Monitoring mahogany

The tracking of mahogany from forest to consumer is critical if the current over-exploitation of the species is to be controlled

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Made with mahogany: This Honduran artisan earns his living by working mahogany, but his livelihood will be threatened if the resource is over-exploited. *Photo: J. Leigh*

CONCERN over the exploitation of mahogany (*Swietenia* spp; Meliaceae) in Latin America has led to trade bans, boycotts and regulation under one of the strictest international environmental agreements, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This history is driven by the high value of mahogany, which is currently worth more than US$1300 per m³ for sawnwood or US$3.50 per board foot (ITTO 2002).

Economic realities (discount rates, opportunity costs, investment insecurity), silvicultural challenges and continued access to mature stocks in natural forests (both legal and illegal) have limited the adoption of sustainable forestry techniques (Rice et al. 1997; Gullison et al. 2000). As a result, the vast majority of internationally traded mahogany sawnwood still comes from unmanaged natural forests (CITES 1997, 2001). In these forests, a pattern of local depletion, which necessitates a shift in supply, makes the exploitation of mahogany closer to mining than sustainable harvesting (Verissimo et al. 1995; Verissimo & Grogan 1998). Moreover, much of this logging is conducted illegally in national parks, forest preserves and indigenous lands (CITES 2001).

An examination of the international community's response to this unsustainable exploitation indicates that reform remains elusive. Perhaps the most compelling option toward sustainability is to require an independently certified chain of custody, thereby maintaining the sovereign rights of exporting countries to use their own resources, satisfying the ethical and legal obligations of importers, and using international support through CITES procedures to the fullest extent to prevent illegal practices.

The case of Brazil

In October 2001, Greenpeace claimed that more than 80% of mahogany was obtained illegally from parks and indigenous reserves and from forests with fraudulent or non-existent management plans (Greenpeace 2001). The immediate response of the Brazilian Institute of Environment and Natural Renewable Resources (IBAMA) was to temporarily shut down the entire industry.

None of this is new. In 1996 (Hering & Tanner 1998) and again in 1999 (Government of Brazil 2000), IBAMA temporarily suspended mahogany operations following similar investigations. For about half a decade IBAMA has refused to license any new mahogany operations (TRAFFIC 2001). In 1992, the Brazilian Secretary of the Environment wrote asking the international community not to buy mahogany because illegal logging was out of control and endangering the lives of indigenous people (Lutzenberg 1992).

The situation in the early 1990s prompted Friends of the Earth UK to launch a boycott of mahogany, principally aimed at retail suppliers (Hering & Tanner 1998). In their campaign 'Mahogany is murder' they reported that Amerindians were being killed by loggers—either murdered to get access to mahogany or, indirectly, from communicable diseases introduced by loggers. A compromise between the UK industry and environmental groups was for mahogany imports to be accompanied by chain-of-custody documents. Ultimately, this standard could not be met by exporters in Brazil—a situation that continues (Bruford 2001). The campaign achieved a large part of its aim in that it succeeded in reducing imports to the UK by more than 70%; nevertheless, it was unsuccessful

in its ultimate aim because the mahogany was simply redirected to an expanded market in the United States (Robbins 2000).

The role of CITES

The formal, multilateral response during the 1990s was to regulate mahogany through CITES. Countries that are party to CITES are obliged to monitor and report the international trade in all CITES-listed species and they must ensure that shipments have the appropriate CITES documents. Listing in CITES Appendix I constitutes a ban on international commercial trade. For Appendix II species, the exporting country must issue an export permit that verifies that each shipment was obtained legally and that its harvest was not detrimental to the survival of the species. The listing of a species in Appendix I or Appendix II requires a two-thirds majority vote at the regular CITES Conference of the Parties.

Any range state can list species on Appendix III provided that they have domestic laws to protect the species. They are then obliged to issue an export permit that verifies that each shipment was obtained legally (although a scientific non-detriment finding is not required). Other CITES parties support this effort through the issuance of certificates stating the origin of each shipment and by monitoring imports.

Although commercially extinct, the mahogany species of the Caribbean (S. *mahagoni*) and Pacific coast of Central America (S. *humilis*) are listed in CITES Appendix II. In 1992, Costa Rica and the USA proposed listing big-leaf mahogany (S. *macrophylla*)—the only mahogany species still commonly traded—in Appendix II. Prior to voting, Costa Rica withdrew its proposal in deference to the proposal by the USA, which was then also withdrawn. Subsequently, Costa Rica listed big-leaf mahogany in Appendix III. There have been two more proposals to list big-leaf mahogany in Appendix II; neither was successful. In 1997, the most recent proposal fell eight votes short of the necessary two-thirds' majority in a secret vote in committee. Following this proposal, five more countries (Brazil, Bolivia, Peru, Mexico and Colombia) have listed their populations in Appendix III.

According to the most recent CITES data, Brazil is a major exporter of big-leaf mahogany (about 40% of the approximately 100 000 m^3 of declared international trade), as was Bolivia until the late 1990s when trade declined due to a lack of supply. Peru has increased exports to meet the demand, and its trade in 1999 was approximately equal to that of Brazil. The USA is the largest importer of mahogany (about 65% of declared trade), most of the remainder of declared trade going to the Dominican Republic and the European Union.

Data limitations

Despite CITES regulations, which should make mahogany one of the best-tracked timber species, tropical or otherwise, the exact volume in trade is difficult to estimate due to reporting irregularities (Blundell & Rodan 2001). In 1999, for example, US Customs recorded about 20% more mahogany imports from Latin America than were reported by US CITES authorities. However, most such discrepancies can be resolved by cross-checking permits for typographical errors or for changes in volume made after the shipment had obtained the CITES permits. On careful analysis, we have shown that more than 90% of shipments listed as mahogany by US Customs most likely had CITES documentation (Blundell & Rodan 2001).

Although the vast majority of imports to the USA appear to be in compliance with CITES, such an analysis cannot track shipments of mahogany that were mislabelled or smuggled across borders. In an analysis by Canada Customs of its 1999 trade data, approximately 60% of mahogany imports, mainly re-exported from the USA, were improperly declared as 'general tropical timber' instead of 'mahogany' (Gerson 2000).

Poor compliance

In other respects, compliance with CITES procedures is relatively poor. In 1999, the USA reported three times more mahogany in trade than was reported by exporting CITES authorities. This is principally due to under-reporting by exporting countries, or to countries, such as Peru, that did not report any data during that year. In addition, the wildlife trade monitoring organisation, TRAFFIC North America, reported that about 30% of the permits received by the US in 1998 were invalid because they had not been signed by the appropriate exporting CITES authority (Robbins 2000). Therefore, the true volume of legally exported mahogany remains unclear.

The most problematic compliance issue, however, is reconciling the issuance of export permits, which are meant to verify that the timber was obtained legally, with the compelling evidence of widespread illegal logging throughout the range of mahogany (CITES 1997, 2001; PROARCA/CAPAS 1999; Greenpeace 2001). It is likely that a considerable amount of illegal mahogany is inappropriately receiving export permits, then entering international trade; in other words, CITES may be providing a veneer of legality to what is otherwise illegal wood.

All major producing countries have existing regulations and laws that require the sustainable management of mahogany (TRAFFIC 2001). However, without enforcement these regulations have little effect on the on-the-ground management of mahogany.

Solutions

In a December 2001 decree, IBAMA aimed to reduce illegal logging in Brazil by requiring that all shipments be 'certified', although it is not yet clear how 'certified' will be defined. In addition to the Forest Stewardship Council (FSC), numerous other certification schemes have been created worldwide for the purpose of providing evidence to

consumers about the sustainability of forestry operations. Many observers, including some non-government organisations (NGOs), have expressed reservations about the Brazilian government relying on an NGO such as the FSC for enforcement of forestry regulations. At present, there are no FSC-certified mahogany operations in South America (FSC pers. comm. 2001).

Chain of custody: given the lack of certified supply and the overwhelming evidence of illegal logging, buyers are faced with an ethical dilemma and, in Brazil, a temporary cessation of supply. A viable solution may be to insist on the tracking of wood from harvest through milling to export, so that the buyer can be assured that the purchased timber was obtained legally. Pursuit of this option must be mindful of historical precedents, including the shortcomings of previous efforts to encourage or mandate sustainability (eg see Burniske 1994, Gullison 1995), and the technical, economic and political impediments to sustainability (Rice et al. 1997), particularly the reality that sustainability will result in reduced trade volumes, at least in the short term. Large, independent inspection services exist and can provide such chain-of-custody tracking for approximately $1–2/m^3 when sufficient volumes are trucked (de la Rochefordiere (SGS) pers. comm. 2002).

Improved compliance and monitoring: regardless of buyer behaviour, better compliance with domestic laws and CITES procedures within exporting countries could vastly improve the legality of the mahogany harvest and the ability of CITES to track trade. For instance, all countries should report trade, including reporting permit numbers, so that importers can determine which export permits have been falsified. International trade monitoring can also be improved if customs agencies assign individual harmonised tariff schedule (HTS) codes to CITES-listed species.

International cooperation: if countries restrict export permits to only those shipments where legality can be demonstrated, import procedures and officials can then serve as an additional enforcement mechanism to assist producer countries. In the USA, trade in mahogany appears essentially limited to those shipments with CITES documents. If these documents become meaningful, then illegal mahogany would be barred from US markets. Buyers would rapidly insist that their primary suppliers operate legally. This would be an important first step in rationalising the use of what has proven to be one of Latin America's most valuable resources.

Disclaimer: *the views expressed in this publication are those of the authors and do not necessarily constitute United States government policy. Mention of trade names should not be construed as endorsement.*

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