CBD

UNEP

CONVENTION ON BIOLOGICAL DIVERSITY

Distr.
GENERAL

UNEP/CBD/SBSTTA/7/8/Add. 1
26 October 2001

ORIGINAL: ENGLISH

SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE
Seventh meeting
Montreal, 12-16 November 2001
Item 4 of the provisional agenda *

MAIN THEMATIC ITEM: FORESTS BIOLOGICAL DIVERSITY

Note by the Chair of the Subsidiary Body on Scientific, Technical and Technological Advice

Summary of issues, recommendations and programme of work and organisation of work for Working Group I

INTRODUCTION

1. The Conference of the Parties has requested the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to improve the scientific and technical advice it provides (e.g. in its decisions IV/16 and V/20). The Conference of the Parties has also decided that there will be a main thematic issue considered at each SBSTTA meeting and that forests biological diversity would be the theme for the seventh meeting. The provisional programme of work for the meeting (UNEP/CBD/SBSTTA/7/1/Add.1, annex II) therefore allocates three full days to the consideration of the issue of forest biological diversity.

2. Given this significant allocation of time, and the need to provide improved scientific and technical products from the session, I have explored with the Bureau possible ways to manage the work of Working Group I, should SBSTTA decide to establish a working group to consider agenda item 4. I have also reviewed the papers provided by the Executive Secretary on this issue (and in particular UNEP/CBD/SBSTTA/7/6, 7 and 8).

3. In order to supplement the Notes prepared by the Executive Secretary on the main issue, forest biological diversity and, in my view, to facilitate SBSTTA discussion in this respect, I have prepared this paper for your consideration.

4. This paper is designed to provide:

* UNEP/CBD/SBSTTA/7/1

- A comprehensive set of draft recommendations, which bring all recommendations into one document, and which contain material covering all matters in the papers.

- A summary of the key issues which SBSTTA will need to consider.

- A more focused and concrete draft programme of work, and some possible targets.

- An outline of the way in which the issues might be handled by the Working Group, elaborating on the proposals in the annotated provisional agenda.

Suggested Recommendations

Work of the Ad Hoc Technical Expert Group

1. The Subsidiary Body on Scientific, Technical and Technological Advice may wish to *welcome* the report of the Ad Hoc Technical Expert Group on Forest Biological Diversity (UNEP/CBD/SBSTTA/7/INF{AHTEG}), thank the Governments of Canada and the United Kingdom for their financial support for this work, and thank the co-chairs and members of the AHTEG for the quality of their work.

Status and Trends

SBSTTA may wish to recommend that the Conference of the Parties, at its sixth meeting:

2. *note* that significant technical work has been undertaken by the Ad Hoc Technical Expert Group on Forest Biological Diversity and provided in reports commissioned by the Secretariat (as summarised in UNEP/CBD/SBSTTA/7/6 and 7/7), and that SBSTTA, after considering this work, has identified the following key conclusions relating to the status and trends of forest biological diversity:

General Status and Trends

a. Forest biological diversity is a significant contributor to overall biological diversity internationally, with almost 30% of the world's ice-free land area in forests.

b. Forests hold more than 50% of the world's biodiversity. Tropical forests in particular have high species richness.

c. Forests provide important services to humans, including fresh water production, soil protection, climate stability, timber and non-timber products, and recreation.

d. The rate of deforestation has been at a high level for many centuries. Losses over the past decades have been particularly rapid and therefore worrisome. Most current deforestation is occurring in tropical forests.

e. Large-scale degradation of forest quality due to human activities occurs in all regions and forest types. Degradation is exacerbated by improved access to intact forests.

f. The number of extinct and endangered forest species, already at historically high levels, can be expected to rise due to an existing "extinction debt", and continued habitat loss, fragmentation, invasive species and over-exploitation. The evidence clearly shows that an "extinction debt" exists, i.e. many extinctions will happen in the future as a result of the deforestation and degradation which have already occurred.

g. Protected forest areas have increased in recent years in both number and area. However, globally, most forest types are neither well protected nor well represented in protected areas. The pattern of protected forest areas remains uneven, especially in terms of distribution and the representativeness of many

forest types. The effectiveness of the protection provided in protected areas remains a major problem.

h. Sustainable forest management is generally less profitable in direct monetary terms than ecologically non-sustainable forest practices, but in the long term will generally generate greater overall economic benefits than unsustainable degradation of forests. Local and indigenous communities and, ultimately, nations are likely to be the major losers from the conversion of forested land to other uses and non-sustainable forest practices.

Climate Change and Biodiversity

i. There are few accounts of impacts of climate change on genotypes, but on a longer time scale warming could result in genetic changes due to changes in selective pressures, forest fragmentation, extinctions of small isolated populations, and changes in pollinators and dispersal agents.

j. It is expected that climate change will result in an overall decline in plant species diversity; a significant species decline in at least some vertebrate groups; an overall decrease in invertebrate species and genetic diversity; loss of rare and specialist insect species, and consequent loss of other dependent species; and changes in insect/plant interactions, other predator-prey interactions and species competition for various resources.

k. It is unlikely that forest biomes or ecosystems will shift as intact entities in response to climate change, so that climate change will result in significant changes in ecosystem composition and functioning.

l. Climate change is expected to result in increases in pest invasions.

m. Climate change is likely to result in an increased forest fire problem in many forest ecosystems; in high latitudes may reduce peat formation and drought stress; and in northern latitudes may result in destruction of permafrost and consequent landscape degradation.

Human-Induced Uncontrolled Forest Fires

n. Fires are a natural and important part of the disturbance regime in many temperate and boreal forest ecosystems, but unnatural changes in frequency or intensity of fires have deleterious ecological impacts. Most fires are caused by human activity.

o. In the past two decades there has been a significant increase in devastating fires, with as much as 20 million hectares impacted in 1997/98; and the extent and effect of these fires was significantly affected by human activities.

p. Burning of forests is considered to contribute between 20 and 40 per cent of total carbon dioxide emissions world-wide.

q. Recent fires have had significant impacts on forest biological diversity, including by causing the replacement of forests with savannah in parts of Indonesia and Amazonia, and impacting forest animal and plant diversity.

Unsustainable harvesting of non-timber forest resources, inlcuding bushmeat and living botanical resources

r. Non-timber forest resources encompass a wide range of products, including at least 150 which are significant in international trade, and a much larger number which are in local use.

s. Non-timber forest resources are important contributors to subsistence or income for several million households world-wide, and 80% of the population of the developing world use these resources for health and nutritional needs

t. The value of non-timber forest resources often accounts for 30-60% of household income, contributing to poverty alleviation, and there is also significant untapped potential for development of small-scale industries.

u. Unsustainable harvest of non-timber forest resources has resulted in depletion of populations, sometimes causing the species to become threatened or (in relatively few cases) extinct; genetic impacts on populations; and reduced benefits from these resources.

v. The bushmeat trade will, if not urgently addressed, cause the extinction of a number of Central and West African wildlife populations, with consequent flow-on effects to ecosystems.

Limitations in Our Knowledge and Ability to Assess Status and Trends

w. Assessing the current global status of forest biological diversity in quantitative as well as qualitative terms is problematic, because quantifying biological diversity is difficult. It is desirable to improve our ability to categorise and understand biological diversity, to enhance our ability to measure trends.

x. There is generally less knowledge with respect to forest biological diversity in tropical forests compared to the other two biomes.

y. The relationship between biological diversity and ecosystem goods and services is direct, but the exact linkages remain unclear and warrant further research. Critical levels of biological diversity loss and/or change, as well as the human impacts that cause them and which affect forest ecosystem functioning and forest goods and services, are still largely unknown.

z. Present knowledge concerning the use and valuation of non-timber forest products, the cultural and spiritual values of forests, and the development of rights and participatory possibilities by indigenous people, is sparse and needs more adequate attention.

3. *Agree* that the rate of loss of forest biological diversity has increased to a level where urgent action is required by Parties, governments, and organisations and communities at the global, regional, national and local levels.

Causes and Key Actions

SBSTTA may wish to recommend that the Conference of the Parties, at its sixth meeting:

Causes and Implications of These for Actions

5. *note* the following key findings relating to the causes of forest biological diversity loss, and *take them into account* in future work to address the problem:

a. There are a range of direct causes of loss of forest biological diversity, including harvest, land clearance, climate change, acid rain, and changed hydrological patterns.

b. The underlying causes of loss of forest biological diversity are very fundamental and complex, as they derive from broader macro-economic, political and social causes (such as poverty, rapid population growth, urbanisation, land use changes, globalisation of trade, unsustainable production and consumption patterns, political unrest, lack of good governance, land rights disputes and lack of institutional technical and scientific capacity). Loss of forest biological diversity cannot be stopped and reversed without addressing these and other fundamental problems.

c. Current economic incentives often encourage forest loss and degradation and are therefore disincentives to sustainable forestry and sustainable harvest of non-timber resources.

d. Many of the threats to forest biological diversity emanate from non-forest sectors, such as agriculture, land use, industry, energy and others. The development of cross-sectoral linkages is therefore very important.

e. Improved access to unmanaged forests as a result of development projects is a significant cause of forest biological diversity loss.

f. The main direct anthropogenic causes of forest fires are land clearing with fire; fire connected with resource extraction, arson, accidental or escaped fires; increased amounts of fuel in forests due to logging or fire suppression.

Goals

6. *Agree* that the overall goal of for the work of the Convention in the period 2002-2012 should be to to reduce the rate of and finally halt biodiversity loss, and to mitigate the negative impacts of deforestation and forest degradation, including by restoring and rehabilitating forest biodiversity, focusing on those aspects of biodiversity which are under threat;

7. *Agree* that in the period 2002-2012 the programme of work will focus on improving the ability of countries to address identified key causes of biodiversity loss, and to enhance protection of species and ecosystems.

Principles Underlying Proposed Actions

8. *endorse* the following general principles as a basis for developing priority actions for conservation and sustainable use of forest biological diversity:

1. Assessment and monitoring

- Biological diversity is a scaled consideration, and classification, monitoring, and reporting must occur on all scales and must involve all stakeholders to place forest biological diversity in proper contexts.

2. Conservation and sustainable use

- Conservation and, where appropriate, enhancement of forest biological diversity should be an important aspect of conservation and sustainable use of all types of forests.

- The development and implementation of the ecosystem approach, should be the guiding principle to achieve the conservation and sustainable use of forest biological diversity and it should be applied to the full continuum of forests, from protected areas to plantations, based on both science and adaptive experience.

- Critical levels of biological diversity loss/change that affect forest ecosystem functioning, and, in turn, the goods and services provided by forests are still largely unknown among forest types, which emphasizes the value of applying the precautionary approach.

3. Institutional and socio-economic enabling environment

- To identify and propose measures to halt and reverse global forest biological diversity loss, both the direct and the underlying causes of forest decline must be addressed.

- Political and economic decisions taken in forestry and other forest-related sectors should safeguard forest biological diversity and result in a fair distribution of associated costs and benefits among resource users.

- Creating an enabling legal, policy, economic, and institutional environment to address the causes of forest biological diversity loss is a fundamental and urgent prerequisite for the conservation and sustainable use of forest biological diversity.

Key actions to establish an enabling environment to address the causes of forest biological diversity loss

9. *endorse* the following key actions, *apply* them in its work on forest biological diversity; and *urge* Parties and countries to apply them in the development of national policies relating to forest biological diversity:

a. increase political will;
b. provide adequate institutional, technical, human and financial resources;
c. ensure adequate involvement of indigenous peoples and local communities in all stages of forest management;
d. ensure integration of forest biological diversity conservation and sustainable use into all relevant sectors;
e. apply the ecosystem approach;
f. secure a permanent forest estate and an adequate land tenure and forest use system;
g. provide a national and global economic environment conducive to the conservation and sustainable use of forest biological diversity; and
h. establish and enforce appropriate legislation.

.

Priority Areas for Action: UNEP Report

10. *Note* that the UNEP "Assessment of the status of the world's remaining closed forests" concluded that 80.6% of these forests are concentrated in 15 countries (Russia, Canada, Brazil, the USA, Democratic Republic of the Congo, China, Indonesia, Mexico, Peru, Colombia, Bolivia, Venezuela, India, Australia and Papua New Guinea), and that protection of these forests should be the initial priority for international effort, and be focused on implementation of strong protection measures, raising the public's awareness about the value of forests, and providing alternatives to exploitation; and

11. *Endorse* those findings, *urge* the Governments of those countries to urgently develop effective policies to protect forest biological diversity, and *urge* relevant international organisations and donors to provide financial and technical support for the development and implementation of those policies in developing countries.

Work Programme

12. SBSTTA may wish to recommend that the Conference of the Parties, at its sixth meeting *adopt* the proposed programme of work for the period 2002 - 2012, and the associated targets.

Ad Hoc Technical Expert Group on Climate Change and Biodiversity

SBSTTA may wish to

13. *direct* the Ad Hoc Technical Expert Group on Climate Change and Biodiversity to provide advice on the following key matters relating to forest biological diversity:

a. the extent to which activities relating to emissions trading or the Clean Development Mechanism will provide practical support for activities which protect forest biological diversity (e.g. the creation of protected areas), and ways in which the level of support may be enhanced by adjustments to those mechanisms;
b. the potential for carbon sequestration activities to have positive or perverse effects on forest biological diversity, and ways in which perverse effects can be minimised and positive effects maximised;
c. the potential to mitigate the effects of climate change on forest biological diversity, or to provide support for communities to help them cope with those effects, and which aspects of mitigation or community support should be the focus for international support efforts.

14. *request* the Executive Secretary to transmit the findings of the AHTEG on Climate Change and Biodiversity in relation to mitigation activities to all Parties, and to all relevant donor organisations, (in particular to the OECD countries which have pledged funding for mitigation activities and the GEF), *urge* Parties to consider these findings in their development of mitigation projects, and *urge* donors to consider these findings in their decisions on the funding of mitigation projects.

SBSTTA may wish to recommend that the Conference of the Parties, at its sixth meeting:

15. *call upon* the UNFCCC to accept and actively consider the advice of the AHTEG on Climate Change and Biodiversity, and take any necessary steps to optimise the effect of mechanisms under the UNFCCC and its Kyoto Protocol, and report to SBSTTA on progress made in that work; and

16. *call upon* parties to the UNFCCC and CBD tofulfil their commitments for the reduction of greenhouse gas emissions.

Contributions to the Work Programme

SBSTTA may wish to recommend that the Conference of the Parties, at its sixth meeting:

17. *Urge* Parties and other Governments to incorporate the objectives and relevant elements of the programme of work into their national biodiversity strategies and action plans and national forest programmes;

18. *Urge* Parties to have national level coordination in their work relating to forests at an international level, particularly in respect of work relating to theCBD and UNFF;

18. *Invite* members of the Collaborative Partnership on Forests (CPF)[1], the CPF network and other relevant organizations and stakeholders to contribute to the implementation of the programme of work;

19. *Invite* Parties to formulate and adopt national targets for the conservation and sustainable use of forest biodiversity, that will contribute to the achievement of the global targets;

20. *Invite* FAO, the International Tropical Timber Organization and the Global Fire Monitoring Center, and other relevant organizations to include forest biodiversity in their assessments of fire impacts; explore possibilities for Joint Work Programme with the Convention on Biological Diversity, including *inter alia,* fire impact assessments, development of guidelines in fire management, and community based approaches in fire prevention and management; and report on progress to SBSTTA prior to COP-7;

21. *Request* the Executive Secretary, in collaboration with other members of the Collaborative Partnership of Forests and the CPF network, to explore possibilities to enhance the integration ofnon-timber forest resources in the forest inventory and management, and to report on progress to SBSTTA prior to COP-7

16. *Establish* a bushmeat task force to facilitate development of a strategic plan of action to reduce unsustainable hunting of endangered species for bush meat, taking into account the need to find alternative sources of protein and income for the rural populations concerned, and *request* the Executive Secretary, in collaboration with the Convention on International Trade in Endangered Spe cies of Wild Fauna

1. The Secretariat of the Convention on Biological diversity (CBD), the Secretariat of the United Nations Convention to Combat Desertification (UNCCD); the Center for International Forestry Research (CIFOR), the Department of Economic and Social Affaris of the United Nations Secretariat (DESA), the Food and Agriculture Organization of the United Nations (FAO), the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), the International Tropical Timber Organization (ITTO), the United Nations Development Programme (UNDP), the United Nations Environmental Programme (UNEP), the World Bank, the Secretariat of the Global Environment Facility (GEF).

and Flora (CITES), the range states, other Parties and relevant organizations and stakeholder groups to participate in this task force.

Monitoring Implementation of the Work Programme, and Reporting

22. SBSTTA may wish to *request* the Executive Secretary, in collaboration with other members of the Collaborative Partnership of Forests and the CPF network, to develop cost-effective means to measure and report against the global targets, using assessments at the global level by international organisations, or existing data, and propose these to SBSTTA prior to COP-7

SBSTTA may wish to recommend that the Conference of the Parties, at its sixth meeting:

23. Invite Parties to report on the way in which this decision and the programme of work have been reflected in NBSAPs and NBSAP implementation work.

BACKGROUND

1. At its fourth meeting in 1998, the Conference of the Parties to the Convention launched a programme of work for forest biodiversity focused on the research, cooperation and development of technologies necessary for the conservation and sustainable use of forest biological diversity of all types of forests (Decision IV/7).

2. At its fifth meeting, the COP established an ad hoc technical expert group on forest biological diversity to provide advice on scientific programmes and international cooperation in research and development, to carry out a review of available information on status, trends and threats to forest biological diversity and to identify options and suggest priority actions for the conservation and sustainable use of forest biological diversity [decision V/4 paragraphs 4, 5, 6, and annex].

3. COP 5 also asked SBSTTA for advice on a number of relevant matters, including the impacts of climate change, human-induced uncontrolled forest fires and harvesting of non-timber forest products on forest biological diversity [decision V/4, paragraphs 11, 12, 14].

4. The COP repeatedly emphasized the importance of ensuring that future activities under the United Nations Framework Convention on Climate Change were consistent with and supportive of the conservation and sustainable use of biological diversity, noting that cooperation with this Convention should be strengthened [decision V/4, paragraphs 11, 16, 17, 18, 19, 20; decision V/21, paragraph 3].

STATUS AND TRENDS

5. The Forests AHTEG provided an analysis of status and trends. This is summarised in paper UNEP/CBD/SBSTTA/7/6.

6. In addition to this work, the Secretariat commissioned reports on forest fires, climate change and harvesting of non-timber forest products. The findings of these reports, together with other information available to the Secretariat, are summarised in UNEP/CBD/SBSTTA/7/7, and that paper provides information on status and trends in relation to those issues.

7. The main findings in those papers are:

General Status and Trends

a. Forest biological diversity is a significant contributor to overall biological diversity internationally, with almost 30% of the world's ice-free land area in forests.

b. Forests hold more than 50% of the world's biodiversity. Tropical forests in particular have high species richness.

c. Forests provide important services to humans, including fresh water production, soil protection, climate stability, timber and non-timber products, and recreation.

d. The rate of deforestation has been at a high level for many centuries. Losses over the past decades have been particularly rapid and therefore worrisome. Most current deforestation is occurring in tropical forests.

e. Large-scale degradation of forest quality due to human activities occurs in all regions and forest types. Degradation is exacerbated by improved access to intact forests.

f. The number of extinct and endangered forest species, already at historically high levels, can be expected to rise due to an existing "extinction debt", and continued habitat loss, fragmentation, invasive species and over-exploitation. The evidence clearly shows that an "extinction debt" exists, i.e. many extinctions will happen in the future as a result of the deforestation and degradation which have already occurred.

g. Protected forest areas have increased in recent years in both number and area. However, globally, most forest types are neither well protected nor well represented in protected areas. The pattern of protected forest areas remains uneven, especially in terms of distribution and the representativeness of many forest types. The effectiveness of the protection provided in protected areas remains a major problem.

h. Sustainable forest management is generally less profitable in direct monetary terms than ecologically non-sustainable forest practices, but in the long term will generally generate greater overall economic benefits than unsustainable degradation of forests. Local and indigenous communities and, ultimately, nations are likely to be the major losers from the conversion of forested land to other uses and non-sustainable forest practices.

Climate Change and Biodiversity

i. There are few accounts of impacts of climate change on genotypes, but on a longer time scale warming could result in genetic changes due to changes in

selective pressures, forest fragmentation, extinctions of small isolated populations, and changes in pollinators and dispersal agents.

j. It is expected that climate change will result in an overall decline in plant species diversity; a significant species decline in at least some vertebrate groups; an overall decrease in invertebrate species and genetic diversity; loss of rare and specialist insect species, and consequent loss of other dependent species; and changes in insect/plant interactions, other predator-prey interactions and species competition for various resources.

k. It is unlikely that forest biomes or ecosystems will shift as intact entities in response to climate change, so that climate change will result in significant changes in ecosystem composition and functioning.

l. Climate change is expected to result in increases in pest invasions.

m. Climate change is likely to result in an increased forest fire problem in many forest ecosystems; in high latitudes may reduce peat formation and drought stress; and in northern latitudes may result in destruction of permafrost and consequent landscape degradation.

Human-Induced Uncontrolled Forest Fires

n. Fires are a natural and important part of the disturbance regime in many temperate and boreal forest ecosystems, but unnatural changes in frequency or intensity of fires have deleterious ecological impacts. Most fires are caused by human activity.

o. In the past two decades there has been a significant increase in devastating fires, with as much as 20 million hectares impacted in 1997/98; and the extent and effect of these fires was significantly affected by human activities.

p. Burning of forests is considered to contribute between 20 and 40 per cent of total carbon dioxide emissions world-wide.

q. Recent fires have had significant impacts on forest biological diversity, including by causing the replacement of forests with savannah in parts of Indonesia and Amazonia, and impacting forest animal and plant diversity.

Unsustainable harvesting of non-timber forest resources, inlcuding bushmeat and living botanical resources

r. Non-timber forest resources encompass a wide range of products, including at least 150 which are significant in international trade, and a much larger number which are in local use.

s. Non-timber forest resources are important contributors to subsistence or income for several million households world-wide, and 80% of the population of the developing world use these resources for health and nutritional needs

t. The value of non-timber forest resources often accounts for 30-60% of household income, contributing to poverty alleviation, and there is also significant untapped potential for development of small-scale industries.

u. Unsustainable harvest of non-timber forest resources has resulted in depletion of populations, sometimes causing the species to become threatened or (in relatively few cases) extinct; genetic impacts on populations; and reduced benefits from these resources.

v. The bushmeat trade will, if not urgently addressed, cause the extinction of a number of Central and West African wildlife populations, with consequent flow-on effects to ecosystems.

Limitations in Our Knowledge and Ability to Assess Status and Trends

w. Assessing the current global status of forest biological diversity in quantitative as well as qualitative terms is problematic, because quantifying biological diversity is difficult. It is desirable to improve our ability to categorise and understand biological diversity, to enhance our ability to measure trends.

x. There is generally less knowledge with respect to forest biological diversity in tropical forests compared to the other two biomes.

y. The relationship between biological diversity and ecosystem goods and services is direct, but the exact linkages remain unclear and warrant further research. Critical levels of biological diversity loss and/or change, as well as the human impacts that cause them and which affect forest ecosystem functioning and forest goods and services, are still largely unknown.

z. Present knowledge concerning the use and valuation of non-timber forest products, the cultural and spiritual values of forests, and the development of rights and participatory possibilities by indigenous people, is sparse and needs more adequate attention.

CAUSES

8. The work by the Forests AHTEG and the Secretariat also identified key causes for the current status and anticipated trends. The following are the key findings in relation to causes:

a. There are a range of direct causes of loss of forest biological diversity, including harvest, land clearance, climate change, acid rain, and changed hydrological patterns.

b. The underlying causes of loss of forest biological diversity are very fundamental and complex, as they derive from broader macro-economic, political and social causes (such as poverty, rapid population growth, urbanisation, land use changes, globalisation of trade, unsustainable production and consumption patterns, political unrest, lack of good governance, land rights disputes and lack of institutional technical and scientific capacity). Loss of forest biological diversity cannot be stopped and reversed without addressing these and other fundamental problems.

c. Current economic incentives often encourage forest loss and degradation and are therefore disincentives to sustainable forestry and sustainable harvest of non-timber resources.

d. Many of the threats to forest biological diversity emanate from non-forest sectors, such as agriculture, land use, industry, energy and others. The development of cross-sectoral linkages is therefore very important.

e. Improved access to unmanaged forests as a result of development projects is a significant cause of forest biological diversity loss.

f. The main direct anthropogenic causes of forest fires are land clearing with fire; fire connected with resource extraction, arson, accidental or escaped fires; increased amounts of fuel in forests due to logging or fire suppression.

GOALS AND PRINCIPLES

Goals

9. The overall goal of the proposed programme of work for the Convention in the period 2002-2012 is promote implementation of the Convention in all types of forest ecosystems, with the following practical goals, which address directly the loss of forest biological diversity:

1. to reduce the rate of and finally halt biodiversity loss, and
2. to mitigate the native impacts of deforestation and forest degradation, including by restoring and rehabilitating forest biodiversity;

focusing on those aspects of biodiversity which are under threat.

10. The programme of work proposed in this paper focuses on improving the ability of countries to address identified key causes of biodiversity loss, and to enhance protection of species and ecosystems.

Key Guiding Principles

The Forests AHTEG proposed the following key guiding principles to structure its recommendations on options and priority actions.

1. Assessment and monitoring

- Biological diversity is a scaled consideration, and classification, monitoring, and reporting must occur on all scales and must involve all stakeholders to place forest biological diversity in proper contexts.

2. Conservation and sustainable use

- Conservation and, where appropriate, enhancement of forest biological diversity should be an important aspect of conservation and sustainable use of all types of forests.

- The development and implementation of the ecosystem approach, should be the guiding principle to achieve the conservation and sustainable use of forest biological diversity and it should be applied to the full continuum of forests, from protected areas to plantations, based on both science and adaptive experience.

- Critical levels of biological diversity loss/change that affect forest ecosystem functioning, and, in turn, the goods and services provided by forests are still

largely unknown among forest types, which emphasizes the value of applying the precautionary approach.

3. *Institutional and socio-economic enabling environment*

- To identify and propose measures to halt and reverse global forest biological diversity loss, both the direct and the underlying causes of forest decline must be addressed.

- Political and economic decisions taken in forestry and other forest-related sectors should safeguard forest biological diversity and result in a fair distribution of associated costs and benefits among resource users.

- Creating an enabling legal, policy, economic, and institutional environment to address the causes of forest biological diversity loss is a fundamental and urgent prerequisite for the conservation and sustainable use of forest biological diversity.

11. In relation to the establishment of an enabling environment, they recommended the following key actions:

a. increase political will;
b. provide adequate institutional, human and financial resources;
c. ensure adequate involvement at all stages of indigenous peoples and local communities in forest management;
d. ensure integration of forest biological diversity conservation and sustainable use into all relevant sectors;
e. apply the ecosystem approach;
f. secure a permanent forest estate and an adequate land tenure and forest use system;
g. provide a national and global economic environment conducive to the conservation and sustainable use of forest biological diversity; and
h. establish and enforce appropriate legislation.

UNEP Assessment of Closed Forests: Recommendations on priorities

12. In addition to the work undertaken for the Convention, UNEP have prepared a report assessing the status of the world's remaining closed forests". This was not available in time to inform the work of the Forests AHTEG. That report concluded that 80.6% of these forests are concentrated in 15 countries (Russia, Canada, Brazil, the USA, Democratic Republic of the Congo, China, Indonesia, Mexico, Peru, Colombia, Bolivia, Venezuela, India, Australia and Papua New Guinea). It therefore recommended that protection of these forests should be the initial priority for international effort, and be focused on implementation of strong protection measures, raising the public's awareness about the value of forests, and providing alternatives to exploitation.

13. SBSTTA may wish to consider that recommendation, and decide whether such a focus is an appropriate addition or amendment to the principles and focus recommended by the Forests AHTEG and in the proposed programme of work.

14. Issues that may be relevant to that consideration are:

- The Forests AHTEG found that most biodiversity is in tropical forests. The UNEP list of priority countries includes significant boreal or temperate forest areas, and does not include many of those countries with significant areas of tropical forest.
- The UNEP report bases its recommendation in part on the fact that many of the forests in these countries are in areas with low population pressure, and therefore the protection of these forests will be relatively easy and low cost. But both this report and the Forests AHTEG work indicates that the areas where addressing biological diversity loss is most most urgent are generally those which are subject to population pressure.
- It is important that all Parties seek to implement the Convention. SBSTTA should consider whether the identification of priority countries will discourage necessary actions in other countries.
- The recommendations of the Forests AHTEG on options, and the proposed programme of work, focus on priority actions rather than priority places. These are not mutually exclusive options, however.

REVISED PROGRAMME OF WORK

Structure of the Programme of Work

15. The programme of work is divided into three sections, matching the divisions of the key guiding principles (see above), vis:

- Assessment and monitoring
- Conse rvation and sustainable use
- Institutional and socio-economic enabling environment

16. The programme contains a three tier structure:

- Goals
- Objectives
- Activities

17. Some overall targets are then included, which will provide a means to measure the success of the activities.

Prioritising of Actions

18. In developing the programme of work, it was necessary to prioritise the actions which would be included. The Forests AHTEG provided a matrix of possible activities (UNEP/CBD/SBSTTA/INF/?). They then undertook initial prioritising of those activities (UNEP/CBD/SBSTTA/7/6). Further work was undertaken on this programme by the Secretariat and the Bureau, also taking into account the activities identified in relation to the climate change, forest fires and non-timber production issues covered in UNEP/CBD/SBSTTA/7/7. This further reduced and refined the actions to those which were considered to contribute the most to achieving the goals and objectives, taking into account the role of the Convention in relation to the work of other international initiatives (notably UNFF and UNFCCC).

19. Questions considered in this prioritising work included:

- What information and assessment tools are most needed in order to identify the critical areas for future work and measure progress?
- What are the key technical impediments to implementation of the ecosystem approach?
- What are the most important direct causes of loss of forest biological diversity, and how can these most effectively be addressed?
- What is an appropriate balance between focusing on preventing future loss and restoring past loss?
- What are the key technical impediments to undertaking restoration activities?
- What are the most effective ways to reduce the impacts on biological diversity of other sectors?

20. SBSTTA may wish to consider whether the activities chosen provide an optimal response to these issues.

Targets

21. The proposed programme of work includes a set of targets, expressing levels of achievement for the year 2012. These targets are modelled in part on the work on the Global Plant Strategy.

22. The targets were selected taking into account the following factors:

- The targets needed to be able to be measured at a global level, using existing information systems.
- The targets needed to be relatively few in number.
- The targets needed to address either the capacity issues most critical to achievement of the work, or the most important effects of carrying out the programme of work.

23. The key rationale for the particular targets proposed is:

- Effective NBSAPs are seen as the most critical mechanism for facilitating national implementation in an integrated way across the sectors.
- The most important single cause of biodiversity loss is deforestation, and this can be relatively readily measured using satellite imagery.
- Reducing the illegal trade in forest products, reducing the unsustainable harvest of endangered species, and increasing the representativeness of protected area networks are seen as three of the most critical means to reduce the loss of biodiversity where forests are not subject to deforestation. The measurability of these targets warrants further exploration.

ANNEX 1
PROPOSED PROGRAMME OF WORK

Note that the elements of the work programme have not been assigned any priority order.

1. Assessment and monitoring

GOAL 1: Develop forest classification systems at various scales, as tools for decision-making and assessment work.

Objective 1: Adopt a global to regional forest classification system that can be mapped, for use in assessing progress against the targets, and for informing future prioritising work within the Convention.

Activities:

Establish a process to review existing classifications, and adopt an agreed classification. That process to be developed by the SCBD, in association with WCMC, FAO, and other relevant bodies. The draft process to be referred to SBSTTA focal points for comment, and once those comments have been incorporated, reported to SBSTTA. The classification to be in place prior to COP 7.

Using GIS technology, develop maps of existing forest areas using that classification, as a baseline for assessing levels of deforestation, through partnerships with bodies such as WCMC and FAO, for consideration by SBSTTA prior to COP 8.

Objective 2: Develop national forest ecosystem classification systems and maps.

Activities:

Urge Parties, as appropriate, to develop national forest ecosystem classification systems and maps, to provide a tool for use in determining priorities for forest protection and management, and for assessment of implementation of priorities in NBSAPs and national forest plans.

GOAL 2: Improve knowledge on and methods for the assessment of the status and trends of forest biological diversity, based on available information.

Objective 1: Advance the development and implementation of methods for assessing the effectiveness of work relating to conservation and sustainable use of forest biological diversity at international, regional and national levels.

Activities:

SCBD to develop a methodology for measuring progress against any global targets for forest biological diversity, noting that this measurement should be undertaken by an appropriate international body. The proposed methodology to be referred to SBSTTA focal points for comment, and once those comments have been incorporated, reported to SBSTTA. The measures to be in place prior to COP 7.

As part of the work on indicators being undertaken in accordance with decisions IV/1A and V/7, develop a menu of indicators the might be used in assessing progress in implementing priority actions in NBSAPs, in relation to key components of forest biological diversity.

GOAL 3: Improve understanding of forest ecosystem functioning.

Objective 1: Conduct key research programmes on forest ecosystem functioning.

Activities:

Establish a fund from voluntary donations, to provide leverage funding for key research programmes in existing institutions, where those research programmes will contribute to the knowledge of forest ecosystem functioning, in relation to those forests in developing countries which are most at risk of forest biological diversity loss, with the objective of providing policy relevant scientific information or methodologies, in particular in relation to:

- Identifying the key components of ecosystem health and key degrading forces.
- Identifying critical thresholds of forest change that trigger significant and/or irreversible forest biological diversity loss.
- Adaptive management approaches for protecting or restoring forest biological diversity.

Establish a science advisory panel to provide guidance on research priorities in this area, and advice to the fund administrators on the value of proposed work.

2. Conservation and sustainable use

GOAL 1: Apply the ecosystem approach.

Objective 1: Develop, test, demonstrate and transfer practical methods for in-situ management of forest biological diversity, both inside and outside protected forest areas, particularly focusing on ecosystem management.

Activities:

Establish an AHTEG to examine the application of the ecosystem approach to forest biological diversity, both to provide technical information of direct value to Parties, and also to provide input to the discussion of Article 8(f) (*in-situ* conservation) in SBSTTA 10. The AHTEG should focus in particular on the following matters:

- Drawing from both the scientific literature and national implementation work, provide a clear conceptual approach for ecosystem management of forest biological diversity.
- Identify key ecosystem elements which are critical as a focus for management and/or monitoring of management effectiveness.
- Identify the key factors to be considered in selecting management or sustainable use methods.
- Identify a small number of forest areas for piloting and demonstrating ecosystem management, incorporating suitable examples from the International Model Forests Network, and provide an approach to those pilot exercises.

The SCBD to develop a process for establishing the pilot exercises.

Objective 2: Assist indigenous and local communities in developing adaptive community-management systems to conserve forest biological diversity.

Activities:

Identify a small number of pilot projects to develop improved harvest, processing and marketing systems for valuable non-timber forest products, in order to improve sustainability of harvest and the availability of income to help support related conservation work by the communities.

GOAL 2: Address the direct causes of loss of forest biological diversity and enhance the conservation of biological diversity

Objective 1: Optimise the contribution of international work relating to climate change to the maintenance of forest biological diversity.

Request the AHTEG on Climate Change and Biological Diversity to provide advice on the following key questions relating to the effect of mechanisms under the UNFCCC on forest biological diversity:

- The extent to which the emissions trading and clean development mechanisms are able to provide financial support for the conservation of biological diversity, and the way in which that support can be optimised;
- Whether the implementation of Articles 3.3 and 3.4 of the UNFCCC (taking into account decisions in relation to the Kyoto Protocol) could provide perverse incentives for the loss of biological diversity, and if so provide proposals for minimising those perverse incentives;
- How the implementation of Articles 3.3 and 3.4 can be adjusted to optimise the potential benefits for forest biological diversity.

Provide that advice to UNFCCC, and seek a report from UNFCCC to COP 7 setting out the steps that they will take to make any desirable adjustments in the Convention, its Protocol, or the administration and operationalisation of the Convention.

Request the AHTEG on Climate Change and Biological Diversity to provide advice that will permit expenditure on mitigation activities for climate change to be targeted to those activities which will most contribute to minimising biological diversity loss, or which will address the most significant impacts of changes in biological diversity on local and indigenous communities within developing countries, and in particular on small island developing states and other countries which are most at risk from climate change. Disseminate the results of that work to potential donor countries and the UNFCCC.

Objective 2: Minimise the impacts on forest biological diversity of human-induced changes in natural fire regimes.

Activities:

Establish a technical advisory group to provide technical advice to Parties on best practice for controlling the key causes of human-induced fires in the most vulnerable forest ecosystems, and in particular:

- To advise on standards for the use of fires as a tool in plantations and agricultural areas;
- To advise on ways to minimise the effect of sustainable logging practices on fuel loadings;
- To advise on fire risk prediction systems, surveillance, public education and other methods to minimise accidental fires.

Establish a technical advisory group to provide advice to Parties on best practice for fire prevention and suppression in natural forests.

Establish a technical advisory group to provide advice to Parties on best practices for forest rehabilitation and restoration in areas prone to fire.

Parties to identify those forest ecosystems which are highly vulnerable to fire, and develop a strategy for minimising fire impacts on forest biological diversity, taking into account the advice provided by the technical advisory groups.

Objective 3: Address the unsustainable harvest of forest resources.

Establish a bushmeat task force to facilitate development of a strategic plan of action to reduce unsustainable hunting of endangered species for bushmeat, taking into account the need to find alternative sources of protein and income for the rural populations concerned.

SCBD to establish a programme to encourage and assist importing countries to restrict the entry of illegally harvested forest resources which are not covered by CITES (e.g. timber illegally extracted from protected areas), taking into account the need to use steps that are least trade distorting consistent with the need to conserve forest biological diversity.

The SCBD to work with other relevant organisations to undertaken or commission evaluations of the effectiveness of existing certification systems for forest resources, in relation to their contribution to implementation of the Convention. Work with with certification agencies to address any identified weaknesses in certification systems.

SCBD to work with other relevant organisations to identify those forest products which are not currently subject to certification systems, and where certification might provide an effective mechanism to reduce unsustainable harvest, and to identify a means to establish such certification systems.

Objective 4: Prevent losses of forest biological diversity caused by the introduction or spread of alien invasive species and genotypes.

Activity:

Taking into account the results of the assessment process agreed by SBSTTA VI, identify general best practice approaches for each of the assessed forest types to address the patterns of invasion and impact for that forest type.

GOAL 3: Protect, manage and enhance rare and threatened species populations.

Objective 1: Enhance access to effective methodologies for identifying threatened species and designing species recovery actions.

Activities:

Carry out an evaluation of available or in-preparation threat classification systems, and provide advice on their value and use to Parties.

Request one or a small group of major institutions working in tropical forest science and/or management to develop guidance for Parties on how to identify those species which will require specific conservation management attention focused on their individual needs, because they will not be adequately conserved by general ecosystem management.

Establish a technical advisory group to carry out an evaluation of species recovery planning processes in a small number of countries with effective processes in place, and provide best practice guidance to Parties.

GOAL 4: Improve the effectiveness of protected area networks in conserving forest biological diversity

Objective 1: Ensure adequate and effective protected area networks.

Activities:

Parties should, if this has not already been undertaken:

1. carry out an evaluation of their protected area networks, and identify:
   - The representativeness of the network in relation to the range of types of forest ecosystems.
   - The effectiveness of the protected area management system for conserving forest biological diversity within protected areas, and the key weaknesses in that management;
   - A strategy for enhancing the representativeness and effectiveness of the network.
2. If necessary, amend the NBSAPs to incorporate that strategy.
3. Undertake necessary implementation work.

3. Institutional and socio-economic enabling environment

GOAL 1: Enhance the institutional enabling environment.

Objective 1: Parties to have NBSAPs that effectively address forest biological diversity conservation, including by addressing the key underlying causes of biodiversity loss.

Activities:

Parties, supported by donors, should review and where necessary amend NBSAPs to ensure that they provide an effective response to forest biological diversity, in accordance with guidance from the COP.

Objective 2: Parties, Governments and organizations to integrate biological diversity conservation and sustainable use into forest and other sector policies and programmes.

Activities:

Donor bodies should, in association with the relevant Parties, develop strategies, standards and protocols to ensure that forest biological diversity considerations are adequately incorporated into non-forest programmes, including energy, transport, infrastructure development, education and agriculture.

Objective 2: Improve the understanding of the various causes of forest biological diversity losses, and increase public support and understanding of the value of forest biological diversity and its goods and services.

Activities:

At a national or regional level, Parties should identify the the most significant cause(s) of forest biological diversity loss, the impacts of that loss on social and economic objectives, and develop a focused strategy for improving recognition of those causes and impacts as a step towards controlling the cause, and also as a contribution towards increased public awareness about forest biological diversity generally.

GOAL 2: Address economic failures and distortions that lead to decisions that result in loss of forest biological diversity.

Objective 1: Improve consideration of the value of forest biological diversity and related ecosystem goods and services in decisions in forest and other sectors.

Activities:

Establish a technical advisory group to develop best practice advice on the methods for valuing forest biological diversity and other forest ecosystem goods and services, and for incorporating those values into forest planning and management, national accounts and other relevant processes.

Targets

1. By 2005 every country has an NBSAP which effectively addresses forest biological diversity conservation, including addressing the key underlying causes of diversity loss.

2. By 2010 deforestation rates of natural forest ecosystems have been reduced by 50%, and in no country has deforestation since 2002 resulted in any major forest type being reduced to less than less than 20% of its original extent.

3. The proportion of forests which are within effective protected areas has been increased by 20% by 2006.

4. No timber from illegal sources entering international trade by 2004.

5. No critically endangered species is subject to harvest after 2002.

6. No deforestation of ancient (old growth) forests after 2003.

ANNEX 2

PROPOSED ORGANISATIO N OF WORK

Session
1: Introduction
2: Status and Trends
Speaker on the conclusions of the AHTEG relating to the status of forest biodiversity.
Discussion of status, to develop conclusions and consider the draft recommendations. **3: Causes, Principles and Key Actions**
Speaker on the conclusions of the AHTEG relating to the key causes of degradation, and the key actions needed to address those causes.
Discussion of the causes of degradation
Discussion of: • The goals of the work programme • the principles proposed by the AHTEG • Key actions to establish an enabling environment to address the causes of forest biological diversity loss • the proposal from UNEP for focused attention on the countries with the most forests.
Conclusions and consideration of draft recommendations
4: Work Programme
Format of Work Programme
Outline by the chair, discussion, and decision on the format
Assessment and Monitoring
Discussion of section 1 of the proposed work programme.
Conservation and sustainable use
Discussion of section 2 of the proposed work programme
Institutional and socio-economic enabling environment
Discussion of section 3 of the proposed work programme
Targets
Discussion of the targets

5: Contributions to the Work Programme
Discussion of the proposed recommendations, the opporutunity for further contributions to be identified
6: Monitoring Implementation of the Work Programme, and Reporting
Discussion of recommendations relating to monitoring and reporting
7: Finalisation of recommendations and summing up
Finalisation of the recommendations

Note that it is expected that this work will extend across the full three days.