INTERNATIONAL TROPICAL TIMBER COUNCIL

COMMITTEE ON REFORESTATION AND FOREST MANAGEMENT

Distr.
GENERAL

CRF(XLIV)/10
5 November 2010

ENGLISH ONLY

FORTY-FOURTH SESSION
13-18 December 2010
Yokohama, Japan

IMPLEMENTATION OF THE ITTO/IUCN GUIDELINES FOR THE CONSERVATION AND SUSTAINABLE USE OF BIODIVERSITY IN TROPICAL TIMBER PRODUCTION FORESTS

A report on measures taken to facilitate implementation of the Guidelines

By

Jeffrey Sayer

Introduction:

ITTO has collaborated with IUCN on measures to better understand and promote the importance of managed tropical forests for biodiversity conservation since the ITTA was signed in 1983. In the late 1980s a study was conducted by IUCN of the situation of biodiversity in managed tropical forests in all ITTO producer member countries (Blockhus et al 1992). This study was presented to the ITTC in 1990 and in the ensuing discussion the decision was taken to develop Guidelines for Biodiversity Conservation in managed forests. These Guidelines were eventually issued in 1993. Subsequently biodiversity issues were addressed in many ITTO field and policy activities.

There are now many instances where significant biodiversity gains have been obtained through improved forest management in the tropics. Some of the best examples are in areas of outstanding biodiversity importance where international conservation NGOs have worked with forestry companies to adapt management practices to address biodiversity needs. Some of the best examples are in the Congo Basin and come from collaboration between the Wildlife Conservation Society, World Wildlife Fund and logging concession holders. Other examples exist in Indonesia involving the same NGOs and, in addition, Birdlife International. However in general it was observed that the implementation of the 1993 Guidelines was patchy and in many cases they had little impact on forestry practices.

Many environmental groups are still fundamentally opposed to industrial forestry and much of their concern stems from their perception that logging destroys biodiversity. In economic terms these environmental groups portray industrial forestry as having significant negative environmental externalities – logging having a negative impact on natural values. These environmental groups have been effective in communicating their concerns through the media and have had a significant impact on policy processes relating to forest management. The reality demonstrated by the significant literature on logging impacts on biodiversity reviewed by ITTO and IUCN is that industrial forestry may have significant positive environmental externalities. Forestry activities when they apply best practices result in better biodiversity outcomes than non-forest land uses. The reason for this is that in the absence of forestry there is a greater probability that forests will be converted for non-forest uses.

In many ITTO consumer member countries biodiversity conservation is an important objective for all forest management and is a significant objective of forest agencies. Many examples exist of managed forests being included in protected areas included in the United Nations lists of protected areas compiled by IUCN. Biodiversity conservation is mainstreamed into most forestry activities in OECD countries but this is still not the case in many ITTO producer countries. This failure to achieve the potential synergies between timber production and biodiversity conservation represents a significant lost opportunity for the achievement of biodiversity conservation targets.

The existence of this lost opportunity led the ITTC to decide in 2003 to initiate further efforts to raise awareness of this issue. A decision was taken to work with stakeholders to prepare a new version of the Guidelines but to do so in a much more inclusive way and to involve the timber industry throughout the process. Thus representatives of the industry were not only included in the team that drafted the Guidelines but resources were also made available to work in the field with forestry companies to examine the feasibility of the Guidelines, analyse the costs and benefits of their application and adjust them to take account of the constraints and opportunities as perceived by the industry.

The revised Guidelines were published in April 2009 under the title "***ITTO/IUCN Guidelines for the conservation and sustainable use of biodiversity in tropical timber production forests."*** It was however recognised that simply publishing the Guidelines was not enough and that there was a need to take active measures to promote their use. These measures were to include raising awareness, providing technical support and capacity building and giving recognition to adopters of the Guidelines. It was expected that implementation and promotion of the Guidelines would come mainly through projects submitted to ITTO by member countries. However so far there have been few requests for assistance and not a single project has been submitted that specifically targets implementation of the Guidelines. The present report is based

upon a review of progress in implementing the Guidelines and summarises a number of activities that ITTO and IUCN have undertaken in 2010 to encourage their better implementation.

Analysis of obstacles to implementation:

The 2009 Guidelines already contained a section that analyses obstacles to implementation of the 1993 Guidelines. In general the conclusions of this analysis are that:

- There is no fundamental objection by any party to the aims and methods included in the Guidelines.
- There is concern on the part of the industry that strict implementation of the Guidelines will incur costs that will not be offset by commercial benefits.
- Many of the measures proposed in the Guidelines are already part of either national forestry regulations or are included in the Criteria and Indicators for sustainable forest management and the Guidelines are therefore seen as redundant.
- Industry representatives are concerned at the proliferation of rules and regulations and find it difficult to follow numerous parallel sets of instructions.
- Certification bodies and the activist environmental NGOs have not taken the Guidelines “on board” and have not been as pro-active as might have been expected in promoting the measures included in the Guidelines.
- Copies of the Guidelines were distributed to ITTO government members but rarely reached the forest operators in the field to whom they were addressed.

Overall there was no real pressure on companies to use the Guidelines and little benefit to them from doing so. The overall assessment was that with some notable exceptions the Guidelines had much less impact than had been expected.

Measures taken to raise awareness of the Guidelines:

In 2010, when partial funds under the ITTO BWP have been made available, and almost a year after the release of the revised Guidelines, a contract was issued to a senior scientific adviser who was part of the IUCN Forest Conservation Programme team to undertake a number of activities to promote the implementation of the 2009 ITTO-IUCN Guidelines. The following actions were taken:

- A one day seminar was conducted in Yokohama in June to raise awareness of the Guidelines amongst forestry organisations and conservation NGOs based in Japan and the Asian region. The event addressed biodiversity conservation in production landscapes and included a presentation by the IUCN Science adviser on the general nature and application of the Guidelines, a presentation from Japan on the Satoyama Initiative which seeks to promote biodiversity conservation in forest landscapes and two presentations dealing with the work of Birdlife International and Burung Indonesia on the conservation of birds in logged-over forests in Sumatra. The seminar was well attended and provoked lively discussion.
- A presentation was made by the head of the IUCN Forest Conservation Programme at the Seoul Conference of the International Union of Forest Research Organisations on biodiversity in production landscapes and generated much interest.
- An article was drafted for a special issue of the Newsletter of the European Tropical Forest Network on the Guidelines. This entire issue of ETFRN News was devoted to articles on biodiversity in production forests and this represented a significant breakthrough in achieving recognition amongst a significant stakeholder group of the value of biodiversity in tropical production forests.
- An article was prepared for inclusion in a special issue of the Tropical Forest Update which was released at the conference of the parties of the Convention on Biodiversity held in Nagoya in October. This article again highlighted the significance of the Guidelines as a contribution to achieving the goals of the CBD. Copies of the TFU were distributed at the COP.
- A brochure and a poster to sensitise people to the existence and main content of the Guidelines were produced and distributed at the COP in Nagoya and will be available for wider distribution over the coming months.

- A side event was held at the COP in Nagoya at which industry representatives were invited talk about their experience with the Guidelines and the measures that they were taking to promote biodiversity in their operations. The Alas Kusuma group from Indonesia spoke of the use of the Guidelines to achieve Orang Utan conservation in their natural forest operations in Kalimantan and the Sinar Mas group spoke of their efforts to establish a Biosphere Reserve in their plantation forestry operations in Sumatra. In addition a representative of WWF spoke of the position of his organisation on the issues of biodiversity in plantation forest landscapes and a representative of CITES spoke of the issues of control of trade in species listed under the convention. The side event was well attended and a useful discussion followed which was summarised by Dr Goto of the Japanese Forest Agency.
- The IUCN adviser made field visits to Malaysia, Indonesia and Cameroon to discuss the Guidelines with conservation organisations and forestry companies and seek their views on the best ways forward in achieving their implementation.
- The CBD Secretariat and IUCN published in 2009 a booklet titled: “Good Practice Guide – Sustainable Forest Management, Biodiversity and Livelihoods” including a chapter describing the ITTO/IUCN Guidelines and a CD-ROM with a complete version of the Guidelines Document. ITTO financially supported the re-print of the booklet that has been widely distributed in ITTO and CBD events in 2010, including at COP 10 in Nagoya, Japan.

A reporting Framework for the Guidelines:

As part of the effort to promote the Guidelines but also to seek information on the extent of their application it was decided to develop a reporting framework to enable ITTO to systematically collect information on the extent of application of the Guidelines in producer member countries.

An initial questionnaire was developed which required respondents to answer yes or no to a series of questions relating to key actions that would indicate that the Guidelines were being applied. This was tested informally with a number of forestry companies and representatives of NGOs and companies but was found to be unsatisfactory. Respondents almost always indicated that they had made some progress in taking these actions but had not fully complied with them. It was therefore decided that an assessment of implementation based upon a five point (Likert) scale would be more useful.

A second questionnaire was then developed which listed all of the recommended actions in the 2009 Guidelines and asked respondents to indicate on a five point scale the extent to which they had fully complied or not complied at all with the Guidelines. This reporting framework is available on request from the ITTO secretariat. The reporting framework was split into three parts – the first for reporting at the national level, the second at the level of forest industries operating at the level of individual management units/concessions and the third for plantation operators. The overall response was as follows:

- The questionnaire revealed that there is some duplication and repetition amongst the recommended actions and this caused some confusion amongst respondents.
- Some recommended actions were perceived by respondents as being unreasonable – for instance the requirement that all pre-logging survey teams be accompanied by qualified taxonomists.
- Many of the recommended actions were seen as only really applicable in situations where forestry operations were taking place in areas with known high conservation values. For instance it was relatively easy to obtain collaboration from conservation NGOs in locations with Great Apes or other conspicuous wildlife but much more difficult to do so in areas with no special known conservation values.
- In general forestry companies complained that they are already subject to excessive reporting requirements.
- ITTO itself recognised that good quality data on a few questions was far more valuable than dubious data on a wide range of questions.

The decision was therefore taken to revert to an abbreviated questionnaire – a set of questions on key issues not drawing directly from the Guidelines but inspired by them – but still using the five point scale for

measuring the degree of compliance. This revised questionnaire which has not yet been used in the field is given in annex 1 to this report.

Field implementation of the Guidelines:

In addition to the above attempts to give greater visibility to the Guidelines in the international policy arena a number of field activities were conducted in ITTO producer member countries to promote implementation of the Guidelines and to seek feedback on any difficulties in their implementation and encourage members to submit proposals to the ITTO for projects to promote implementation of the Guidelines.

Indonesia:

The Guidelines and the reporting framework were examined with the field staff of the Alas Kusuma Group and Sinar Mas. The general responses given above reflect the views of these two important stakeholders. Both will continue to use the Guidelines and the Alas Kusuma Group is collaborating with WWF to develop a proposal for a project for the implementation of the Guidelines to secure Orang Utan conservation in their concessions in West Kalimantan.

Malaysia:

The Samling Company were approached and their response was that much that was contained in the Guidelines was already part of the Malaysian regulatory framework and therefore applied by them in their operations. Although they expressed interest in consulting the Guidelines they did not see the need to follow them in any systematic way. They had only been vaguely aware of the Guidelines prior to our meeting with them and the Guidelines had not been mentioned in their interactions with certification companies with whom they were exploring certification options. They did however commit themselves to taking the Guidelines into consideration in their future forest management activities.

Cameroon:

The Guidelines and the reporting framework were place on the agenda of a meeting of forest conservation groups and forestry companies in SE Cameroon in September 2010. All of the participants in the meeting had been to some extent involved in the development of the 2009 Guidelines and had a good knowledge of their content. All the companies were observing most of the requirements of the Guidelines and since all of the companies were engaged in the process of achieving certification, or were already certified, the Guidelines had already had a significant impact on their operations. It is clear that awareness of the Guidelines and their application is far more advanced in the Congo Basin countries than elsewhere and that this stems to a large extent from the level of activity of international conservation organisations in this region.

Conclusions:

The objective of achieving uniform adoption of the Guidelines across a broad spectrum of forestry companies has not been achieved. However there is a good level of awareness of the Guidelines amongst a wide range of companies and conservation organisations – especially in the Congo Basin and in Indonesia. The Guidelines are not anywhere being applied in their entirety but in many situations they are making a contribution to the “policy discourse” and are beginning to have a broad incremental impact. For instance the International Bamboo and Rattan Network has translated the Guidelines into Mandarin and they have been used in the field in Western China. We have also learned of the following examples of use of the Guidelines:

- The 1993 Guidelines did influence the content of revisions of forestry laws in several countries in the late 1990s – these countries included but were probably not restricted to Malaysia, Indonesia, Philippines and Brazil.
- Companies seeking certification in West and East Kalimantan, Indonesia have used the Guidelines.
- An ITTO project in Mindanao, Philippines, has made extensive use of the Guidelines.
- The Guidelines in their draft form were used as a source of information in preparing the new forestry laws of Brazil.

There is widespread support for the message contained in the Guidelines and we did not encounter any real resistance to the measures included in the Guidelines – any reluctance stemmed from the additional bureaucratic load of implementation and especially reporting on them.

Companies in Indonesia and Cameroon working in partnership with conservation NGOs have now drafted project proposals seeking support for activities to implement the Guidelines and these proposals will be submitted to the ITTO in the coming weeks or months. However in these cases and potentially in several others there is a need for support from the ITTO in preparing project proposals.

We did conclude that one major opportunity that had been missed was not having secured support for the Guidelines from activist NGOs and certification bodies whose activities have direct impacts on the operations of forestry companies.

The only negative feedback on the Guidelines is that they do contain some repetition and that some of them are stated in such general terms that they are not easy to translate into action on the ground.

Recommended next steps:

- The poster, leaflet and Tropical Forest Update material prepared for the CBD COP should be widely disseminated amongst ITTO and IUCN members involved in forest management.
- The Guidelines themselves should be mailed directly to forestry companies and conservation NGOs and they should be encouraged to use them more actively.
- Resources should be made available to assist member countries in preparing proposals for projects to support implementation of the Guidelines. In some cases it would be appropriate that these projects should provide practical support to individual forestry operations in high biodiversity areas – for instance the Alas Kusuma group concessions in West Kalimantan, Indonesia where important populations of Orang Utan are present – in other situations it may be more effective to work at a national or regional level through workshops to promote the Guidelines amongst several forestry companies and conservation organisations at one time.
- A workshop should be held to sensitise staffs of conservation NGOs and certification bodies to the content and significance of the Guidelines. In particular this workshop should include representatives of Greenpeace, Friends of the Earth, Global Witness, Conservation International, The Nature Conservancy, Fauna and Flora International, Birdlife International as well as representatives of forestry companies with whom these NGOs have worked.
- The approach of the comprehensive reporting framework (annex 1) should not be pursued as it would be very time consuming and costly to seek responses to this complex document and the processing of the data would also require a heavy investment – it is unlikely that the quality of the raw data that is likely to be submitted would justify the effort involved.
- The simplest version of the reporting framework (annex 2) should be adopted by the ITTO and used in its annual reporting exercises. An analysis of the results of the reports should be presented to the ITTC and summary data should be disseminated widely.
- Members of the ITTC should make funds available to prepare and fund projects, conduct the promotional workshops outlined above and implement the reporting framework.

References

Blockhus, G., M. Dillenbeck, J.A. Sayer and P. Wegge. 1992. Conserving biodiversity in Managed Tropical Forests. IUCN, Gland, Switzerland.

Annex 1:

Draft reporting framework proposed for use in a pilot phase of future reporting

A Reporting Framework

In 2009 ITTO and IUCN released a set of Guidelines for the Conservation of Biodiversity in Tropical Timber Production Forests. This marked the culmination of four years of work by the two organisations and several collaborating partners to review best practice in this domain. ITTO and IUCN now wish to monitor the adoption of the Guidelines and to assemble evidence on the extent to which the potential of tropical production forests to contribute to biodiversity conservation goals is being realised in practice.

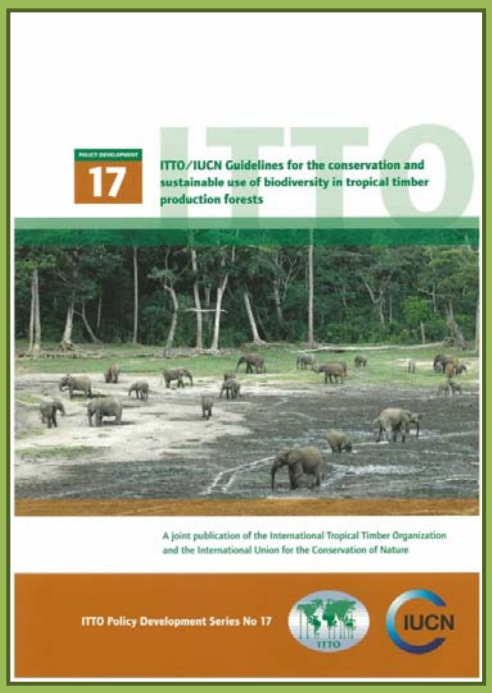
This reporting framework has therefore been produced primarily to allow for feedback from ITTO producer member countries on the status of efforts to conserve biodiversity in their production forests. However we hope that other countries and international organisations may also wish to use this reporting framework to assemble evidence on the progress that they are making in conserving forest biodiversity.

The complete reporting framework is designed to be used at the national level and requires an overview survey of progress in developing laws, institutions and programmes to conserve forest biodiversity. It would also require a sample survey of forest operators to determine their individual progress.

The questions under Principles 8, 9 and 11 are intended to be addressed at the level of management units – these might be forest concessions, community forests, state forest etc. These questions may be dealt with by the operators themselves.

The questions under Principle 10 and 11 should be addressed by operators of plantation forests.

ITTO would welcome feedback from governments on the entire questionnaire – but at least on the questions relating to Principles 1 to 7.



Principles, guidelines and actions for the conservation of biological diversity in tropical production forests: A reporting framework

Please circle who you are:

GOVERNMENT – PRODUCTION FOREST MANAGER – PLANTATION MANAGER

Governments may wish to report on the entire set of Guidelines.
Production forest managers should report on Principles 8, 9 and 11
Plantation managers should report on Principles 10 and 11.

	Assessment					
	Fully - complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 1. SOVEREIGNTY AND SOCIETAL CHOICE						
1: National, regional and local biodiversity strategies, plans and regulations that are based on national and local priorities should be reflected in the management of tropical production forests						
Ensure that forest management plans comply with all national biodiversity laws and plans						
2: Biodiversity goals and targets for tropical production forests should be developed with the involvement of all relevant stakeholders with particular attention to the needs and priorities of local communities						
Improve methods for consultation with and the participation of civil society, especially local communities, in setting biodiversity conservation and sustainable use goals, strategies and priorities						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 2. INTERNATIONAL COMMITMENTS						
3: International commitments for the conservation of genes, populations, species and assemblages of species or habitats should be reflected in the legal and regulatory frameworks guiding the allocation and use of land for production forestry						
Ensure that all national and international commitments are known to forest planners and operators						
4: Special measures will often be required when species and populations that are internationally recognized as rare, threatened or endangered occur in or adjacent to forest management areas						
Pay particular attention to the management of species or habitats that are internationally recognized as rare, threatened or endangered						
Consult with scientific and technical authorities on the species to be protected and to identify appropriate conservation measures						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 3. POLITICAL COMMITMENT, POLICIES AND LAWS						
5: The value of biodiversity as a vital component of ecosystems and a key element of local livelihoods should be demonstrated and communicated to all stakeholders, including decision-makers						
Raise awareness amongst all stakeholders on the importance of biodiversity conservation and sustainable use in production forests						
6: Appropriate policies, laws and regulations should be developed and implemented to ensure that biodiversity interests are adequately addressed in the management of tropical production forests						
Encourage multi-stakeholder involvement in the formulation of policies, laws and regulations related to biodiversity conservation in production forests						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 4. LAND USE AND SPATIAL PLANNING						
7: National land-use planning processes and forest and environmental laws should explicitly address issues of biodiversity conservation and sustainable use in forests at all spatial scales						
Ensure that national biodiversity action plans or similar biodiversity conservation initiatives are reflected in forest land-use or spatial plans at all scales						
8: Inconsistent or contradictory land-use policies and laws at national and sub-national levels that conflict with biodiversity conservation and sustainable use or do not support SFM in general should be identified, reviewed and modified						
Identify, review and modify policies, laws or subsidies outside the forest sector that are unfavourable to biodiversity conservation						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 5. DECENTRALIZATION, FOREST TENURE AND NATURAL RESOURCE ACCESS RIGHTS						
9: Local communities should have the right to use biodiversity to meet their economic and cultural needs and should be involved in its management and protection. Clearly demarcated and defined tenure and resource use rights might benefit biodiversity by providing local people with incentives for conservation and sustainable use						
Encourage and regulate community and small-scale forestry, and collaborative and joint forest management agreements in ways that favour conservation of biodiversity						
Provide safeguards for biodiversity in local forest management schemes						
10: Arrangements regarding forest ownership and use at the landscape scale should be favourable for the conservation of forest biodiversity						
Coordinate the actions of forest owners, users and managers across landscapes to ensure the maintenance of connected habitat for species and populations of conservation value						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 6. INCENTIVES						
11: Managers of tropical production forests should be compensated for the incremental costs of biodiversity conservation measures						
Support pilot schemes to introduce payments for ecosystem services to support biodiversity conservation in tropical production forests						
12: Independent voluntary forest certification should be recognized as a way of encouraging biodiversity conservation in production forests						
Encourage increased emphasis on biodiversity conservation in certification processes						
13: Where they do not distort international trade, subsidies and credits should be made available to offset the costs of biodiversity conservation in tropical production forests. Subsidies and credits that favour deforestation or forest degradation should be identified and progressively eliminated						
Create mechanisms for the exemption or reduction of taxes for forests managed in ways that promote biodiversity conservation						
14: Governments should make use of international payment/financial mechanisms to support and offset the incremental costs of conserving biodiversity values and use these as an incentive to encourage biodiversity conservation and sustainable use in tropical production forests						
Explore financial mechanisms to favour products sourced from forests in which biodiversity conservation measures are in place						
Provide financial support to assist managers of tropical production forests to meet the costs of surveys, monitoring and other measures needed for the conservation of biodiversity						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 7. KNOWLEDGE, LEARNING, TECHNOLOGY TRANSFER AND CAPACITY BUILDING						
15: Relevant government agencies, forest managers, universities, research agencies and other organizations should collaborate in the development of systems for the collection, storage and processing of, and improved access to, existing and new data on biodiversity in tropical production forests						
Train more ecologists, taxonomists and para-taxonomists and provide them with career opportunities in production forestry						
Establish, restore and maintain libraries and reference collections to support the biodiversity conservation efforts of forest agencies						
16: Governments, universities, research agencies and conservation NGOs should collaborate to produce manuals, guides and other material for communicating the underlying concepts, objectives and values of biodiversity in tropical production forests to forest managers and field personnel, key stakeholders and the media in language that is understandable, relevant and useful for all stakeholder groups						
Produce user-friendly field manuals containing maps, lists of species, and information on the benefits of biodiversity conservation in tropical production forests						
17: Biodiversity conservation and sustainable use in the complex ecological, social and economic settings that frequently characterize tropical production forests requires skills in adaptive management based on sound data and knowledge of forest conditions derived from monitoring and from communication with all stakeholders						
Encourage collaboration between conservation NGOs and timber companies to adapt management practices to conserve biodiversity						
18: The successful dissemination and uptake of innovative approaches to the conservation and sustainable use of biodiversity in tropical production forests requires alliances and partnerships between organizations with complementary knowledge and skills						
Foster greater collaboration between timber companies, technical agencies and research institutions on biodiversity conservation						
Encourage education and research on biodiversity in tropical production forests						
19: Low-cost monitoring programs for biodiversity in tropical production forests that serve the needs of forest managers should be developed and conducted in ways that facilitate learning and adaptive management and that make information on achievements and failures widely available. Para-taxonomists can provide valuable support to biodiversity assessment and monitoring						
Encourage the development of improved methods for monitoring biodiversity in tropical production forests						
Explore alternative biodiversity mapping and monitoring methods, including participatory community-based approaches for mapping biodiversity of particular importance to local communities						
Provide long-term incentives and financial resources for biodiversity monitoring in tropical production forests						
20: More capacity for biodiversity conservation in tropical production forests is needed in technical agencies, planning departments and timber companies and among local forest owners and managers						
Provide training opportunities in taxonomy for forest management personnel who will work in tropical production forests						
Encourage trained staff to spend time surveying and monitoring biodiversity as part of their normal work						
Encourage the creation of specialized courses and training activities in tropical forest taxonomy, ecology and biodiversity management for forest managers						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 8. MANAGING TROPICAL PRODUCTION FORESTS AT A LANDSCAPE SCALE						
21: The management of different types of production and plantation forest within the larger landscape has a major influence on biodiversity in that landscape						
Plan harvesting blocks in ways that do not disrupt the continuity of mature forests						
Retain natural unlogged refugia adjacent to or within harvesting blocks						
22: The restoration of native vegetation on degraded sites should be planned to provide a diversity of successional vegetation types, increase the connectivity of forest patches, and allow the dispersal of plants and animals, thereby helping to ensure the viability of populations at landscape and forest management unit scales						
Incorporate biodiversity conservation goals in the planning of large-scale reforestation or forest landscape restoration activities						
Plant native species on degraded land to increase habitat and to provide opportunities for the movement of biodiversity between fragmented natural forest patches						
Create corridors of habitat between forest patches by: maintaining intact forest along streams and rivers; retaining canopy 'bridges' over roads and taking other measures to facilitate animal movement						
23: Private and community forest owners need technical support to ensure that their activities are consistent with biodiversity conservation objectives						
Ensure that the managers of small or community forests understand and respect long-term needs for biodiversity conservation						
Assist community forest owners and managers to support activities that are consistent with biodiversity conservation objectives						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 9. BIODIVERSITY CONSIDERATIONS AT THE FOREST MANAGEMENT UNIT LEVEL						
24: Biodiversity should be given a prominent place at all stages of the preparation and implementation of forest management plans						
Define biodiversity goals at all stages of the preparation and implementation of forest management plans						
Ensure that biodiversity conservation is dealt with explicitly in manuals, codes of conduct and guidelines related to the implementation of SFM						
25: All forest management activities affect biodiversity. Forest management must ensure that changes do not impact negatively on biodiversity features identified as having special value						
Identify and monitor biodiversity values that should be protected against excessive change during forest management						
26: Forest management plans should include information on the presence and conservation status of plants, animals and habitats of special conservation concern						
When developing forest management plans, encourage collaboration with museums, herbaria, environmental agencies and conservation NGOs to assemble baseline information on biodiversity resources						
Incorporate baseline information on biodiversity and forest ecology in the forest management plans						
Ensure that forest management plans provide for biodiversity monitoring and that management will be responsive to the results of that monitoring						
Ensure that forest management plans include measures to protect local biodiversity values						
Ensure that forest management plans include provisions to address specific biodiversity issues such as genetic conservation areas for commercial tree species						

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
27: Actual, potential and emerging threats to biodiversity must be anticipated and contingency plans prepared to ensure that, when needed, technically sound responses can be put rapidly into place						
Ensure that monitoring systems and protocols established for tropical production forests include assessments of actual and emerging threats to biodiversity within and adjacent to those forests						
28: Biodiversity conservation objectives should be clearly and explicitly identified for each area of forest under management. These objectives should recognize and reflect the biodiversity values and possible tradeoffs amongst key stakeholders, including local communities						
Make the biodiversity priorities of a tropical production forest as explicit as possible by listing species, habitats and populations to be maintained						
29: The preparation of harvesting plans, including stock maps at the compartment level, should take into consideration the local occurrence of species or habitats of special conservation concern						
Support pre-logging inventories by providing biodiversity specialists, particularly in areas of high biodiversity value						
Collaborate to build the capacity of field staff to monitor biodiversity by providing training and appropriate communication materials for the field identification of commercial tree species and other forest biodiversity						
30: Reduced impact logging should be used in tropical production forests						
Apply reduced impact logging						
Retain buffer strips along water courses						
Ensure that silvicultural treatments – e.g. climber cutting - do not place important biodiversity features at risk						
31: Special precautionary measures are required to protect populations, and maintain the within-species variability, of the most valuable timber species						
Assess the need for special measures to encourage the retention of viable populations of seed trees and maintain the genetic diversity of commercially important species						
Encourage the establishment and maintenance of permanent forest sample plots and other monitoring systems to better understand long-term forest dynamics, regeneration, and within-species genetic variability with a special emphasis on actual and potentially valuable tree species						
32: Hollow trees, although generally of low commercial value, should be retained, as they provide important habitats for a wide range of animal species						
Retain hollow trees in harvest operations						
33: Unnecessary nutrient losses from the forest ecosystem and impacts on soils should be minimized						
Debark trees in the forest unless there are sound commercial or ecological reasons for not doing so						
34: Disruption of canopy cover might be important in allowing the regeneration of light-demanding species but this should be balanced by the need to retain canopy connectivity for canopy-dwelling animals and to reduce fire risk and the exposure of open ground to rain and sun						
Ensure that decisions on the extent of canopy opening take into account impacts on biodiversity						
35: Forestry operations can encourage the introduction and spread of invasive alien species and measures should be taken to minimize this risk						
Take measures to eradicate invasive alien species that become established						
36: Measures should be taken to avoid unsustainable levels of hunting and the gathering of NTFPs						
Monitor and regulate the commercial exploitation of bushmeat and NTFPs						
Provide forest employees with meat and fish obtained from sustainable sources to reduce their need for bushmeat						
37: Forest managers and other stakeholders should take special measures to mitigate increases in human-wildlife conflicts that might arise from logging activities						
Assist local people to manage wildlife conflicts caused by their forestry or biodiversity conservation and sustainable use activities						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 10. BIODIVERSITY CONSERVATION IN PLANTED FORESTS						
38: Planted forest establishment should focus on previously deforested or other degraded sites and not replace natural forest habitats of conservation concern						
Take measures to protect features of high biodiversity value, especially when natural forest is to be converted to plantation forest						
39: Large-scale planted forests can provide a forest matrix within which areas of high conservation value can be protected and managed						
Set aside biodiversity reserves within large-scale plantation schemes						
Retain natural habitats along watercourses within plantation estates						
40: Management systems that favour natural processes and native species and enhance the productivity and resilience of the planted forest should be developed						
Where economically viable, adjust silvicultural practices to favour local biodiversity in planted forest stands						
Reduce pesticide and herbicide use						
41: The use of native tree species and species mixes in planted forests enhances the biodiversity value of the stand. When exotic species must be used, choose those which provide the best habitat for local biodiversity						
Encourage the use of native species in planted forests						
42: Measures should be taken to ensure that plantation forestry does not facilitate the introduction of invasive species, which could impact negatively on both the planted forest and neighbouring natural forests						
Avoid introducing tree species that are likely to spread outside the planted forest area						

Comments:

	Assessment					
	Fully complied	Largely complied	Some progress	Little progress	No compliance	Not applicable
Principle 11. MAINTAINING FUNCTIONING FOREST ECOSYSTEMS						
43: Ecological knowledge should be improved and applied to ensure that forest management enhances or maintains biodiversity and thus ensures forest functions such as pollination, seed dispersal and nutrient cycling. The ecology and habitat requirements of species of both commercial and conservation concern need to be understood and addressed in forest management planning						
Adopt, as a fundamental principle, the idea that as much indigenous biodiversity as possible should be retained in tropical production forests						
Facilitate and encourage ecological research in tropical production forests, including the establishment and maintenance of long-term forest biodiversity monitoring plots						
Encourage research on the ecology and habitat requirements of species of conservation and commercial interest						
44: Special management consideration should be given to species that are strongly interactive or play a key role in the ecology of other species or have important influences on the overall ecology of a forest and the survival of other species						
Conserve keystone species of those with high importance for ecosystem functions						
45: Particular sites and areas of forest and other habitats that provide important ecological functions should be identified and special measures taken to ensure their protection						
Identify and give special protection to areas that are identified as providing important ecological functions						
46: The fire ecology and fire susceptibility of tropical production forests should be understood and biodiversity considerations included in fire management measures						
Take special measures to manage firs in locations of high biodiversity value						