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Item 6.3 of the provisional agenda*

REPORT OF THE INTER-SESSIONAL (SECOND) MEETING OF THE AD HOC TECHNICAL EXPERT GROUP ON THE REVIEW OF IMPLEMENTATION OF THE PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY

INTRODUCTION

1. In its decision VII/30, the Conference of the Parties (COP) developed and adopted a framework to facilitate the evaluation of achievements and progress in the implementation of the Strategic Plan of the Convention and, in particular, its mission to achieve by 2010, a significant reduction in the current rate of biodiversity loss at global, regional, and national levels, and communication of this evaluation. The framework (annex II to the decision) which includes goals and targets embedded within seven focal areas, also aims at promoting coherence among the various programmes of work of the Convention when these are reviewed.

2. In paragraph 12 (d) of the same decision, the Conference of the Parties further requested the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to develop recommendations for the integration of outcome-oriented targets into each of the thematic programmes of work, according to the overall framework and approach adopted in the annexes to that decision, and identifying more precise targets, including, as appropriate, quantitative elements.

3. More specifically, paragraph 7 of decision VII/1 on forest biological diversity requested the Executive Secretary, in collaboration with the Ad Hoc Technical Expert Group (AHTEG) on the Review of Implementation of the Programme of work on Forest Biological Diversity, to propose outcome-oriented targets to be integrated into the Work programme for consideration by the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) prior to the eighth meeting of the Conference of the Parties. In the same paragraph, the Conference of the Parties also stated that the proposed targets should be viewed as a flexible framework within which national and/or regional targets might be developed.

4. With generous funds from the European Community, the Executive Secretary convened the second meeting of the AHTEG on the Review of Implementation of the Programme of Work on Forest

* UNEP/CBD/SBSTTA/11/1.

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Biological Diversity in Montreal from 14 to 16 March 2005 to develop draft outcome-oriented targets for the expanded programme of work on forest biological diversity. To facilitate the work of the Group, the Executive Secretary prepared a note entitled "Further development of goals and targets to facilitate coherence among the programmes of work, and to provide a flexible framework for national targets: draft outcome-oriented targets for the implementation of the expanded programme of work on forest biological diversity" (UNEP/CBD/AHTEG-FBD.REV/IS-1/2). The working document was based partially on the report of the first meeting of the AHTEG, held in Montpellier, France, from 24 to 27 November 2003 (UNEP/CBD/COP/7/INF/20), and it also took into account the inputs of the Group through an electronic forum organized from June to September 2004. The Group considered and refined the working document as contained in annex I.

ITEM 1. OPENING OF THE MEETING

5. The meeting was opened by the Executive Secretary of the Convention on Biological Diversity at 10 a.m. on Monday 14 March 2005. The meeting was steered by the co-chairs of the AHTEG, Dr. Ebby Chagala, from Kenya and Dr. Robert Nasi, from France/CIFOR. The list of participants is attached as annex II.

ITEM 2. ORGANIZATIONAL MATTERS

2.1. Adoption of the agenda

6. The Group adopted the provisional agenda (UNEP/CBD/AHTEG-FBD.REV/IS-1/1) without change.

2.2. Organization of work

7. The Group endorsed the proposed organization of work for the meeting annexed to the annotated provisional agenda (UNEP/CBD/AHTEG-FBD.REV/IS-1/1/Add.1). The Group met five times in plenary and it broke once into small drafting groups.

ITEM 3. DEVELOPMENT OF OUTCOME-ORIENTED TARGETS FOR THE EXPANDED PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY

8. Mr. Manuel Guariguata, who represented the Executive Secretary of the Convention on Biological Diversity briefly reviewed the objectives of the meeting, provided relevant background, and presented the expected outputs of the meeting. The presentation was followed by a discussion related to the overall mandate of the Group.

3.1. Consideration of the targets and their technical rationales for their integration into the forest work programme

9. The Group discussed in general terms the note by the Executive Secretary outcome-oriented targets for the expanded programme of work on forest biological diversity (UNEP/CBD/AHTEG-FBD. REV/IS-1/2). In particular, the Group reviewed whether the draft addressed all priority issues concerning the expanded programme of work on forest biological diversity, and whether the targets included were the most suitable based on the overall targets proposed by the Conference of the Parties in decision VII/30. After reviewing and modifying the proposed targets, the Group also considered the relevance, scope, and applicability of the technical rationales for each target. The Group agreed to include, as far as possible, the following in the technical rationales: (i) meaning of

the target; (ii) its relevance for the achievement of the 2010 global biodiversity target; (iii) links with the forest work programme; and (iv) indicators for assessing progress.

10. The Group concluded that, given the current relevance of the issue, one additional target had to be developed to cover forest fires and that two overall targets under goal 4 and two overall targets under goal 8 were to be combined.

3.2. Consideration of more precise targets, including as appropriate, quantitative elements for their integration into the expanded programme of work on forest biological diversity

11. Under this agenda item, the Group discussed the relevance of assigning quantitative elements for specific targets. When appropriate, the Group also developed the justification for the quantitative element selected. Only one proposed target (1.1) was assigned a quantitative element.

12. The outcome of items 3.1 and 3.2 are contained in detail in annex I. The Group requested the Secretariat to finalize the proposed amendments to the note by the Executice Secretary as adopted under item 5 below, and after any follow-up discussions if deemed necessary.

ITEM 4. OTHER MATTERS

13. The Group emphasized the following: (i) the need to further develop and incorporate relevant indicators under each of the technical rationales to facilitate the assessment of progress in implementation and/or achievement of the target, taking into account suitable criteria and indicators for sustainable forest management from regional processes and (ii) the urgent need to post the final report of the meeting through the forest biodiversity web portal for wider circulation before the eleventh meeting of SBSTTA. It is expected that comments could be provided on the most suitable indicators; and (iii) the need for relevant baseline data for quantifying trends in forest biodiversity for the measurement of progress in achieving the targets as contained in annex I. Based on its recommendation X/4 on global outcome-oriented targets for the implementation of the programmes of work on the biological diversity of inland water ecosystems and marine and coastal biodiversity, the Group recommended that at its eleventh meeting, SBSTTA considers how the proposed targets 9.1, 9.2, 10.1 and 10.2 relate to the work of the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions (9.1 and 9.2) and the work of the Ad Hoc Open-ended Working group on Access and Benefit-sharing (targets 10.1 and 10.2), and decides if further refinement is needed by these bodies.

14. Finally, the Group noted that there are a number of objectives in the forest work programme for which targets have not been defined, and that the group needs time to consider indicators for the various targets.

ITEM 5. ADOPTION OF THE REPORT

15. The Group adopted its report, on the basis of a draft presented by the Co-Chairs.

16. One of the Co-Chairs is expected to introduce the report of this inter-sessional meeting to the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) at its eleventh meeting and subsequently to the Conference of the Parties at its eighth meeting, as part of the recommendations of the AHTEG on the review of implementation of the programme of work on forest biological diversity.

ITEM 6. CLOSURE OF THE MEETING

17. The meeting was closed at 5 p.m. on Wednesday, 16 March 2005.

Annex I

PROPOSED REVISED DRAFT OUTCOME-ORIENTED TARGETS FOR THE EXPANDED PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY

I. RELATIONSHIP BETWEEN THE EXPANDED PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY AND OTHER RELEVANT PROCESSES AND INSTRUMENTS

A. Millenium Development Goals

1. At the Millennium Summit in 2000, heads of State recognized the role that sustainable management of natural resources plays in environmental sustainability and in combating poverty. The implementation of the expanded programme of work on forest biological diversity makes a direct contribution to the achievement of the goals contained in the Millennium Declaration, where heads of State resolved to intensify their efforts for the management, conservation, and sustainable development of all types of forests.

2. The implementation of the expanded programme of work on forest biological diversity contributes directly to the achievement of goal 7 "Ensure environmental sustainability" and indirectly to all other Millennium Development Goals, notably goal 1 "Eradicate extreme poverty and hunger".

B. Plan of Implementation of the World Summit on Sustainable Development

3. The expanded programme of work on forest biological diversity makes a direct contribution to the implementation of paragraphs 44 and 45 of the Plan of Implementation of the World Summit on Sustainable Development. 1/

4. The expanded programme of work on forest biological diversity contributes indirectly or potentially to the implementation of several other elements of the Plan of Implementation of the World Summit on Sustainable Development, including:

(a) *Paragraph 7 (c)* Development of national programmes for sustainable development and local community development;

(b) *Paragraphs 9 (b) and (c):* Access to modern biomass technologies and fuelwood resources and sustainable use of biomass;

1/ Paragraph 44 relates to the target of achieving by 2010 a significant reduction in the current rate of loss of biological diversity.

Paragraph 45 states that sustainable forest management of both natural and planted forests, and for timber and non-timber products is essential to achieving sustainable development, significantly reduce deforestation, halt the loss of forest biodiversity and improve food security and affordable energy. This would include actions to:

(a) Enhance political commitment to achieve sustainable forest management;

(b) Support the United Nations Forum on Forests (UNFF);

(c) Promote and facilitate the means to achieve sustainable timber harvesting;

(d) Develop and implement initiatives to address the needs of those parts of the world that currently suffer from poverty and the highest rates of deforestation;

(e) Create and strengthen partnerships and international cooperation to facilitate the provision of increased financial resources, and transfer of environmentally sound technologies;

Recognize and support indigenous and community-based forest management systems.

(c) *Paragraph 10 (f):* Support for natural resource management for creating livelihoods for the poor;

(d) *Paragraph 26 (b):* Employ the full range of policy instruments, including regulation, monitoring, voluntary measures, market and information-based tools, land-use management and cost recovery of water services, without cost recovery objectives becoming a barrier to access to safe water by poor people, and adopt an integrated water basin approach;

(e) *Paragraph 37 (d):* Reduce the risk of flooding and drought in vulnerable countries;

(f) *Paragraph 38:* Contribution of forests to sequester carbon dioxide;

(g) *Paragraph 41:* Contribution to the reduction of desertification and land degradation and measures to prevent and combat desertification;

(h) *Paragraphs 42 (a) and (b):* Develop and promote programmes, policies and approaches that integrate environmental, economic and social components of sustainable mountain development and implement programmes to address deforestation, erosion, land degradation, loss of biodiversity, disruption of water flows and retreat of glaciers;

(i) *Paragraph 58 (g):* Development of community-based initiatives on sustainable tourism by 2004 and build the capacities necessary to diversify tourism products;

(j) *Paragraph 132:* Development and wider use of Earth observation technologies, including satellite remote-sensing, global mapping and geographic information systems, to collect quality data on environmental impacts, land use and land-use change.

C. Biodiversity-related conventions and United Nations organizations

5. The expanded programme of work on forest biological diversity is complementary with the work of the United Nations Forum on Forests (UNFF); and many of the goals and objectives of the forest work programme are also reflected in the UNFF IPF/IFF proposals for action (UNEP/CBD/COP/6/INF/9 and UNEP/CBD/SBSTTA/9/INF/31).

6. Furthermore, goals and activities of the expanded programme of work are variously relevant to the provisions of a number of conventions, including the World Heritage Convention (WHC), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Plant Protection Convention (IPPC), the United Nations Framework Convention on Climate Change (UNFCCC), and the United Nations Convention to Combat Desertification (UNCCD) as well as to the work of members of the Collaborative Partnership on Forests, and to the "Forest Principles" agreed at the 1992 United Nations Conference on Environment and Development.

D. Other thematic programmes of work of the Convention

7. Other relevant programmes of work under the Convention that are relevant to forest biological diversity are mountain biological diversity (decision VII/27), protected areas (decision VII/28), and biological diversity of inland water ecosystems (decision VII/4).

II. VISION, MISSION, GOALS AND OUTCOME ORIENTED TARGETS OF THE EXPANDED PROGRAMME OF WORK ON FOREST BIOLOGICAL DIVERSITY

A. Overall vision

8. The overall vision of the expanded programme of work on forest biological diversity is to halt the loss of forest biological diversity and ensure its capacity to provide goods and services, and ensure the sharing of benefits that may arise from their sustainable use.

B. Mission

9. The mission of the programme of work on forest biodiversity, consistent with the Strategic Plan of the Convention, as adopted in decision VI/26 of the Conference of the Parties, is to promote the implementation of the three objectives of the Convention and to achieve significant reduction of the current rate of forest biological diversity loss by the year 2010 at the global, regional and national level as a contribution to poverty alleviation and to the benefit of life on Earth.

C. Goals and targets

10. Eleven goals and 20 outcome-oriented targets are proposed. The targets are considered as a useful means for communicating the priority issues for forest biodiversity conservation at the global level, facilitate the review of the expanded programme of work on forest biological diversity, and as a flexible framework within which national and/or regional targets may be developed, according to national priorities and capacities, and taking into account differences in forest biological diversity between countries. The targets have been re-worded to suit the expanded programme of work on forest biological diversity and are based upon those contained in annex II to decision VII/30 (specified here as overall targets).

Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats and biomes.

Overall target: At least 10% of each of the world's ecological regions effectively conserved.

Application to forest biological diversity: *Target 1.1: At least 10 % of each of the world's forest types effectively conserved in protected areas*

Technical rationale

11. The world's major forest types may be taken from the United Nations Food and Agriculture Organization (FAO) Forest Resources Assessment 2000 (13 types) or from the United Nations Environment Program-World Conservation Monitoring Centre's (UNEP-WCMC) 27 types as contained in the CBD Technical Series Report No. 7, on forest biodiversity. 2/ Globally, the percentage of forest area under protection of major forest types is about 12 per cent, regardless of whether recent estimates from FAO or UNEP -WCMC are used. 3/ These estimates vary at regional and national levels, but much less is known about figures for the specific forest types. The term "effectively conserved" is understood to mean that the area is managed for a favourable conservation status by achieving its goals and objectives.

2/ Available at http://www.biodiv.org/doc/publications/cbd-ts-07.pdf

3/ Van Tol, G., and Gidda, S. B. 2004. Protected forest areas: their representativeness and efficacy for the conservation of biological diversity. In: Biodiversity Issues for Consideration in the Planning, Establishment and Management of Protected Area Sites and Networks. Secretariat of the Convention on Biological Diversity, Montreal. (CBD Technical Series no. 15).

12. The object of this target is to ensure that a portion of each of the world's main forest types is maintained in protected areas and to increase their management effectiveness. There is no detailed scientific basis for the figure of 10 per cent, although this figure is recommended in decision VI/9 of the Conference of the Parties on the Global Strategy for Plant Conservation, and has been agreed to by many countries as a 'reasonable target' to maintain in protected areas. Parties may wish to consider a research objective to determine the adequacy and rationality of the 10 per cent figure in terms of effectiveness for conservation. One of the values of protected areas in each of the forest types is that it permits their use as a benchmark against which to assess ecological sustainability of forest management outside reserves, as well as promoting the conservation of forest ecosystems and all of the plant and animal life associated with these systems. Where such protected areas are to be created or expanded, consideration should be given to large size, connectivity, representativeness of particular forest ecosystems (see target 1.2), and potential value with respect to ecosystem adaptation to climate change (see target 7.1). Implementation of activities under objective 3 of goal 3, programme element 1, 4/ as well as those under objective 3 of goal 1, element 3, 5/ of the expanded programme of work on forest biological diversity are essential for achieving this target.

13. *Possible indicators*: (i) area of forest protected by major forest type; (ii) percentage of forest type protected nationally, regionally, and globally; (iii) level of protection attributed to each area (IUCN protected area categories I through VI).

Overall target: Areas of particular importance to biodiversity protected

Application to forest biological diversity. *Target 1.2: Areas of particular importance to biodiversity protected in the most threatened and vulnerable forest ecosystems*.

Technical rationale

14. The term "particular importance to biodiversity" is understood in the context of this target as forests with distinct ecological roles and/or that are underrepresented both in terms of protection status and current area under protection. Criteria for identifying these ecologically significant forests might include global rarity, degree of endemism, species richness, presence of certain important habitats for endangered species, taxonomic uniqueness, unusual ecological or evolutionary phenomena, and specific attributes such as their role in providing essential ecosystem services (e.g., carbon storage, regulation of hydrologic regimes). At the national level, such forests could be selected by Parties based on national and sub-national forest classifications, where these exist, possibly at the level of forest ecosystem or forest subtype. Suggested forest types, subtypes, or ecosystems under this category could include: cloud forests, certain temperate rain forests, mangrove forests, certain Mediterranean forests, semi-arid forests, tropical dry forests, riparian/gallery forests, late successional (old-growth) temperate and boreal forests, and peat/swamp forests. 6/

15. As in target 1.1, implementation of activities under objective 3 of goal 3, programme element 1, 7/ as well as those under objectives 2 and 3 of goal 1, element 3 8/ of the expanded programme

4/ "Ensure adequate and effective protected forest area networks."

5/ "To develop, where appropriate, specific forest ecosystem surveys in priority areas for conservation and sustainable use of forest biodiversity."

6/ The group noted that UNEP-WCMC in collaboration with FAO, the NASA-NGO Conservation Working Group and other relevant partners, is expected to undertake global assessment aiming at completing coverage of all major types of forest biomes/ecosystem (including different forest types, notably mangroves) for immediate indicator implementation (Annex I to SBSTTA recommendation X/5).

7/ "Ensure adequate and effective protected forest area networks."

of work on forest biological diversity are needed for achieving the target. Possible indicators: (i) area of type, subtype, or forest ecosystem protected; (ii) percentage of specific type, subtype or forest ecosystem protected; (iii) level of protection afforded to each area.

Goal 2. Promote the conservation of species diversity

Overall target: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups.

Application to forest biological diversity: *Target 2.1: Restore or maintain populations, or reduce substantially the decline of populations of forest species of selected taxonomic groups.*

Technical rationale

16. The term "selected taxonomic groups" refers to a defined subset of species of forest plants and animals that would include representatives of major taxonomic divisions or life forms (e.g., insects and other invertebrates, birds, mammals, reptiles and amphibians for animals; and trees, shrubs, herbs, epiphytes for plants), and representatives found within the forest types as defined in target 1.1. For example, species targeted could be derived from the IUCN Red Lists. Restoration of forest biological diversity through natural regeneration, enrichment planting, reintroduction of forest fauna, and catalysing secondary succession by planting native or otherwise threatened tree species, generate favourable environmental conditions and benefits to people through products for food and raw materials, erosion control, recreation, clean water, provision of wildlife habitat, and maintenance of selected forest animal and plant populations. Due to the relatively high costs (including opportunity costs) often associated with restoration management activities, sites that are targeted for restoration should be chosen carefully to ensure that restoration management activities will yield optimal desired benefits in terms of habitat creation for species or communities of primary interest (for conservation and/or sustainable use), and that specific restoration management practices are developed that will be both effective, affordable, and sustainable. 9/

17. The forest web portal of the Convention on Biological Diversity contains relevant information for helping to implement the target. 10/ Activities under objective 1 of goal 3, element 1 11/ of the expanded programme of work on forest biological diversity are also fully in line for achieving the target, as well those contained under targets 2.2, 3.1 and 5.1 below.

Overall target: Status of threatened species improved.

Application to forest biological diversity: *Target 2.2: Conservation status of threatened and endangered forest species substantially improved.*

Technical rationale

18. Changes in the conservation status of currently threatened and endangered species reflect the efficiency of conservation measures. For conservation status estimations of forest species, the

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8/ "Develop national forest classification systems and maps (using agreed international standards and protocols to enable regional and global synthesis" (see also footnote no. 4).

9/ See e.g., "Guidelines for the restoration, management and rehabilitation of degraded and secondary tropical forest". ITTO Policy Development Series No. 13. (www.itto.or.jp).

10/ http://www.biodiv.org/programmes/areas/forest/portal/topic1/ecosystem.shtml

11/ "Restore forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes, including in plantations."

international conservation (threat) status categories will have to be used such as IUCN Red Lists, 12/ CITES appendices, among others. There is a range of quantitative criteria for assigning different threat categories; meeting any one of these criteria qualifies a taxon for being listed at a given level of threat. Objective 2 of goal 3, element 1 13/ of the expanded programme of work on forest biological diversity contains activities relevant for achieving the target.

19. In the development of indicators composite indices can be used as recommended by The Ad Hoc Technical Expert Group on Indicators for Assessing Progress Towards the 2010 Biodiversity Target 14/ in addition to assessing directly conservation/threat status. Such composite indices provide information on the change in species abundances as well as other components of biodiversity. These are, in particular, the Living Planet Index (LPI), the various Species Assemblage Trend Indices (STI) and the Red List Index (RLI).

Goal 3. Promote the conservation of genetic diversity

Overall target: Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.

***Application to forest biological diversity**: Target 3.1: Genetic diversity of major socio-economically valuable forest species assessed, conserved and associated indigenous and local knowledge maintained.*

Technical rationale

20. This target derives from target 9 of the Global Strategy for Plant Conservation. Contrary to agricultural crops, the vast majority of forest species is found *in situ*, in natural or semi-natural ecosystems where the conservation of a particular set of species, populations or genes depends on the integrity of the forest estate, and is therefore intimately linked to sustainable forest management. Ideally**,** *in situ* conservation programs need to be based on substantial knowledge of the species. However, and in spite of the current threats to forest genetic resources, very little information is available at this level, not to mention on the genetic structure and composition of most forest plants. Development of information systems is a necessary step to achieve the target.

21. Central to achieving this target is the maintenance of population sizes and numbers above critical thresholds in order to maintain the longer-term viability of the meta-population (e.g., genetic diversity, reproductive fitness, and dispersal mechanisms) and to avoid loss of genetic diversity through excessive inbreeding. For example, for trees, a meta-population of several (3-5) thousand reproductively mature individuals spread among 20-30 sub-populations would largely ensure the longer-term, genetic viability of a species.

22. Practical experience suggests that sound management of genetic resources must include conservation efforts based on finding a balance between (i) management of natural forests and plantations with due respect to their genetic resources; and (ii) the establishment of networks of smaller areas protected for genetic conservation. The right balance between these two approaches will depend on biological factors, and management objectives. Tools and approaches on how to develop general strategies for conservation of forest genetic diversity for focal species, and at the ecosystem level, have

12/ http://www.iucn.org/themes/ssc/redlists/categor.htm

13/ "Promote forest management practices that further the conservation of endemic and threatened species."

14/ Report of the Ad Hoc Technical Expert Group on Indicators for Assessing Progress Towards the 2010 Biodiversity Target. (UNEP/CBD/SBSTTA/10/INF/7).

been recently made available. 15/ Implementing the activities contained in objective 4 of goal 4, element 1 16/ of the expanded programme of work on forest biological diversity will contribute to achieving the target, and also taking into account target 11.1.

23. In the development of indicators a first approach could be to assess the genetic and reproductive status of a forest species by documenting and quantifying the distribution of population sizes and numbers (e.g., as useful surrogate measures for genetic status) within the geographic area of interest. As a more direct step, genetic diversity can be directly quantified/measured using standard molecular and quantitative genetic estimates/techniques described in the literature. This kind of baseline data can later be used in order to establish trends over time.

Goal 4. Promote sustainable use and consumption

Overall target: Biodiversity-based products derived from sources that are sustainably managed, and production areas consistent with the conservation of biodiversity.

Overall target: Unsustainable consumption, of biological resources or that impacts upon biodiversity, reduced.

Combined application to forest biological diversity: *Target 4.1: Forest goods and services are derived from sources managed according to the principles of sustainable forest management including conservation of biological diversity.*

Technical rationale

24. This target is derived from targets 6 and 12 of the Global Strategy for Plant Conservation. Its objective embraces the overall objective of sustainable forest management that attempts to balance environmental, socio-cultural, and economic benefits for present and future generations — in line with the Forest Principles agreed to at the United Nations Conference on Environment and Development in 1992. The concept of sustainable forest management has been further elaborated within the Intergovernmental Panel on Forests (IPF)/Intergovernmental Forum on Forests (IFF) process and the United Nations Forum on Forests (UNFF) and seven thematic areas for sustainable forest management were agreed upon at the international level at the fourth session of UNFF. 17/ Biodiversity conservation is essential in sustainable forest management and it is contained in one of these seven thematic areas. The application of sustainable forest management includes a suite of approaches, tools, and techniques implemented such as particular sets of criteria and indicators developed at the national, regional, and global levels.

25. The ecosystem approach is the primary framework for addressing the three objectives of the Convention. At its seventh meeting, the Conference of the Parties noted in paragraph 7 of its decision VII/11, on the ecosystem approach, that sustainable forest management can be considered as a means for applying the ecosystem approach to forests. Hence, sustainable forest management addresses all three objectives of the Convention and not just sustainable use.

15/ "Forest genetic resources conservation and management. Vols. 1, 2, 3. International Plant Genetic Resources Institute. Rome, Italy."

16/ "Develop effective and equitable information systems and strategies and promote implementation of those strategies for in situ and ex situ conservation and sustainable use of forest genetic diversity, and support countries in their implementation and monitoring."

17/ These are: (1) Extent of forest resources; (2) Biological diversity; (3) Forest health and vitality; (4) Productive functions of forest resources; (5) Protective functions of forest resources; (6) Socio-economic functions; and (7) Legal, policy and institutional framework.

26. Recent global estimates 18/ suggest that almost 90 per cent of forests in industrialized countries (which account for about 45 per cent of the world's forest area) are currently being managed according to a formal or informal management plan or have been designated as areas where no active management should take place. A much lower figure — about 12 per cent of the total forest area — applies for developing countries using similar criteria. Although there are inherent differences in definitions among countries and geographical coverage, the study indicates that, overall, the situation as regards to planning for sustainable forest management has improved within the past 20 years. This does not necessarily mean that products are being extracted and/or from these areas that are managed in a sustainable manner in these areas; therefore the sub-target seems justified. The various activities under objectives 1, 2 and 3 of goal 4, element 1 19/ of the expanded programme of work on forest biological diversity are also relevant for achieving the target.

27. Possible indicators: (i) area of forest under sustainable management regimes; (ii) areas of forest under community-based adaptive management systems; (iii) quantity of products coming from certified forest.

Overall target: No species of wild flora or fauna endangered by international trade.

Application to forest biological diversity: *Target 4.2: No species of forest flora or fauna endangered by international trade.*

Technical rationale

28. This target is derived from targets 11 and 12 of the Global Strategy for Plant Conservation. The target focuses on those species that are actually threatened by international trade. The target is consistent with the main purpose of the CITES Strategic Plan (to 2005): "No species of wild flora subject to unsustainable exploitation because of international trade". Wildlife species endangered by international trade include but are not limited to species listed on appendix 1 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Objective 4 of goal 1, element 2 and objective 2, goal 4, element 1 of the expanded programme of work on forest biological diversity contains relevant actions for achieving the target. 20/

Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.

Overall target: Rate of loss and degradation of natural habitats decreased.

Application to forest biological diversity: *Target 5.1: The current forest loss, degradation, and conversion to other land uses are substantially reduced.*

18/ Wilkie, M. L. et al. 2003. Forest area covered by management plans: global status and trends. Paper presented at the XII World Forestry Congress. Quebec City, Canada.

19/ "Promote sustainable use of forest resources to enhance the conservation of forest biological diversity."

"Prevent losses caused by unsustainable harvesting of timber and non-timber forest resources."

"Enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity."

20/ "Promote forest law enforcement and address related trade."

"Prevent losses caused by unsustainable harvesting of timber and non-timber forest resources."

Technical rationale

29. The aim of this target is to counteract the effects of forest degradation and fragmentation on forest biological diversity. Degradation is implied here as any combination of loss of soil fertility, absence of forest cover, lack of natural function, soil compaction, and salinization, that either impedes or retards unassisted forest recovery through secondary succession. Reduction of forest cover, forest degradation and its fragmentation leads to forest biodiversity loss by reducing available habitat of forest-dependent species and indirectly through disruption of major ecological processes such as pollination, seed dispersal, and gene flow. Forest fragmentation 21/ may also hamper the ability of plant and/or animal species to adapt to global warming as previously connected migration routes to cooler sites disappear. In certain forest types, fragmentation may also exacerbate the probability of forest fires, which further affects biological diversity in negative ways. 22/

30. Recently developed global scenarios for the year 2100 suggest that for terrestrial ecosystems, land-use change probably will have the greatest effect on biodiversity—followed by climate change and nitrogen deposition. 23/ Furthermore, a recent global analysis reveals that: (i) over half of the temperate broadleaved and mixed forest biome and nearly one quarter of the tropical rainforest biome have been fragmented as opposed to about 4 per cent of the boreal forest; (ii) these and other major forest biomes and selected forest ecoregions 24/ show contrasting degrees of forest fragmentation across regions; and (iii) for all forest biomes considered, a high proportion of residual forest also means a lesser degree of fragmentation. 25/ This last fact suggests that deforestation rates are also likely to indicate fragmentation rates. Sources of data may include the FAO Forest Resources Assessment, UNEP/WCMC or other appropriate sources as explained in the rationales of targets 1.1. and 1.2 above. The *Guiding Principles for the Quantitative Assessment of Soil Degradation* discusses principles and provides examples of experimental, preliminary as well as applied procedures and standards from different countries, with a focus on salinization, fertility decline and soil pollution. 26/ Implementation of activities within objective 6 of goal 2, element 1 27/ of the expanded programme of work on forest biological diversity are relevant to achieve the target.

31. *Possible indicators*: (i) measurements of habitat loss (ha/year, or % loss/year) can be estimated using data from successive analyses (using the classification system chosen for targets 1.1 and 1.2).

Goal 6. Control threats from invasive alien species.

Overall target : Pathways for major potential alien invasive species controlled**.**

***Application to forest biological diversity**: Target 6.1: Pathways for potential invasive alien species affecting forest ecosystems controlled*

21/ "The degree to which continuous forested areas are broken into smaller patches and interspersed with non-forest areas".

22/ Cochrane, M.A. 2001. Synergistic Interactions Between Habitat Fragmentation and Fire in Evergreen Tropical Forests. *Conservation Biology* 15 (6): 1515-1521.

23/ Sala, O. E. *et al*. 2000. Global biodiversity scenarios for the year 2100. Science 287: 1770-1774.

24/ Olson, D. M. et al. *2001*. Terrestrial ecoregions of the world. BioScience 51: 933-938.

25/ Wade, T. G. et al. *2003*. Distribution and causes of global forest fragmentation. Conservation Ecology 7 (www. consecol.org/vol7/iss2/art7).

26 G.W.J. van Lynden, S. Mantel, A. van Oostrum. 2004. International Soil Reference and Information Centre-Food and Agriculture Organization of the United Nations. ftp://ftp.fao.org/agl/agll/docs/misc36e.pdf

27/ "To prevent and mitigate losses due to fragmentation and conversion to other land uses."

Technical rationale

32. Invasive alien species means introduced exotic or non-native species that alter ecosystem processes and threaten the survival of native species in natural ecosystems and/or cause a significant economic impact in managed lands. For example, in native forest ecosystems, invasive alien plant species are able to dominate the understorey and suppress the regeneration of native species. They can also promote fire occurrences and alter water and nutrient availability. 28/ Even natural disturbances in forests, such as tree falls, can facilitate the establishment of exotic species. Since very few forests are disturbance-free, virtually all are vulnerable to invasion by alien plants.

33. The need to restore degraded forest lands, protect fragile forested watersheds and establish timber species may stimulate extensive planting of a variety of alien species that have the potential to become invasive under particular environmental conditions, as has been demonstrated in many forest ecosystems across the globe. Even some plant species imported as ornamentals that become naturalized are now known to have greatly altered indigenous forest ecosystems, particularly in oceanic islands. 29/ Because of the large scale and long time frame of forestry operations and their potential impacts on the composition and health of native forests, there is a need to assess the potential consequences of species choices.

34. In line with article 8(h) of the Convention, the activities within the expanded programme of work on forest biological diversity that can help to achieve the target are contained in objective 1, goal 2, element 1; objective 3, goal 1, element 2; and objective 1, goal 3, element 2. 30/ The Global Invasive Species Programme (GISP) also provides relevant guidance. 31/

35. *Possible indicators*: (i) changes in area occupied by invasive alien species; (ii) number of invasive alien species.

Overall target: Management plans in place for major alien species that threaten ecosystems, habitats or species.

***Application to forest biological diversity**: Target 6.2: Management plans developed and implemented for all invasive alien species that threaten forest ecosystems, habitats or species.*

Technical rationale

36. Alien invasive species often deprive and/or displace native species through competition. In addition, the ecology on alien invasive species is sometimes poorly known, since many invasions are relatively new events. Since there is no agreed reliable estimate of the number of alien species that threaten indigenous forest ecosystems, habitats, and species, it is recommended that the target be established for all invasive alien species that can be identified as a threat to forest biological diversity.

28/ D'Antonio, C.M. 2000. Biological invasions, fire and global change. In Invasive Species in a Changing World. Island Press, USA.

29/ Denslow, J. S. 2002. Invasive alien woody species in Pacific island forests. UNASYLVA vol. 209.

30/ "Prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biological diversity in accordance with international law."

"Parties and Governments to develop good governance practices, review and revise and implement forest and forest-related laws, tenure and planning systems, to provide a sound basis for conservation and sustainable use of forest biological diversity."

"Increase public support and understanding of the value of forest biological diversity and its goods and services at all levels."

31/ Wittenber R. & Cock M.J.W. (eds). 2001. Invasive Alien Species: A Toolkit for Best Prevention and Management Practices. http://www.gisp.org/downloadpubs/Toolkiteng.pdf

For any invasive alien species, it is expected that different management plans will be required in different countries in which such species threaten indigenous forest ecosystems (including plantations), forest habitats, and endemic species. Enforcement of the national and international laws on the control of alien invasive species, scientific surveys on their ecology and reproductive biology, and sharing knowledge of their impacts on ecosystems, habitats or species and the practical cases of containment and/or eradication for alien invasive species, are key to the implementation of this target. The implementation of the two activities contained under objective 1 of goal 2, element 1 32/ of the expanded programme of work on forest biological diversity are means to achieve the target, including also guidance from the Global Invasive Species Programme.

37. *Possible indicators*: (i) presence of national laws on invasive alien species; (ii) the number of active management programmes to control invasive alien species; (iii) changes in the population sizes of specific invasive alien species.

Goal 7. Address challenges to biodiversity from climate change, and pollution

Overall target: Maintain and enhance resilience of the components of biodiversity to adapt to climate change.

***Application to forest biological diversity**: Target 7.1: Implement practices and activities that maintain the capacity of forest ecosystems and its species to adapt to climate change*

Technical rationale

38. Maintaining and enhancing resilience is directly related to the *adaptive capacity* of a forest ecosystem; that is, its intrinsic options (e.g., genetic diversity, reproductive fitness, and propagule dispersal mechanisms among its species) for population reorganization in response to climate change. The attributes of a forest ecosystem that maintain and/or enhance resilience include: (i) redundancy (the number of species is less important to an ecosystem than the presence of "functional groups"); (ii) complementarity (the number of species, as different species contribute to its forest ecosystem structure and function in complementary ways); (iii) spatial heterogeneity at the landscape level which favours the coexistence of different species in a given area; and (iv) evolutionary memory (e.g., genetic make-up present in current biological communities selected over favourable/unfavourable periods and that expresses itself differently according to environmental conditions).

39. Taking into account the above attributes of ecosystem resilience, the work of the Ad Hoc Technical Expert Group on Biodiversity and Climate Change 33/ presented specific strategies and option for land use, land-use change, and forestry activities (LULUCF) to achieve this target. These include: (i) the maintenance of representative forest ecosystems and genetic resources; (ii) use of mixed-species native tree plantations; (iii) minimizing deforestation and fragmentation; (iv) provision of ecological connectivity between forest fragments; (v) provision of buffer zones for adjustment of reserve boundaries; and (vi) anticipating shifts in the geographical range of native species by testing these species beyond their margins of their current ranges. In addition, the implementation of specific targets 1.1, 1.2, 2.1, 3.1, and 5.1. above, will also contribute to achieving this target as well as the objectives contained in goal 2, 34/ element 1 of the expanded programme of work on forest biological diversity contain a set of activities whose implementation will contribute to achieve the target.

32/ "Prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biological diversity in accordance with international law."

33/ Interlinkages between biological diversity and climate change: advice on the integration of biodiversity considerations into the implementation of the United Nations Framework Convention on Climate Change and its Kyoto Protocol. CBD Technical Series No. 10.

34/ "To reduce the threats and mitigate the impacts of threatening processes on forest biological diversity."

Overall target : Reduce pollution and its impacts on biodiversity

Application to forest biological diversity: *Target 7.2: Practices are implemented to reduce substantially the adverse impact of long range and localized pollution on forest biodiversity*

Technical rationale

40. Forest health is affected by various types of pollution, including: (i) atmospheric deposition of sulphur and nitrogen emissions; (ii) changes in quality of ground and surface waters resulting from industrial and agricultural effluents; and (iii) discharge of industrial and mining waste. Among the obvious effects of these practices are acidification and eutrophication of forest soils.

41. *Local and long-range air pollution*. A great deal of accumulated scientific evidence reveals that excessive sulphur and nitrogen inputs persisting for many decades impair forest ecosystem health and biodiversity—affecting directly trees and soils—especially in temperate regions. This leads to further reductions in the capacity of forest soils to retain airborne pollutants. In tropical and sub-tropical latitudes, forests are also suffering from the effects of long-range air pollution. Reduction of the deposition loads of nitrogen and sulphur in forest soils may require curtailing anthropogenic nitrogen fixation and fossil-fuel combustion. 35/ Past efforts in this direction include: (i) the 1979 Geneva Convention on Long-range Transboundary Air Pollution; in particular with the Protocol on Further Reduction of Sulphur Emissions and the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone; (ii) the Mâle Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effects for South Asia—adopted in 1998; and (iii) the Harare Resolution on the Prevention and Control of Regional Air Pollution in Southern Africa and its Likely Transboundary Effects (1998).

42. *Ground and surface water quality*. In agriculture, nitrogen-efficient technologies and management practices that can increase the efficiency of fertilizer have been increasingly recognized and sometimes imposed by law. There are also ways to prevent that nitrogen lost from fertilized farmland from reaching watercourses, so as to avoid eutrophication. Restoration of forested wetlands and riparian forests has been effective at reducing the transfer of pollutants from agricultural land to other environments.

43. *Industrial and mining waste*. Disposal of industrial and mining waste have become problematic both as a factor of deforestation and as a source of pollution spreading into the neighbouring environment. Point-source or broad-scale deposition of compounds containing mercury, cyanide, hydrocarbons, etc. does not only affect forest health and biodiversity and its regenerative capacity but may also have negative influence on human populations. A specific issue to be addressed is the control over informal small-scale industrial and mining activities in forest areas.

44. Of particular relevance to forests is the implementation of activities under objective 2 of goal 2, element 1 36/ of the expanded programme of work on forest biological diversity as well as the further guidance on the implementation of the principles of the ecosystem approach adopted by the Conference of the Parties at its seventh meeting. 37/ Appropriate implementation of impact assessments as mentioned in Article 14 of the Convention are also critical in ensuring the achievement of this target.

35/ Galloway, J. N. et al. 1994. Year 2020: consequences of population growth and development on the deposition of oxidized nitrogen. Ambio 23: 120–123.

36/ "Mitigate the impact of pollution such as acidification and eutrophication on forest biodiversity."

37/ Annexes I and II of decision VII/11 of the Conference of the Parties on the ecosystem approach.

New target applied to forest biological diversity: *Target 7.3: The impact on forest biodiversity of human-induced uncontrolled/unwanted forest fires substantially reduced*

Technical rationale

45. Improper use of fire can have substantial negative impact on available forest cover. For example, in 2000, more than 350 million ha of forests were burned, of which 95% was human-caused and largely unwanted, and the trend over time is increasing (FAO 2005). 38/ This rate of burning has consequences for human health as well as forest biodiversity. Institution of policies and improved management of this problem, as part of an overall sustainable forest management strategy, forms an essential component in the global reduction of forest loss and the loss of associated biodiversity, that will benefit local communities as well as nations. Data on area burned can be taken from information compiled remotely by the Global Fire Monitoring Centre 39/ as well as from national statistics where these exist. Implementation of the activities in the expanded programme of work on forest biological diversity objective 4, goal 2, element 1, 40/ are means to achieve this target.

46. *Possible indicators*: Area of forest burned reduced by area wanted burned; percentage area deforested by unwanted burning.

Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods

Overall target: Capacity of ecosystems to deliver goods and services maintained.

Overall target: Biological resources that support sustainable livelihoods, local food security and health care, especially of poor people, maintained.

Combined application to forest biological diversity*: Target 8.1 Maintain or improve the capacity of forest ecosystems to deliver goods and services and to support sustainable livelihoods, local food security, and health care, especially for people living in poverty.*

Technical rationale

47. This target addresses the Millennium Development Goal concerning eradicating extreme poverty and hunger, and strengthens all the previous targets on conservation and sustainable use (targets 1.1 through 7.3). The target explicitly recognizes that humans are an integral component of many ecosystems. Forests, being large biodiversity repositories, provide numerous goods and services, including resource provision (fiber, fuelwood, non-timber products), biotic regulation (of water and carbon dioxide flows; erosion control, disease control), cultural and social aspects (e.g., tourism, spiritual and religious values), and support of biological processes (e.g., pollination, nutrient cycling). Biodiversity regulates the rate, magnitude, and direction of major processes that are critical for the provision of these goods and services, and hence underpins livelihoods, food security and health care.

48. Achieving the target will require the further implementation of sustainable forest management as developed within the framework established by the 1992 Rio Forest Principles and which explicitly incorporates the continuous flow of goods and services as one of its key concepts. As noted in decision VII/11 of the Conference of the Parties on the ecosystem approach, sustainable forest

38/ FAO. 2005. Needs and opportunities for international cooperation in forest fire preparedness. Committee on Forestry, 17th Session, Rome.

39/ http://www.fire.uni-freiburg.de/

40/ "To prevent and mitigate the adverse effects of forest fires and fire suppression"

management can be considered as a means for applying the ecosystem approach to forests. 41/ However, greater emphasis could be put on better cross-sectoral integration and inter-sectoral collaboration, ecological interactions within a landscape, and biodiversity conservation issues. Of particular relevance to forests is the implementation of activities under objective 1 of goals 1 and 4, element 1 42/ and under objective 3 of goal 4, element 1 43/ of the expanded programme of work on forest biological diversity as well as the further guidance on the implementation of the principles of the ecosystem approach (decision VII/11). Progress towards the achievement of target 4.1 will also help is assessing achievement of this target.

49. *Possible indicators*: (i) human development indexes of forest-dependent people.

Goal 9. Maintain socio-cultural diversity of indigenous and local communities

Overall target: Protect traditional knowledge, innovations and practices.

Application to forest biological diversity: *Target 9.1: Measures to protect traditional knowledge, innovations and practices associated with forest biological diversity are implemented, and the participation of indigenous and local communities in activities aimed at this are promoted and facilitated*

Technical rationale

50. The Convention on Biological Diversity (CBD) is the primary international instrument with the mandate to address issues regarding the respect, preservation, and maintenance of knowledge, innovations and practices of indigenous and local communities including those that depend on forests for their livelihood. The contribution of traditional knowledge to the conservation and sustainable use of forest biological diversity has been acknowledged by the Convention on Biological Diversity. The aim of this target is being addressed by the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity, which is considering measures to enhance the capacity of indigenous and local communities to protect their own environment and their traditional knowledge against misuse and misappopriation. To reach the target, a participatory approach, as stated in the 1992 Rio Declaration, is also needed, to ensure the involvement of indigenous and local communities in decision making and co-management. Activities in objective 3, goal 4, element 1 are also essential for reaching the target (see footnote No. 43.)

Overall target: Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit-sharing.

Application to forest biological diversity *Target 9.2: Traditional knowledge, innovations and practices regarding forest biological diversity are respected, preserved and maintained, the wider application of such knowledge, innovations and practices are promoted with the prior informed consent and involvement of the indigenous and local communities providing such traditional knowledge, innovations and practices, and the benefits arising from such knowledge, innovations and practices are equitably shared.*

Technical rationale

41/ Annexes I and II of decision VII/11 of the Conference of the Parties on the ecosystem approach.

42/ "To apply the ecosystem approach to the management of all types of forests".

43/ "Enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity."

51. The aim of this target has been partially addressed by the Ad Hoc Open-ended Working Group on Article 8(j). To promote the wider application of traditional knowledge, innovations and practices, the development and implementation of education and awareness programmes is needed. To ensure that indigenous and local communities benefit from the broad use of their traditional knowledge, innovations and practices, measures should be taken to guarantee their intellectual property rights. However, indigenous and local populations should share the benefits of their knowledge in a fair and equitable manner. This issue is under consideration by the Open-ended Working Group on Access and Benefit-Sharing of the Convention. Activities in objective 3, goal 4, element 1 (see footnote No. 43) are needed to reach the target, as well as objective 1, goal 5, element 1. 44/

Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources

Overall target: All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements.

***Application to forest biological diversity*:** *Target 10.1: All access to genetic resources derived from forest biological diversity is in line with the relevant provisions of the Convention on Biological Diversity and the International Treaty on Plant Genetic Resources for Food and Agriculture, and other applicable agreements*.

Overall target: Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources.

Application to forest biological diversity: *Target 10.2: Benefits arising from the commercial and other utilization of genetic resources derived from forest biodiversity are shared with the countries providing such resources.*

Combined technical rationale

52. Forests are an important source of genetic resources and such genetic resources may have considerable value. All access to genetic resources derived from forest biological diversity is in line with the relevant provisions of the Convention on Biological Diversity and the International Treaty on Plant Genetic Resources for Food and Agriculture, and other applicable agreements including the work by the Ad Hoc Open-ended Working Group on Access and Benefit-sharing. There is therefore a need to ensure that access to forest genetic resources and the sharing of benefits arising out of their use is carried out in accordance with the provisions of the Convention. The third objective of the Convention is the "fair and equitable sharing of the benefits arising out of the utilization of genetic resources". Article 15 of the Convention on Biological Diversity on access to genetic resources further sets out the obligations of Parties as providers and users of genetic resources. In order to assist Parties with the implementation of these provisions, the Bonn Guidelines on access and benefit-sharing were adopted in 2002 by the Conference of the Parties in order to assist Parties when establishing legislative, administrative and policy measures on access and benefit-sharing and/or when negotiating contractual arrangements for access and benefit-sharing. Further work is ongoing under the Convention to further assist Parties with the implementation of the access and benefit-sharing provisions of the Convention. As in targets 9.1 and 9.2, the further implementation of activities under objective 1, goal 5, element 1 of the expanded programme of work on forest biological diversity are needed to help achieving both targets 10.1 and 10.2.

44/ "Promote the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge".

Goal 11. Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention

Overall target: New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.

Application to forest biological diversity: *Target 11.1: New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of the expanded programme of work on forest biological diversity under the Convention, in accordance with Article 20.*

Technical rationale

53. Achieving this target will enable developing country Parties to fulfil their obligations with the Convention on Biological Diversity, in accordance with Article 20, paragraph 2, of the Convention. This target also reflects the unique feature of the Convention in which collective efforts in ensuring the sustainable provision of global public goods should be carried out by developing country Parties with financial support from developed country Parties. Thus the target will have a great bearing on the realization of other targets established under the expanded programme of work on forest biological diversity. Although the methodology of measuring new and additional financial resources being transferred to developing country Parties remains to be elaborated, the rule of thumb is that the provision of new and additional financial resources implies no decrease in official development assistance related to forest biological diversity. Article 21, paragraph 1, of the Convention is relevant to achieving the target, as is paragraph 17 of decision VI/22 on forest biological diversity.

Overall target: Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.

Application to forest biological diversity: *Target 11.2: Environmentally sound technology is transferred to developing country Parties, to allow for the effective implementation of the expanded programme of work on forest biological diversity under the Convention, in accordance with its Article 20, paragraph 4, and Article 16.*

Technical rationale

54. Paragraph 4 of Article 20 of the Convention states that the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology. The Convention's programme of work on technology transfer and technological and scientific cooperation 45/ is the primary means to achieve this target as provided in Article 16 of the Convention. The purpose both of this target and of the programme of work is to promote and facilitate the transfer of and access to technologies from developed to developing countries, necessary to ensure implementation of the three objectives of the Convention and in support of the 2010 global biodiversity target, including the participation, approval, and involvement of indigenous and local communities. Partnerships and cooperation among the private sector, governments, indigenous and local communities, academic institutions, and funding institutions, among all countries, will be

45/ Annex to decision VII/29 of the Conference of the Parties.

needed for the effective implementation of the target. Activities contained in objective 1, goal 4, element 3 are also necessary to achieve the target. 46/

46/ "Enhance and improve the technical capacity at the national level to monitor forest biological diversity, benefiting from the opportunities offered through the clearing-house mechanism, and to develop associated databases as required on a global scale"

Annex II

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