

Certification and the search for sustainable timber

Over the last decade there has been mounting public concern about the decline of forests and the unsustainable production of timber for the international market. Initially these concerns focused on tropical forests, fuelled by the results of a study carried out in the late 1980s, which showed that less than 1 per cent of tropical timber-producing forests were managed for sustained yield of timber (Poore, 1989), let alone other components of sustainability, such as biodiversity or benefits to local people.

The impact of the timber trade on tropical forests is considerable. According to FAO estimates, logging is directly responsible for 10 per cent of all tropical deforestation (16 per cent of closed broad-leaved forest) (Johnson and Cabarle, 1993). Probably the same area again is degraded causing loss of ecological function even though some tree cover remains (Myers, 1989). Even where forests are not completely cleared, logging still plays a pivotal role by opening up forests to encroachment and further exploitation, leading eventually to deforestation and its well-documented damage to local communities, biodiversity, soils and water sources.

Temperate forests are also threatened by commercial timber production, which is destroying old-growth forest in north-west North America, northern Russia, Chile, Tasmania and Europe. While the overall area covered by temperate forests is probably stable, there is a serious decline in forest quality, particularly biodiversity, due to replacement of natural forest by plantations (Dudley, 1992).

The lack of progress by international agencies and governments in halting unsustainable timber production has led consumers and wood-users to change their purchasing choices in an attempt to signal their concerns and influence the timber trade. Initially this strategy focused on tropical timbers with the adoption of 'good wood' policies avoiding purchase of tropical timbers. For example, 51 per cent of Dutch municipalities and 200 city councils in Germany had banned the use of

tropical timbers by 1993 (Johnson and Cabarle, 1993).

However, with growing realization of the impact of commercial forestry on temperate forests, it is clear that a more sophisticated instrument is required – one that will enable consumers to make ethical decisions when buying timber, whether it is of tropical or temperate origin. Channelling consumer purchasing power towards well-managed timber sources could provide the leverage for reform of forestry practice in both private and state-owned forests.

This is the rationale for the independent timber certification and labelling movement, which has developed rapidly over the last 4 years. The aim is to establish a credible, trustworthy system for the identification of genuine 'sustainable' timber. Independent timber certification offers timber producers or traders a market-led incentive for improved forest management and protects consumers and genuine producers of 'sustainable' timber from false claims.

The Forest Stewardship Council (FSC) is the international organization spearheading independent timber certification. It is unique in being the only international forestry body in which northern and southern members meet on equal terms with balanced participation of economic timber trade interests and non-governmental environmental and social organizations (NGOs), and in which NGOs are centrally involved in decision making.

The FSC was formally established in October 1993, following 18 months of intensive consultation with 'stakeholders', including governments, academics, NGOs, the timber industry and indigenous peoples. Its headquarters are in Mexico and its role is to provide an internationally consistent framework for the certification and labelling of timber, by accrediting timber-certifying bodies that meet its standards.

As part of this process the FSC has developed general Principles and Criteria covering the environmental, social and economic impacts of commercial timber production (see box), which set out the minimum criteria for good forest management. Accredited certifiers

Forest Stewardship Council Principles and Criteria for Natural Forest Management

Principle 1 Compliance with Laws and FSC Principles

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

Principle 2 Tenure and Use Rights and Responsibilities

Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

Principle 3 Indigenous Peoples' Rights

The legal and customary rights of indigenous peoples to own, use and manage their lands, territories and resources shall be recognized and respected.

Principle 4 Community Relations and Workers' Rights

Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.

Principle 5 Benefits from the Forest

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

Principle 6 Environmental Impact

Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

Principle 7 Management Plan

A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.

Principle 8 Monitoring and Assessment

Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Principle 9 Maintenance of Natural Forests

Primary forests, well-developed secondary forests and sites of major environmental, social or cultural significance shall be conserved. Such areas shall not be replaced by tree plantations or other land uses.

Principle 10 Plantations

Plantations shall complement, not replace, natural forests. Plantations should reduce pressures on natural forests.

FSC Members will vote to ratify Principles 1–9 and their criteria in September 1994. Principle 10 will be subjected to further consultation before ratification.

are required to evaluate forest management using detailed forestry standards, which take account of specific national or regional forestry issues and meet or exceed the FSC's Principles and Criteria.

The FSC's Charter is designed to maintain accountability of the organization to its members, transparency of operations and public credibility. Its criteria for certifiers ensure that certifying bodies are free of vested commercial interests and maintain high operational standards or forest inspections and tracing of certified timber through the supply chain.

The FSC expects to start accrediting certifiers in autumn 1994. At present, four inde-

pendent certifiers are up and running (two in the UK and two in the USA), five others are close to starting operations and many more are being established. By mid-1994 25 forests (3 million hectares), both tropical and temperate, had been certified. In the UK, the Soil Association, well known in environmental circles for its organic food label, has established a parallel timber-certification programme, the Woodmark scheme, which is certifying both home-grown and imported timber. The other UK-based certifier is SGS Silviconsult, a subsidiary of the Swiss inspection company, Société Générale de Surveillance.

It is clear that, by itself, timber certification cannot solve the problem of forest loss. Progress must also be made on other fronts, including government policy and legislation, international trade agreements, land reform, strengthening indigenous and local communities' rights, careful deployment of development aid and loans, research and education. And underlying all these, timber consumption must be reduced to a level that can actually be met by responsible forest exploitation.

However, it seems certain that certification will play a major role in the UK due to the commitment of major timber traders to source from well-managed forests under the auspices of the FSC. These include the four largest DIY stores, whose combined turnover in timber products exceeds £1 billion, enabling them to send a clear commercial message through their suppliers to the forest managers at the other end of the supply chain.

Opponents of independent certification place their faith instead in intergovernmental initiatives and 'whole country' certification, whereby the national government guarantees that all its timber is produced sustainably. Most of us aspire to a future in which all countries can truthfully say that all their forests are well managed. However, we are still very far from achieving this desirable goal. Intergovernmental agreements, as we have learned from experience at Rio and with the International Tropical Timber Organization, often take too many years to develop and can only be achieved by agreeing broadly worded and general principles, which may be interpreted in very different ways in the various countries.

Many national governments currently face severe difficulties in administering, inspecting and controlling logging operations. Illegal timber exports are commonplace, yet national sanctions are ineffective. According to a World Bank report, the Congolese Government fails to collect \$US12 million a year in fees and taxes on declared timber production and is quite unable to control the quality of forest management and illegal traffic in timber across its borders (Colchester, 1993). Similar instances are documented for Brazil (Monbiot,

1991), Papua New Guinea (Barnett, 1990) and the Asia-Pacific region (Callister, 1992) to name but a few.

Government bodies in countries such as the Philippines and Brazil have even been urging consumer nations to prohibit the import of illegally produced timbers, because they are unable to exert adequate control domestically. In an interesting development of this theme, the Indonesian Government is investigating independent certification as a means of scrutinizing the implementation of its national forestry guidelines in a way that its overstretched forest service is unable to do.

Independent certification is currently voluntary but represents the first step towards any future legal controls that may be implemented, by establishing the method of identifying sustainable timber. Some countries are already developing regulatory frameworks, such as the legally binding covenant signed between trade, industry, NGOs, government and labour unions in the Netherlands to ensure that by 1995 only sustainably produced tropical timber will be imported.

There is an inherent tension in the use of marketing devices to bring about environmental improvements. The powerful influence of vested commercial interests can subvert and distort, resulting in 'green tokenism', which at best disguises and at worst exacerbates environmental problems. The FSC provides a forum for concerned organizations to insist on high standards and ethical operation of timber certification programmes, and so presents one of the best current opportunities to stimulate positive improvements in forest management.

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References

- Barnett, T. 1990. *The Barnett Report: A Summary of the Report of the Commission of Inquiry into Aspects of the Timber Industry in Papua New Guinea*. Asia-Pacific Action Group, Hobart, 1990.

- Callister, D. J. 1992. *Illegal Tropical Timber Trade: Asia-Pacific*. TRAFFIC International, Cambridge, UK.
- Colchester, M. 1993. Slave and enclave: towards a political ecology of equatorial Africa. *The Ecologist*, 23, 166–173.
- Dudley, N. 1992. *Forests in Trouble*. WWF, Gland.
- Johnson, N. and Cabarle, B. 1993. *Surviving the Cut: Natural Forest Management in the Humid Tropics*. World Resources Institute, Washington DC.
- Monbiot, G. 1991. *Amazon Watershed: The New Environmental Investigation*. Michael Joseph, London.
- Myers, N. 1989. *Deforestation Rates in Tropical Forests and their Climatic Implications*. Friends of the Earth, London.
- Poore, D. 1989. *No Timber without Trees: Sustainability in the Tropical Forest*. Earthscan Publications Ltd, London.

Disposal of confiscated ivory

In recent years the increasingly effective enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has meant that large quantities of live animals and plants, and products and derivatives have been seized. The disposal of these has often caused problems.

In the case of live animals and plants, there is little controversy and most people would agree that, wherever possible, they should be returned to the wild in their country of origin. However, in a large proportion of cases this is not possible and the usual option (at least for the rarer species) is to donate animals to captive-breeding programmes and plants to botanical gardens for propagation. Similarly, for the rarer species, museums and other scientific institutions may be able to find a use for parts and derivatives. The problems are encountered with larger quantities, especially ivory. The international trade in illegal ivory became an issue in the 1970s, when I made some of the earliest attempts to quantify the illegal international trade (Burton, 1976, 1977). Since then the trade has escalated and numerous summaries have been published, for example, Parker and Martin (1982, 1983).

The disposal of confiscated ivory presents a serious problem. On more than one occasion this has been apparently 'solved' by burning the seized ivory. One of the first times this was carried out appears to have been on 17 July 1989 (Anon., 1989), when President Arap Moi of Kenya set light to 12 tonnes valued at \$US2.5 million. This and subsequent burnings have been greeted as conservation successes by animal rights supporters and some conservationists, but others, notably those who support conservation through sustainable use (CSU), have had serious doubts.

It is important to realize that ivory is an unusual commodity and not typical of animal derivatives. It needs to be understood how it differs, and strategies for dealing with it need to take these differences into account. In the past it was often suggested that ivory could be replaced with synthetics and alternatives. Unfortunately, those proposing these solutions failed to grasp that the feature that made ivory a valued commodity was not its ability to make good billiard balls or piano keys (these had long ceased to be important uses, in any case) but its intrinsic value. A synthetic substitute was no more likely to be acceptable than glass is for diamonds. While a substitute was not the answer, perhaps an alternative, with the same intrinsic value, rarity and other attributes might have worked – substances such as jade have been substituted in the past for some of the uses of ivory.

Until the 1960s the value of ivory was related to its demand as a raw material. However, during the 1970s, at around the time of the expulsion of the large Asian community from Uganda, it became increasingly used as a form of currency in order to avoid currency controls. It is my belief that the huge amount of publicity concerning rising ivory prices, which was generated by conservation bodies in the 1980s, effectively prevented a return to the previous relatively low values and ensured ivory its position as a valued commodity. Until the 1960s the supply of ivory had more or less kept pace with demand and, although there were local extinctions these were generally in areas with a high human occupation where there were conflicts and damage to

agriculture. In fact it has been suggested that the ivory from elephants dying naturally was more than enough to supply world demand throughout most of history (this assumes, of course, that it could be found). However, the huge amount of publicity generated in the 1980s stimulated poachers to extend their activities and many dealers to start stockpiling ivory. Soon prices were escalating.

Clearly, in a situation where there were still legal supplies of ivory coming on to the market, and dealers were stockpiling, the only effect of removing ivory from the market by seizures of illegal supplies would be to push the price still higher. The response of conservation groups was often naive; in fact newspaper articles almost certainly fuelled the increase in poaching, and many conservationists probably had the delusion that poachers either could not read or were unaware of international trends. While this might be true of individual nomadic hunters carrying out the killing, it certainly would not be true of the middlemen (and in some countries, government officials) profiting from the trade.

Finally, when the international trade in ivory was effectively outlawed, the situation became even more serious. In Hong Kong and elsewhere, there were huge stocks of ivory, which were 'legal' because they originated before the ban. (There were also significant quantities of mammoth ivory being traded, which are also legal, as is ivory from hippos, walrus and other mammals, just to add to the confusion.) With a ban on trade, what should governments do if they seize any contraband? The solution some adopted, of burning it, has a very simple result: it pushes the price even higher. However, if we assume that the CITES controls work, even to a limited degree, and that in 10 years time elephant stocks have recovered, there is no reason why there should not be some limited trade in ivory again. If all the ivory that had been confiscated were then allowed on the market, it would probably depress the market and could even provoke a state of panic selling by those with stockpiles, fuelling a downward trend in market prices. But is this what those involved

with elephant conservation want? The proponents of CSU need ivory to have a relatively high value, but this can be obtained only by increasing demand for ivory or reducing the supply.

Kenya has been at the forefront of ivory burning, but it will not help save any elephants. In fact the Kenyan burning of ivory will have the effect of increasing the demand for, and the value of, other ivory being smuggled from that country. It will also have the effect of raising the value of ivory produced by countries such as Zimbabwe or South Africa, where there are more effective management policies. So that when, eventually, ivory comes back on to the market it commands a higher price. Unless all countries unite and agree to destroy all ivory, for ever, one country doing so is futile, to the point where one must also question the motives.

My conclusion is that the only way to reduce poaching for ivory is to reduce the value to a level where it is no longer worth the risks. It is doubtful if this could be achieved in most countries in the elephant's range, while standards of living in rural areas are very low. However, it is not the rural hunters who need to be targeted, but the middlemen. If the profits are reduced significantly, and the risks of being caught increase, then it is no longer worth their while. In the past smuggling has often been possible only because of the involvement of government officials, and if the profits are reduced it will simply not be economic to bribe the necessary officials. As has happened in the past, attention may be switched to other commodities. But the key to this scenario is stockpiling, not burning, ivory, ready for flooding the market in a few years time. It is my belief that once this policy was adopted, then market prices would probably start to fall in anticipation, thus reducing pressure on the elephant and allowing a more rapid recovery.

However, such a trend would cause some consternation among those supporters of CSU, because ultimately it might undermine the value of ivory to an extent that might make support for elephant conservation measures dwindle. Clearly, the only answer is that the

range states of the African and Asian elephant need to form a cartel, controlling the supply at a level where the price is high enough to pay for national conservation measures but not high enough to make poaching for the international markets cost-effective. This will not be easy to achieve, but it will certainly be more effective than burning ivory.

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References

- Anon. 1989. Kenya ivory becomes a burning issue. *TRAFFIC Bulletin*, 11 (1), 2.
- Burton, J.A. 1976. The ivory connection. *New Scientist*, 15 April.
- Burton, J.A. 1977. The ivory connection, part 2. *New Scientist*, 20 October.
- Parker, I.S.C. and Bradley Martin, E. 1982. How many elephants are killed for the ivory trade? *Oryx*, 16, 235–239.
- Parker, I.S.C. and Bradley Martin, E. 1983. Further insight into the international ivory trade. *Oryx*, 17, 194–200.

Conservation in Ruaha National Park, Tanzania

Ruaha National Park in central Tanzania is part of a much larger (29,115 sq km) ecosystem, which comprises three additional protected areas – the Rungwa, Kizigo and Muhesi game reserves. Rungwa, Kizigo and Ruaha were established in 1910 as the Sabu Game Reserve. In 1951 Sabu was gazetted the Rungwa Game Reserve and in 1964 the Ruaha was separated from the reserve and gazetted a national park. A decade later Kizigo was joined to Rungwa to form the Rungwa–Kizigo Game Reserve. In 1993 the Muhesi Game Reserve, which had been gazetted 2 years earlier, was joined to the Rungwa–Kizigo.

Tanzania National Parks (TANAPA) is committed to a programme to provide an improved infrastructure for the better protection and management of the Ruaha. This includes: the construction of causeways over the

Mwagusi and Jongomero Rivers (which will enable antipoaching activities to be conducted throughout the park in all seasons); an increase in the number of ranger posts from six to 10, and in the number of rangers from 66 to around 100; an improvement in living and working conditions for rangers; road building and repairs; the clearance of bush airstrips; the acquisition of additional vehicles; and an improvement in radio communications. The recently formed Ruaha Ecological Monitoring Programme checks the effectiveness of these measures on the implementation of the anti-ivory poaching campaign within the park.

In 1987 the Tanzanian government commissioned a report from the International Trade Centre (ITC), which recommended, *inter alia*, the development of sustainable wildlife use as a means of generating funds for the benefit of local communities. The Tanzanian Forestry Action Plan on Wildlife Policy confirmed the ITC findings, and recommended the formation of a series of buffer zones surrounding parks and game reserves, in which game-ranching, game-hunting and other fund-raising activities may be conducted. Among the last, commercial crocodile farming was suggested. The annual value of wildlife to Tanzania's economy is currently estimated at around \$US108 million, which it is believed could rise to \$US500 million by the end of the century.

TANAPA is not alone in its conservation efforts in Ruaha. In 1984 the Friends of Ruaha Society (FoRS) was formed in Tanzania, and 6 years later the Ruaha Trust was founded in the UK. Funds raised by these organizations help to provide fuel, oil, spares, books, cement, grader blades, fire control, road and ranger-post construction, antipoaching activities, ranger remuneration, and general maintenance and repairs. In 1991, FoRS, the Ruaha Trust, Tusk Trust (another UK-based African charity), and private donors together provided the Ruaha with a Cessna 182 aircraft primarily for antipoaching surveillance, and in 1993 Tusk purchased a radar altimeter for the aircraft to assist in accurate aerial game censusing. This aircraft is also of value for emergency medial evacuations, park-encroachment sur-

veys and the delivery of supplies. Since 1990, a Belgian chocolate-maker, Côte d'Or, has provided the park with, among other items, a bulldozer, a tipper truck, four-wheel drive vehicles, VHF radios and a second Cessna.

Outside the park, work has started on improving the road from Iringa to the park entrance, which will greatly ease access to the Ruaha for both staff and tourists. This project is being funded by US-AID. The boundaries of the park are being clearly demarcated, involving the clearance of large trees and other vegetation and the erection of signboards. The FoRS aircraft and a Global Positioning System are being used to ensure that the alignment of the boundary is correct.

In July 1993, on behalf of the British

Government, the High Commissioner, Mr Roger Westbrook, handed over to the Ruaha National Park six Land Rover pick-ups and two station-wagons. Because British Overseas Development Agency support embraces the entire Ruaha ecosystem, three Land Rovers have been given to the Rungwa-Kizigo Game Reserve. A mobile workshop for vehicle maintenance has also been donated.

The Ruaha ecosystem is of great national importance, not least because it protects a large part of the catchment area of the Great Ruaha River. Its conservation is thus of vital importance to the wildlife of Tanzania.

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