plan. Such a plan should involve:



**Banned:** Indonesia has temporarily banned the export of logs at the recommendation of the ITTO mission. Photo: A. Sarre

stakeholder participation; the division and transfer of powers and responsibilities; the formulation of regulations for implementing the decentralisation laws in forestry; the design and installation of institutions with the required capability at the different levels; an agreed system of revenue allocation; coordination mechanisms to avoid misinterpretations; and a system of monitoring and control.

At this stage, decentralisation should be extended to the provincial rather than the district level, with the central government providing policy support, guidance and coordination. This can be done by invoking the decentralisation laws and would further call for several related actions, including to:

- articulate and decide on a decentralisation plan for forestry, through a high-powered consultative body;
- prepare and implement a clear framework and sequenced strategy for decentralisation in forestry;
- restructure the Ministry of Forestry, strengthen forestry institutions at the provincial and district levels and define the roles, responsibilities and powers of all institutional components;
- settle land disputes and ensure tenure security for indigenous communities;
- enforce financial discipline through the involvement of civil society;
- carry out macro spatial planning in forestry at the provincial level, with the central government facilitating synchronisation of the provincial plans; and
- make sustainable forest management compulsory by law, with the central government determining relevant criteria and indicators and monitoring their implementation through multi-stakeholder processes.

## Need for reforming and strengthening institutions

All the issues discussed here are affected by institutional factors, which provide the context in which to implement sustainable forest management. These include policy and strategy, planning and programming under the umbrella of the National Forest Program, and institutional reforms. The last is a prerequisite for solving the problems facing the forestry sector, as decentralisation has made many of the previous institutions inadequate.

## Conclusions

Indonesian forestry is now at a critical crossroad and has two clear choices: continue on a path of forest depletion leading to a precipitous decline in the sector's contribution to socio-economic and environmental contributions, or shift towards sustainable contributions over the longer term. There can be no doubt that the costs of the former option are greater than those of the latter. The rational choice is therefore obvious.

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Sustainable forestry development can be achieved and the rule of law enforced if guided by appropriate policies and supported by pragmatic strategies to rid the sector of the scourge of illegal and corrupt activities. Immediate steps to be taken in that direction, as proposed by the ITTO Mission, are to:

- establish a National Forestry Council, with the Ministry of Forestry providing the secretariat for it (and for the taskforces linked to it), to function as a policy-guiding, consultative and supervisory body. This Council would serve as the lead agency for formulating the National Forest Program;
- strengthen policy and law enforcement to curtail illegal logging;
- develop and implement a strategic plan for restructuring the forest industries;
- develop and implement a sequenced strategic plan for decentralising the forestry sector involving well thought-out institutional measures and avoiding over-regulation;
- rationalise and streamline the industrial timber estate program with special emphasis on joint-ventures; and
- prepare and implement project(s) for demonstrating models of sustainable, decentralised and multi-stakeholder forest management in selected districts of Indonesia.

These initial steps can serve to promote long-term sustainable forestry development in Indonesia.

*The Mission also made a series of recommendations on development of the forest plantation sector. For a full copy of the Mission's report go to [www.itto.or.jp/inside/report.html](http://www.itto.or.jp/inside/report.html) or contact the ITTO Secretariat (address details p 2). After considering the report last November, the International Tropical Timber Council decided to provide funds to the Government of Indonesia to help promulgate the Mission's findings to national, provincial and district-level officials of relevant ministries and departments. It also encouraged Indonesia to submit project proposals to ITTO with a view to implementing the Mission's recommendations.*

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