Subsidary Body on Scientific, Technical and Technological Advice (SBSTTA-14)

WWF Position Papers

UNEP Headquarters, Nairobi Kenya
May 10 – 21, 2010

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To CBD SBSTTA Focal Points and Delegations
To CBD Secretariat

Herewith find WWF’s Positions and corresponding recommendations to SBSTTA-14 agenda items. We hope you will consider our suggestions and we look forward to working with you further in preparation of COP-10.

WWF calls on Parties at SBSTTA-14 to ensure that COP decisions will include:

- an ambitious set of goals and targets in the new Strategic Plan for the next decade which will focus on key threats to biodiversity loss, increase sustainable use practices and enhance benefit sharing implementation,

- a Joint Programme of Work of the CBD with UNFCCC and UNCCD which will improve linkages and explore co-benefits between the conventions, set governance principles and ensure biodiversity is protected and not adversely affected by climate change and UNFCCC work,

- strengthened thematic programmes of work on Protected Areas and on Marine and Coastal Biological Diversity,

- an ambitious strategy for resource mobilization to increase financing for biodiversity by development of innovative financing mechanisms, establishing clear targets and mechanisms for funding from governments and the private sector, as well as eliminating harmful subsidies,

- practical steps to integrate biodiversity and ecosystem services into key sectors, such as finance and development, by taking into account the recommendations of The Economics of Ecosystem and Biodiversity for Policy Makers Report (TEEB).

Yours Sincerely

Günter Mitlacher,
WWF CBD Focal Point

How to read the report: Amendments and additions to the original SBSTTA-14 documents are marked as follows throughout the report - Text = text is suggested to be deleted; Text = suggestion for new text; (Text) = comment. Only those passages of the Secretariat’s documents to which amendments are proposed are reproduced in the report.
### 2. Summary WWF Positions to SBSTTA-14

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<tr>
<td>3.1.1</td>
<td>UNEP/CBD/SBSTTA/14/2 In-Depth Review of the Implementation of the Programme of Work on Mountain Biological Diversity</td>
<td>(see separate CI, TNC, WWF document for full position)</td>
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| 3.1.2       | UNEP/CBD/SBSTTA/14/3 In-Depth Review of the Programme of Work on the Biological Diversity of Inland Water Ecosystems | **Focus on the two key main threats to freshwater – over-abstraction and fragmentation, especially through the adoption and implementation of adequate environmental flows and related policies and measures;**  
**Integrate freshwater biodiversity considerations into decision making of other sectors and the implementation of related programmes of work;**  
**Address the under-representation of inland waters in the global network of protected areas; and**  
**Cooperate over the effective and sustainable management, protection and use of transboundary inland waters.** |
| 3.1.3       | UNEP/CBD/SBSTTA/14/4 In-Depth Review of the Implementation of the Programme of Work on Marine and Coastal Biological Diversity | **Elaborate a practical set of guidelines for the selection of representative networks of marine and coastal protected areas on the basis of biogeographic classification systems;**  
**Highlight the progress made in the identification of ecologically or biologically significant areas in marine areas within and beyond national jurisdiction to relevant United Nations General Assembly processes;**  
**Encourage the ratification of the FAO agreement on Port States measures to eliminate illegal, unreported and unregulated fishing (IUU) and develop national plans of actions in order to mitigate the impacts of destructive fishing practices.** |
<p>| 3.1.4       | UNEP/CBD/SBSTTA/14/5 In-Depth Review of the Implementation of the Programme of Work on Protected Areas | (see below) |</p>
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| 3.1.4      | **UNEP/CBD/SBSTTA/14/5/ADD1**  
In-Depth Review of the Implementation of the Programme of Work on Protected Areas  
(Addendum - Executive Summary and Suggested Recommendation) | • Increase funding via traditional (government, aid agency) and innovative financing mechanisms.  
• Evaluate and communicate economic benefits of protected areas to key government decision-makers.  
• Ensure protected areas are recognised as part of the solution to climate change and integrated into national adaptation and mitigation strategies and relevant funding schemes.  
• Expand protected area systems to include under-represented ecosystems such as inland waters and grasslands.  
• Ensure protected areas are mainstreamed into all relevant sectors of government through effective landscape/seascape approaches.  
• Enhance protected areas governance, participation, equity and benefit sharing (Element 2 of the PoWPA), including respect for the rights of indigenous peoples.  
• Improve the management effectiveness of existing protected area systems.  
• Strengthen partnerships between government, civil society, aid agencies and other stakeholders at national and regional level to support PoWPA implementation.  
• Engage regional conventions, agreements and networks in PoWPA implementation. |
| 3.1.5      | **UNEP/CBD/SBSTTA/14/6**  
In-Depth Review of the Work on Biodiversity and Climate Change | (see below) |
| 3.1.5      | **UNEP/CBD/SBSTTA/14/6/ADD1**  
In-Depth Review of Work On Biodiversity and Climate Change  
(Addendum: Integration of Climate Change Impacts and Response Activities within Programme of Work On Biodiversity of Dry and Sub-Humid Lands) | • WWF strongly supports the development of a Joint Work Programme between CBD and UNFCCC and UNCCD to deal with linkages and explore co-benefits between the conventions, set governance principles and ensure biodiversity is protected and not adversely affected by climate change and UNFCCC work. |
| 3.1.5      | **UNEP/CBD/SBSTTA/14/6/ADD2**  
Proposed Elements for a Joint Work Programme between 3 Rio Conventions on Biodiversity, Climate Change and Land Degradation | -- |
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| 3.1.6       | UNEP/CBD/SBSTTA/14/7 Review of Implementation of Article 10 of the Convention (Sustainable Use of Biodiversity) and Application of the Addis Ababa Principles and Guidelines | - Establish multi-sectoral mechanism at the national level (forestry, fisheries, water supply, agriculture, disaster prevention, health, climate change) to promote a more constructive dialogue on sustainable use at national level.  
- Integrate the findings and approach of the study on The Economics of Ecosystems and Biodiversity (TEEB) to highlight the importance of biodiversity for the different economic sectors.  
- Interlink biodiversity, ecosystem services and climate change.  
- WWF supports the convention of an Ad Hoc Technical Expert Group on Sustainable Use with the mandate to analyse the coherence of global and regional policy frameworks for key economic sectors. |
| 3.2         | UNEP/CBD/SBSTTA/14/8 3rd Edition of the Global Biodiversity Outlook: Implications for Future Implementation of the Convention | - Parties should substantially and with urgency strengthen efforts to implement COP decisions and the actions identified in the GBO-3 and monitor the status and trends of biodiversity. |
| 3.3         | UNEP/CBD/SBSTTA/14/9 Proposals for a Consolidated Update of the Global Strategy for Plant Conservation | - Fully support suggested recommendations.  
- WWF calls for parties to accelerate implementation of the updated GSPC.  
- WWF supports the development of an online version of the GSPC toolkit by 2012. |
| 3.4         | UNEP/CBD/SBSTTA/14/10 Examination of the Outcome-Oriented Goals and Targets (and Associated Indicators) and Consideration of Their Possible Adjustment for the Period Beyond 2010 | - Targets address the underlying drivers of biodiversity loss; are SMART (specific, measurable, ambitious, realistic and time-bound); and accompany a set of SMART milestones that can be reviewed at each CBD COP leading up to 2020.  
- Apply Driver-Pressure-State-Impact/Benefit-Response framework to targets and indicators.  
- Develop strong links between the Strategic Plan and relevant Programmes of Work.  
- Use the ecological footprint as an indicator for the significant reduction of drivers and pressures of biodiversity loss.  
- Increase funding and capacity for CBD implementation.  
- Representative protected areas covering at least 20% of land and sea areas.  
- Eliminate harmful and perverse subsidies.  
- Eliminate overfishing and destructive fishing practices (including bycatch and discards).  
- Halt the over-abstraction of water and fragmentation of freshwater systems. |
<p>| 4.1.1       | UNEP/CBD/SBSTTA/14/11 Agricultural Biodiversity: Follow-Up to Requests of the Conference of the Parties in Decision IX/1 | No comments |</p>
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| 4.1.2       | UNEP/CBD/SBSTTA/14/12  
Agricultural Biodiversity - Biofuels and Biodiversity: Consideration of Ways and Means to Promote the Positive and Minimize the Negative Impacts of the Production and Use of Biofuels on Biodiversity | - Ensure development of frameworks and toolkits build on existing credible initiatives aiming to develop sustainability principles and criteria for biofuel production and use.  
- Promote transparent, participatory land use planning and management to ensure that expansion of biofuel production does not threaten conservation targets, livelihoods and carbon stocks.  
- Encourage biofuel consumer countries to provide technical and financial support to the producer countries for the implementation of sustainability frameworks through the relevant mechanisms.  
- Consider the outcomes of the Roundtable on Sustainable Biofuels, a global, multi-stakeholder process aiming to develop a set of sustainability principles implemented through practical measures.  
- Ensure that national or international support schemes for biofuels consider the environmental and social performance of the different types of biofuels especially related to proposed incentives.  
- Concrete actions that maximize environmental and social benefits and minimize impacts follow the recommendations formulated by the Conference of the Parties in the IX/2 decision.  
- Proposed frameworks and toolkits incorporate effective measures to protect high conservation value and significant carbon stock areas.  
- The financial resources required to implement such measures are allocated.  
- All relevant stakeholders are involved with the future work under the CBD umbrella on biofuels. |
| 4.2         | UNEP/CBD/SBSTTA/14/13  
Biodiversity of Dry and Sub-Humid Lands: Follow-Up to Requests of COP in Decision IX/17 | (see separate CI, TNC, WWF document for full position) |
| 4.3         | UNEP/CBD/SBSTTA/14/14  
Forest Biodiversity: Collaboration with Secretariat of UN Forum on Forests, and with FAO (Decision IX/5) | No comments |
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<td>GTI: Results/Lessons Learned From Regional Taxonomic Needs Assessments/Identification of Priorities</td>
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<td>4.4</td>
<td>UNEP/CBD/SBSTTA/14/16/REV1</td>
<td>No comments</td>
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<td>Further Work on Gaps and Inconsistencies in International Regulatory Framework on Invasive Alien Species, Particularly Species Introduced as Pets, Aquarium and Terrarium Species, as Live Bait/Live Food, &amp; Best Practices for Addressing Risks Associated with Their Introduction</td>
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| 4.6        | UNEP/CBD/SBSTTA/14/17 | • Recognize that the programme of work on incentive measures is crucial for achieving the goals and targets proposed in the new strategic plan, and that timely implementation is now necessary.  
• Increase efforts at implementation, by actively identifying and removing or mitigating existing perverse incentives, and to prevent inadvertent effects on biodiversity in the design of new incentive measures.  
• Increase efforts at streamlining biodiversity into sector policies and plans, using, as appropriate, tools for valuing biodiversity and ecosystem services.  
• Design and implement positive incentive measures for the conservation and sustainable use of biodiversity with the support of adequate valuation schemes for biodiversity.  
• Host regional workshops for the exchange of experience and know-how among national practitioners on the removal and mitigation of perverse incentive measures other than subsidies.  
• Harmful subsidies constitute only a sub-set of potentially perverse incentive measures.  
• All values of biodiversity and ecosystem services are not quantifiable, but should nevertheless be considered in the design of incentive measures.  
• Payment for Ecosystem Services (PES) schemes aligned to the Polluter Pays Principle (PPP) and based on the idea of using public money for public goods. |
| 4.7        | UNEP/CBD/SBSTTA/14/18 | No comments |
|            | New and Emerging Issues | |
| 5          | UNEP/CBD/SBSTTA/14/19 | Support suggested recommendations |
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<th>Name</th>
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IN-DEPTH REVIEW OF THE IMPLEMENTATION OF THE PROGRAMME OF WORK ON MARINE AND COASTAL BIOLOGICAL DIVERSITY

UNEP/CBD/SBSTTA/14/4

SBSTTA Fourteenth Meeting
Nairobi, Kenya, 10-21 May 2010
(Agenda Item 3.1.3)

WWF urges SBSTTA to recommend that COP 10:

- *Invites* parties, other governments and relevant organizations to *elaborate practical guidelines for the selection of representative networks of marine and coastal protected areas on the basis of biogeographic classification systems*;

- *Decides to* bring the *progress made in the identification of ecologically or biologically significant areas* in marine areas within and beyond national jurisdiction to the attention of relevant United Nations General Assembly processes;

- *Requests* parties and other governments to *ratify the FAO agreement on Port States measures to eliminate illegal, unreported and unregulated fishing (IUU) and develop national plans of actions in order to mitigate the impacts of destructive fishing practices.*
IN-DEPTH REVIEW OF the IMPLEMENTATION OF THE PROGRAMME OF WORK ON MARINE AND COASTAL BIOLOGICAL DIVERSITY

Note by the Executive Secretary

EXECUTIVE SUMMARY

The present note summarizes the findings of the in-depth review of the elaborated programme of work on marine and coastal biological diversity and suggests recommendations for improved implementation of the programme of work. Further information in relation to this note is available in a background document (UNEP/CBD/SBSTTA/14/INF/2), two expert workshop reports (UNEP/CBD/SBSTTA/14/INF/4 and UNEP/CBD/SBSTTA/14/INF/5), and three reports on scientific synthesis of the impacts of unsustainable fishing (UNEP/CBD/SBSTTA/14/INF/6), the impacts of ocean fertilization (UNEP/CBD/SBSTTA/14/INF/7), and the impacts of ocean acidification (UNEP/CBD/SBSTTA/14/INF/8) on marine biodiversity, respectively.

Key findings and conclusions of the assessment of the progress made in the implementation of the programme of work include, inter alia:

a. Despite evidence that progress is being made in many places and on many issues, from high-level policy-making to local and regional field initiatives, the global status and trend show serious declines in marine living resources, losses of coastal and deepwater habitats, elevated pollution levels, and poor water quality in many areas. Overall deterioration of the marine environment is further exacerbated by the effects of climate change, such as sea-level rise and sea-temperature rise, and the potential impacts of ocean acidification as direct consequence of increased carbon dioxide emissions. Coastal communities and local economies are adversely impacted by such trends as poverty, land-use changes, overfishing, nutrient loading, sewage, and coastal development, which put the capacity of the marine environment beyond its sustainable limit;

b. Pressures on coastal and marine biodiversity will continue to increase, with 50 per cent of the world’s population living along the coasts by 2015, putting increasing stress on coastal resources; these human pressures will combine with the impacts of climate change, which will become more severe in the future;

c. Slow progress has been made towards achieving the 2012 target of establishing ecologically representative and effectively managed marine protected areas networks, despite efforts in the last few years; less than 1 per cent of the ocean surface is protected, compared to nearly 15 per cent of protected-area coverage on land;

d. Increase in sea-water temperature will have wide-ranging impacts on marine and coastal systems, from more frequent and severe coral bleaching events to rising sea levels and melting sea ice. Rising carbon dioxide concentrations in the atmosphere will result in sea water becoming more acidic, reducing the
biocalcification of tropical and cold-water coral reefs, as well as other shell-forming organisms, such as calcareous phytoplankton, and impacting the entire marine food chain. Climate change may affect ocean circulation, including potentially reducing the intensity and frequency of large-scale water exchange mechanisms;

e. Information available from the third and fourth national reports submitted by Parties to the Convention and from relevant organizations indicates that the programme of work has provided an effective framework to facilitate national, regional and global efforts to reduce the loss of marine and coastal biological diversity. The programme of work is also found to be useful in engaging various partners and creating synergy with relevant international and regional agreements, action plans and processes;

f. Despite progress made, to different extents, in various countries and regions, the effective implementation of the programme of work in many countries was constrained by a range of barriers, such as: lack of political commitment and support; lack of mainstreaming and lack of integration of environmental, social and economic objectives; institutional and policy obstacles and weaknesses; insufficient human and technical resources and capacity; limited financial resources; lack of suitable data; low awareness; insufficient training in the use of guidelines and tools, and inadequate dissemination of such materials; limited or low involvement of indigenous and local communities and various stakeholders; and lack of economic incentives;

g. Priority should be given to the following, in order to overcome the identified barriers and constraints, inter alia, enhancing cross-sectoral coordination and policy planning in regard to marine and coastal areas; enhancing coordination between levels of Government, with emphasis on local implementation; developing and strengthening stakeholder networks; demonstrating the economic and social value of marine and coastal biodiversity; undertaking periodic review of the adequacy of policies and legislation and their implementation; securing resourcing and funding through forward planning; enhancing capacity of personnel through training; making scientific information and traditional knowledge easier to access through improved information management; scaling-up and replicating demonstration projects; developing regional scientific collaboration to address science, policy and management information needs; developing or further enhancing spatial approaches to data management; developing international scientific expertise and processes for assessing and managing poorly known ocean areas such as the deep sea, and providing information about the status of marine biodiversity globally, as well as management options; and identifying areas of global ecological and biological significance in marine areas beyond national jurisdiction.

(Rationale: There is a strong need for increased collaboration to not only increase scientific knowledge, but also knowledge on its policy and management implications.)

Drawing upon the findings and recommendations of the in-depth review and above-mentioned reports, the present note recommends some areas to be considered in updating the existing programme of work, in regards to, inter alia: (i) biodiversity conservation in marine areas beyond national jurisdiction; (ii) aspects of marine biodiversity related to climate change and addressing ocean acidification; (iii) impacts of unsustainable fishing; and (iv) improving the representativity of the global system of marine and coastal protected areas.

**SUGGESTED RECOMMENDATIONS**

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties adopt a decision along the following lines:

*The Conference of the Parties*

*In-depth review of the progress made in the implementation of the elaborated programme of work on marine and coastal biological diversity, as contained in annex I to decision V/7*

1. Expresses its appreciation to the Division of Environmental Policy Implementation (DEPI) of the United Nations Environment Programme (UNEP) for providing financial and technical support to the Secretariat of the Convention on Biological Diversity for preparing the background document (UNEP/CBD/SBSTTA/14/INF/2) and to Parties, other Governments and relevant organizations for submitting relevant information such as third and fourth national reports, voluntary reports and other relevant reports;
2. Takes note of progress made in the implementation of the elaborated programme of work on marine and coastal biological diversity, as contained in the annex I to decision VII/5, at national, regional and global levels and that implementation has been facilitated by the Executive Secretary as well as relevant United Nations agencies and international organizations;

3. Recognizes and supports the ongoing work under the United Nations to establish a legitimate and credible regular process for global reporting and assessment of the state of the marine environment, including socio-economic aspects, while building on existing regional assessments and avoiding duplication of effort;

4. Notes with concern the slow progress towards achieving the 2012 target of establishing ecologically representative and effectively managed networks of marine protected areas and that despite efforts in the last few years, still less than 1 per cent of the ocean surface is protected, compared to nearly 15 per cent of protected-area coverage on land;

5. Recognizing that the ocean is one of the largest natural reservoirs of carbon, which can significantly affect the rate and scale of global climate change, requests Parties, other Governments and relevant organizations to further integrate climate-change-related aspects of marine and coastal biodiversity into national biodiversity strategies and action plans (NBSAPs), national integrated marine and coastal management programmes, the design and management of marine and coastal protected areas, including the selection of areas in need of protection to ensure maximum adaptive capacity of biodiversity, and other marine environment and resource management-related strategies;

6. Requests the Executive Secretary to convene in collaboration with the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) an expert workshop on oceans and climate change with a view of promoting joint responses of the two Rio conventions;

7. Noting that the world’s oceans host 32 of the 34 known phyla on Earth and contain between 500,000 and 10 million species, and that new oceanic marine species are continuously being discovered, particularly in the deep sea, requests Parties, other Governments and organizations to further enhance globally networked scientific efforts, such as the Census of Marine Life, to continue to update a comprehensive global list of all forms of life in the sea, and further assess and map the distribution and abundance of species in the sea;

8. Taking note that the elaborated programme of work on marine and coastal biological diversity has been strengthened through subsequent decisions VIII/21, VIII/22, VIII/24, and IX/20, decides to further update the programme of work, taking into account, inter alia:

   a. Further emphasis on improving the representativity and other network properties, as identified in annex II to decision IX/20, of the global system of marine and coastal protected areas, in particular identifying ways to support Parties with the aim of accelerating progress in achieving the commonly agreed 2012 target of establishing ecologically representative and effectively managed MPA networks, in particular within national jurisdiction;

   b. Progress on marine biodiversity conservation in areas beyond national jurisdiction and identification of ecologically or biologically significant marine areas in open-ocean waters and deep-sea habitats, considering the suggested update under the programme element 2 on marine and coastal living resources contained in annex I to this note;

   c. Climate change-related aspects of marine biodiversity, and the adverse impacts on marine biodiversity of ocean acidification as a direct consequence of increased carbon dioxide emissions;

   d. Adverse impacts of ocean fertilization and other human responses to climate change;

   e. Further emphasis on the role of the ecosystem approach in supporting ecological and social resilience and adaptation in the face of climate change, and the contribution of marine spatial planning to further strengthening the application of the ecosystem approach and integrated marine and coastal area management; and

   f. Further emphasis on the impacts of destructive fishing practices, unsustainable fishing and illegal, unreported and unregulated (IUU) fishing on marine biodiversity, in collaboration with FAO and the regional fisheries management organizations (RFMOs).
Identification of ecologically or biologically significant areas (EBSAs) and scientific and technical aspects relevant to environmental impact assessment in marine areas beyond national jurisdiction

9. Expresses its gratitude to the Governments of Canada and Germany for co-funding, and Canada for hosting, the Expert Workshop on Scientific and Technical Guidance on the Use of Biogeographic Classification Systems and Identification of Marine Areas Beyond National Jurisdiction in Need of Protection, held in Ottawa, from 29 September to 2 October 2009, to other Governments and organizations for sponsoring the participation of their representatives, and to the Global Ocean Biodiversity Initiative (GOBI) for its technical assistance and support; and welcomes the report of this Expert Workshop (UNEP/CBD/SBSTTA/14/INF/4);

10. Welcomes the report on Global Open Oceans and Deep Seabed (GOODs) Biogeographic Classification published by the Intergovernmental Oceanographic Commission of the United Nations Educational, Cultural and Scientific Organization (UNESCO), as contained in the report on Global Open Oceans and Deep Seabed (GOODs) Biogeographic Classification (UNEP/CBD/SBSTTA/14/INF/10), which was submitted pursuant to paragraph 6 of decision IX/20;

11. Invites Parties, other Governments and relevant organizations to use the “scientific guidance on the use and further development of biogeographic classification systems”, contained in annex V to the report of the Ottawa Expert Workshop (UNEP/CBD/SBSTTA/14/INF/4), in their efforts to conserve and sustainably use marine and coastal biodiversity, and to enhance ocean management at a large ecosystem scale, in particular to achieve the 2012 target of the World Summit on Sustainable Development to establish representative networks of marine protected areas (MPAs);

12. Urges Parties, other Governments and relevant organizations to use the scientific guidance on the identification of marine areas beyond national jurisdiction, which meet the scientific criteria in annex I to decision IX/20, as contained in annex II to this note, based on annex VI to the above-mentioned workshop report (UNEP/CBD/SBSTTA/14/INF/4);

13. Invites Parties, other Governments and relevant organizations to elaborate practical guidelines for the selection of representative networks of marine and coastal protected areas on the basis of biogeographic classification systems such as GOODs;

(Rationale: more clarity is needed on the relation of identified EBSAs and GOODs provinces in establishing representative networks of marine protected areas)

14. Urges Parties, other Governments and relevant organizations to cooperate, as appropriate, collectively or on a regional or subregional basis, to identify and protect ecologically or biologically significant areas in open-ocean waters and deep-sea habitats in need of protection, including by establishing representative networks of marine protected areas in accordance with international law, including the United Nations Convention on the Law of the Sea, and to inform the relevant processes within the United Nations General Assembly;

15. Requests the Executive Secretary to work with relevant organizations and initiatives, such as the World Conservation Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC), the Global Ocean Biodiversity Initiative (GOBI) and others, to keep track of progress made in identification of ecologically or biologically significant areas in marine areas beyond national jurisdiction and vulnerable marine ecosystems (VMEs), and facilitate the sharing of scientific data, methods, experiences and lessons learned in this regard;

16. Decides to review progress made in the identification of ecologically or biologically significant areas in marine areas within and beyond national jurisdiction as part of its consideration of the 2012 target related to marine protected areas and to bring that review to the attention of relevant United Nations General Assembly processes, including the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction; (Rationale: to establish a link between the scientific progress of identifying EBSAs in need of protection and those organizations mandated to take protective measures)

17. Requests Parties, in particular developed country Parties, other Governments and relevant organizations, to cooperate in facilitating capacity development activities, including through conducting a series of regional training workshops for developing country Parties, in particular the least developed countries and small island developing States among them, as well as countries with economies in transition, as well as relevant regional initiatives, such as regional seas organizations, in order to facilitate their efforts in identifying ecol-
ogically or biologically significant marine areas using the scientific criteria adopted in decision IX/20 as well as the scientific guidance on the identification of marine areas beyond national jurisdiction, which meet the scientific criteria in annex I to decision IX/20, as contained in annex II below, making use of the findings of the report of the Expert Workshop on Scientific and Technical Aspects relevant to Environmental Impact Assessment in Marine Areas Beyond National Jurisdiction, held in Manila, Philippines, 18-20 November 2009 (UNEP/CBD/SBSTTA/INF/C);

18. Requests the Executive Secretary to prepare, in collaboration with the relevant international organizations, a training manual and modules, subject to the availability of financial resources, which can be used to meet the capacity-building needs for identifying ecologically or biologically significant marine areas using the scientific criteria adopted in decision IX/20 (annex I to decision IX/20) as well as the “scientific guidance on the identification of marine areas beyond national jurisdiction, which meet the scientific criteria in annex I to decision IX/20”, as contained in annex II to this note;

19. Requests the Executive Secretary to bring the two sets of scientific guidance on scientific criteria and biogeographic classification systems, as referred to in paragraphs 11 and 12, to the attention of relevant United Nations General Assembly processes, including the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction and the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea;

20. Requests the Executive Secretary to bring the scientific criteria (annex I to decision IX/20) and these sets of scientific guidance on scientific criteria and biogeographic classification systems to the attention of relevant organizations, including the Food and Agriculture Organization of the United Nations, International Maritime Organization, International Seabed Authority, regional fisheries management organizations (RFMOs), and regional seas organizations, with a view to fostering compatible initiatives to identify and protect ecologically or biologically significant areas;

21. Recalling decision IX/20, paragraph 27, requests the Executive Secretary to undertake a study in consultation with the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions to identify specific elements for integrating the traditional, scientific, technical and technological knowledge of indigenous and local communities, consistent with Article 8(j) of the Convention, and social and cultural criteria and other aspects for the identification of marine areas in need of protection as well as the establishment and management of marine protected areas;

22. Urges Parties, other Governments and relevant organizations to adopt complementary measures to prevent significant adverse effects to areas identified as ecologically or biologically significant;

23. Expresses its gratitude to the Government of the Philippines and the Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) for co-hosting, and the European Commission for providing financial support for, the Expert Workshop on Scientific and Technical Aspects relevant to Environmental Impact Assessment in Marine Areas Beyond National Jurisdiction, held in Manila, from 18 to 20 November 2009, and to other Governments and organizations for sponsoring the participation of their representatives, and welcomes the report of this Expert Workshop (UNEP/CBD/SBSTTA/14/INF/5);

24. Invites Parties, other Governments and relevant organizations to take into account the guidance provided in annexes II, III and IV to the Manila workshop report (UNEP/CBD/SBSTTA/14/INF/5) in the conduct of environmental impact assessments (EIAs) and strategic environmental assessments (SEAs), as invited in paragraph 8 of decision IX/20;

25. Requests the Executive Secretary, in collaboration with relevant organizations, including the United Nations Division for Ocean Affairs and Law of the Sea, the Food and Agriculture Organization of the United Nations, the International Maritime Organization and International Seabed Authority, and building upon the work of the Manila workshop, to develop scientific and technical guidance on environmental impact assessment and strategic environmental impact assessment in marine areas beyond national jurisdiction by making appropriate revisions to CBD Voluntary Guidelines on Biodiversity-inclusive Environmental Impact Assessment (decision VIII/28) and the CBD Draft Guidance on Biodiversity-inclusive Strategic Environmental Assessment (decision VIII/28), in order to make existing CBD guidelines on EIA and draft guidance on SEA applicable to marine systems in planning human uses of the ocean and coastal waters, and submit these guidelines for consideration of a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to eleventh meeting of the Conference of the Parties to the Convention.
Impacts of destructive fishing practices, unsustainable fishing, and IUU fishing on marine and coastal biodiversity

26. Expresses its appreciation to the Food and Agriculture Organization of the United Nations (FAO) and to UNEP for the financial and technical support, and the Fisheries Expert Group (FEG) of the Commission on Ecosystem Management (CEM) of the International Union for the Conservation of Nature (IUCN) for technical support, provided for the FAO/UNEP Expert Meeting on Impacts of Destructive Fishing Practices, Unsustainable Fishing and Illegal, Unreported and Unregulated (IUU) Fishing on Marine Biodiversity and Habitats, which was organized in collaboration with the Secretariat of the Convention on Biological Diversity in pursuance of paragraph 2 of decision IX/20, at FAO, Rome, Italy, from 23 to 25 September 2009, and welcomes the report of this Expert Meeting, contained in document UNEP/CBD/SBSTTA/14/INF/6;

27. In view of identified information gaps and constraints in undertaking the scientific review due to limited resources available for the initial collaboration efforts with FAO and UNEP, and noting an urgent need to further review the impacts of destructive fishing practices, unsustainable fishing, and illegal, unreported and unregulated (IUU) fishing on marine biodiversity and habitats, building upon the initial efforts, requests the Executive Secretary to develop, in collaboration with FAO, RFMOs, UNEP, IUCN and other relevant organizations and scientific groups, subject to the availability of financial resources, a regular mechanism of joint expert processes to effectively address biodiversity concerns in sustainable fishery management, and report the progress of such collaboration at a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eleventh meeting of the Conference of the Parties;

26 bis Requests Parties and other Governments, as relevant, to ratify the FAO agreement on Port States measures to prevent, deter and eliminate IUU fishing and to implement relevant FAO’s IPOAs and develop national plans of actions in order to mitigate the impacts of destructive fishing practices, unsustainable fishing and IUU fishing, including through their participation in RFMOs. (Rationale: previous paragraphs address information gaps, but do not call for mitigation measures; COP should stress the need to engage in international cooperative efforts to address the impact of fisheries.)

Impacts of ocean fertilization on marine and coastal biodiversity

28. Welcomes the report on compilation and synthesis of available scientific information on potential impacts of direct human-induced ocean fertilization on marine biodiversity (UNEP/CBD/SBSTTA/14/INF/7), which was prepared in collaboration with UNEP-WCMC and the International Maritime Organization in pursuance of paragraph 3 of decision IX/20;

29. Recalling decision IX/16 C, on ocean fertilization, recognizes that given the scientific uncertainty that exists, significant concern surrounds the potential intended and unintended impacts of large-scale ocean fertilization on marine ecosystem structure and function, including the sensitivity of species and habitats and the physiological changes induced by micro nutrient and macro nutrient additions to surface waters as well as the possibility of persistent alteration of an ecosystem;

30. Notes that in order to provide reliable predictions on the adverse impacts on marine biodiversity of activities involving ocean fertilization, further work to enhance our knowledge and modelling of ocean biogeochemical processes is required;

31. Notes also that there is a pressing need for research to advance our understanding of marine ecosystem dynamics and the role of the ocean in the global carbon cycle;

Impacts of ocean acidification on marine and coastal biodiversity

32. Welcomes the compilation and synthesis of available scientific information on ocean acidification and its impacts on marine biodiversity and habitats (UNEP/CBD/SBSTTA/14/INF/8), which was prepared in collaboration with UNEP-WCMC in pursuance of paragraph 4 of decision IX/20;

33. Expresses its concern that increasing ocean acidification, as a direct consequence of increased carbon dioxide emissions, reduces the availability of carbonate minerals in seawater, important building blocks for marine plants and animals, and thus by 2100 it has been predicted that 70 per cent of coldwater corals, key refuges and feeding grounds for commercial fish species, will be exposed to corrosive waters, noting that given current emission rates, it is predicted that the surface waters of the highly productive Arctic Ocean will become under-saturated with respect to essential carbonate minerals by the year 2032, and the Southern Ocean by 2050, with disruptions to large components of the marine food web;
34. *Takes note* that many questions remain regarding the biological and biogeochemical consequences of ocean acidification for marine biodiversity and ecosystems, and the impacts of these changes on oceanic ecosystems and the services they provide, for example, in fisheries, coastal protection, tourism, carbon sequestration and climate regulation, and that the ecological effects of ocean acidification must be considered in conjunction with the impacts of global climate change;

35. *Requests* the Executive Secretary to develop, in collaboration with the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, the Food and Agriculture Organization of the United Nations, the World Conservation Monitoring Centre of the United Nations Environment Programme, International Coral Reef Initiative (ICRI) and other relevant organizations and scientific groups, subject to the availability of financial resources, a series of joint expert review processes to monitor and assess the impacts of ocean acidification on marine and coastal biodiversity and identify mitigation options and widely disseminate the results of this assessment in order to raise awareness of Parties, other Governments and organizations and promote corresponding national assessment efforts so that relevant information collected at the national level can be incorporated into NBSAPs, national and local plans on integrated marine and coastal area management, and the design and management plans for marine and coastal protected areas, and also requests the Executive Secretary, given the relationship between CO$_2$ emissions and ocean acidification, to transmit the results of assessment to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) for further transmission to its Parties.

*(Rationale: The CBD should give States guidance on how to take action to mitigate the effects of ocean acidification)*

*Abridged*
PoWPA – 2004 to 2010

The Programme of Work on Protected Areas (PoWPA), with its clear targets and timelines and widespread support from governments, donors and civil society, has been the most effective instrument under the CBD for delivering results on the ground. Since its adoption in 2004, there has been substantial progress in the establishment, management and financing of protected area networks. The establishment of the LifeWeb Initiative has also helped promote funding for protected areas. The CBD should recognise and celebrate these achievements at COP 10 and understand what can be learned from PoWPA for other areas of the Convention while also addressing elements of PoWPA that need to be more fully implemented.

PoWPA post-2010

While there has been substantial progress, much remains to be done to fully implement the PoWPA. Parties and donors need to redouble their efforts to support PoWPA implementation in the post-2010 period to ensure effective protected area systems are put in place.

WWF urges SBSTTA to give priority to the following issues:

- Increasing funding via traditional (government, aid agency) and innovative financing mechanisms;
- Evaluating and communicating economic benefits of protected areas to key government decision-makers;
- Ensuring protected areas are recognised as part of the solution to climate change and integrated into national adaptation and mitigation strategies and relevant funding schemes;
- Urgently expanding protected area systems to include under-represented ecosystems such as inland waters and grasslands;
- Ensuring protected areas are mainstreamed into all relevant sectors of government through effective landscape/seascape approaches;
- Enhancing protected areas governance, participation, equity and benefit sharing (Element 2 of the PoWPA), including respect for the rights of indigenous peoples;
- Improving the management effectiveness of existing protected area systems;
- Strengthening partnerships between government, civil society, aid agencies and other stakeholders at national and regional level to support PoWPA implementation;
- More effectively engaging regional conventions, agreements and networks in PoWPA implementation.
**WWF Supporting delivery on CBD commitments**

Protected areas are a cornerstone of WWF’s work in more than 100 countries around the world. We are active in protected area establishment, management and financing as well as ensuring the participation of local communities and respect for the rights of indigenous peoples. We work at the site level in more that 1000 protected areas as well as at the national and regional system level. Integrating protected areas into surrounding landscapes through the ecosystem approach is a key priority. WWF is also active in supporting governments to meet their specific commitments under the CBD PoWPA. For example, key projects and activities include:

- **Protected Areas for a Living Planet** – with the support of MAVA Fondation pour la Protection de la Nature, WWF has brought together partners and stakeholders (governments, donor agencies, scientists and civil society) to support and monitor implementation of the PoWPA in five ecoregions stretching across 27 countries: Altai-Sayan, Carpathian, Caucasus, Dinaric Arc and West Africa Marine. ([www.panda.org/pa4lp](http://www.panda.org/pa4lp))

- **Pan-Amazon Protected Areas Initiative** – in partnership with RedParques, Colombia National Parks, IUCN (Sur) and the CBD Secretariat WWF is supporting the development of an ecological vision for the Amazon biome based on transboundary implementation of the PoWPA.

- **“Friends of PoWPA”** – the “Friends of PoWPA” is an informal group of NGOs, governments and individuals who have supported the work of the CBD Secretariat to build capacity and raise awareness of the PoWPA. WWF has contributed to these activities by supporting regional capacity building workshops and the development of training materials.

**Priorities for the future**

Despite the progress in implementing the PoWPA, protected area networks continue to be under-funded and require additional resources and capacity for their effective establishment and management. WWF has identified the following priorities for future work:

1. **Funding**

Governments and donors need to increase efforts to ensure adequate support to protected area systems from traditional and innovative funding sources. The development of sustainable financing plans as required under the PoWPA should be prioritized. These plans should include new means and methods of generating and allocating finance, e.g. by redirecting perverse incentives, the introduction of equitable Payment for Ecosystem Services (PES) mechanisms, or the redistribution of tax revenues on the basis of stronger validation of ecosystem services, taking into account the findings of The Economics of Ecosystems and Biodiversity (TEEB) study.

2. **Communicating the benefits of protected areas**

If protected area networks are to receive adequate financial and political support then key decision makers need to understand the social and economic benefits of PA networks. Several studies are now available that detail the value of biodiversity and ecosystem services, and the central role that protected areas play in maintaining them, such as the TEEB report and WWF’s Arguments for Protection series. CBD Parties should adapt these studies to the national context and communicate them to key national decision-makers so that they understand the value of protected areas and take appropriate action. Studies that evaluate the economic and other benefits of protected areas should be prioritized as they are vital to promoting understanding of the values of protected areas.

3. **Climate Change**

Protected areas need to be an integral part of national adaptation and mitigation strategies and plans. This requires UNFCCC to: a) recognise that protected areas are an essential part of the

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1. Available at [www.panda.org/protection/arguments](http://www.panda.org/protection/arguments)
global response to climate change through the important role they play in mitigation and adaptation; b) ensure that national mitigation and adaptation actions that involve enhancement of protected area networks can receive financial and technical assistance through climate-related financial mechanisms; and c) recognize ecosystem based adaptation approach as an effective mechanism/tools to build the resilience of vulnerable communities and ecosystems. Guidelines for the integration of protected areas into national adaptation and mitigation strategies should be developed as a matter of urgency so that governments can understand how to integrate protected areas into these strategies.

4. Multi-sectoral integration
With effective communications relevant sectors of government (forestry, fisheries, health, tourism, aid agencies, climate change) should understand the value of biodiversity and protected areas to fulfilling their work programmes. In addition, effective mechanisms to ensure cooperation between government sectors need to be established, so that effective planning for development and conservation can be put in place.

5. Management Effectiveness
Governments should continue to carry out regular assessments of the management effectiveness of their protected area system as required under the PoWPA and ensure that the recommendations of assessments are fully implemented.

6. Strengthening implementation of Element 2
Participation of indigenous peoples and local communities in protected area governance and equitable sharing of costs and benefits from protected areas are critical to ensuring that protected areas are effective and sustainable. Governments should increase recognition and support to the broader range of protected area governance types, and expand efforts to ensure full and effective participation in the establishment and management of protected areas.

7. Regional Agreements and Networks
There are many multi-lateral agreements, conventions and networks that deal with biodiversity conservation or specifically with protected area networks. At regional level these agreements and networks are doing very effective work on conservation, capacity building and exchange of expertise. However, they are not always effectively linked to the CBD. To promote implementation of the PoWPA in the post-2010 period, these regional agreements and networks should be more effectively integrated into global efforts on capacity building, reporting and the development of expertise.

8. Strong and enduring partnerships
Governments, NGOs, international organizations, and donors must make every effort to establish or enhance existing national and transboundary partnerships to combine their efforts in establishing effective PA networks. These partnerships have been effective to date at national and regional level and merit being replicated in other countries and regions based on lessons learned.

9. Ensuring Representative Systems of Protected Areas
While protected area systems have been expanding rapidly in many countries there are still major gaps in many biomes such as grasslands, freshwater and marine. Governments should urgently address these gaps as well as ensuring that all habitat types and species are represented in national systems of protected areas. Many countries have carried out protected area gap analyses. It is important to protect the areas identified by these studies but obviously it takes time to put the necessary legal and financial requirements in place for new protected areas. WWF urges governments to ensure that unsustainable development does not take place in those areas identified in gap analyses as important for biodiversity.
IN-DEPTH REVIEW OF THE IMPLEMENTATION OF THE PROGRAMME OF WORK ON PROTECTED AREAS

Note by the Executive Secretary

Addendum

EXECUTIVE SUMMARY AND SUGGESTED RECOMMENDATIONS

suggested

SUGGESTED RECOMMENDATIONS

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties adopt a decision along the following lines:

A. Strategies for strengthening implementation

1. National level

1. Requests Parties to:

(a) Actively communicate to decision makers in key sectors of government, the economic and other benefits of protected areas to national economies, sustainable development and climate change adaptation and mitigation, in order to promote greater national support for protected area networks and the integration of protected areas into relevant sectors of government;

Develop national programmes to evaluate the economic and other benefits of protected area networks that can support communications efforts;

Urgently carry out sustainable financing plans for protected area networks and ensure adequate funding from national and international sources;

(a) Develop a long-term action plan or reorient relevant existing plans, involving all stakeholders, for the implementation of the programme of work on protected areas, including appropriate implementation mechanisms, detailing list of activities, timelines, budget and responsibilities, based on the results of key assessments of the programme of work on protected areas, with a view to contributing to the implementation of the strategic plan of the convention and requests the Executive Secretary to submit a report on the preparation of such plans to the Conference of the Parties at its eleventh meeting;

(b) Integrate the action plans of the programme of work on protected areas into revised national biodiversity strategies and action plans, as soon as possible and no later than the twelfth meeting of the Conference of the Parties and requests the Executive Secretary to submit a report on the integration of protected
area action plans into other national environmental instruments, and into national economic plans and budgets, to the Conference of the Parties at its twelfth meeting;

(c) Expedite establishment of multisectoral advisory committees for strengthening intersectoral coordination and communication for PoWPA implementation;

(d) Increase awareness of the programme of work on protected areas especially to decision-makers, in the context of communication, education and public awareness and the Green Wave;

(e) Foster national-level “Friends of the programme of work on protected areas” multi-stakeholder partnerships under the guidance of national focal points for the programme of work on protected areas;

(f) Use standard criteria for the identification of sites of global biodiversity conservation significance, derived from the IUCN Red List of Threatened Species;

2. Regional level

The Conference of the Parties

2. Notes progress in promoting PoWPA implementation via regional inter-governmental and multi-stakeholder initiatives, the Micronesian Challenge, the Caribbean Challenge, the Dinaric Arc Initiative, the Amazonian Initiative, the Coral Triangle Initiative, the Caucasus Biodiversity Council, the Carpathian Network of Protected Areas, the Network of Managers of Marine Protected Areas of the Mediterranean, and the Natura 2000 network in the EU, and invites Parties to foster the formation of such initiatives and formulate regional action plans through national focal points for the programme of work on protected areas in collaboration with, the IUCN-World Commission on Protected Areas as well as regional and international organisations, development agencies, indigenous peoples organisations and other conservation organizations-NGOs, based on country action plans for implementation of the programme of work on protected areas and through regional technical support networks, to coordinate funding, technical support, exchange of experiences and capacity building for implementing the programme of work on protected areas;

3. Requests donor countries, non-governmental organizations and other funding organizations to support regional initiatives;

3. Global level

The Conference of the Parties

4. Requests the Executive Secretary to:

(a) Continue work with regional and subregional conventions, agreements and networks of experts to hold regional and subregional capacity-building workshops, with specific time tables for planning and funding;

(b) Provide Convene a group of international organisations to identify needs for additional technical support through the development of toolkits, best practices, and guides on themes of the programme of work on protected areas in collaboration with partners, in particular on Element 2 (governance, participation, equity and benefit sharing) and identify regional agreements, organisations and groupings of experts that can ensure that these toolkits are adapted to and widely disseminated and used at the regional and national level;

(c) Increase awareness of the benefits of the programme of work on protected areas to health, water and other sectors, climate change adaptation and mitigation, poverty alleviation and the Millennium Development Goals by holding workshops to bring key actors from these sectors to discuss ways of collaborating to develop mutually beneficial responses to the programme of work on protected areas;

(d) Strengthen and expand the global “Friends of the programme of work on protected areas” network of international organisations supporting PoWPA implementation to include all relevant organisations at international level as well as regional and sub-regional conventions, agreements and networks of experts dealing with protected areas, and develop an action plan for undertaking the above mentioned activities to facilitate implementation;

(e) Strengthen synergies with regional conventions in the implementation of the programme of work on protected areas;
5. **Invites** the IUCN-World Commission on Protected Areas, and other relevant organizations to develop technical guidance **based on the needs identified under 4(b)** on issues such as ecological restoration, conservation connectivity and corridors, and adaptation to and mitigation of climate change;

B. **Issues that need greater attention**

1. Sustainable finance

6. **Requests** Parties to:

(a) Develop and implement sustainable finance plans by 2012 based on realistic needs assessments and a diversified portfolio of traditional and innovative financial mechanisms;

(b) **Develop and implement additional new means and methods of generating and allocating finance, e.g.** by redirecting perverse incentives, the introduction of equitable Payment for Ecosystem Services (PES) mechanisms or the redistribution of tax revenues on the basis of stronger validation of ecosystem services, **taking into account the findings of the TEEB study**;

(b)bis **Timely and appropriately use the Global Environmental Facility 5 protected area biodiversity allocations, bilateral, multilateral and other aid using the action plan for implementing the programme of work on protected areas as the basis for accessing funds**;

7. **Encourages** Parties to express their protected area system-wide and project funding needs via the LifeWeb Initiative, based on the action plan of their programme of work on protected areas and **invites** donors to support expressions of interest through this mechanism, taking into account the Paris Declaration on Aid Effectiveness;

8. **Encourages** donors and Parties to hold subregional and national donor roundtable meetings to mobilize funding for implementing the programme of work on protected areas involving the LifeWeb Initiative;

9. **Invites** the Global Environmental Facility and its implementing agencies to streamline their delivery for expeditious disbursement and to align the projects to national action plans for the programme of work on protected areas for appropriate and focused interventions and continuity of projects;

2. Climate change

10. **Invites** Parties to:

(a) Achieve target 1.2 of the programme of work on protected areas by 2015, through concerted efforts to integrate protected areas into wider landscapes and seascapes and sectors, including through the use of connectivity measures such as the development of corridors and the protection of free-flowing rivers, **in order to address climate change impacts and increase resilience capacity**;

(a)bis **Carry out national inventories to identify natural areas and biological hotspots that are important from climate change mitigation and adaptation perspective and ensure appropriate protection**;

(b) Improve carbon sequestration potential of protected areas, where appropriate, and while recognizing that biodiversity conservation remains the primary objective, by improving management effectiveness and addressing the shortcomings identified in management effectiveness evaluations;

(c) **Evaluate and communicate** the benefits of healthy protected area systems in climate change adaptation and mitigation **actions**;

(d) Support and finance the establishment and/or improved management of protected area systems to **enhance carbon capture and storage services to address climate change**;

(e) **Support and finance protected areas as part of** ecosystem-based adaptation to climate change, and **integrate** improved design and management approaches for protected area systems into national strategies and action plans for addressing climate change, including through existing national adaptation programmes of action (NAPAs);

11. **Takes note** of paragraph 6 of the Copenhagen Accord which recognizes the need to enhance removals of greenhouse gas emissions by forests and the need to provide positive incentives to such actions, and invites Parties to explore funding opportunities for implementation of the programme of work on protected areas under Reducing Emissions for Deforestation and Forest Degradation – (REDD) plus;
12. *Invites* the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) to:

(a) recognize the role of protected areas and *ensure their integration* into national adaptation and mitigation strategies;

(b) permit nationally appropriate mitigation and adaptation actions that involve enhancement of protected areas networks to receive financial and technical assistance through climate-related financial mechanisms

(c) recognize ecosystem based adaptation approach as an effective mechanism/tool to build the resilience of vulnerable communities and ecosystems;

13. *Invites* the Executive Secretary to convene a special meeting of the Joint Liaison Group of the three Rio conventions in 2011 on the role of protected areas in the implementation of the objectives of the three Rio conventions with a view to recommending to the sixteenth meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) elements of a joint programme on protected areas, biodiversity, climate change and land degradation;

13 bis *Invites* the Executive Secretary in collaboration with relevant organisations to develop guidelines for the integration of protected areas into national adaptation and mitigation strategies.

3. Management effectiveness

14. *Invites* Parties to:

(a) *Provide adequate resources to ensure effective management of protected areas at site and system level;*

(a) bis Continue to expand and institutionalize management effectiveness assessments to work towards assessing 75 per cent of *the total area covered by* protected areas by 2015 using national and regional tools *recommended by WCPA* and report the results into the global database on management effectiveness maintained by the World Conservation Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC);

(b) Incorporate governance assessments into the management effectiveness evaluation process;

(c) Incorporate climate change adaptation and mitigation into management effectiveness assessments and report on both the results of management effectiveness assessments, and the results of implementation;

(d) Ensure that the results of assessments are implemented and integrated into other *activities* of the programme of work on protected areas (e.g., sustainable finance, capacity) and report on both the results of management effectiveness, and the results of implementation;

4. Marine protected areas

15. *Urges* the United Nations General Assembly (UNGA) to explore options for establishing marine protected areas in areas beyond national jurisdiction including taking into account the United Nations Convention on the Law of the Sea (UNCLOS), the outcome of the in-depth review of the marine and costal biological diversity programme of work and the new biodiversity target of the revised Strategic Plan of the Convention;

16. *Invites* Parties to increase their efforts to improve the design and extent of marine protected area networks in territorial waters and *to the offshore limit of national jurisdiction* – acknowledging that *where a state has the right to exploit natural resources, it also has the obligation to protect its nature* – to achieve the 2012 target;

17. *Encourages* Parties to implement a range of governance types for management of marine protected areas noting the United Nations Declaration on the Rights of Indigenous Peoples (General Assembly resolution 61/295);
5. Ensuring representative protected area systems

17bis Invites Parties to:

(a) urgently finalize protected area gap analyses and address the under-representation of key biomes and ecosystems such as inland waters and grasslands through the establishment, or expansion, of protected areas that maintain the resilience of ecosystems and sustain ecosystem services;

(b) complete national and regional assessments to identify areas that require protection or restoration to preserve and enhance ecosystem services such as carbon storage and adaptation to climate change;

(c) integrate freshwater considerations into the design and management of existing protected areas in order to adequately protect freshwater ecosystems and sustain ecosystem services (for example, by including the headwaters and riparian buffers on both sides of rivers within protected areas);

(d) take steps to sustain the ecological services of existing protected areas and integrate their management into landscape planning, for example by promoting best practices for sustainable production activities in adjacent areas.

6. Restoration of ecosystems and habitats of protected areas

17 ter. Urges Parties to increase the effectiveness of protected area systems in biodiversity conservation and their resilience through increased efforts in restoration of ecosystems and habitats;

5. Valuing protected area costs and benefits including their ecosystem services

18. Requests the Executive Secretary in collaboration with IUCN-WCPA and other relevant partners to develop and implement a methodology and framework for measuring the values, costs and benefits of protected areas, building on existing work including on the findings of The Economics of Ecosystems and Biodiversity (TEEB D1) and WWF’s Arguments for Protection series and Protected Areas Benefits Assessment Tool;

19. Invites Parties to increase understanding of the role, importance and benefits of protected areas in sustaining local livelihoods, providing ecosystem services, reducing risks from natural disasters, adapting to and mitigating climate change, health, water and other sectors, at all levels;

6. Programme element 2 on governance, participation, equity and benefit sharing

20. Encourages Parties to:

(a) Establish a coordination mechanism between the programme of work on protected areas and other related processes under the Convention on Biological Diversity, including inter alia, forests, marine, access and benefit-sharing and Article 8(j) working groups and the processes related to the Addis Ababa and Akwe: Kon guidelines for exchange of information on implementation of these programmes and recommendations on possible joint actions for enhanced implementation;

(b) Consider the creation of a national indigenous and local community focal point under Article 8(j), where appropriate, who could liaise with their respective focal points for the programme of work on protected areas;

21. Invites Parties to:

(a) Establish clear mechanisms and processes for equitable benefit-sharing related to protected areas noting the United Nations Declaration on the Rights of Indigenous Peoples;

(b) Recognize the role of indigenous and community conserved areas in biodiversity conservation, collaborative management and diversification of governance types;

(c) Include indigenous and local communities in multi-stakeholder committees, in consultations for national reporting on the programme of work on protected areas, and in national reviews of protected area system effectiveness;
7. Reporting

22. *Invites* Parties to:

a) Consider a simple and effective reporting process that tracks the overall status of the conservation of biodiversity within protected areas, as well as actions and outcomes of the programme of work on protected areas;

b) Adopt the draft reporting framework contained in annex I that fosters periodic updates using standardized, user-friendly, web-based frameworks;

c) Consider voluntary in-depth reporting using standardized indexes and taxonomies including the proposed global database of Indigenous and Community Conserved Areas;

d) Allow for mechanisms for stakeholder input and review;

e) Ensure that reporting on the programme of work on protected areas is clearly integrated with post-2010 biodiversity targets;

f) Involve the multi-stakeholder coordination committees in the reporting process;

23. *Encourages* Parties to report progress in the implementation of the programme of work on protected areas through the World Database on Protected Areas and the United Nations list of Protected Areas;

C. Target and time table issues

*The Conference of the Parties,*

24. *Invites* Parties to:

a) Align the targets of the programme of work on protected areas with specific indicators and timelines that are based on agreed post-2010 targets and the revised Strategic Plan of the Convention on Biological Diversity;

b) Link these indicators and timelines to national targets and indicators and use this framework to focus monitoring and reporting.

*Abridged*
SBSTTA should recommend that COP 10:

- *Urges Parties to establish a multi-sectoral mechanism* at the national level that brings together the different sectors of government that depend on or exploit biodiversity (forestry, fisheries, water supply, agriculture, disaster prevention, health, climate change).

**Rationale:**

A multi-sectoral approach may be a suitable tool to promote more constructive dialogue on sustainable use at the national level.

In addition, SBSTTA should take into account the following recommendations:

- *Integrate the findings and approach from The Economics of Ecosystems and Biodiversity (TEEB) study throughout the recommendations to highlight the importance of biodiversity for the different economic sectors.*

- *WWF supports the recommendation to convene an Ad Hoc Technical Expert Group on Sustainable Use* with the mandate to analyze the coherence of global and regional policy frameworks for key economic sectors.
SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE
Fourteenth meeting
Nairobi, 10-21 May 2010
Item 3.1.6 of the provisional agenda

REVIEW OF IMPLEMENTATION OF ARTICLE 10 OF THE CONVENTION (SUSTAINABLE USE OF BIODIVERSITY) AND APPLICATION OF THE ADDIS ABABA PRINCIPLES AND GUIDELINES

Abridged

SUGGESTED RECOMMENDATIONS
The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties adopt a decision along the following lines:

The Conference of the Parties
1) Adopts the recommendations of the Liaison Group on Bushmeat, as annexed to the present document, as a specific complement to the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (AAPG) in relation to the hunting of wildlife in moist tropical forests, which was identified as a matter of priority in decision IX/5, while taking into consideration Article 10(c) as related to customary sustainable hunting practices for the livelihoods of indigenous and local communities;

2) Urges Parties and invites other Governments to:
   a) Further integrate sustainable-use principles into national policies, plans, and strategies for relevant economic sectors, and to develop or further improve criteria and indicators for the sustainable use of biodiversity; and to identify targets and indicators at the national level that contribute to the relevant targets and indicators of the post-2010 Strategic Plan of the Convention;
   b) Increase human and financial capacity for the application of the AAPG and other provisions of the Convention related to sustainable use of biodiversity, inter alia by establishing and enforcing management plans; enhancing cross-sectoral integration and coordination; improving the operationalization of the definition of sustainable use; improving the understanding and implementation of concepts of adaptive management; and combating unsustainable, unauthorized and unregulated activities;
   c) Address obstacles and devise solutions to protect and encourage customary sustainable use of biodiversity by indigenous and local communities, such as securing access to land and natural resources and involving indigenous and local communities in decision-making and management of biological resources;
   d) Revise and update national biodiversity strategies and action plans to further engage different sectors of government and the private sector (including inter alia, forestry, fisheries, water supply, agriculture, disaster prevention, health, and climate change), with a view to fully account for the value of biodiversity and ecosystem services in decision-making;
   e) Strengthen the application of the ecosystem approach, in particular through adaptive management approaches (including customary management systems by indigenous and local communities, with ref-

2. The CBD Liaison Group on Bushmeat defines bushmeat (or wild meat) hunting as the harvesting of wild animals in tropical and sub-tropical forests for food and for non-food purposes, including for medicinal use (UNEP/CBD/LG-Bushmeat/1/2).
ference to decision IX/7 on ecosystem approach) and adequate monitoring, for key economic sectors depending on and impacting biodiversity;
f) With reference to the programme of work on incentive measures (decisions V/15 and IX/6 as well as the decision on incentive measures3 to be adopted by the Conference of the Parties at its tenth meeting) and national biodiversity strategies and action plans, review and revise national incentive measures and frameworks with a view to identify and remove or mitigate incentives that are harmful to biodiversity, to strengthen existing incentives, and to create new incentives for the conservation and sustainable use of biodiversity;
g) Support or facilitate effective market-based instruments that have the potential to support the sustainable use of biodiversity and improve the sustainability of supply chains, such as certification schemes;
h) Implement the recommendations of the Liaison Group on Bushmeat for the conservation and sustainable use of bushmeat, where appropriate, as annexed to this decision;

3) Invites Parties, other Governments, and relevant international and other organizations to:
   a) Welcome, support and participate in the Satoyama Initiative,4 as a useful tool to further disseminate knowledge, build capacity and promote projects and programmes for the sustainable use of natural resources in rural areas for the benefit of biodiversity and human well-being;
   b) Invite the private sector to adopt and apply the AAPG and compatible provisions of the Convention into sectoral and corporate strategies, standards and practices, and facilitate such efforts of the private sector;
   c) Identify targets and indicators at the national level that contribute to the relevant targets and indicators of the Strategic Plan;
   d) Establish multi-sectoral mechanisms at the national level that bring together the different sectors of government that depend on or exploit biodiversity (forestry, fisheries, water supply, agriculture, disaster prevention, health, climate change) with a view to promoting the value of biodiversity and ecosystem services and integrating management and accounting measures based on sustainable use of biodiversity principles.

4) Requests the Executive Secretary to:
   a) Compile information on the operationalization of the definition of sustainable use, and information on the understanding and implementation of the concept of adaptive management, and make this information available to Parties;
   b) Convene, in collaboration with Food and Agriculture Organization of the United Nations and other relevant international organizations, subject to the availability of resources, an Ad Hoc Technical Expert Group on Sustainable Use with the mandate to analyse the coherence of global and regional policy frameworks for key economic sectors (notably forestry, fisheries, and agriculture, including biofuels) with provisions of the Convention on Biological Diversity related to sustainable use of biodiversity, and to provide recommendations for the improvement of such sectoral policies and guidelines, in the context of the achievement of the objectives and targets of the post-2010 Strategic Plan of the Convention, and the revision of national biodiversity strategies and action plans, and to submit its report for the consideration of SBSTTA at a meeting prior to the eleventh meeting of the Conference of the Parties.

Abridged

3. The Conference of the Parties is expected to take a decision on good practice cases from different regions on the identification and removal or mitigation of perverse incentives. (see UNEP/CBD/SBSTTA/14/17).
SBSTTA should recommend that COP 10:

- Urges Parties and other governments to substantially and with urgency strengthen their efforts to implement COP decisions and the actions identified in the third edition of the Global Biodiversity Outlook, and in particular to monitor the status and trends of biodiversity including ecosystem services, as well as pressures on biodiversity and ecosystem services, at the national level.

Rationale:

WWF believes that the findings of GBO-3, in particular the failure to reach the 2010 target, require a very strong call for action from Parties and all other relevant entities to curb the continuing loss of biodiversity. National biodiversity monitoring is essential if Parties are to assess the changing state of their biodiversity, the pressures on it, and the benefits from it, and to ensure that their conservation measures are working effectively. National monitoring is also necessary to improve the reporting on the global biodiversity status.
THIRD EDITION OF THE GLOBAL BIODIVERSITY OUTLOOK: IMPLICATIONS FOR THE FUTURE IMPLEMENTATION OF THE CONVENTION

Note by the Executive Secretary

abridged

SUGGESTED RECOMMENDATIONS

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties adopt a decision along the following lines:

The Conference of the Parties

1) Welcomes the third edition of Global Biodiversity Outlook;

2) Acknowledges the contributions and support from the World Conservation Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC), the partners of the 2010 Biodiversity Indicators Partnership, DIVERSITAS-International, members of the GBO-3 Advisory Group and scientific review panel, interested organizations, other stakeholders and reviewers;

3) Also acknowledges the financial contributions from Canada, the European Commission, Germany, Japan, Spain and the United Kingdom;

4) Takes note of the conclusions drawn in the third edition of Global Biodiversity Outlook, including:

   a) The target to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth has not been met;

   b) Action to implement the Convention has not been taken on a sufficient scale to address the pressures on biodiversity and there has been insufficient integration of biodiversity issues into broader policies, strategies and programmes, and as a consequence the underlying drivers of biodiversity loss have not been addressed significantly;

   c) Most future scenarios project continuing high levels of extinctions and loss of habitats throughout this century, with associated decline of some ecosystem services important to human well-being. There are risks of large scale negative impacts on human-well-being if certain thresholds or “tipping points” are crossed;

   d) At the same time, there are greater opportunities than previously recognized to address the biodiversity crisis while contributing to other social objectives. Even though it will be extremely challenging to prevent further human-induced biodiversity loss for the near-term future, well-
targeted policies focusing on critical areas, species and ecosystem services can help to avoid the most dangerous impacts on people and societies;

5) *Notes* that a strategy for reducing biodiversity loss requires action at multiple levels including:
   a) Mechanisms for addressing the underlying causes of biodiversity loss, including a recognition of the real benefits of biodiversity and their reflection within economic systems and markets;
   b) Urgent actions to curb the five pressures directly driving biodiversity loss (habitat change, overexploitation, pollution, invasive alien species and climate change) with a view to enhancing the resilience of ecosystems and to avoid that ecosystems are pushed beyond certain thresholds or tipping points;
   c) Direct conservation action to safeguard species, genetic diversity and ecosystems;
   d) Measures to enhance the benefits from biodiversity, contributing to local livelihoods and to climate change adaptation and mitigation;
   e) Enabling mechanisms in support of the above;

6) *Further notes* the need to place greater emphasis on the restoration of degraded terrestrial, inland water and marine ecosystems with a view to re-establish ecosystem functioning and the provision of valuable services, taking note of relevant guidance prepared by the Society for Ecological Restoration;

7) *Also notes* the opportunities that arise for the conservation and sustainable use of biodiversity where management aims to optimize outcomes for multiple ecosystem services instead of seeking to maximize single or few services;

8) *Agrees* to use the third edition of Global Biodiversity Outlook to guide the scientific and technical discussions on the updating of the Strategic Plan of the Convention.

9) *Urges* Parties and other governments to substantially and with urgency strengthen their efforts to implement COP decisions and the actions identified in the third edition of the Global Biodiversity Outlook

(Rationale: the findings of GBO-3, in particular the failure to reach the 2010 target, requires a very strong call for action from Parties and all other relevant entities to curb the continuing loss of biodiversity.)
SBSTTA should recommend that COP 10:

- Adopts the suggested recommendations.

In addition, SBSTTA should take into account the following recommendations:

- WWF strongly demands the implementation of the updated GSPC.
- WWF supports to develop, by 2012, an online version of the GSPC toolkit.
The CBD’s post-2010 targets and indicators will be the roadmap for biodiversity conservation over the next decade. It is vital that the targets are concrete and add up to halting the loss of biodiversity by 2020 to underpin human development. A robust set of targets and indicators will also help to strengthen the Convention itself and support its implementation especially though the mainstreaming of biodiversity into relevant sectors.

**WWF urges SBSTTA to ensure:**

- Targets address the underlying drivers of biodiversity loss.
- Targets are SMART (specific, measurable, ambitious, realistic and time-bound).
- A Driver-Pressure-State-Impact/Benefit-Response framework is applied to targets and indicators.
- Each target is accompanied by a set of SMART milestones that can be reviewed at each CBD COP leading up to 2020.
- Strong linkages between the Strategic Plan and relevant Programmes of Work.

**WWF urges SBSTTA to recommend concrete targets that ensure:**

- Significant reduction of drivers and pressures of biodiversity loss.
- Increased funding and capacity for CBD implementation.
- Representative protected areas covering terrestrial, freshwater and marine areas.
- Elimination of harmful and perverse subsidies.
- Elimination of overfishing and destructive fishing practices (including bycatch and discards) in both inland and marine ecosystems.
- Halting of the over-abstraction of water and fragmentation of freshwater systems.
- Identification, restoration, protection and/or sustainable use of areas that provide key ecosystem services.
The 2010 Target

The 2010 biodiversity target to significantly reduce the rate of biodiversity loss as a contribution to poverty alleviation and to the benefit of all life on earth was adopted by governments in 2002 at the 6th Conference of the Parties (COP 6) of the Convention on Biological Diversity (Decision VI/26) and later endorsed at the World Summit on Sustainable Development (WSSD), and subsequently included in Millennium Development Goal 7 (MDG7) under the “reducing biodiversity loss” indicator.

The 2010 target is accompanied by a Framework for Evaluation of Progress comprised of 7 Focal Areas, a set of Goals and Sub-targets and a set of related indicators that includes the Living Planet Index and the Ecological Footprint. This framework was adopted by COP 8 decision VIII/15 in 2006 when the Goals and Sub-targets were also integrated into the programmes of work of the Convention. Some of the indicators are not ready for immediate use and are still being developed by the 2010 Biodiversity Indicators Partnership. The 3rd Global Biodiversity Outlook, due for publication in 2010, will assess progress towards the 2010 Biodiversity Target using the indicators of the framework.

Process for development of the CBD post-2010 Strategic Plan

In May 2010, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) will consider goals, targets and associated indicators for the period beyond 2010. The SBSTTA meeting will be followed by the Third Meeting of the Ad Hoc Open-ended Working Group on Review of Implementation of the CBD (WGRI-3), which will re-examine the implementation of the Strategic Plan as well as progress made towards the 2010 biodiversity target.

At COP 10, in October 2010, Parties will adopt a new Strategic Plan for the period 2010-2020.

Recommendations for the revision of the CBD post-2010 Strategic Plan

The CBD Strategic Plan must point the way for innovative solutions that can deliver on the explicit goals of biodiversity conservation with respect to concerns on climate change, development aid for poverty reduction and greening the economy. The Strategic Plan should also link these solutions to broader multi-lateral, bilateral and other funding mechanisms like the GEF and funding for climate change mitigation and adaptation.

In 2009, WWF developed a paper with other international NGOs identifying several issues that must be given high priority in the new Strategic Plan such as: Access and Benefit Sharing (ABS); mainstreaming biodiversity; understanding ecosystem services and human wellbeing; identifying and measuring the drivers of biodiversity loss; identifying common factors of successful CBD implementation; achieving stronger science-policy links on biodiversity and ecosystem services, using for example the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES); and securing sustainable budgets and investments in biodiversity conservation.

The paper also stressed that in order to facilitate delivery, the new Strategic Plan should include more precisely defined measurable targets; timelines and indicators linked to an improved reporting process, as well as specific renewed commitments of resources for implementation.

1 Available at: www.panda.org/cbd/ngo_position_2010
### Highlights of WWF’s Proposed Changes to CBD 2020 Targets

<table>
<thead>
<tr>
<th>Mission statement: By 2020, to: reduce the pressures on biodiversity; prevent extinctions; restore ecosystems; and enhance ecosystem services, while equitably sharing the benefits, thus contributing to human well-being and poverty eradication, and to have provided the means for all Parties to do so.</th>
<th>WWF proposed targets: By 2020, biodiversity loss is halted and restored and the benefits of biodiversity and ecosystems are fully integrated into all aspects of development. Humanity’s ecological footprint is significantly reduced.</th>
<th>Difference and rationale: A more ambitious, measurable and communicable mission statement. Includes concept of humanity’s footprint. Ecological footprint is already an indicator under the CBD.</th>
</tr>
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<tr>
<td><strong>Target 1</strong> By 2020, everyone is aware of the value of biodiversity and the steps they can take to protect it.</td>
<td>By 2020, all sectors of government, including heads of state and ministries of finance, trade and economics, as well as the general public are aware of the value of biodiversity and concrete steps are taken to accelerate implementation of the CBD.</td>
<td>Increased awareness of the role of biodiversity in delivering ecosystem services to society should translate into concrete actions by governments to implement the Strategic Plan of the CBD.</td>
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<tr>
<td><strong>Target 4</strong> By 2020, governments and stakeholders at all levels have formulated, and have begun to implement, sustainability plans to keep the use of resources within ecological limits.</td>
<td>By 2020, humanity’s global ecological footprint falls below its 2000 level and continues its downward trend.</td>
<td>Measurable target that includes concept of ecological footprint. Ecological footprint is already an indicator under the CBD.</td>
</tr>
<tr>
<td><strong>Target 5</strong> By 2020, the loss and degradation of forests and other natural habitats is halved.</td>
<td>5. By 2020, zero net deforestation is achieved. 5 bis. By 2020, the loss and degradation of natural habitats is halted. 5 ter. By 2020, over-abstraction and fragmentation of inland waters are halted. (NEW TARGET)</td>
<td>More ambitious target; zero net loss for all habitats. Zero deforestation will help the CBD to align with UNFCCC REDD. CBD needs a target that addresses major threats to freshwater systems which are showing the highest rates of biodiversity loss.</td>
</tr>
<tr>
<td><strong>Target 11</strong> By 2020, at least 15% of land, freshwater and sea areas, including the areas of particular importance for biodiversity, have been protected through representative networks of effectively managed protected areas and other means, and integrated into the wider land- and seascape.</td>
<td>By 2020, at least 15% of land, freshwater and sea areas, including the areas of particular importance for biodiversity and areas beyond national jurisdiction, have been protected through representative networks of effectively managed protected areas and other means, and integrated into the wider land- and seascape.</td>
<td>Includes the concept of “areas beyond national jurisdiction” (high seas), as reflected in PoWPA and the PoW on marine and coastal biodiversity.</td>
</tr>
<tr>
<td><strong>New Target 14 bis</strong></td>
<td>By 2020, the contribution of ecosystem restoration and management as a means to regulate water flows and quality is fully taken into account in climate change adaptation and disaster risk reduction strategies, policies and plans.</td>
<td>The importance of fully functional ecosystems and/or ecosystem restoration is insufficiently taken into account in climate change adaptation.</td>
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</table>
SUGGESTED RECOMMENDATIONS

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to make a recommendation along the following lines:

**The Subsidiary Body on Scientific, Technical and Technological Advice:**

Having examined the scientific and technical aspects of the proposed set of targets for the Strategic Plan 2011-2020 of the Convention, including their technical rationale and proposed indicators;

Noting that, in line with Decision IX/9, the Ad Hoc Open-ended Working Group on the Review of Implementation, at its third meeting, will be drawing upon this examination of the scientific and technical aspects of the outcome-oriented goals and targets, and associated indicators, in preparing its recommendations on the revised and updated Strategic Plan, including a revised biodiversity target,

1. **Concludes** that, from a scientific and technical viewpoint, the framework of targets in Annexes 1 and 2 of this decision, combined with mechanisms for their implementation, provide a logical evolution of the framework of goals and targets adopted through decisions VII/30 and VIII/15, and respond to the key issues identified in the third edition of Global Biodiversity Outlook (UNEP/CBD/SBSTTA/14/8);

2. **Recommends** that the targets listed in Annex 1 to this note be considered in the process of finalizing the revision and updating of the Strategic Plan of the Convention for the post 2010 period, **noting** that the technical rationale provided for each target is provided in Annex 2.

3. **Notes** the outcomes of the Expert Workshop on the 2010 Biodiversity Indicators and Post-2010 Indicator Development (Reading, United Kingdom, 6 - 8 July 2009);

   **Recommends** that the **Conference of the Parties:**

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5. * UNEP/CBD/SBSTTA/14/1.
4. **Welcomes** the progress made in biodiversity monitoring since the adoption of the framework to enhance the evaluation of achievements and progress in the implementation of the Strategic Plan (decision VII/30);

5. **Recognizes** the need to continue strengthening our ability to monitor biodiversity at all levels including through *inter alia*:
   - Building on and pursuing the work of the 2010 Biodiversity Indicators Partnership in delivering global indicators for the post-2010 period;
   - Inviting scientific networks to contribute to the development and refinement of indicators suitable for monitoring biodiversity at the global, regional, national and local levels and encouraging science funding bodies to support such endeavours;
   - Supporting national and regional efforts to establish or strengthen biodiversity monitoring systems to enable Parties to assess progress towards biodiversity targets established at national and/or regional level;
   - Strengthening our capacity to mobilize and use biodiversity data, information and forecasts so that they are readily accessible to policymakers, managers, experts and other users, including through participation in, and support to, the Group on Earth Observations Biodiversity Observation Network (GEO-BON) and the Conservation Commons.

6. **Agrees to**:
   - Pursue the use of the global headlines indicators contained in decision VIII/15 and the further development of measures (or specific indicators) in monitoring progress towards selected targets as indicated in annex II to this note and summarized in the table in document UNEP/CBD/WG-RI/3/3;
   - Complement these global headline indicators with additional indicators which are suitable for monitoring progress towards the remaining targets; and
   - Invite the scientific community to develop measures (or specific indicators) that could complement or substitute the existing indicators and to bring these to the attention of the Executive Secretary.

7. **Requests** the Executive Secretary, pending the availability of the necessary financial resources, to convene a meeting of an Ad hoc Technical Expert Group on Indicators for the Strategic Plan 2011-2020, which shall be established in accordance with the procedures outlined in the consolidated *modus operandi* of SBSTTA (decision VII/10, annex III), taking into account the need to draw upon the experience of the members of the 2010 Biodiversity Indicators Partnership and other relevant international organizations, and to report to the Subsidiary Body on Scientific, Technical and Technological Advice prior to its fifteenth meeting. The Ad hoc Technical Expert Group has the following terms of reference:
   - Provide advice on the further development of indicators agreed through decisions VII/30 and VIII/15;
   - Suggest additional indicators that have been, or could be, developed to assess progress towards targets for which the current suite of indicators is not suited;
   - Propose options for the establishment of mechanisms to support Parties in their efforts to develop national biodiversity monitoring systems.
PROPOSED MISSION, STRATEGIC GOALS AND TARGETS FOR THE POST 2010 FRAMEWORK

WWF proposed Vision: Living in harmony with nature – biodiversity and ecosystems are restored, conserved and wisely used, with humanity’s footprint sustaining a healthy planet delivering benefits shared equitably.

The Mission of this Strategic Plan is to ensure a coherent implementation of the Convention on Biological Diversity and achievement of its three objectives by promoting “Urgent action to halt the loss of biodiversity” and, “By 2020, to reduce the pressures on biodiversity; prevent extinctions; restore ecosystems; and enhance ecosystem services, while equitably sharing the benefits, thus contributing to human well-being and poverty eradication, and to have provided the means for all Parties to do so.”

Mission: By 2020, biodiversity loss is halted and restored and the benefits of biodiversity and ecosystems are fully integrated into all aspects of development. Humanity’s ecological footprint significantly reduced.

Strategic Goal A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society:

Target 1. By 2020, all sectors of government, including heads of state and ministries of finance, trade and economics, as well as the general public are everyone is aware of the value of biodiversity and concrete steps are taken to accelerate implementation of the CBD the steps they can take to protect it.

Target 2: By 2020, the values of biodiversity are integrated by all countries in their national accounts, national and local strategies and planning processes, and by business, applying the Ecosystem Approach.

Target 3: By 2020, subsidies harmful to biodiversity are eliminated, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied.

Target 4: By 2020, Governments and stakeholders, at all levels, have formulated, and begun to implement, sustainability plans to keep the use of resources within ecological limits.

Target 4: By 2020, humanity’s global ecological footprint falls below its 2000 level and continues its downward trend.

Strategic Goal B. Reduce the direct pressures on biodiversity and promote sustainable use.

Target 5: By 2020, the loss and degradation of forests and other natural habitats is halved.

Target 5: By 2020, zero net deforestation is achieved.

Target 5 bis: By 2020, the loss and degradation of natural habitats is halted.

Target 5 ter: By 2020, over-abstraction and fragmentation of inland waters are halted. (NEW TARGET)

Target 6: By 2020, overfishing is ended and destructive fishing practices are eliminated both in marine and inland water ecosystems.

Target 7: By 2020, all areas under agriculture, aquaculture, forestry are managed according to internationally acceptable standards based on agreed sustainability criteria.

Target 8: By 2020, pollution from excess nutrients and other sources has been brought below critical ecosystem loads.

Target 9: By 2020, pathways for the introduction and establishment of invasive alien species have been controlled, and established invasive alien species are identified, prioritised and controlled or eradicated.

Target 10: By 2020, manage the multiple pressures on coral reefs and other vulnerable species and ecosystems...
tems impacted by climate change and ocean acidification so as to maintain their integrity and functioning.

**Strategic Goal C. Safeguard ecosystems, species and genetic diversity**

Target 11: By 2020, at least 15% of land, freshwater and sea areas, including the areas of particular importance for biodiversity, and areas beyond national jurisdiction, have been protected through representative networks of effectively managed protected areas and other means, and integrated into the wider land- and seascape.

Target 12: The extinction of known threatened species has been prevented.

Target 13: By 2020, the status of crop and livestock genetic diversity in agricultural ecosystems and of wild relatives has improved.

**Strategic Goal D: Enhance the benefits from biodiversity and ecosystems.**

Target 14: By 2020, ecosystems that provide essential services, and contribute to local livelihoods, are identified and safeguarded or are being restored, and adequate and equitable access to essential ecosystem services is guaranteed for all, especially for indigenous and local communities and the poor and vulnerable.

Target 14 bis: **By 2020, the contribution of ecosystem restoration and management as a means to regulate water flows and quality is fully taken into account in climate change adaptation and disaster risk reduction strategies, policies and plans. (NEW TARGET)**

Target 15: By 2020, the contribution of biodiversity to ecosystem resilience and to carbon storage and sequestration are enhanced, through conservation and restoration, including restoration of at least 15% of degraded lands and freshwater ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

**Strategic Goal E. Enhance implementation through planning, knowledge management and capacity development, and the fair and equitable sharing of the benefits arising from the use of genetic resources.**

Target 16: By 2020, each Party has implemented an effective national biodiversity strategy and legislation, contributing to the achievement of the mission, goals and targets of the Strategic Plan.

Target 17: By 2020, access to genetic resources is enhanced, and substantial benefits are shared, consistent with the international regime on access and benefit sharing.

Target 18: By 2020, traditional knowledge, innovations and practices are protected and their contribution to the conservation and sustainable management of biodiversity is recognized and enhanced.

Target 19: By 2020, knowledge and technologies relating to biodiversity, its value and functioning, its status and trends, and the consequences of its loss, are improved and widely shared.

Target 20: By 2020, capacity (human resources and financing) for implementing the Convention has increased tenfold.
Annex II

TECHNICAL RATIONALE FOR THE STRATEGIC GOALS AND TARGETS, INCLUDING POTENTIAL INDICATORS AND MILESTONES

Strategic Goal A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society:
Abridged; continued.

Target 1. By 2020, all sectors of government, including heads of state and ministries of finance, trade and economics, as well as the general public are aware of the value of biodiversity and concrete steps are taken to accelerate implementation of the CBD.

Technical rationale: Addressing the drivers of biodiversity loss requires behavioural change by individuals (e.g., to reduce waste or consumption) and by governments (e.g., to change regulations or incentives). Understanding, awareness and appreciation of the value of biodiversity are necessary to underpin the ability and willingness for individuals to make such changes and to create the “political will” for governments to act. Nearly all Parties indicate in their fourth national reports that they are undertaking actions related to education and public awareness. The target covers the three objectives of the Convention.

Increased awareness of the role of biodiversity in delivering ecosystem services to society should translate into concrete actions by governments to implement the Strategic Plan of the CBD. This should include increased funding for biodiversity conservation as well as the sustainable use and restoration of ecosystems.

Implementation: Learning occurs in formal contexts of learning, such as in schools and universities, as well as in informal contexts, such as through the guidance of elders regarding the natural environment, as well as in museums and parks, and through films, television and literature. Where possible, awareness and learning about biodiversity should be linked to and mainstreamed into the principles and messages of education for sustainable development. The United Nations Educational, Scientific and Cultural Organization (UNESCO) could be one key partner in carrying out work towards this target. The key audiences for such communication, education and public awareness activities will vary nationally, but generally could focus on international agencies, national and local governments, business, non-governmental organizations and civil society groups. Information campaigns can, not only promote awareness, but behavioural change and concrete actions as well. The Communication, Education and Public Awareness programme is the main instrument under the Convention for this target.

Indicators and baseline information: Possible indicators could include the number of visits to museums and parks, participation of volunteers in relevant activities, number of school biodiversity education programmes or materials, the demand for or consumption of biodiversity-friendly products, and the development of lists of recommended citizen actions. Progress could also be monitored through surveys on awareness and attitudes such as the eurobarometer survey conducted in 2007 which provides a baseline for the European region.

Milestones: Possible milestones for this target include:

- By 2011, basic public awareness campaigns about biodiversity and steps people can take to protect it are initiated;
- By 2012, communications plans to promote understanding of the economic importance of biodiversity and ecosystem services among high-level government decision makers have been completed;
- By 2014, communications activities aimed at other sectors of government including ministries of finance, trade and economics have been completed;
- By 2014, national baseline surveys are carried out and comprehensive national strategies to promote awareness of the value of biodiversity are prepared, adopted and are being implemented;
- By 2016, all national high level decision-makers are aware of the economic importance of biodiversity and ecosystem services;

• By 2018, the implementation of the CBD becomes a high-level priority and steps are taken to engage the highest levels of government in the mainstreaming of biodiversity into all sectors of government.

Target 2. By 2020, the values of biodiversity are integrated by all countries in their national accounts, national and local strategies and planning processes, and by business, applying the Ecosystem Approach.

Technical rationale: The target implies that the opportunities derived from the conservation and sustainable use of biodiversity, and the fair and equitable sharing of benefits arising from the use of genetic resources, are recognized and reflected in all relevant public and private decision-making. Though numerous studies at various scales have illustrated the economic value of biodiversity and the ecosystem services it underpins, 4,5 many Parties report that the absence of economic valuations of biodiversity is an obstacle to its conservation and sustainable use. Natural capital accounting (see TEEB report for policy makers Chapter 2, pages 14/15) is an essential step in mainstreaming biodiversity at the national level. Once this information is captured on a regular basis, there is a baseline on which to measure gains and loss to the national economy, to provide real and up to date data to inform decision making and trade-offs and to form the basis of appropriate indicators. Including the value of biodiversity in national accounts, including accounts of inclusive wealth, would give it greater visibility amongst policy-makers and contribute to the “mainstreaming” of biodiversity issues in decision-making processes. Reflecting the values of biodiversity in the planning processes of governments at all levels, including economic, financial, spatial planning, and the application of strategic environmental assessment as a tool to identify and quantify tradeoffs, would be particularly effective in the long term. Values of biodiversity and ecosystem services are not limited to financial values.

Implementation: Integration of biodiversity into national accounts, strategies and planning processes will require increased coordination among government ministries and levels of government. Tools to assess the value of biodiversity are now being made more widely available, including the Convention’s work on economic, trade and incentive measures, as well as through the Economics of Ecosystems and Biodiversity (TEEB) study. The UN System of Economic and Environmental Accounting (SEEA) and the World Bank’s experience in integrating natural capital (e.g., forests) into national accounts could be further developed and built upon to incorporate the value of biodiversity and ecosystem services. Tools are also available for integrating biodiversity into spatial planning exercises through the mapping of biodiversity ecosystem services and systematic conservation planning. Strategic environmental assessment, that incorporates biodiversity (and integrated ecosystem assessment), is a useful approach. Payment for ecosystem services mechanisms, as well as the development of private sector guidelines for the appropriate reflection of the value of biodiversity, are additional implementation mechanisms which could be used to meet this target.

Indicators and baseline information: Possible indicators for this target include the number of countries with biophysical inventories of biodiversity and ecosystem services; the number of countries with national accounts reflecting the state of biodiversity and ecosystem services; the number of countries with poverty reduction strategies and national development plans which incorporate biodiversity and the number of companies (or their market share) with polices for biodiversity-friendly practices. Baseline information for 2010 could be obtained through desk studies and from TEEB study.

Milestones: Possible milestones for this target include:

• By 2012, work on bio-physical inventories of biodiversity and associated ecosystem services is initiated and, by 2014, a work programme for reflecting biodiversity and ecosystem values in national accounts is developed;

• By 2014, governments agree on a method for natural capital accounting and undertake to produce these on an (annual) basis and to make them public. (This will support awareness raising under Target 1 as well as Target 2);

• By 2014, the opportunities derived from the conservation and sustainable use of biodiversity, and the fair and equitable sharing of benefits arising from the use of genetic resources, are integrated into

9. The Economics of Ecosystems and Biodiversity (TEEB) Project (http://www.teebweb.org/)
PRSPs and other national development plans, and are routinely included in environmental impact assessment, strategic environmental assessment and spatial planning:

- **By 2016, natural accounting is in use by 50% of governments who publish annual updates on the state of natural resources:**
- **By 2016, all Parties incorporate biodiversity considerations, including the role of biodiversity to support socioeconomic development and climate change adaptation and mitigation, into the mandate of natural resources, river basin and other relevant local, national and international institutions, and into relevant domestic and international laws, policies, enforcement tools and planning frameworks, at all appropriate levels:**
- **By 2018, the most important aspects of biodiversity and ecosystem services are reflected in national statistics.**

**Target 3.** By 2020, subsidies harmful to biodiversity are eliminated, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied

*Abriedged; continued.*

**Target 4.** By 2020, Governments and stakeholders at all levels have formulated, and begun to implement, sustainability plans to keep the use of resources within ecological limits.

**Target 4 : By 2020, humanity’s global ecological footprint falls below its 2000 level and continues its downward trend.**

*Technical rationale:* Most Parties indicated in their fourth national reports that the unsustainable use or over-exploitation of resources was a threat to biodiversity. Bringing the use of natural resources within ecological limits is an integral part of the Vision, thus steps towards this must be taken by 2020. Reducing total demand and increasing efficiency contribute to the target which can be pursued through government regulations or incentives, education, and social and corporate responsibility. This target will build upon, and contribute to, the achievement of the target established in the Johannesburg Plan of Implementation (para. 26) to develop integrated water resources management and water efficiency plans by 2005.

*Implementation:* Currently, many individuals, businesses and countries are making efforts to substantially reduce their use of fossil fuels, with a view to mitigating climate change. Similar efforts are needed to ensure that the use of other natural resources are within sustainable limits. Early action would involve each production- and consumption-related sector developing and implementing plans for this purpose. The target will be achieved through dialogue among sectors and stakeholders, supported by planning tools such as strategic environmental assessment and economic tools such as incentive measures that integrate biodiversity issues. The creation of inter-ministerial committees, nationally developed guidelines, sectoral guidelines and the promotion of ecosystem management in city districts and other local authorities could be used to help reach this target. The programme of work on the sustainable use of biodiversity, the business and biodiversity initiative as well as the work on impact assessment would be particularly relevant to this target.

*Indicators and baseline information:* Initially, process indicators, such as the establishment of plans with clear and measurable targets, would be the main indicators. Other process indicators include the presence of strategic environmental impact assessment or similar assessment tools, and their application at multiple levels of government. One relevant outcome indicator is the ecological footprint (and related concepts) for which baseline data is available. Other possible indicators could include the total demand for natural resources and the proportion of products derived from sustainable sources.

*Milestones:* Possible milestones for this target include:

- **By 2014, Governments and major private sector actors, at sector or company level, have developed assessments of their ecological footprint, especially in terms of water and carbon footprints, and have developed sustainability plans to reduce their footprint:**
- **By 2016, Governments and stakeholders at all levels have formulated and begun to implement sustainability plans as part of their NBSAPs based on their 2000 national ecological footprint to increase efficiency, reduce waste and maintain the use of resources within ecological limits:**
- **By 2016, all Parties are engaged in dialogue with neighbouring countries towards the conservation and sustainable use of transboundary biodiversity components:**
- **By 2018, Governments and major private sector actors can demonstrate progress towards sustainability.**
Strategic Goal B. Reduce the direct pressures on biodiversity and promote sustainable use. Abridged; continued.

Target 5: By 2020, the loss and degradation of forests and other natural habitats is halved.

Target 5: By 2020, zero net deforestation is achieved.

i.e. through: reducing gross deforestation by 75% by 2020 through enhancing the conservation (effective forest protect area network) and sustainable management of forests and through compensating ongoing forest loss through socially and environmentally sound afforestation and reforestation programmes.

Technical rationale: Deforestation continues at an alarming rate − 13 million hectares per year, or 36 football fields a minute (7.3 million hectares per year “net” forest loss taking into account forest restoration and afforestation). Deforestation and degradation of forests, particularly in the tropics, have dire consequences for the global climate, biodiversity and people. Emissions from deforestation, and forest degradation, currently generate almost 20 per cent of global greenhouse gas (GHG) emissions. Forests contain the vast majority of the world’s terrestrial biodiversity. Many people source food, medicine, building materials and fuelwood directly from forests, and depend on forest ecosystem services for water supply, flood prevention, and climate change mitigation. Some 1.6 billion people worldwide depend on forests for their livelihoods, with 60 million indigenous people depending on forests for their subsistence.

Zero net deforestation can be distinguished from "zero deforestation", which means no deforestation anywhere. Zero net deforestation acknowledges that some forest loss could be offset by forest restoration. Zero net deforestation is not synonymous with a total prohibition on forest clearing. Rather, it leaves room for change in the configuration of the land-use mosaic, provided the net quantity, quality and carbon density of forests is maintained. It recognizes that, in some circumstances, conversion of forests in one site may contribute to the sustainable development and conservation of the wider landscape. In some cases natural forests are converted into forest plantations while undisturbed primary forests are being changed into modified or even degraded forests. To maximise the conservation of biodiversity and the reduction of GHG emissions we need to conserve as much of the world’s remaining natural forests as possible. This is also underpinned by the key findings of leading experts assembled in the Ad Hoc Technical Expert Group (AHTEG) on biodiversity and climate change.

A Zero Net Deforestation by 2020 target can also be translated into a GHG emission reduction target. As forest destruction is responsible for close to 20% of global emissions, it is imperative that action to reduce emissions from deforestation be taken. Countries should commit to reducing gross forest-based greenhouse gas emissions by at least 75% by 2020, with a view to eliminating nearly all human induced forest emissions by 2030.

Implementation: Parties can develop and implement national programmes for reducing (emissions from) deforestation and forest degradation, with support from developed countries. Such programmes should identify policies and measures and of prospective early actions necessary to make meaningful reductions and gain relevant practical experience, assess the drivers of deforestation and forest degradation, identify pathways to equitable sharing of benefits and should contribute to biodiversity conservation and the well-being of people, especially indigenous and local communities. Planning should involve all relevant ministries and levels of government to avoid policy conflicts and clarify respective responsibilities. Pilots can build capacity on the ground and test methodologies for biodiversity (and carbon) monitoring and measurement. National programmes should also include climate change adaptation measures to reduce vulnerability of forest ecosystems and natural resources and integrate environmental and social safeguards into climate change mitigation and adaptation activities. Parties can also adopt responsible public procurement policies for all products made from raw materials potentially linked to deforestation. Such policies can recognise credible voluntary certification schemes for wood and paper products, bio-energy and agricultural commodities such as palm-oil, soy and others. Governments can also take action to combat imports of products containing illegally-sourced timber including legislation to ensure that only wood and paper products from legal sources are traded.

Implementation: Parties can develop and implement national programmes for reducing (emissions from) deforestation and forest degradation, with support from developed countries. Such programmes should identify policies and measures and of prospective early actions necessary to make meaningful reductions and gain relevant practical experience, assess the drivers of deforestation and forest degradation, identify pathways to equitable sharing of benefits and should contribute to biodiversity conservation and the well-being of people, especially indigenous and local communities. Planning should involve all relevant ministries and levels of government to avoid policy conflicts and clarify respective responsibilities. Pilots can build capacity on the ground and test methodologies for biodiversity (and carbon) monitoring and measurement. National programmes should also include climate change adaptation measures to reduce vulnerability of forest ecosystems and natural resources and integrate environmental and social safeguards into climate change mitigation and adaptation activities. Parties can also adopt responsible public procurement policies for all products made from raw materials potentially linked to deforestation. Such policies can recognise credible voluntary certification schemes for wood and paper products, bio-energy and agricultural commodities such as palm-oil, soy and others. Governments can also take action to combat imports of products containing illegally-sourced timber including legislation to ensure that only wood and paper products from legal sources are traded.
The private sector in forestry, agriculture and extractive industries, producers can develop and implement better management practices that are consistent with environmental and social safeguards and certification standards. Further down the supply chain, manufacturers, traders and end-users can procure responsibly from these sectors and reject products linked to deforestation. The financial sector can also apply investment screens based on these safeguards.

At the CBD COP 9 in Germany 2008, 67 Parties and the EU already pledged to support a target of Zero Net Deforestation by 2020.

**Milestones:** Possible milestones for this target include:

- By 2012, All Parties have defined baselines and developed National Action Plans for achieving Zero Net Deforestation by 2020, including identification of critical forests for maintaining and enhancing biodiversity and eco-system services with special consideration of carbon values;
- By 2012, Donors have action plans in place to support developing countries with National Action Plans to reduce (emissions from) deforestation and degradation;
- By 2014, Net Deforestation is reduced by 40%;
- By 2016, Net Deforestation is reduced by 60%;
- By 2018, Net Deforestation is reduced by 80%.

**Target 5 bis.** By 2020, the loss and degradation of natural habitats is halted.

*Technical rationale:* Nearly all Parties report that habitat loss is the most important factor driving biodiversity loss. While demographic, economic and social pressures are likely to mean continued land use change beyond 2020, the rate of change needs to be substantially reduced. Ultimately, there must be limits to the conversion or degradation of natural habitats. This is particularly the case for some ecosystems, where continued loss risks passing “tipping points” that could lead to large scale negative effects on human well-being.6,7 The target refers to gross loss, and should be regarded as a step towards halting deforestation and the loss of other natural habitats. Emphasis should be on preventing loss of primary forests and other high-biodiversity value habitats, including many wetlands. Recent evidence suggests that the global rate of deforestation is already decreasing.

*Implementation:* Reduction in the loss and degradation of natural habitats through land use change could be achieved through improvements in production efficiency and land use planning, combined with recognition of the economic and social value of ecosystem services provided by natural habitats.8 In particular, the value of carbon sequestration by forests and wetlands, and other ecosystem services (such as denitrification by wetlands) provide contemporary incentives for reducing the net loss of these habitats, and reversing their decline. The programmes of work on forest, marine and coastal, inland water and dry and sub-humid lands biodiversity and the Convention’s work on sustainable use are particularly relevant to this target.

*Indicators and baseline information:* Relevant indicators include trends in the extent of selected biomes, ecosystems, and habitats (forest area; mangroves), trends in the abundance and distribution of selected species and the connectivity/fragmentation of ecosystems. Reasonably good data is available for some habitats, such as forests, while for other habitats improvements in data would be needed.

**Milestones:** Possible milestones for this target include:

- By 2014, national legislation and land use plans or zonation maps have been reviewed and updated in relation to national targets for the maintenance of natural habitats, and spatial planning tools are made available for wide use;
- By 2014, additional measures are taken, as necessary, including for example enhanced law enforcement and use of incentive measures.

**Target 5 ter: By 2020, over-abstraction and fragmentation of inland waters are halted. (NEW TARGET)**

*Technical rationale:* Water is the fundamental environmental factor shaping other related biomes, and freshwater flows are the ‘master variable’ determining the structure and functions of freshwater eco-

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systems. Nonetheless, according to Doc. UNEP/CBD/SBSTTA/14/3, “the 2010 target and sub-targets for inland waters biodiversity have not been achieved. The rate of decline/loss for some populations has more than quadrupled over the last 10 years. The drivers of biodiversity loss remain unchanged and are all escalating.” Furthermore, biodiversity loss in inland waters remains the fastest among all the biomes. The UN Millennium Ecosystem Assessment underscores that freshwater ecosystems tend to have the highest proportion of species threatened with extinction, and the use of two ecosystem services – capturing fisheries and abstracting freshwater – is now well beyond levels that can be sustained, even at current demands in many parts of the world. In particular, changes to freshwater flows regimes and connectivity, associated with inland waters over-abstraction and fragmentation due to infrastructure, are now the greatest threat to inland waters, fundamentally undermining the capacity of these ecosystems to sustain crucial functions and services. These changes affect not only freshwater biodiversity, but also the species migrating between freshwater and the sea, with grave consequences for livelihoods and human wellbeing. Due to over-abstraction, many mighty rivers no longer reach the sea, numerous lakes have been shrinking and recharging aquifers around the world are being exploited at unsustainable rates. At the same time, among the world’s 177 rivers longer than 1,000 Km, only 64 (<40%) remain free-flowing on the mainstem (WWF, 2006). Hence, this target aims to trigger action, by all relevant stakeholders, aimed at protecting and restoring the environmental flows necessary to sustain freshwater and related terrestrial and estuarine ecosystems, as well as the livelihoods that depend upon them.

**Implementation:** There is growing experience in integrating environmental flow releases and other environmental considerations into dam planning, design and operations. This includes the assessment and maintenance (or restoration) of environmental flows, i.e., the water (and its timing, quantity and quality) that must remain in the river to sustain those services. Environmental flows policies, based on thresholds of flow alteration, aim to secure and restore inland water ecosystems across political entities. In this context, it becomes possible to identify and evaluate current and future hydropower needs, ‘no-go’ areas and alternative sites, and the capacities of dams, with a view to managing river flows so as to enable multiple water uses in a sustainable manner. This approach involves a combination of regional planning with more detailed local-scale environmental assessments for individual dams or cascades of dams on specific rivers. Regional planning can facilitate environmental protection by giving due consideration to demand-side strategies to reduce the need for additional power sources; determining environmental flow needs for a region’s rivers and setting related objectives for biodiversity and ecosystem service protection; clarifying who will bear the costs of environmental mitigation; and helping to identify dam locations that will have the least impact on sensitive species, ecological processes, and ecosystem services. With respect to water abstraction, a number of tools and approaches already exist to inform water allocation decision-making processes and lead to revisions that ensure water is also allocated to address environmental needs. These include water markets, water permits and fees, water banking, and legal and policy reforms towards well defining water rights and securing environmental flows.

**Indicators and baseline information:** Possible indicators for this target include the extent to which water has been returned to previously over-abstracted ecosystems and maintained within systems currently with sufficient water; the number of existing and new dams sited, designed, and operated, as appropriate, so that environmental flows and connectivity are protected; the application of regional approaches to hydropower and irrigation planning, and environmental flows assessments, so as to protect priority inland water ecosystems and species within the wider river basin; the preservation of remaining free-flowing rivers; the number of key river basins where environmental flows have been restored or protected; and the number of countries with reformed water policies that account for the need to safeguard environmental flows;

**Milestones:**
- **By 2012,** all Parties have taken steps to consider the ratification of relevant international agreements, at the global, regional and basin levels, dealing with the sustainable management, protection and use of transboundary inland waters;

By 2014, key global and regional water management institutions adopt and implement standards and policies that protect environmental flows;

By 2014, all Parties have taken tangible measures to re-assess and allocate water in light of climate, development and economic changes taking into account water for basic human needs and environmental flows;

By 2016, Parties have taken tangible measures to significantly reduce the impacts of water resource extraction on inland waters biodiversity;

By 2016, environmental water needs are recognised and implemented at the heart of water resource management and water rights policies, at all relevant levels, within the framework of adaptive management capable of responding to climate and socio-economic change;

By 2018, connectivity and environmental flows have been restored and protected in a significant number of basins, and are adequate to sustain freshwater ecosystems and human development.

Target 6. By 2020, overfishing is ended and destructive fishing practices are eliminated both in marine and freshwater ecosystems.

Technical rationale: Overexploitation is the main pressure on marine fisheries globally leading to loss of biodiversity and ecosystem structure. Global marine capture fisheries are yielding lower harvest and contributing less to the global economy than they could do under stronger policies to manage fish stocks. The World Bank estimates that this situation represents a lost profitability of some $50 billion pa. and puts at risk some 27 million jobs directly and the well-being of more than one billion people. A reduction in fishing intensity is needed to reduce pressure on ecosystems. Models suggest that, for some fisheries, on average, modest (~10%) reductions in catch could halve pressure on marine ecosystems while also contributing to the long term profitability and sustainability of fishing. Where fisheries are already managed sustainably, no further reductions in fishing pressure may be needed, while in some areas greater reductions might be warranted. Such a reduction in fishing pressure would substantially diminish the likelihood of fishery collapses. Inland fisheries, on the other hand, provide significant aquatic products. In many developing countries, overfishing is a major threat to freshwater biodiversity with the potential for considerably depleting the genetic diversity of fish.

Implementation: The specific target should be regarded as a step towards ensuring that all fisheries are sustainable while building upon existing initiatives such as the Code of Conduct for Responsible Fishing. Actions taken to reach this target would also contribute to fisheries targets set during the 2002 World Summit on Sustainable Development and build upon the diverse approaches and tools agreed upon there: the Ecosystem Approach; the elimination of destructive fishing practices; the establishment of representative networks of marine protected areas; and time/area closures for the protection of nursery grounds. In situations where fisheries are shared by several countries in a region, mechanisms may need to be developed to allow for a coordinated approach to resource management. The programmes of work on marine and coastal biodiversity are the most relevant to this target, along with the sustainable use cross-cutting issue.

18. Targets adopted in the Johannesburg Plan of Implementation include: the application by 2010 of the ecosystem approach; to establish representative networks of marine protected areas by 2012; to put into effect the international plans of action of the FAO, in particular the International Plan of Action for the Management of Fishing Capacity by 2005 and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing by 2004.
**Indicators and baseline information:** Indicators to measure progress towards this target include the Marine Trophic Index, the proportion of products derived from sustainable sources and trends in abundance and distribution of selected species. Other possible indicators include the proportion of collapsed species *in marine and inland waters*, fisheries catch, catch per unit effort, and the proportion of stocks overexploited. Baseline information for several of these indicators is available from the work conducted by the Food and Agriculture Organization of the United Nations. 14

**Milestones:** Possible milestones for this target include:

- **By 2012,** Parties should have taken steps to address the management of fishing capacity for international fisheries requiring urgent attention, with priority being given to those harvesting transboundary, straddling, highly migratory and high seas stocks which are significantly overfished;
- **By 2012,** all Parties that have not yet done so have taken steps to consider ratification of the United Nations Convention on the Law of the Sea and its 1995 Agreement relating to the Conservation and Management of Straddling Fish Stocks and Highlly Migratory Fish Stocks;
- **By 2012,** Parties should have eliminated destructive fishing practices *in marine and inland waters systems*;
- **By 2012,** Parties should develop or update national assessments of fishing capacity and national plans for the management of fishing capacity, in line with the Ecosystem Approach, in order to halve the pressure on marine ecosystems by 2015 and end overfishing in both domestic and foreign waters by 2020;
- **By 2014,** Parties should have restored stocks to levels that can produce maximum sustainable yield; 15
- **By 2014,** all Parties that have not yet done so have ratified the United Nations Convention on the Law of the Sea and its 1995 Agreement relating to the Conservation and Management of Straddling Fish Stocks and Highlly Migratory Fish Stocks;
- **By 2014,** Regional Fisheries Management Organizations (RFMOs) have adopted effective bycatch reduction management strategies;
- **By 2016,** a review has been done on the effectiveness of RFMOs bycatch reduction management strategies and communicated to Parties;
- **By 2016,** pressure on marine and inland waters ecosystems from fishing is halved, globally;
- **By 2016,** favourable policies have been enacted to eliminate destructive fishing, including fishing bans for certain inland and marine areas at certain period of the year (e.g., during the spawning season).

**Target 7. By 2020,** all areas under agriculture, aquaculture, forestry are managed according to internationally acceptable standards based on agreed sustainability criteria.

**Technical rationale:** The ecologically unsustainable consumption of water, the use and run-off of pesticides and excess fertilizers, and the conversion of natural habitats to uniform monocultures, amongst other factors, have major negative impacts on biodiversity inside and outside of agricultural areas, as well as on forest, inland water and coastal ecosystems. **Furthermore, the rapid development of aquaculture has had negative impacts on inland waters, particularly due to overuse of fish feed and introduction of new species.** The increasing demand for food, fibre and fuel will lead to increasing losses of biodiversity and ecosystem services if issues related to sustainable management are not addressed 16,17. On the other hand, sustainable management not only contributes to biodiversity conservation but can also deliver benefits to the production systems in terms of services such as soil fertility, erosion control, enhanced pollination and reduced pest outbreaks.

**Implementation:** Criteria for sustainable forest management have been adopted by the forest sector and there are many efforts by governments, NGOs and the private sector to promote good agricultural, aquaculture and forestry practices and to apply law and governance mechanisms. While, as yet, there are no universally agreed sustainability criteria, given the diversity of production systems and environmental conditions, each

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14 Food and Agriculture Organization (2009). The State of World Fisheries and Aquaculture 2008. FAO Fisheries and Aquaculture Department, Rome Italy.
20. 15 Johannesburg Plan of Implementation paragraphs. 30-32
sector and many initiatives have developed their own criteria which could be used pending the development of a more common approach. In addition, customary use of biodiversity by indigenous and local communities can often offer lessons of wider applicability. Similarly, the use of certification and labelling systems or standards could be promoted as part of this target. The Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity developed under the Convention on Biological Diversity could serve as a framework for developing further sustainability criteria. The programmes of work on agricultural, forest, inland water, marine and coastal, dry and sub-humid lands biodiversity, and the Convention’s work on sustainable use, as well as the International Initiatives on Soil Biodiversity and on Pollinators are particularly relevant to this target.

Indicators and baseline information: Relevant indicators for this target include the area of forest, agricultural and aquaculture ecosystems under sustainable management, the proportion of products derived from sustainable sources, and trends in genetic diversity of domesticated animals, cultivated plants and fish species of major socioeconomic importance. Other possible indicators could include the ecological footprint and related concepts, the extent of the use of good agricultural practices and the proportion of products derived from sustainable sources. Existing sustainability certification schemes could provide baseline information for some ecosystems and sectors.

Milestones: Possible milestones for this target include:

- By 2012, all Parties have identified or developed and promoted sustainability criteria and/or good practices for agriculture, aquaculture and forestry;
- By 2014, CBD adopts internationally recognized sustainability criteria for major agricultural crops;
- By 2016, the area of agriculture, aquaculture and forestry managed according to internationally recognized sustainability criteria has doubled from 2010 levels.

Target 8. By 2020, pollution from excess nutrients and other sources has been brought below critical ecosystem loads.

Abridged; continued.

Target 9. By 2020, pathways for the introduction and establishment of invasive alien species have been controlled, and established invasive alien species are identified, prioritised and controlled or eradicated.

Technical rationale: Invasive alien species are those alien species which threaten ecosystems, habitats or species (Article 8(h)). They are a major threat to biodiversity and ecosystem services, as identified by most Parties in their fourth national reports. In some ecosystems, such as many islands, invasive alien species are the leading cause of biodiversity loss. In addition, invasive alien species can pose a threat to food security, human health and economic development. Increasing trade and travel means the threat is likely to increase unless additional action is taken. An emerging concern that often creates new pathways for the introduction of invasive alien species is the practice of inter-basin transfers to address local water scarcity issues.

Implementation: Pathways for the introduction of invasive alien species can be addressed through improved border and port controls and quarantine, including through better coordination with national and regional bodies responsible for plant and animal health. Work initiated by the International Plant Protection Convention, the International Organization for Animal Health (OIE), the International Maritime Organization (IMO) Water Ballast Convention and the World Trade Organization’s Committee on the Agreement for the Application of Sanitary and Phytosanitary Measures and its Standards and Trade Development Facility, could also be built upon when taking actions to meet this target. The Global Invasive Species Programme has developed several tools. Of the Convention’s programmes of work, that dealing with invasive alien species is the most relevant to this target however, given the particularly acute impact of invasive alien species on island ecosystems, the programme of work on island biodiversity is also relevant.

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Indicators and baseline information: Process indicators for this target could include the number of countries with national invasive species policies, strategies and action plans and the number of countries which have ratified international agreements and standards related to the prevention and control of invasive alien species. One outcome-oriented indicator is trends in invasive alien species while other possible indicators could include the status of alien species invasion, and the Red List Index for impacts of invasive alien species. While well-developed and, globally-applicable indicators are lacking, some basic methodologies do exist which can serve as a starting point for further monitoring or provide baseline information. The work undertaken by the Global Invasive Species Programme, as well as by IUCN’s Invasive Species Specialist Group, could be useful starting points in this regard. Further, many countries do have data on invasions and pest outbreaks and therefore national-level targets might be developed.

Milestones: Options for milestones for this target include:

- By 2014, potential pathways for invasive alien species are identified using a risk assessment framework, lists of the most harmful invasive species are developed, action plans are developed and relevant legislation is reviewed;
- By 2016, actions have been taken to address the most important introduction pathways and the most serious invasions.

Target 10. By 2020, manage the multiple pressures on coral reefs and other vulnerable species and ecosystems impacted by climate change and ocean acidification so as to maintain their integrity and functioning.

Abridged; continued.

Strategic Goal C. Safeguard ecosystems, species and genetic diversity
Abridged; continued.

Target 11. By 2020, at least 15% of land, freshwater and seas areas, including the areas of particular importance for biodiversity and areas beyond national jurisdiction, have been protected through representative networks of effectively managed protected areas and other means, and integrated into the wider land- and seascape.

Technical rationale: Well managed protected areas are a proven method for safeguarding both habitats and populations of species and for delivering important ecosystem services. Currently, some 13% of terrestrial areas and 5% of coastal areas are protected, while very little (approximately 1%) of the open oceans is protected. The current target of 10% protection for each ecological region has been achieved in approximately 55% of all terrestrial eco-regions, and it is proposed that this target be retained for the remaining eco-regions. Reaching the proposed target implies a modest increase in terrestrial protected areas globally, especially for inland waters, with an increased focus on the incorporation of inland waters considerations into the management of existing protected areas, as well as on representativity and management effectiveness, together with major efforts to expand marine protected areas. Particular emphasis is needed to protect critical ecosystems such as tropical coral reefs, sea-grass beds, deepwater cold coral reefs, seamounts, tropical forests, peat lands, freshwater ecosystems and coastal wetlands. Further particular emphasis needs to be put on those two thirds of the oceans which lie in areas beyond national jurisdiction, where in most regions, governance gaps prevent the protection of valuable ecosystems and biodiversity often still unknown. Finally, as a reference for Parties, the Ramsar Strategic Plan 2009-2015 calls for at least 2,500 Ramsar sites to be designated worldwide, covering at least 250 million hectares.

Implementation: Protected areas should be integrated into the wider land- and seascape, and relevant sectors, bearing mind the importance of complementarity and spatial configuration. In doing so, the Ecosystem A-
proach should be applied taking into account ecological connectivity and the concepts of ecological networks and environmental flows, including connectivity for migratory species (through, for example, “fly-ways” for migratory birds). Protected areas should also be established and managed in close collaboration with indigenous and local communities, with these communities equitably sharing in the benefits arising from protected areas. Work towards this target could also be linked to the more specific targets under the programme of work on protected areas and the Global Strategy for Plant Conservation. The World Parks Congress is a further resource which can be drawn upon when taking actions towards this target. Protected areas could be complemented by limits to processes and activities harmful to biodiversity that are under the jurisdiction or control of Parties, including in areas beyond national jurisdiction.

Indicator and baseline information: Relevant indicators to measure progress towards this target are the coverage of protected areas and the connectivity/fragmentation of ecosystems. Other possible indicators include the trends in extent of selected biomes, ecosystems, and habitats, the Marine Trophic Index, the overlay of protected areas with ecoregions, the management effectiveness of protected areas, trends in the extent of selected biomes, ecosystems and habitats, water quality in aquatic ecosystems, and connectivity/fragmentation of ecosystems, and the number of key river basins with secured environmental flows and connectivity/fragmentation of ecosystems. Specifically with respect to addressing the under-representation of inland waters in the global network of protected areas, some possible indicators include, e.g., the number of new appropriately managed and well-funded inland waters protected areas and networks; the length of rivers covered by protected areas; the number and size of basins and sub-basins entirely encapsulated within protected areas; the number of existing terrestrial and marine protected areas whose boundaries have been modified to safeguard inland water ecosystems and to prevent detrimental effects on other ecosystems linked to the mismanagement of inland waters; and the number of protected areas with management systems that incorporate inland waters considerations and biodiversity objectives for freshwater species and systems. Strong baseline information, from sources such as the World Database of Protected Areas and IUCN’s World Commission on Protected Areas, already exists for many of these indicators.

Milestones: Milestones for this target included in the Programme of Work on Protected Areas are:

- By 2012, in the marine area, a global network of comprehensive, representative and effectively managed national and regional protected area system is established;
- By 2012, all protected areas have effective management in existence, using participatory and science-based site planning processes that incorporate clear biodiversity objectives for freshwater, terrestrial and marine species and systems, as appropriate, as well as targets, management strategies and monitoring programmes, drawing upon existing methodologies and a long-term management plan with active stakeholder involvement;
- By 2014, national and regional assessments have identified areas that require protection or restoration to preserve and enhance ecosystem services such as carbon storage and adaptation to climate change and the results are circulated to relevant ministries;
- By 2014, all protected areas and protected area systems are integrated into the wider land- and seascape, and relevant sectors, by applying the Ecosystem Approach and taking into account ecological connectivity and the concept, where appropriate, of ecological networks;
- By 2014, the under-representation of key ecosystems, such as grasslands and inland waters, in national and regional protected area systems has been addressed;
- By 2014, at least 275 million ha of wetlands of particular importance for biodiversity are protected;
- By 2016, more than 50% of areas that provide key ecosystem services have been protected or are under sustainable management and restoration activities has been initiated;
- By 2018, at least 300 million ha of wetlands of particular importance for biodiversity are protected;
- By 2018, all areas that provide key ecosystem services have been protected or are under sustainable management.

Target 12. The extinction of known threatened species has been prevented.
Abridged; continued.
Target 13. By 2020, the status of crop and livestock genetic diversity in agricultural ecosystems and of wild relatives has improved.

Abridged; continued.

Strategic Goal D. Enhance the benefits from biodiversity and ecosystems.

Abridged; continued.

Target 14. By 2020, ecosystems that provide essential services, and contribute to local livelihoods, are identified and safeguarded or are being restored, and adequate and equitable access to essential ecosystem services is guaranteed for all, especially indigenous and local communities and the poor and vulnerable.

Abridged; continued.

Milestones: Options for milestones for this target include:

- By 2012, information on the services provided by ecosystems and the benefits received by local and indigenous communities is compiled and reviewed;
- By 2012, all Parties have taken tangible measures towards significantly reducing gender disparity associated with inadequate access to natural resources and to the services they provide;
- By 2014, national strategies or polices for enhanced provision of and access to essential ecosystem services are developed as a contribution to poverty reduction and sustainable development strategies.

Target 14 bis By 2020, the contribution of ecosystem restoration and management as a means to regulate water flows and quality is fully taken into account in climate change adaptation and disaster risk reduction strategies, policies and plans. (NEW TARGET)

Technical rationale: Ecosystems including forests, peatlands, wetlands, aquifers and floodplains play a key role in mitigating, adapting and reducing risks of climate change induced disasters such as floods and droughts. Natural ecosystems can store excessive water due to extreme rainfall or glacier melt and are able to provide an ongoing supply in times of less rainfall and droughts which are likely to be more frequent in some areas due to higher temperatures.

The importance of fully functional ecosystems and/or ecosystem restoration and management is insufficiently taken into account in approaches to (national) climate adaptation planning processes. The potential for functional ecosystems to contribute to reducing vulnerability should be fully integrated into national adaptation plans.

Target 15 By 2020, the contribution of biodiversity to ecosystem resilience and to carbon storage and sequestration are enhanced, through conservation and restoration, including restoration of at least 15% of degraded lands and freshwater ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

Abridged; continued.

Technical rationale: The conservation, restoration and sustainable management of forests, soils (especially peatlands), freshwater and coastal wetlands and other ecosystems is a proven, cost-effective, safe and immediately-available means to sequester carbon dioxide and prevent the loss of other greenhouse gases. Deforestation, wetland drainage and other habitat change lead to the emission of carbon dioxide, methane and other greenhouse gases. For example, “more than 50% of specific types of wetlands in parts of North America, Europe, Australia, and New Zealand were converted during the 20th Century.” Furthermore, the world loses annually approximately 13 million hectares of forests, including 6 million hectares of primary forests and, in the process, biodiversity is reduced, greenhouse gases are released and the livelihoods of millions of people, including indigenous peoples and local communities, are threatened.

Milestones: Options for milestones for this target include:

- By 2014, information on the potential contribution of all ecosystems to carbon storage and sequestration is compiled and reviewed;
- By 2014, a national plan for ecosystem restoration is in place and being implemented by all Parties;
- By 2016, a national strategy for the enhancement of the contribution of biodiversity to ecosystem resilience and carbon storage has been prepared and adopted, taking into account provisions under the Ramsar Convention, the United Nations Framework Convention on Climate Change and its Kyoto Protocol, as well as the United Nations Convention to Combat Desertification and its 10-year strategic plan and framework to enhance the implementation of the Convention (2008–2018);

Strategic Goal E. Enhance implementation through planning, knowledge management and capacity development, and the fair and equitable sharing of the benefits arising from the use of genetic resources.

Target 16: By 2020, each Party has implemented an effective national biodiversity strategy and legislation, contributing to the achievement of the mission, goals and targets of the Strategic Plan.

Target 17. By 2020, access to genetic resources is enhanced, and substantial benefits are shared, consistent with the international regime on access and benefit sharing.

Target 18. By 2020, traditional knowledge, innovations and practices are protected and their contribution to the conservation and sustainable management of biodiversity is recognized and enhanced.

Target 19. By 2020, knowledge and technologies relating to biodiversity, its value and functioning, its status and trends, and the consequences of its loss, are improved and widely shared.

Target 20. By 2020, capacity (human resources and financing) for implementing the Convention has increased tenfold.
AGRICULTURAL BIODIVERSITY - BIOFUELS AND BIODIVERSITY: CONSIDERATION OF WAYS AND MEANS TO PROMOTE THE POSITIVE AND MINIMIZE THE NEGATIVE IMPACTS OF THE PRODUCTION AND USE OF BIOFUELS ON BIODIVERSITY

UNEP/CBD/SBSTTA/14/12
SBSTTA Fourteenth Meeting
Nairobi, Kenya, 10-21 May 2010
(Agenda Item 4.1.1)

WWF urges SBSTTA to recommend that COP 10:

- Ensures that development of further frameworks and toolkits build on existing credible initiatives aiming to develop sustainability principles and criteria for biofuel production and use.
- Promotes transparent, participatory land use planning and management to ensure that expansion of biofuel production does not threaten conservation targets, livelihoods and carbon stocks.
- Encourages biofuel consumer countries to provide technical and financial support to the producer countries for the implementation of sustainability frameworks through the relevant mechanisms.
- Consider the outcomes of the Roundtable on Sustainable Biofuels, a global multi-stakeholder process aiming to develop a set of sustainability principles implemented through practical measures.
- Ensures that national or international support schemes for biofuels consider the environmental and social performance of the different types of biofuels especially related to proposed incentives.

In addition, SBSTTA should adopt concrete targets that ensure:

- The recommendations formulated by the Conference of the Parties in the IX/2 decision, are followed by concrete actions aiming to maximize environmental and social benefits and minimize impacts.
- Proposed frameworks and toolkits should incorporate effective measures to protect areas harbouring high conservation values and significant carbon stocks.
- The financial resources required to implement such measures are allocated.
- Future work under the umbrella of the CBD on biofuels takes place with the effective involvement all relevant stakeholders.
Rationale:

There is growing recognition that biofuels will play an important role in the future energy mix. Drivers of the increase in biofuel consumption include the need to reduce GHG emissions in various sectors as well as energy security and the lack of alternatives in sectors dependent on liquid fuels.

More than 50 countries have adopted legally binding biofuel targets and the trend is expected to continue. While WWF welcomes the support for renewable energy, the organization would like to underline that based on growing scientific evidence environmental, economic and social benefits will largely depend on how and where biofuel feedstock production and use is taking place.

In WWF’s view a comprehensive framework is required, combining legally binding and voluntary instruments to ensure that biofuel use delivers the expected benefits. The business community has a very clear responsibility to ensure that development takes place using best management practices on site selection, production and use of biofuels. However governments have an equally important role in ensuring that broader scale sustainability concerns are effectively addressed. Biofuel production potentials differ widely across the globe. It is expected that certain regions will be net producers, while other regions with high energy demand will import significant quantities. WWF would like to highlight that producer and consumer regions have equal responsibility in ensuring that biofuels production does not lead to unwanted biodiversity and social impacts.

The biofuel sector is still in an early phase of development and there are good opportunities to guide the large scale deployment of this source of renewable energy. In this context WWF welcomed the recommendations formulated by the Conference of the Parties in the IX/2 decision, on biofuels and biodiversity. WWF would like to highlight that concrete action is needed to ensure development takes place in a responsible manner.

WWF would like to offer its technical expertise to all the interested parties for the implementation of above mentioned measures. For additional information please check our “Bioenergy in Africa – Time for a Shift?” paper and visit our website http://wwf.panda.org/what_we_do/footprint/climate_carbon_energy/energy_solutions/renewable_energy/bioenergy/

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AGRICULTURAL BIODIVERSITY - BIOFUELS AND BIODIVERSITY: CONSIDERATION OF WAYS AND MEANS TO PROMOTE THE POSITIVE AND MINIMIZE THE NEGATIVE IMPACTS OF THE PRODUCTION AND USE OF BIOFUELS ON BIODIVERSITY

Abridged

SUGGESTED RECOMMENDATIONS

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to recommend that the Conference of the Parties adopt a recommendation along the following lines:

The Conference of the Parties

1. Expresses its gratitude to the European Community for its financial contribution towards the regional workshops for Latin America and the Caribbean, and Asia and the Pacific, and to the Government of Germany for the regional workshop for Africa, on ways and means to promote the positive and minimize the negative impacts of biofuel production and use on biodiversity, to the Governments of Brazil, Thailand and Ghana for hosting these workshops and to the Government of Brazil for providing Spanish interpretation to facilitate active participation of the entire region;

2. Invites Parties, other Governments and relevant organizations and stakeholders to examine, and as appropriate, further develop and apply the conceptual frameworks for ways and means to minimize the negative and maximize the positive impact of biofuel production and use developed by the three regional workshops;

3. Requests the Executive Secretary, subject to financial resources, to develop, in collaboration with competent partner organizations and relevant processes such as the Roundtable on Sustainable Biofuels a toolkit including guidance on available standards and methodologies to identify indirect land-use impacts of biofuels to further assist Parties, the business sector and other relevant stakeholders in applying appropriate ways and means to promote biofuel production that is sustainable in relation to biodiversity.

4. Encourages Parties to develop and implement as part of their policy frameworks for the sustainable production and use of biofuels land-use planning policies that minimize negative impacts on biological diversity.

5. Invites relevant organizations and donor agencies to provide technical and financial support to developing countries, in particular least developed countries and small island developing States, and countries with economies in transition to develop policy frameworks for the sustainable production and use of biofuels land-use planning policies that minimize negative impacts on biological diversity.

6. Requests Parties, governments and other relevant organizations to ensure that supportive measures promote the positive and minimize the negative impacts of the production and use of biofuels on biodiversity.
WWF urges SBSTTA to recommend that COP 10:

In light of:
- Perverse incentive measures contributing to the loss of biodiversity and degradation of ecosystem services;
- Increased awareness of the linkages between biodiversity, ecosystem functions, the services they deliver and human development and poverty alleviation;
- Increased knowledge of how biodiversity and ecosystem services can be evaluated; and
- Growing number of efforts to design incentives measures to mitigate biodiversity loss as well as climate change at international, national, and sub-national levels

• Recognises that the programme of work on incentive measures is crucial for achieving the goals and targets proposed in the new strategic plan, and that timely implementation is now necessary.

• Urges Parties and other governments to increase their efforts at implementation, by actively identifying and removing or mitigating existing perverse incentives, and to prevent inadvertent effects on biodiversity in the design of new incentive measures.

• Urges Parties and other governments to increase their efforts at streamlining biodiversity into sector policies and plans, using, as appropriate, tools for valuing biodiversity and ecosystem services.

• Encourages Parties and other governments to design and implement positive incentive measures for the conservation and sustainable use of biodiversity with the support of adequate valuation schemes for biodiversity.

• Requests the Executive Secretary to convene [regional] workshops for the exchange of experience and know-how among national practitioners on the removal and mitigation of perverse incentive measures other than subsidies.

Rationale: Removing perverse incentive measures is not only technically complicated, but often also politically risky. Having access to wider international experience may help public officers navigating difficult policy processes.

In addition, SBSTTA should take into account that:

• Harmful subsidies constitute only a sub-set of potentially perverse incentive measures.

• All values of biodiversity and ecosystem services are not quantifiable, but should nevertheless be considered in the design of incentive measures.

• Payment for Ecosystem Services (PES) schemes should be aligned to the Polluter Pays Principle (PPP). Payment schemes should also be based on the idea of using public money for public goods.
The Subsidiary Body on Scientific, Technical, and Technological Advice may wish to recommend that the Conference of the Parties at its tenth meeting adopt a decision along the following lines:

The Conference of the Parties

1. Welcomes the work of the international workshop on the removal and mitigation of perverse, and the promotion of positive incentives, held in Paris, from 6 to 8 October 2009; and expresses its appreciation to the Government of Spain for providing financial support in convening the workshop, to the United National Environment Programme (UNEP) for hosting the workshop, and to IUCN – the World Conservation Union and UNEP for providing support to the write-up of the good-practice cases;

2. Takes note of the information, including lessons learned, and the compilation of good-practice cases from different regions on the removal or mitigation of perverse incentives, and the promotion of positive incentive measures, identified by the international expert workshop, as contained in the note by the Executive Secretary on the subject submitted to SBSTTA (UNEP/CBD/SBSTTA/14/17);

2bis Invites Parties and other Governments, relevant organizations, initiatives as well as business companies continue to share with the Executive Secretary examples of good practices for, and lessons learned from, concrete and practical experiences in incentive measures for the conservation and sustainable use of biodiversity;

3. Requests the Executive Secretary to disseminate the lessons learned and good-practice cases through the clearing-house mechanism of the Convention and other means;

4. Invites Parties and other Governments, as well as relevant international organizations and initiatives, to take the lessons learned and the compilation of good-practice cases into consideration as voluntary guidance in their work on the identification and removal or mitigation of perverse incentives, and the promotion of positive incentive measures for the conservation and sustainable use of biodiversity, while emphasizing that any collection of good-practice cases is, by necessity, not comprehensive, and that the absence of a particular case from such a collection does not imply that such a case could not also be considered good practice;
5. **Recognizing** that perverse incentives are harmful for biodiversity while frequently being not cost-efficient and/or not effective against social objectives, **urges** Parties and other Governments to prioritize and significantly increase their efforts in actively identifying and removing or mitigating existing perverse incentives, and to take into account, in the design of new incentive measures, the risk of generating perverse effects for biodiversity;

6. **Invites** Parties and other Governments to promote the design and implementation of positive incentive measures for the conservation and sustainable use of biodiversity;

7. **Recognizing** the importance of assessing the economic value of biodiversity for the enhanced calibration of positive incentive measures, **invites** Parties and other Governments to take measures and establish, or enhance, mechanisms with a view to fully account for the value of biodiversity and ecosystem services in decision-making, including by revising and updating national biodiversity strategies and action plans to further engage different sectors of government and the private sector, building on the work of the initiative on The Economics of Ecosystems and Biodiversity (TEEB), under the aegis of the United Nations Environment Programme (UNEP), the regional initiative of the United Nations Development Programme (UNDP) on the importance of biodiversity and ecosystems for sustained growth and equity in Latin America and the Caribbean, and other relevant initiatives;

7 bis **Further requests** the Executive Secretary to provide analysis of existing tools for economic valuation of ecosystem services and payments for ecosystem services programmes including *inter alia* Artificial Intelligence for Ecosystem Services (ARIES), Ecosystem Services Review (ESR), Integrated Valuation of Ecosystem Services and Tradeoffs (InVEST), Multi-scale Integrated Models of Ecosystem Services (MIMES), Natural Value Initiative (NVI) with the goal to identify those to be recommended for practical use by Parties for achieving various tasks under three goals of the CBD.

(Rationale: This point may be also addressed to SBSTTA as the technical body or separate request for the special workshop could be required for this topic with the results to be presented to SBSTTA-15)

8. **Welcomes** the work of relevant international organizations, such as the Food and Agriculture Organization of the United Nations (FAO), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and its initiative on the Economics of Ecosystems and Biodiversity (TEEB), and the Organisation for Economic Co-operation and Development (OECD), IUCN – The World Conservation Union, as well as other international organizations and initiatives, to support the efforts at global, regional and national levels in identifying and removing or mitigating perverse incentives, in promoting positive incentives for the conservation and sustainable use of biodiversity, and in assessing the value of biodiversity and associated ecosystem services, and **invites** them to continue and intensify this work;

9. **Requests** the Executive Secretary to continue and further deepen his cooperation with relevant organizations and initiatives, with a view to catalysing, supporting, and facilitating the work spelled out in paragraphs 1-8 above and to ensure its effective coordination with the programme of work on incentive measures as well as the other thematic and cross-cutting programmes of work under the Convention;

10. **Invites** Parties, other Governments, and relevant international organizations and initiatives to report to the Executive Secretary progress made, difficulties encountered, and lessons learned, in implementing the work spelled out in the paragraphs above;

11. **Requests** the Executive Secretary to disseminate, through the clearing-house mechanism of the Convention, the information submitted pursuant to the invitation expressed in the previous paragraph, as well as to synthesize and analyse the information submitted and to prepare a progress report for consideration of the Conference of the Parties at its eleventh meeting.

**Abridged**

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