

*COP Decision VII/30. Strategic Plan: future evaluation of progress*

*The Conference of the Parties,*

***Review and evaluation***

*Recognizing* the need to: (i) facilitate assessment of progress towards the 2010 target, and communication of this assessment; (ii) promote coherence among the various programmes of work of the Convention; and (iii) provide a flexible framework within which national and regional targets may be set, and indicators identified, where so desired by Parties; as well as (iv) the need for a mechanism to review implementation of the Convention,

*Recalling* the statement in the Johannesburg Plan of Implementation that a more efficient and coherent implementation of the three objectives of the Convention and the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity will require the provision of new and additional financial and technical resources to developing countries,

1. *Decides* to develop a framework to enhance the evaluation of achievements and progress in the implementation of the Strategic Plan and, in particular, its mission, to achieve a significant reduction in the current rate of biodiversity loss at global, regional and national levels. The framework includes the following focal areas:

- (a) Reducing the rate of loss of the components of biodiversity, including: (i) biomes, habitats and ecosystems; (ii) species and populations; and (iii) genetic diversity;
- (b) Promoting sustainable use of biodiversity;
- (c) Addressing the major threats to biodiversity, including those arising from invasive alien species, climate change, pollution, and habitat change;
- (d) Maintaining ecosystem integrity, and the provision of goods and services provided by biodiversity in ecosystems, in support of human well-being;
- (e) Protecting traditional knowledge, innovations and practices;
- (f) Ensuring the fair and equitable sharing of benefits arising out of the use of genetic resources; and
- (g) Mobilizing financial and technical resources, especially for developing countries, in particular least developed countries and small island developing States among them, and countries with economies in transition, for implementing the Convention and the Strategic Plan;

Goals and sub-targets will be established, and indicators identified, for each of the focal areas. The goals and sub-targets will complement the existing goals of the Strategic Plan; <sup>1/</sup>

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<sup>1/</sup> These are:

Goal 1: The Convention is fulfilling its leadership role in international biodiversity issues.

Goal 2: Parties have improved financial, human, scientific, technical, and technological capacity to implement the Convention.

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2. For the purposes of assessing progress towards the target to achieve by 2010, a significant reduction in the current rate of biodiversity loss, *defines* biodiversity loss as the long-term or permanent qualitative or quantitative reduction in components of biodiversity and their potential to provide goods and services, to be measured at global, regional and national levels;

### *Indicators for assessing progress towards, and communicating the 2010 target at the global level*

3. In order to assess progress at the global level towards the 2010 target, and to communicate effectively trends in biodiversity related to the three objectives of the Convention, *agrees* that a limited number of trial indicators, for which data are available from existing sources, be developed and used in reporting, *inter alia*, through the Global Biodiversity Outlook. A balanced set of indicators should be identified or developed, according to the principles for choosing indicators identified by the Expert Group on Indicators and Monitoring (UNEP/CBD/SBSTTA/9/10) referred to in decision VII/8, on monitoring and indicators, to assess and communicate trends in the focal areas listed in paragraph 1. The global application of those indicators as well as the assessment of the progress towards the 2010 target should not be used to evaluate the level of implementation of the Convention in individual Parties or regions. As far as is feasible, the indicators should be identified or developed in such a way that:

(a) The same indicators may be used at the global, regional, national and local levels as tools for the implementation of the Convention and of national biodiversity strategies and action plans, where so desired by Parties;

(b) The indicators relate to one or more of the various Programmes of Work of the Convention;

(c) The indicators should take into consideration relevant Millennium Development Goals and indicators developed by other relevant international processes; and

(d) Existing data sets are used.

Full use should be made of the report of the London meeting (UNEP/CBD/SBSTTA/9/INF/9), and the notes by the Executive Secretary: on proposed biodiversity indicators relevant to the 2010 target (UNEP/CBD/SBSTTA/9/INF/26); on using existing processes as building blocks in reporting on the 2010 target (UNEP/CBD/SBSTTA/9/INF/27), on proposed global indicators (UNEP/CBD/COP/7/INF/33), and on monitoring and indicators (UNEP/CBD/SBSTTA/9/10);

4. *Agrees* that the indicators to be tested, identified or developed, are listed in annex I to the present decision. Indicators for immediate testing are listed in column B of annex I; indicators requiring further development are listed in column C of annex I;

5. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meetings to evaluate information on the changes in trends and status of biodiversity, particularly the current rate of biodiversity loss at the global level *inter alia* by reviewing a draft of the Second Global Biodiversity Outlook;

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Goal 3: National biodiversity strategies and action plans and the integration of biodiversity concerns into relevant sectors serve as an effective framework for the implementation of the objectives of the Convention.

Goal 4: There is a better understanding of the importance of biodiversity and of the Convention, and this has led to broader engagement across society in implementation.

6. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meetings, with the assistance of an ad hoc technical expert group, subject to the availability of the necessary voluntary contributions, to:

(a) Review the use of the indicators listed in annex I, column B, to the present decisions, *inter alia*, by reviewing a draft of the second Global Biodiversity Outlook;

(b) Identify or develop indicators listed in annex I, column C, to the present decision, ensuring that the full set of indicators is limited in number;

and report on the results to the Conference of the Parties at its eighth meeting;

7. *Requests* the Ad Hoc Open-ended Working Group on Access and Benefit-sharing and the Ad Hoc Open-ended Inter-Sessional Working Group on Article 8(j) and Related Provisions of the Convention on Biological Diversity, respectively, to explore the need and possible options for indicators for access to genetic resources and in particular for the fair and equitable sharing of benefits arising from the utilization of genetic resources, and associated innovations, knowledge and practices of indigenous and local communities, and for the protection of innovations, knowledge and practices of indigenous and local communities, and to report the results to the Conference of the Parties at its eighth meeting;

8. *Requests* the Executive Secretary, with the assistance of the World Conservation Monitoring Centre of the United Nations Environment Programme and other relevant international organizations, to

(a) Prepare the second Global Biodiversity Outlook for publication prior to the eighth meeting of the Conference of the Parties following peer review and review by the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meeting. The second Global Biodiversity Outlook should provide an assessment of progress towards the 2010 biodiversity target at the global level and communicate effectively trends in biodiversity related to the three objectives of the Convention, based on the focal areas listed in paragraph 1 of the present decision, and making use of the indicators listed in annex I below that are successfully developed and tested, information provided in the national reports, as well as information provided by international organizations;

(b) Prepare the necessary background documentation to assist the Subsidiary Body on Scientific, Technical and Technological Advice in the work outlined in paragraph 6 above;

9. *Invites* related conventions, assessment processes and relevant organizations to contribute reports and information that assist the monitoring of progress towards the 2010 targets;

10. *Invites* the World Conservation Monitoring Centre of the United Nations Environment Programme to support the Secretariat in facilitating the compilation of information necessary for reporting on achievement on the 2010 target;

***Goals and sub-targets to facilitate coherence among the programmes of work, and to provide a flexible framework for national targets***

11. *Decides* to establish, goals and sub-targets for each of the focal areas identified in paragraph 1 above, as set out in annex II to the present decision, in order to clarify the 2010 global biodiversity target adopted by decision VI/26, help assess progress towards the target, and promote coherence among the programmes of work of the Convention. Such goals would complement the existing goals of the Strategic Plan;

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12. *Requests* the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth or eleventh meetings to:

(a) Review, and, as necessary, further refine the goals and sub-targets, ensuring that they are linked to relevant Millennium Development Goals, initiatives of the World Summit on Sustainable Development, and the goals articulated by other relevant international processes;

(b) Identify indicators for the sub-targets, where possible, by association with the indicators provided in annex I to the present decision;

(c) Refine proposals for the integration of outcome-oriented targets proposals for the integration of outcome-oriented targets into the programmes of work of inland water biodiversity and of marine and coastal biodiversity, according to the framework in annex II and using the approach set out in annex III to the present decision, identifying more precise targets, including, as appropriate, quantitative elements and decides that outcome oriented targets are a key priority for the Subsidiary Body on Scientific, Technical and Technological Advice;

(d) When the programmes of work of the Convention, are reviewed according to the multi-year programme of work of the Conference of the Parties develop recommendations for the integration of outcome-oriented targets into each of the thematic programmes of work, according to the framework in annex II and using the approach set out in annex III to the present decision, identifying more precise targets, including, as appropriate, quantitative elements;

13. *Requests* the Executive Secretary:

(a) To prepare proposals for the integration of goals and targets into the programmes of work when these programmes are due for review according to the multi-year programme of work of the Conference of the Parties, taking into account that these goals and targets should be viewed as flexible framework within which national and/or regional targets may be developed, according to national priorities and capacities; and

(b) To make full use of the clearing-house mechanism in promoting technical cooperation to achieve the 2010 targets and facilitating information exchange on progress made;

### ***National implementation and national biodiversity strategies and action plans***

14. *Emphasizes* that the goals and targets referred to in paragraph 12 above should be viewed as a flexible framework within which national and/or regional targets may be developed, according to national priorities and capacities, and taking into account differences in diversity between countries;

15. *Invites* Parties and Governments to develop national and/or regional goals and targets, and, as appropriate, to incorporate them into relevant plans, programmes and initiatives, including national biodiversity strategies and action plans;

16. *Invites* Parties and Governments to use existing national indicators or to establish national indicators using the tools (UNEP/CBD/SBSTTA/9/10) referred to in decision VII/8, on monitoring and indicators, and according to their national needs and priorities, to assess progress towards their national/and or regional targets;

17. *Emphasizes* the need for capacity-building, especially in developing countries, in particular the least developed countries and the small island developing States among them, and countries

with economies in transition, in order to enable them to implement activities to achieve and monitor progress towards the goals and targets;

18. *Invites* Parties, Governments, international and funding organizations to provide adequate and timely support for the implementation of activities to achieve and monitor progress towards the goals and targets to developing country Parties, in particular the least developed countries and small island developing States among them, and Parties with economies in transition, as appropriate;

19. *Requests* the Executive Secretary to continue to explore ways to expand active support for developing country Parties in particular least developed countries and small island developing States among them, and Parties with economies in transition, where appropriate, in the development, revision and implementation of national biodiversity strategies and action plans. This process should include the commitment and resources of civil society in the development and implementation of national biodiversity strategies and action plans;

20. *Emphasizes* that national biodiversity strategies and action plans, as the primary mechanisms for the implementation of the Convention and the Strategic Plan, should be developed or reviewed with due regard to the relevant aspects of the four goals of the Strategic Plan, and the goals established by this decision, to enable greater contribution to the achievement of the 2010 target, consistent with national needs and priorities; and invites Parties to incorporate the goals, as appropriate, into the national biodiversity strategies and action plans when these are revised;

21. *Invites* developed country Parties continue to provide support to developing country Parties, in particular least developed countries and small island developing States among them, and Parties with economies in transition, as appropriate, to develop national-level indicators;

22. *Requests* the Executive Secretary to report to Conference of the Parties at its eighth meeting on the work required by decision V/20, paragraph 41, to allow further work to be undertaken to identify ways to support the review by Parties of national implementation;

### ***Review of implementation of the Convention***

23. *Recognizing the need* to establish a process, for evaluating, reporting and reviewing the Strategic Plan 2002-2010, *decides* to allocate adequate time in subsequent meetings of the Conference of the Parties and the Subsidiary Body on Scientific, Technical and Technological Advice, as well as ad hoc open-ended Working Groups, as appropriate, and *establishes* an Ad Hoc Open-ended Working Group on Review of Implementation of the Convention, subject to the availability of the necessary voluntary contributions, to consider progress in the implementation of the Convention and the Strategic Plan and achievements leading up to the 2010 target in line with the multi-year programme of work for the Conference of the Parties (decision VII/31), to review the impacts and effectiveness of existing processes under the Convention, such as meetings of the Conference of the Parties, the Subsidiary Body on Scientific, Technical and Technological Advice, national focal points and the Secretariat, as part of the overall process for improving the operations of the Convention and implementation of the Strategic Plan, and to consider ways and means of identifying and overcoming obstacles to the effective implementation of the Convention;

24. *Invites* Parties, other Governments and relevant organizations to submit views on these issues to the Executive Secretary, and requests the Executive Secretary to compile and make available these views for consideration by the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention;

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25. *Requests* the Executive Secretary to participate in processes arising from the twenty-second session of the Governing Council of the United Nations Environment Programme relating to consideration of the development and establishment of an intergovernmental strategic plan for implementation support, linked to the outcome of the international environmental governance process, to ensure that it will contribute to the implementation of the Convention;

26. *Decides* to address explicitly the need to provide focused support and improve existing support mechanisms where obstacles to implementation of national biodiversity strategies and action plans have been identified, particularly when considering the results of the evaluation of progress in achievement the goals and mission of the Strategic Plan as well as the goals and sub-targets established in this decision

27. *Recognizing* in the development of better methods to evaluate progress in the implementation of the Convention that consideration could be given to making full use of the experiences of other multilateral environmental agreements, such as the United Nations Framework Convention on Climate Change, *requests* the Executive Secretary to initiate action as a follow-up to paragraph 41 of decision V/20,.

## COP Decision VII/30 - Annex I

## PROVISIONAL INDICATORS FOR ASSESSING PROGRESS TOWARDS THE 2010 BIODIVERSITY TARGET

<i>A: Focal area</i>	<i>B: Indicator for immediate testing</i>	<i>C: Possible indicators for development by SBSTTA or Working Groups</i>
Status and trends of the components of biological diversity	Trends in extent of selected biomes, ecosystems and habitats	
	Trends in abundance and distribution of selected species	
		Change in status of threatened species (Red List indicator under development)
		Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance
	Coverage of protected areas	
Sustainable use		Area of forest, agricultural and aquaculture ecosystems under sustainable management
		Proportion of products derived from sustainable sources
Threats to biodiversity	Nitrogen deposition	
		Numbers and cost of alien invasions
Ecosystem integrity and ecosystem goods and services	Marine trophic index	Application to freshwater and possibly other ecosystems
		Connectivity/fragmentation of ecosystems
		Incidence of human-induced ecosystem failure
		Health and well-being of people living in biodiversity-based-resource dependent communities
	Water quality in aquatic ecosystems	
Biodiversity used in food and medicine		
Status of traditional knowledge, innovations and Practices	Status and trends of linguistic diversity and numbers of speakers of indigenous languages	Further indicators to be identified by WG-8j
Status of access and benefit-sharing		Indicator to be identified by WG-ABS
Status of resource transfers	Official development assistance provided in support of the Convention (OECD-DAC-Statistics Committee)	
		Indicator for technology transfer

## **Annex 1**

### *COP Decision VII/30 - Annex II*

#### **PROVISIONAL FRAMEWORK FOR GOALS AND TARGETS**

##### ***Protect the components of biodiversity***

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

*Target 1.1: At least 10% of each of the world's ecological regions effectively conserved.*

*Target 1.2: Areas of particular importance to biodiversity protected*

##### **Goal 2. Promote the conservation of species diversity**

*Target 2.1: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups*

*Target 2.2: Status of threatened species improved.*

##### **Goal 3. Promote the conservation of genetic diversity**

*Target 3.1: Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.*

##### ***Promote sustainable use***

##### **Goal 4. Promote sustainable use and consumption.**

*Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and Production areas managed consistent with the conservation of biodiversity.*

*Target 4.2 Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced*

*Target 4.3: No species of wild flora or fauna endangered by international trade*

##### ***Address threats to biodiversity***

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

*Target 5.1: Rate of loss and degradation of natural habitats decreased*

##### **Goal 6. Control threats from invasive alien species**

*Target 6.1: Pathways for major potential alien invasive species controlled.*

*Target 6. 2: Management plans in place for major alien species that threaten ecosystems, habitats or species.*

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

*Target 7.1: Maintain and enhance resilience of the components of biodiversity to adapt to climate change*

*Target 7.2: Reduce pollution and its impacts on biodiversity*

**Maintain goods and services from biodiversity to support human well-being**

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

*Target 8.1: Capacity of ecosystems to deliver goods and services maintained.*

*Target 8.2: biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained*

***Protect traditional knowledge, innovations and practices***

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

*Target 9s.1 Protect traditional knowledge, innovations and practices*

*Target 9.2: Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing*

***Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources***

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

*Target 10.1: All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements.*

*Target 10.2: Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources*

***Ensure provision of adequate resources***

**Goal 11: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention 2/**

*Target 11.1: New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.*

*Target 11.2: Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.*

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2/ This is the existing goal 2 of the Strategic Plan of the Convention on Biological Diversity.

**GENERAL APPROACH FOR THE INTEGRATION OF TARGETS INTO THE PROGRAMMES OF WORK OF THE CONVENTION**

The following steps would be carried out: for each thematic programme of work, and for other programmes of work, as appropriate:

(a) *Vision, mission and outcome-oriented targets:*

- (i) Identification of the overall vision (or long-term goal) to be ultimately achieved for the biome/issue covered by the programme of work, consistent with the Purpose of the Strategic Plan;
- (ii) Identification of a 2010 outcome-oriented global target specific to the scope of the programme of work and consistent with the mission of the Strategic Plan;
- (iii) Identification of a limited number of outcome-oriented targets related to the status and trends of biodiversity and its components, threats to biodiversity, and goods and services provided by biodiversity and ecosystems within the scope of the programme of work. Where appropriate, quantitative sub-targets should be established. The targets should be assigned to a number of goals according to the proposed headings in annex I above. Where possible the sub-targets of annex II above should be incorporated into the work programmes without modification to avoid unnecessary proliferation of targets. Where appropriate, identification of targets could draw upon the approach used to develop the Global Strategy for Plant Conservation. However, this process does not imply that all targets in annex I and the Global Strategy for Plant Conservation should be applied in every programme of work. Rather, targets may highlight broad strategic issues and/or particularly urgent priority issues, and each target should be associated with one or more indicators, which can draw upon existing data.

(b) *Relationship between the programme of work, its targets, and other processes:*

- (i) Examination of how the programme of work contributes to particular Millennium Development Goals and associated targets;
- (ii) A brief analysis of how the programme of work, and its targets, relates to the elements of the Plan of Implementation of the World Summit on Sustainable Development, categorizing such elements as follows:
  - Elements to be integrated into the programme of work (these elements should be fully within the scope of the programme of work), specifying which of these represent outcome-oriented biodiversity related targets;
  - Elements which complement the goals of the programme of work; and
  - Elements representing goals to which the programme of work contributes;

- (iii) A brief analysis of how the programme of work, and its targets, relates to the objectives, plans and targets of other multilateral environmental agreements and other relevant agreements, using the same categorization as in subparagraph (b) (ii) above;

(c) *Intermediate output- or process-oriented targets, milestones and deadlines for the activities of the programme of work:* Identification of a number of process- or output-oriented targets, milestones and deadlines, relating to the specific objectives, programme elements, and/or activities of the programme of work, according to the structure and needs of each programme of work.

***SBSTTA Recommendation X/5. Indicators for assessing progress towards, and communicating, the 2010 target at the global level***

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

*Recalling* the guidance provided in decision VII/30 on the identification, development and use of indicators and ways of communicating progress towards the 2010 biodiversity target,

*Emphasizing* the value of indicators to evaluate achievements and progress in the implementation of the three objectives of the Convention and the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity,

*Aware* of the need for strengthening national capacities, especially in developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition, to enable them to contribute to the indicators used for assessing progress towards the 2010 target and, where so desired by Parties, to use the same indicators at the regional, subregional, national and local levels as tools for the implementation of the Convention and of national biodiversity strategies and action plans,

1. *Welcomes* the report of the Ad Hoc Technical Expert Group on Indicators for Assessing Progress Towards the 2010 Biodiversity Target (UNEP/CBD/SBSTTA/10/INF/7);
2. *Expresses its appreciation to:*
  - (a) The Governments of the Netherlands, the United Kingdom of Great Britain and Northern Ireland, and the United States of America for their financial support of the meeting;
  - (b) Other Governments and organizations for the participation of their representatives;
  - (c) The Co-Chairs and all the members of the Group for their contributions;
3. *Confirms* the suitability of those indicators considered by the Conference of the Parties as ready for immediate testing and use;
4. *Considers* the following indicators ready for immediate testing, while recognizing that data availability and/or indicator methodology may require improvement prior to 2010:
  - (a) Change in status of threatened species;
  - (b) Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socio-economic importance;
  - (c) Area of forest, agricultural and aquaculture ecosystems under sustainable management;
  - (d) *Trends in invasive alien species;\*/*
  - (e) Connectivity/fragmentation of ecosystems;
5. In respect to the indicators mentioned in paragraph 4 above, given the broad nature of these indicators, *recommends* that various sources of data could be used, including, but not limited to, the following:

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*\*/* SBSTTA recommends a rewording of the title of this indicator from that contained in decision VII/30 (Numbers and cost of alien invasions).

## Annex 2

(a) The application of the Red List Index approach, developed by the Red List Consortium (IUCN, BirdLife International, Conservation International and NatureServe), to selected taxonomic and ecological/functional groups for which data exist, as an indicator of *Change in status of threatened species*;

(b) The use of suitable data on both *in situ* and *ex situ* conservation, including genetic diversity of tree species of socio-economic importance, as an indicator of *Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socio-economic importance*;

(c) The use of a range of parameters, including, where appropriate, but not limited to, the area under certified production systems, biological corridors, and areas under community management, as an indicator of *Area of forest, agricultural and aquaculture ecosystems under sustainable management*;

(d) Recognizing the limited global data on invasive alien species and the lack of a consistent approach towards calculating cost of alien invasions, to draw on the information available at the national level and data available through the Global Invasive Species Information Network (GISIN);

(e) The initial application of the indicator on *Connectivity/fragmentation of ecosystems* to forest and inland water ecosystems;

6. *Further recommends* the urgent development of the indicators identified by the Conference of the Parties and the Subsidiary Body on Scientific, Technical and Technological Advice at its tenth meeting as requiring further work;

7. *Reaffirms* the importance for the relevant open-ended working groups to develop global headline indicators on the *Status of traditional knowledge, innovations and practices* and on the *Status of access and benefit-sharing*;

8. *Invites* the organizations listed in annex I to this recommendation to contribute the data and analysis required for the delivery of the indicators, and the Parties and other Governments to facilitate this task, including by collecting and sharing information relevant to each indicator, *inter alia* by contributing such information to relevant databases;

9. *Invites* Parties, other Governments, and national, regional and international organizations that have data sets relevant to assessing progress towards the 2010 target to contribute pro-actively through the provision of relevant information to the realization of the second edition of the Global Biodiversity Outlook;

10. *Notes* that the indicators can be used to assess progress towards the goals and sub-targets adopted in decision VII/30 as set out in annex II to this recommendation;

11. *Calls for* urgent increased capacity-building efforts and financial support to developing countries, in particular the least developed and small island developing States among them, and countries with economies in transition, to the organizations listed in annex I to the present recommendation to facilitate their contributions to the use, testing and further development of the indicators relevant to the 2010 target.

12. *Requests* the Executive Secretary to:

(a) Develop an overall delivery plan for the indicators, data and analyses, taking into account the timetable for developing the Global Biodiversity Outlook, clarifying the arrangements and responsibilities for development and delivery of the indicators, setting out the roles of the Secretariat, the World Conservation Monitoring Centre of the United Nations Environment Programme (UNEP-WCMC), and other relevant international organizations, taking into account information provided through national reports, voluntary reports, indicators in use by Parties, other Governments and relevant organizations;

(b) Prepare a full characterization of the methods, technical limitations and the availability of data sources for the calculation of the indicators, and the validity of making global estimates;

(c) Report on progress made in the development of the indicators listed in annex I to this recommendation at the eleventh meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, and, if necessary, and subject to the availability of resources, convene another meeting of an ad hoc technical expert group to facilitate this task and provide additional scientific advice to the Subsidiary Body;

(d) Develop and submit, for consideration by the Conference of the Parties at its eighth meeting, an information strategy to ensure that the indicators, data and analyses are periodically available over the coming years to support policy intervention and communication with respect to the 2010 target;

(e) Explore options for reporting on the impact of climate change on biological diversity, using the framework of indicators relevant to the 2010 target and report thereon to the Subsidiary Body on Scientific, Technical and Technological Advice at its eleventh meeting;

(f) Explore options for the identification of process indicators for the four global goals for the Strategic Plan of the Convention, and report thereon to the Open-ended Working Group on the Review of Implementation of the Convention on Biological Diversity and to the Subsidiary Body on Scientific, Technical and Technological Advice at its eleventh meeting.

13. *Invites* the Open-ended Working Group on the Review of Implementation of the Convention on Biological Diversity to consider the linkages between the process for assessing progress towards the 2010 target, including the use of indicators, and national reporting, with a view to streamlining future national reporting.

## SUMMARY OF INDICATOR STATUS AND WORK THAT NEEDS TO BE CARRIED OUT

Headline Indicator <sup>†/</sup>	Status <sup>‡</sup> /	Potential Measures	Data available now?	Methodology available now?	Possible sources of data	Organizations to coordinate delivery of indicator
<b>Trends in extent of selected biomes, ecosystems, and habitats §/</b>	B	Forests, and forest types (e.g. mangroves)	Yes	Yes	FRA (FAO); EU-JRC, NASA Modland; Corine land cover (see appendix 2 to the AHTEG report)	UNEP-WCMC (with FAO, NASA-NGO Conservation Working Group and other relevant partners)
		Peatlands	Yes	Yes	Various national datasets and remote-sensing (see appendix 2 to the AHTEG report)	
		Coral reefs	Yes	Yes	GCRMN/Reefcheck	
		Croplands	Yes	Yes	National regional datasets and remote-sensing (see appendix 2 to the AHTEG report), MA	
		(Natural) grasslands	Yes	Yes	Remote-sensing (see appendix 2 to the AHTEG report), MA	
		Polar/ice	Yes	Yes	Remote-sensing( see appendix 2 to the AHTEG report), MA	
		Inland wetlands	No	No	Remote-sensing (see appendix 2 to the AHTEG report), MA	
		Tidal flats/estuaries	No	No	Remote-sensing (see appendix 2 to the AHTEG report), MA	
		Seagrasses	No	No	Seagrass Atlas, MA	
		Dry and sub-humid lands	No	No	LADA, Remote-sensing (see appendix 2), MA	
Urban	No	No	Remote-sensing (see appendix 2), MA			

<sup>†/</sup> **Bold = Indicator considered ready for immediate testing and use (column B in decision VII/30); *Bold italic = Indicator considered ready for immediate testing and use and therefore recommended for upgrading from column C to column B***; Regular = Indicator confirmed as requiring more work (to remain in column C)

<sup>‡/</sup> B = Indicator is considered ready for immediate testing and use; C = Indicator requires further work

<sup>§/</sup> Based on current and short-term future availability of trend information, the following major ecosystem types are recommended for immediate indicator implementation: (i) forests (including different forest types, notably mangroves), (ii) peatlands (probably for certain geographic areas only by 2010), (iii) coral reefs, (iv) croplands, (v) grasslands/savannahs, (vi) polar/ice. Efforts should also be made to apply the indicator to the following ecosystem types, for which suitable global datasets need to be gathered, to ensure coverage of all thematic areas recognized by the Convention: (i) inland wetlands, (ii) tidal flats/estuaries, (iii) seagrass beds, (iv) dry and sub-humid lands, and (v) urban.

Headline Indicator <sup>1/</sup>	Status <sup>2/</sup> /	Potential Measures	Data available now?	Methodology available now?	Possible sources of data	Organizations to coordinate delivery of indicator
<b>Trends in abundance and distribution of selected species</b>	B	Living Planet Index	Yes	Yes	WWF	UNEP-WCMC (WWF, Birdlife International and others, encouraged to review and refine methodology for calculation of index; These groups and IUCN encouraged to compare and share data with that used for the Red List Index.) Indices could be developed from data disaggregated (e.g.: migratory species, wetland species))
		Various species assemblage-trends indices	Yes	Yes	Birdlife International and partners, others	
<b>Coverage of protected areas</b>	B	Coverage according to World List of Protected areas.	Yes	Yes	WCMC/WCPA	UNEP-WCMC/IUCN-WCPA
		Ecological networks and corridors	Yes	Could be developed	MBC, PEEN etc.	
		Overlays with areas of key importance to biodiversity	Yes	Yes	WCMC, WCPA, BirdLife International	
		Inclusion on community and private protected areas	No	No		
		Management effectiveness	No	No		
<b>Change in status of threatened species</b>	B	Red List Index (IUCN-SSC)	Yes	Yes	Red List Consortium	Red List Consortium (Methodological refinements requested)

## Annex 2

Headline Indicator <sup>†</sup> / <sub>‡</sub>	Status <sup>‡</sup> / <sub>†</sub>	Potential Measures	Data available now?	Methodology available now?	Possible sources of data	Organizations to coordinate delivery of indicator
<i>Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance</i>	B	<i>Ex situ</i> crop collections	Yes	Could be developed	FAO (SOW, WIEWS); IPGRI (CGIAR-SINGER); Fishbase	FAO with IPGRI on behalf of CGIAR
		Livestock genetic resources	Yes	Could be developed	FAO (DADIS)	
		Fish genetic resources	Yes	Could be developed	FAO; Fishbase	
		Tree genetic resources	Some	Could be developed	REFORGEN database of FAO; OECD	
		Varieties on-farm	Some	Could be developed	FAO, IPGRI, OECD	
<i>Area of forest, agricultural and aquaculture ecosystems under sustainable management</i>	B	Existing data sets for measuring sustainability of agriculture, aquaculture and forestry, including FAO reports, Certification, and Ecological corridors and community-based management areas, and wildlife sustainable management schemes	Yes	Yes	FAO reports; Certification bodies (e.g., FSC, MSC, ISO, PEFC, CSA, SFI, LEI); MBC; Parties	UNEP-WCMC with FAO
Proportion of products derived from sustainable sources	C		No	No	Equilibrium/WWF/World Bank/TNC intend to propose some indicators	SCBD
Ecological footprint and related concepts	C <sup>**</sup> / <sub>†</sub>	Ecological footprint	Yes	Yes,	FAO, IAE, IPCC, UNEP-WCMC	Ecological Footprint network

<sup>\*\*</sup>/<sub>†</sub> New indicator recommended by SBSTTA at its tenth meeting.

Headline Indicator <sup>††</sup> / /	Status <sup>‡</sup> /	Potential Measures	Data available now?	Methodology available now?	Possible sources of data	Organizations to coordinate delivery of indicator
		Other measures of the area of land and sea needed to support production of goods and deliver services	Some	Some		SCBD and UNEP-WCMC
<b>Nitrogen deposition</b>	B		Yes	Yes	Available (INI) models for 2010 could be developed with additional effort	INI with UNEP-WCMC
<i>Trends in invasive alien species <sup>††</sup>/ /</i>	B	Numbers and cost of alien invasive species	Yes – some areas	Yes	Various, particularly national data sets	GISP
		Other measures to be identified and developed	Some	No		
<b>Marine Trophic Index</b>	B		Yes	Yes	Available (UBC)	UBC
<b>Water quality of freshwater ecosystems</b>	B	Indicator of biological oxygen demand (BOD), nitrates and sediments/ turbidity	Yes	Yes	UNEP-GEMS/Water Programme	UNEP-GEMS/Water Programme
Trophic integrity of other ecosystems	C		No	No		SCBD to assemble available information
<i>Connectivity / fragmentation of ecosystems</i>	B	Patch size distribution of terrestrial habitats (forests and possibly other habitat types)	Yes	Yes	NASA Consortium; CI; WWF-US based on remote sensing data	UNEP-WCMC (with FAO, CI, NASA-NGO Conservation Working Group and USDA-FS)
		Fragmentation of river systems	Yes	Yes	WRI	
Incidence of human-induced ecosystem failure	C	(see notes)	Some	No	SCBD to assemble available information for later consideration	SCBD/UNEP-WCMC
Health and well-being of communities who depend directly on local	C		No	No	To be identified	SCBD

<sup>††</sup> / SBSTTA recommends a rewording of the title of this indicator from that contained in decision VII/30 (Numbers and cost of alien invasions).

## Annex 2

Headline Indicator <sup>††</sup> / /	Status <sup>‡</sup> /	Potential Measures	Data available now?	Methodology available now?	Possible sources of data	Organizations to coordinate delivery of indicator
ecosystem goods and services <sup>††</sup> / /						
Biodiversity for food and medicine	C		Some	No	FAO, IPGRI, WHO and others	SCBD
<b>Status and trends of linguistic diversity and numbers of speakers of indigenous languages</b>	B		Yes	Under review	UNESCO World Atlas of Endangered Languages; Ethnologue: Languages of the World - Fifteenth Edition	UNESCO with UNEP-WCMC (Smithsonian Institution requested to explore possible application of Red List methodology)
Other indicator of the status of indigenous and traditional knowledge	C		No	No	To be considered by the Working Group on Article 8(j) (possibly including land-tenure of indigenous and local communities)	SCBD
Indicator of access and benefit-sharing	C		No	No	To be considered by the Working Group on Access and Benefit-sharing	SCBD
<b>Official development assistance provided in support of the Convention</b>	B	Official development assistance as marked	Some	Yes	Donor countries encouraged to mark data	OECD (OECD is working on this for a trial period)
Indicator of technology transfer	C		No	No	Countries invited to submit information. The Expert Group on Technology Transfer may wish to consider this matter.	SCBD

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<sup>††</sup>/  
/ The indicator from decision VII/30 (Health and well-being of people living in biodiversity-based-resource dependent communities) was reworded to clarify the focus on local dependency.

## SBSTTA Recommendation X/5 - Annex II

## INDICATORS RELEVANT TO THE 2010 GOALS AND SUB-TARGETS

<i>Goals and targets</i>	<i>Relevant headline indicators</i>
<b>Protect the components of biodiversity</b>	
<b><i>Goal 1. Promote the conservation of the biological diversity of ecosystems, habitats and biomes</i></b>	
Target 1.1: At least 10% of each of the world's ecological regions effectively conserved.	Most relevant indicator: <ul style="list-style-type: none"> <li>• Coverage of protected areas</li> </ul> Other relevant indicators: <ul style="list-style-type: none"> <li>• Trends in extent of selected biomes, ecosystems and habitats</li> <li>• Trends in abundance and distribution of selected species</li> </ul>
Target 1.2: Areas of particular importance to biodiversity protected	Relevant indicators: <ul style="list-style-type: none"> <li>• Trends in extent of selected biomes, ecosystems and habitats</li> <li>• Trends in abundance and distribution of selected species</li> <li>• Coverage of protected areas</li> </ul>
<b><i>Goal 2. Promote the conservation of species diversity</i></b>	
Target 2.1: Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups.	Most relevant indicator: <ul style="list-style-type: none"> <li>• Trends in abundance and distribution of selected species</li> </ul> Other relevant indicator: <ul style="list-style-type: none"> <li>• Change in status of threatened species</li> </ul>
Target 2.2: Status of threatened species improved.	Most relevant indicator: <ul style="list-style-type: none"> <li>• Change in status of threatened species</li> </ul> Other relevant indicators: <ul style="list-style-type: none"> <li>• Trends in abundance and distribution of selected species</li> <li>• Coverage of protected areas</li> </ul>

## Annex 2

<i>Goals and targets</i>	<i>Relevant headline indicators</i>
<b>Goal 3. Promote the conservation of genetic diversity</b>	
<p>Target 3.1: Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.</p>	<p>Most relevant indicator:</p> <ul style="list-style-type: none"> <li>• Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socio-economic importance</li> </ul> <p>Other relevant indicators:</p> <ul style="list-style-type: none"> <li>• <i>Biodiversity used in food and medicine (indicator under development)</i></li> <li>• Trends in abundance and distribution of selected species</li> </ul>
<b>Promote sustainable use</b>	
<b>Goal 4. Promote sustainable use and consumption.</b>	
<p>Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and Production areas managed consistent with the conservation of biodiversity.</p>	<p>Most relevant indicators:</p> <ul style="list-style-type: none"> <li>• Area of forest, agricultural and aquaculture ecosystems under sustainable management</li> <li>• <i>Proportion of products derived from sustainable sources (indicator under development)</i></li> </ul> <p>Other relevant indicators:</p> <ul style="list-style-type: none"> <li>• Trends in abundance and distribution of selected species</li> <li>• Marine trophic index</li> <li>• Nitrogen deposition</li> <li>• Water quality in aquatic ecosystems</li> </ul>
<p>Target 4.2 Unsustainable consumption, of biological resources, or that impacts upon biodiversity, reduced.</p>	<p>Relevant indicator:</p> <ul style="list-style-type: none"> <li>• <i>Ecological footprint and related concepts (indicator under development)</i></li> </ul>
<p>Target 4.3: No species of wild flora or fauna endangered by international trade.</p>	<p>Most relevant indicator:</p> <ul style="list-style-type: none"> <li>• Change in status of threatened species</li> </ul>
<b>Address threats to biodiversity</b>	
<b>Goal 5. Pressures from habitat loss, land use change and degradation, and unsustainable water use, reduced.</b>	
<p>Target 5.1: Rate of loss and degradation of natural habitats decreased.</p>	<p>Most relevant indicator:</p> <ul style="list-style-type: none"> <li>• Trends in extent of selected biomes, ecosystems and habitats</li> </ul> <p>Other relevant indicators:</p> <ul style="list-style-type: none"> <li>• Trends in abundance and distribution of selected species</li> <li>• Marine trophic index</li> </ul>

<i>Goals and targets</i>	<i>Relevant headline indicators</i>
<b><i>Goal 6. Control threats from invasive alien species</i></b>	
Target 6.1: Pathways for major potential alien invasive species controlled.	Relevant indicator: <ul style="list-style-type: none"> <li>• Trends in invasive alien species</li> </ul>
Target 6.2: Management plans in place for major alien species that threaten ecosystems, habitats or species.	Relevant indicator: <ul style="list-style-type: none"> <li>• Trends in invasive alien species</li> </ul>
<b><i>Goal 7. Address challenges to biodiversity from climate change, and pollution</i></b>	
Target 7.1: Maintain and enhance resilience of the components of biodiversity to adapt to climate change.	Relevant indicator: <ul style="list-style-type: none"> <li>• Connectivity/fragmentation of ecosystems</li> </ul>
Target 7.2: Reduce pollution and its impacts on biodiversity.	Nitrogen deposition Water quality in aquatic ecosystems
<b>Maintain goods and services from biodiversity to support human well-being</b>	
<b><i>Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods</i></b>	
Target 8.1: Capacity of ecosystems to deliver goods and services maintained.	Relevant indicators: <ul style="list-style-type: none"> <li>• <i>Biodiversity used in food and medicine (indicator under development)</i></li> <li>• Water quality in aquatic ecosystems</li> <li>• Marine trophic index</li> </ul>
Target 8.2: biological resources that support sustainable livelihoods, local food security and health care, especially of poor people maintained.	Most relevant indicator: <ul style="list-style-type: none"> <li>• Health and well-being of communities who depend directly on local ecosystem goods and services</li> </ul> Other relevant indicator: <ul style="list-style-type: none"> <li>• <i>Biodiversity used in food and medicine</i></li> </ul>
<b>Protect traditional knowledge, innovations and practices</b>	
<b><i>Goal 9 Maintain socio-cultural diversity of indigenous and local communities</i></b>	
Target 9.1 Protect traditional knowledge, innovations and practices.	Most relevant indicator: <ul style="list-style-type: none"> <li>• Status and trends of linguistic diversity and numbers of speakers of indigenous languages</li> </ul> Other relevant indicator: <ul style="list-style-type: none"> <li>• <i>Additional indicators to be developed</i></li> </ul>
Target 9.2: Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit-sharing.	<i>Indicator to be developed</i>

## Annex 2

<i>Goals and targets</i>	<i>Relevant headline indicators</i>
<b>Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources</b>	
<b><i>Goal 10. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources</i></b>	
Target 10.1: All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements.	<i>Indicator to be developed</i>
Target 10.2: Benefits arising from the commercial and other utilization of genetic resources shared with the countries providing such resources.	<i>Indicator to be developed</i>
<b>Ensure provision of adequate resources</b>	
<b><i>Goal 11: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention</i></b>	
Target 11.1: New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.	Most relevant indicator: <ul style="list-style-type: none"> <li>• Official development assistance provided in support of the Convention</li> </ul>
Target 11.2: Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph.	<i>Indicator to be developed</i>

*SBSTTA Recommendation X/5 - Annex III***LIST OF ACRONYMS AND ABBREVIATIONS**

AHTEG	Ad Hoc Technical Expert Group
BOD	Biochemical oxygen demand
CBD	Convention on Biological Diversity
CGIAR	Consultative Group on International Agricultural Research
CI	Conservation International
COP	Conference of the Parties
CSA	Canadian Standards Association
DADIS	Domestic Animal Diversity Information System of FAO
EGTT	Expert Group on Technology Transfer
EU-JRC	Joint Research Centre of the European Union
FAO	Food and Agriculture Organization of the United Nations
FRA	Forest Resources Assessment of FAO
FSC	Forest Stewardship Council
GBO	Global Biodiversity Outlook
GCRMN	Global Coral Reef Monitoring Network
GEMS	Global Environment Monitoring System of UNEP
GISIN	Global Invasive Species Information Network
GISP	Global Invasive Species Programme
ICSU	International Council
IGBP	International Geosphere-Biosphere Programme
INI	International Nitrogen Initiative: a Joint Programme of SCOPE and IGBP
IPGRI	International Plant Genetic Resources Institute
ISO	International Organization for Standardization
IUCN	The World Conservation Union
LADA	Land Degradation Assessment in Drylands, a project of FAO
LEI	Lembaga Ekolabeling Institute
LPI	Living Planet Index
MA	Millennium Ecosystem Assessment
MBC	Meso-American Biological Corridor
MSC	Marine Stewardship Council
NASA	National Aeronautics and Space Administration
NGO	non-governmental organization
ODA	Official development assistance
OECD	Organisation for Economic Co-operation and Development
PEEN	Pan-European Ecological Network
PEFC	Programme for the endorsement of forest certification schemes
PGRFA	Plant genetic resources for food and agriculture
REFORGEN	The FAO Global Information System on Forest Genetic Resources
RLI	Red List Index
SBSTTA	Subsidiary Body on Scientific Technical and Technological Advice
SCBD	Secretariat of the Convention on Biological Diversity
SCOPE	Scientific Committee on Problems of the Environment of ICSU
SFI	Sustainable Forestry Initiative
SINGER	System-wide Information Network for Genetic Resources (for CGIAR)
SOW1	First report on the State of the World's Plant Genetic Resources for Food and Agriculture. FAO, Rome 1997.

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SSC	Species Survival Commission of IUCN
TNC	The Nature Conservancy
UBC	University of British Columbia
UNEP	United Nations Environment Programme
UNEP-WCMC	World Conservation Monitoring Centre of UNEP
UNESCO	United Nations Educational, Scientific and Cultural Organization
USDA	United States Department of Agriculture
WCPA	World Commission on Protected Areas of IUCN
WHO	World Health Organization
WIEWS	World Information and Early Warning System on PGRFA
WRI	World Resources Institute
WWF	World Wide Fund for Nature
WWF-US	World Wildlife Fund United States

<b>Provisional Logframe Matrix</b>		<b>Project title: Tracking Progress Towards the 2010 Biodiversity Target: Delivering Indicators through a Partnership Approach</b>		<b>Project period: June 2005 - June 2010</b>			
		<b>Country: Global</b>		<b>Prepared on: 30 March 2005</b>			
Project strategy		Objectively quantifiable indicators		Sources of verification		Assumptions	
<b>Development objective</b>							
Significant reduction in the current rate of biodiversity loss by the year 2010 <i>(CBD COP Decision VI/26)</i>		A suite of indicators has been identified by the CBD for addressing progress in achieving this objective <i>(CBD COP Decision VII/30)</i>		The purpose of this project is to deliver this suite of indicators			
<b>Immediate objective</b>							
Track progress towards achieving the 2010 target at the global level using the suite of indicators identified by the CBD		<ul style="list-style-type: none"> <li>• Delivery of the full suite of indicators based on activities of a wide range of organizations and agencies</li> <li>• Clear understanding of users and user needs, and delivery of products that meet those needs</li> <li>• Wide acceptance of the value and validity of the indicators</li> <li>• Clear recognition of the relevance of 2010 indicators to other international conventions, programmes and targets</li> <li>• Programmes in place that facilitate the use of national-level data in derivation of global indicators</li> <li>• Increased application of 2010 indicators at the national level</li> </ul>		<ul style="list-style-type: none"> <li>• Products that contain the agreed indicators</li> <li>• Positive feedback on indicators and indicator-based products from identified user groups and peer review processes</li> <li>• Reporting at intergovernmental meetings and media coverage that uses the indicators</li> <li>• Demonstrated use of the 2010 indicators by other conventions and programmes, and in other sectors</li> <li>• Contribution to the 2010 indicators by other international convention and programmes</li> <li>• Increase in national datasets made available to organizations and agencies developing and delivering indicators</li> <li>• Increase in the number of national indicator programmes that are based on national implementation of the suite of global 2010 indicators</li> </ul>		<ul style="list-style-type: none"> <li>• The willingness of all stakeholders to work together to develop the full suite of indicators</li> <li>• The availability of necessary data to ensure full development of the databases underlying the indicators</li> <li>• The availability of necessary financial resources to ensure full development of the indicators and the underlying datasets</li> <li>• The relevance of the indicators themselves to the policy agenda they are intended to address</li> </ul>	
<b>Outputs</b>							
1. Working partnership delivering 2010 indicators		<ul style="list-style-type: none"> <li>• Collaboration between all organizations and agencies involved in development and delivery of the agreed indicators</li> </ul>		<ul style="list-style-type: none"> <li>• MoUs and agreed working methods implemented</li> </ul>		<ul style="list-style-type: none"> <li>• The willingness of all stakeholders to work together to develop the full suite of indicators</li> </ul>	
2. Clear understanding of user needs, and a defined strategy for meeting those needs.		<ul style="list-style-type: none"> <li>• Communications strategy for the 2010 indicators incorporating a full user-needs analysis</li> </ul>		<ul style="list-style-type: none"> <li>• Report incorporating the assessment and strategy</li> </ul>		<ul style="list-style-type: none"> <li>• That there is a wide range of potential users</li> </ul>	
3. Process for regular delivery of the full suite of 2010 indicators		<ul style="list-style-type: none"> <li>• Information strategy identifying the key processes, timelines, roles, responsibilities and deliverables</li> </ul>		<ul style="list-style-type: none"> <li>• Copy of agreed information strategy</li> </ul>		<ul style="list-style-type: none"> <li>• That agreement can be reached between the many organization on implementation of an agreed process</li> <li>• That sufficient resources are available for proper implementation of the individual indicators</li> </ul>	

<b>Provisional Logframe Matrix</b> <b>Project title: Tracking Progress Towards the 2010 Biodiversity Target: Delivering Indicators through a Partnership Approach</b> <b>Country: Global</b>		<b>Project period: June 2005-June 2010</b> <b>Prepared on: 30 March 2005</b>	
Project strategy	Objectively quantifiable indicators	Sources of verification	Assumptions
4. Range of appropriate products tracking progress towards 2010 delivered to a range of audiences	<ul style="list-style-type: none"> <li>• <i>[Specific products to be defined during PDF phase of the project]</i></li> <li>• 2010 indicators incorporated into the second edition of the <i>Global Biodiversity Outlook</i></li> <li>• Dissemination and use of products</li> <li>• Peer review of the suite of indicators and</li> <li>• Peer review of products delivered using the 2010 indicators</li> </ul>	<ul style="list-style-type: none"> <li>• Copy of products available for identified users</li> <li>• Analysis of the dissemination and use of products</li> <li>• Reports on peer reviews</li> </ul>	<ul style="list-style-type: none"> <li>• That all the identified indicators can be readily related to biodiversity loss and associated policy intervention</li> <li>• That products can be developed that meet users needs</li> </ul>
5. Full suite of 2010 indicators available for use in products developed by outside the context of this project..	<ul style="list-style-type: none"> <li>• 2010 indicators incorporated into other specific products (eg GEO, national or regional progress assessments)</li> <li>• Peer review of products [where carried out by those commissioning the products]</li> </ul>	<ul style="list-style-type: none"> <li>• Copy of products available for identified users</li> <li>• Report on peer review [where carried out by those commissioning the products]</li> <li>• Report on dissemination of products</li> </ul>	<ul style="list-style-type: none"> <li>• Desire on the part of others to incorporate the 2010 indicators into their products</li> <li>• Availability of resources for these products</li> </ul>
6. Regular use of the global 2010 indicators by other conventions, programmes and sectors as a result of the project.	<ul style="list-style-type: none"> <li>• Incorporation of 2010 indicators into the MDG indicator process <i>[pending consideration with the PDF phase]</i></li> <li>• Use of 2010 indicators by other convention secretariats, governing bodies and advisory bodies.</li> <li>• Contribution to 2010 indicators by other international conventions and programmes.</li> </ul>	<ul style="list-style-type: none"> <li>• Reports generated by UNDP and the UN Statistical Office</li> <li>• Official recognition of outputs incorporating the 2010 indicators within other convention COPs.</li> <li>• Official communication of indicators and/or data to the 2010 indicator process by other conventions and programmes.</li> </ul>	<ul style="list-style-type: none"> <li>• Willingness of other processes to use and contribute to the global 2010 indicators</li> <li>• Relevance of the global 2010 indicators to these processes</li> </ul>
7. Increased understanding of the relationship between global 2010 indicators and datasets at national and regional levels	<ul style="list-style-type: none"> <li>• <i>[To be defined during PDF phase based on inputs from workshops]</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>[To be defined during PDF phase based on inputs from workshops]</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>[To be identified during PDF phase]</i></li> </ul>

<b>DRAFT</b> <b>Logframe</b> <b>Matrix</b>	<b>Project title:</b> Building the Partnership to Deliver the Global 2010 Indicators	<b>Project period:</b> June 2005-June 2010
	<b>Country:</b> Global	<b>Prepared on:</b> 30 March 2005
<b>Activities</b>	<b>Specification of inputs</b>	<b>Specification of costs</b>
1.1 Develop a 2010 indicators partnership based on organizations and agencies delivering individual indicators 1.2 Coordinate and manage the 2010 indicators partnership and programme in delivering this project 1.3 Build capacity within the partnership by sharing lessons learnt in indicator development and use		
2.1 Identify potential users of the 2010 indicators and define their needs 2.2 Design and test products that meet these needs 2.3 Develop a communications and outreach strategy		
3.1 Review needs for further development and implementation of each individual indicator 3.2 Establish as necessary the basic standards for each indicator, including QA processes and documentation 3.3 Develop and implement short and long term plans for data collection, management and use 3.4 Develop an information management strategy for the global 2010 indicators		
4.1 Deliver products developed using the 2010 indicators <i>[to be defined during the PDF phase]</i> 4.2 Deliver 2010 indicators for use in products developed and delivered by others <i>[to be defined during the PDF phase]</i>		
5.1 Establish and implement a process for regular peer review of the full suite of indicators and the products delivered using them		
6.1 Identify and implement means to relate the 2010 indicators to the MDGs, targets and indicators 6.2 Identify and implement means to relate the 2010 indicators to other international conventions and programmes 6.3 Identify how to relate the indicators arising from other relevant conventions and programmes into the suite of 2010 indicators		
7.1 Facilitate action at the national and regional level that will ensure increased availability of data for the 2010 indicators 7.2 Facilitate action at the national and regional level that will increase development and use of scalable 2010 indicators <i>[To be defined during PDF phase]</i>		

**SUMMARY OF INDICATOR STATUS AND WORK THAT NEEDS TO BE CARRIED OUT<sup>i/</sup>**

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
Status and trends of the components of biodiversity	Trends in extent of selected biomes, ecosystems, and habitats <sup>vi/</sup>	Ready (COP Decision VII/30)	Forests, and forest types (e.g. mangroves)	AHTEG considered that this indicator could be developed immediately. There are two major approaches to data collection for global statistics. The FAO Global Forest Resources Assessment (FRA) periodically compiles data from national sources using standard methodologies. There is also extensive remote sensing imagery used at all levels (including in much of the information provided to FAO) which has been used to also derive regional and global forest data by, amongst others the EU Joint Research Centre and NASA Modland.	FAO NASA-NGO Consortium <sup>vii/</sup> EU Joint Research Centre Ramsar Convention Secretariat	UNEP-WCMC  (with FAO, NASA-NGO Conservation Working Group and other relevant partners)  (Note that initial discussion on MA datasets and their origin and use will be with the coordinator of the MA Conditions and Trends Working Group, who is based at UNEP-WCMC)  (Note that in helping coordinate delivery of this indicator, the NASA-NGO Conservation Working Group will be addressed through Conservation International/CABS as focal point)
			Coral reefs	AHTEG considered that this indicator could be developed immediately. The Global Coral Reef Monitoring Network (GCRMN) continuously updates information on the extent and health of coral reefs through online information systems (Reefbase). Remote sensing imagery is currently being used to significantly improve available coral maps, and to develop a new atlas or coral reefs. There are also regional-scale studies on live coral coverage which could also deliver valuable additional data.	GCRMN World Fish Centre NASA-NGO Consortium	
			Seagrasses	UNEP-WCMC has recently published a seagrass atlas which was a first attempt to compile information globally on the status and distribution of seagrasses. There is also an analysis in the Millennium Ecosystem Assessment based on available data. It is not clear to what extent trend data is currently available, and this needs further exploration.	UNEP-WCMC Ramsar Convention Secretariat	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Tidal flats/estuaries	This needs further consideration based on potential for use of remote-sensing approaches. Some analysis was done for the MA, and this information could be reviewed further. UBC has developed a database of estuaries including water flows, and is collaborating with TNC to enhance it.	Ramsar Convention Secretariat NASA-NGO Consortium	
			Peatlands	AHTEG considered that this indicator could be developed immediately. Various national and regional datasets exist, and this habitat is also amenable to remote-sensing approaches. Review of available datasets needs to be made to ensure that this can be developed as a meaningful indicator with appropriate time-series data.	Ramsar Convention Secretariat NASA-NGO Consortium	
			Inland wetlands	This needs further consideration based on potential for use of remote-sensing approaches. Some analysis was done for the MA, and this information could be reviewed further.	Ramsar Convention Secretariat NASA-NGO Consortium	
			Dry and sub-humid lands	This needs further consideration based on potential for use of remote-sensing approaches. Some analysis was done for the MA, and this information could be reviewed further. In addition, the FAO coordinated project on Land Degradation Assessment in Drylands (LADA) may also be delivering information on value.	FAO NASA-NGO Consortium	
			(Natural) grasslands	AHTEG considered that this indicator could be developed immediately. Several major studies have presented estimates of the extent of the world's grassland area, and changes over time. This is amenable to analysis using remote-sensing, and was also reviewed in the MA.	NASA-NGO Consortium	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Croplands	AHTEG considered that this indicator could be developed immediately. There are various national and regional datasets and analyses, but this indicators would be primarily based on remote-sensing data. Some work will need to be put into assessing exactly what this indicator means in the context of conservation and sustainable use of biodiversity and achievement of the 2010 target.	NASA-NGO Consortium	
			Polar/ice	AHTEG considered that this indicator could be developed immediately, as the extent of polar ice can be readily assessed using remote-sensing. There was also an analysis in the MA. Some work will need to be put into assessing exactly what this indicator means in the context of conservation and sustainable use of biodiversity and achievement of the 2010 target. Sea ice is important for some marine mammals and animals such as polar bears, so this may suggest a need to integrate different indicators.	NASA-NGO Consortium	
			Urban	Again data on extent of urban areas can be derived from remote-sensing, and analysis was made in the MA. Some work will need to be put into assessing exactly what this indicator means in the context of conservation and sustainable use of biodiversity and achievement of the 2010 target.	NASA-NGO Consortium	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
	<b>Trends in abundance and distribution of selected species</b>	Ready (COP Decision VII/30)	Living Planet Index (LPI)	The LPI is developed by WWF and UNEP-WCMC and published by WWF. The index is usable, but there is work already identified that needs to be done on both the index and the datasets and their management which will significantly improve the indicator. This needs to involve closer collaboration with other species data-rich programmes including those of IUCN, BirdLife International, Conservation International, NatureServe and Wetlands International. Might also be valuable to explore whether the Census of Marine Life can also contribute.	WWF UNEP-WCMC	UNEP-WCMC  (with WWF, Birdlife International and other relevant partners)
			Various species assemblage-trends indices	Various indicators of trends in populations of common species exist and can be used as examples to augment the LPI. Particularly appropriate is the species trend index for common birds already used within Europe as a headline indicator, and developed and promoted by Birdlife International and its partners.	BirdLife International	
	<b>Coverage of protected areas</b>	Ready (COP Decision VII/30)	Coverage according to World Database on Protected areas.	UNEP-WCMC and the IUCN World Commission on Protected areas have collaborated for years on development of the World Database on Protected Areas (WDPA) that can deliver basic statistics on protected area trends, and maps on which to base further analysis. There is need for substantial further work on this core database, and in this there is the active support of a WDPA Consortium – a number of international active NGOs. Work is already underway to upgrade the Marine Protected Areas within the database in collaboration with the Sea Around Us at UBC. The work that needs to be done of the database to improve the basic data is largely understood, but mechanisms for data collection and quality control need improvement. The biggest single limiting factor is financial resources.	UNEP-WCMC IUCN World Commission on Protected Areas WDPA Consortium	UNEP-WCMC  IUCN World Commission on Protected Areas

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Management effectiveness	<p>Protected areas trend data needs to be linked to information on the effectiveness of management of the listed sites in order to be meaningful. The IUCN World Commission on Protected Areas has developed a framework for assessment of management effectiveness at the site level, and various other organizations including TNC and the WWF/World Bank Forest Alliance have implemented assessments in a number of sites. Monitoring of Important Bird Areas by the BirdLife International Partnership will also provide information relevant to the management effectiveness of protected IBAs. Preliminary work is also under way to analyse management effectiveness as part of the Sea Around US (UBC) work on marine protected areas. There is a need to develop and test means for linking this information to the WDPA in such a manner that protected areas trend data can be regularly associated with information on management effectiveness derived from site and national-level assessments. However the testing of this must also take account of national sensitivities, and this will also need to be explored in the initial phases of the project. A preliminary meeting has already been held between the key stakeholders to discuss these issues.</p>	<p>UNEP-WCMC  IUCN World Commission on Protected Areas  WDPA Consortium  TNC  WWF/World Bank Forest Alliance  BirdLife International</p>	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Overlays with areas of key importance to biodiversity	In order to be meaningful, protected areas trend data also needs to be linked to information on the extent to which the areas protected actually cover key areas for biodiversity. In the past IUCN and UNEP-WCMC have delivered a number of basic assessments of the extent to which, but in the lead up to the World Parks Congress this was taken significantly further in the gap analyses carried out primarily by Conservation International/CABS. There is a need to develop this as an ongoing programme linked to the WDPA. In addition, the work of BirdLife International on Important Bird Areas is another potentially valuable dataset for assessing coverage of key areas for birds, and similar work can be done for areas important for plants, and for certain key habitats. There are also a range of other potential approaches, including biogeographic and ecoregion analysis, and analysis against CI Hotspots, or WWF priority areas. Consideration might also be given to the developing work of the “Alliance for Zero Extinction”. Assessment needs to be made of what can sensibly be done as an indicator, given the breadth of what could be done, and this then developed as an ongoing process. In addition to this, within the European Union countries, the Natura 2000 network could be used to look at effectiveness of sites in protecting biodiversity features.	UNEP-WCMC IUCN World Commission on Protected Areas WDPA Consortium BirdLife International PlantLife International Conservation International/CABS	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Inclusion of community and private protected areas	Data management is straightforward, as part of the WDPAs. The difficulty is in identifying an appropriate method for collection of data in a systematic manner that will allow meaningful identification of trends. This will be considered further by UNEP-WCMC, IUCN/WCPA and the WDPAs Consortium, working closely with IUCN task forces working on these issues and with NGOs who are themselves large land owners. This may initially be tackled on a regional basis, possibly with different regions for different types of ownership (community, NGO, industry, private individual, etc)	UNEP-WCMC WDPAs Consortium IUCN World Commission on Protected Areas	
			Ecological networks and corridors	Thought needs to be given to how to develop this as a meaningful indicator. An initial review of the Meso-American Biological Corridor and the Pan-European Ecological Network with the major stakeholders may help through identification of what information they find helpful in reviewing progress in establishment of the networks. This can then be used as a basis for planning a programme for developing indicators based on integrated network/corridor approaches.	UNEP-WCMC WDPAs Consortium IUCN World Commission on Protected Areas	
	<i>Change in status of threatened species</i>	Ready (SBSTTA Rec X/5)	Red List Index (RLI)	There is an existing methodology, and the Red List Index has been published in the scientific literature. There is an ongoing programme coordinated by the Red List Consortium (IUCN, BirdLife International, Conservation International and NatureServe). Currently the index can only be applied to birds and amphibians, but plans are in place to extend coverage of the indicator and work is already under way on some other groups. The key limitation is time and availability of resources for species assessment.	IUCN Species Survival Commission BirdLife International Conservation International/CABS NatureServe	Red List Consortium (Methodological refinements requested)

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
	<i>Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance</i>	Ready (SBSTTA Rec X/5)	<i>Ex situ</i> crop collections	FAO has data available on the management of plant genetic resources for food and agriculture from assessment of the state of the world's plant genetic resources (SOW), and monitoring implementation of the Global Plan of Action). It also has a mandate to continue compiling data based on this and to contribute it to work on the 2010 target. The associated databases maintained by FAO also includes a database of ex situ collection of crop genetic resources – the World Information and Early Warning System for PGRFA (WIEWS). In addition, the CGIAR SINGER database contains accession level data for over 600,000 accessions of a significant number of crops and other species in cultivation. This would complement the information available to FAO. FAO and IPGRI would need to continue to work together to develop a robust and meaningful indicator (or indicators) based on the available data.	FAO IPGRI (CGIAR Centre)	FAO with IPGRI (on behalf of CGIAR)
			Livestock genetic resources	Countries are reporting data on national animal genetic resources to FAO using the Domestic Animal Diversity Information System (DAD-IS), however there are large data gaps in both quality and quantity and there is a need for an improved monitoring system. Quite a bit of work will need to be done before a fully operational indicator is available.	FAO	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Fish genetic resources	Data on domesticated fish species and fish species of major importance are available particularly for salmonids and increasingly for carps and tilapia in the FAOSTAT Fisheries Database. The World Fish Centre is the lead agency for the conservation of wild and improvement of domesticated carp and tilapia. A fisheries global information system (FIGIS) is currently being designed that will integrate much of the relevant information managed by FAO. Meanwhile, knowledge of genetic diversity in inland water ecosystems is generally poor except for the taxa mentioned. Meaningful indicators need to be developed based around the available data.	FAO World Fish Centre (CGIAR Centre)	
			Tree genetic resources	This needs further definition. SBSTTA recommended using the REFORGEN database of FAO, and also referred to input from OECD.	FAO	
			Varieties on-farm	There is no global database at present, and no consistent system of recording information at country level, that would provide information on the amount of crop and useful plant diversity in production systems. Partial data is available and being reported by some countries in the pilot phase of monitoring the Global Plan of Action for the Conservation and Sustainable Use of PGRFA. A review of available data is essential, and potentially development of both test indicators based on this and proxy indicators.	FAO IPGRI (CGIAR Centre)	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
Sustainable use	<i>Area of forest, agricultural and aquaculture ecosystems under sustainable management</i>	Ready (SBSTTA Rec X/5)	Existing data sets for measuring sustainability of agriculture, aquaculture and forestry, including FAO reports, Certification, and Ecological corridors and community-based management areas, and wildlife sustainable management schemes	This indicator focuses on production systems, and the <i>Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity</i> provide the framework for development of indicators. Outcome oriented indicators of sustainable use are needed, but SBSTTA has recommended that in the meantime an indicator can be developed based on area under certified production as this provides information on market demand and a measure of the degree of awareness about sustainable production. With this in mind a range of certification systems needs to be reviewed with their relationship to the Addis Ababa principles in mind. These include the schemes of at least the following certification bodies: FSC, MSC, ISO, PEFC, CSA, SFI, LEI. In addition, FAO has data and experience relevant to sustainable management of forest ecosystems, agricultural ecosystems and aquaculture, and further exploration needs to be made of how to use this data effectively. There is also MSC certification for select fisheries, and work through SCOR to develop ecosystem indicators for fisheries management that may be relevant.	FAO  IUCN Sustainable Use Specialist Group  Equilibrium (Consultants who have worked extensively with IUCN, WWF and others on certification issues)	UNEP-WCMC with FAO
	Proportion of products derived from sustainable sources	More work required		AHTEG considered that not enough data existed at relevant geographical scales to start using this indicator. Further investigation on what can be done needs to be undertaken.	IUCN Sustainable Use Specialist Group  Equilibrium (see above)	SCBD
	Ecological footprint and related concepts <sup>viii/</sup>	More work required	Ecological footprint	The Global Footprint Network regularly publishes ecological footprint, with global indicators based on data published by FAO, IAE, IPCC and others. Outputs are included, for example, in WWF's Living Planet Report. The Global Footprint Network also works with countries to produce national footprint and biocapacity accounts using standard approaches, and this is also used to derive global statistics.	Global Footprint Network  WWF	Global Footprint Network  [SBSTTA referred to the Ecological Footprint Network, but we assume that this is the network intended]

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
			Other measures of the area of land and sea needed to support production of goods and deliver services	This needs further definition. There are two initiatives underway to look at this question for marine areas: Redefining Progress and Wildlife Conservation Society.	??	SCBD and UNEP-WCMC
Threats to biodiversity	<b>Nitrogen deposition</b>	Ready (COP Decision VII/30)		Data on global anthropogenic nitrogen production are available and accurate for fertilizer production and fossil fuel use. Data on cultivation-induced biological nitrogen fixation are available as estimates with an error margin of $\pm 20\%$ . The models of atmospheric deposition are accurate regarding pattern at least, and different models on loading in major water basins and on nitrogen flux to coasts show a high level of agreement. More work needs to be done on the link between nitrogen deposition and biodiversity impacts, and on the policy relevance of the trend data. Links could be made to potential impact on sensitive sites through a map-based approach.	International Nitrogen Initiative	INI with UNEP-WCMC
	<b>Trends in invasive alien species <sup>ix/</sup></b>	Ready (SBSTTA Rec X/5)	Numbers and cost of alien invasive species  Other measures to be identified and developed	While it was considered by AHTEG and SBSTTA that data were available sufficient to develop and test indicator on invasive alien species, no further review has taken place, and the Global Invasive Species Programme has yet to give serious attention to what work needs to be done. This project must help stimulate development of this work.	GISP Secretariat  GISP Members	GISP
Ecosystem integrity and ecosystem goods and services	<b>Marine Trophic Index</b>	Ready (COP Decision VII/30)		Both data and methodology are available through the <i>Sea Around Us</i> project of the Fisheries Centre at the University of British Columbia, combined with data available from FAO and Fishbase. Further improvement would require improvement in catch data.	UBC Fisheries Centre  Fishbase Information Network	UBC

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
	<b>Water quality of freshwater ecosystems</b>	Ready (COP Decision VII/30)	Indicator of biological oxygen demand (BOD), nitrates and sediments/ turbidity	Water quality data are routinely available for major waterways in a large number of countries. The UNEP-GEMS Water Programme maintains a database for water quality which complements a second database for hydrological data. Data is currently collected from more than 900 stations worldwide, with good time series on a range of parameters. Of these parameters, AHTEG decided that biological oxygen demand (BOD), nitrogen concentrations and sediment load and turbidity were the most appropriate measures. AHTEG also wanted to see complementary indicators for water quantity (water use, water flow, water abstraction, water allocations, etc) developed in conjunction with the Ramsar Convention.	UNEP-GEMS/Water Programme Ramsar Convention Secretariat  (Note that WWF and WRI are also potential stakeholders here)	UNEP-GEMS/Water Programme
	Trophic integrity of other ecosystems	More work required		Potential datasets and methodologies need to be reviewed.	??	SCBD to assemble available information
	<b>Connectivity / fragmentation of ecosystems</b>	Ready (SBSTTA Rec X/5)	Patch size distribution of terrestrial habitats (forests and possibly other habitat types)	This would be based on remote sensing data, and information is available for a number of biomes and countries. In the first instance data on forest fragmentation for certain regions could be used to give a good illustration of trends, augmented with data on other ecosystems in future years. There is need for further analysis of the relationship between this indicator and causal factors, and to look at the impacts of fragmentation on biodiversity and how this can be related to the trend data.	FAO NASA-NGO Consortium	UNEP-WCMC (with FAO, CI, NASA-NGO Conservation Working Group and USDA-FS)
			Fragmentation of river systems	Although data on fragmentation of rivers is not complete, there is sufficient for initial analysis and presentation based on information compiled by the World Resources Institute.	WRI	

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
	Incidence of human-induced ecosystem failure	More work required	<i>[See notes in AHTEG paper on possible measures]</i>	This needs further work to assemble available information and to consider more seriously what indicators can be developed and applied that are useful for policy intervention and communication. This would include review of information already compiled for the Millennium Ecosystem Assessment on converted wetlands and dead zones, amongst others.	??	SCBD/UNEP-WCMC
	Health and well-being of communities who depend directly on local ecosystem goods and services <sup>x/</sup>	More work required		To be identified, as no comprehensive data or methodologies exist. Data are available for certain communities, but the analysis would be difficult to undertake. This is also a sensitive indicator as the dependent communities are often the poorest communities and data may therefore not be readily available. There is data on human health, such as stunted growth for children under five, which is spatially resolved at a finer scale than national, also there is GDP information for some countries below the national level that could be used in conjunction with other data. See MA coastal chapter for work with infant mortality rates and GDP.	??	SCBD
	Biodiversity for food and medicine	More work required		Both FAO and WHO compile datasets that are relevant to development of this indicator, however further work needs to be done to actually identify appropriate trend data and indicators that can be based on it.	FAO IPGRI and possibly other CGIAR Centres WHO Potentially a range of others to be identified	SCBD

Focal area	Headline Indicator <sup>ii/</sup>	Status <sup>iii/</sup>	Potential Measures <sup>iv/</sup>	Status and possible sources of data <sup>v/</sup>	Potential stakeholders	Organizations to coordinate delivery of indicator identified by SBSTTA
Status of traditional knowledge, innovations and practices	<b>Status and trends of linguistic diversity and numbers of speakers of indigenous languages</b>	Ready (COP Decision VII/30)		Data on the status of linguistic diversity and numbers of speakers of indigenous languages are available through the Ethnologue database. However a methodology for extracting meaningful trends information from these data is yet to be developed. The link between biodiversity and linguistic diversity needs to be related to this data. The UNESCO <i>World Atlas of Languages in Danger of Disappearing</i> is another relevant source, as is <i>Ethnologue: Languages of the World</i> which is now in its 15th Edition	UNESCO Terralingua WWF Smithsonian Institution also requested to explore possible application of Red List methodology	UNESCO with UNEP-WCMC
	Other indicator of the status of indigenous and traditional knowledge	More work required		COP has requested that this be considered by the CBD Ad Hoc Open-ended Working Group on Article 8(j). SBSTTA has noted, however, that these indicators should also possibly include indigenous traditional land-tenure, and co-management of protected areas by indigenous and local communities.	??	SCBD
Status of access and benefits sharing	Indicator of access and benefit-sharing	More work required		COP has requested that this be considered by the CBD Ad Hoc Open-ended Working Group on Access and Benefit-sharing.	??	SCBD
Status of resource transfers	<b>Official development assistance provided in support of the Convention</b>	Ready (COP Decision VII/30)	Official development assistance as marked	Data and methodology are available, but the quality of the data is dependent on participation of governments in marking their expenditure and reporting these figures. It is possible for others to do this as a post hoc analysis, but this is time-consuming. AHTEG recommended that this data be complemented with data on multilateral development assistance, and in particular that made available through the GEF. This area needs further review to identify what can be done to ensure data availability for more years, to ensure consistency in categorization, and potentially to relate this to resources available from other sources.	OECD DAC GEF Secretariat Multilaterals	OECD

<b>Focal area</b>	<b>Headline Indicator <sup>ii/</sup></b>	<b>Status <sup>iii/</sup></b>	<b>Potential Measures<sup>iv/</sup></b>	<b>Status and possible sources of data <sup>v/</sup></b>	<b>Potential stakeholders</b>	<b>Organizations to coordinate delivery of indicator identified by SBSTTA</b>
	Indicator of technology transfer	More work required		Neither COP nor SBSTTA have fully addressed this indicator beyond identifying that there needs to be one. Countries have been invited to submit information, and it has been suggested that the CBD Expert Group on Technology Transfer may wish to consider the matter.	??	SCBD

<sup>i/</sup> Based on Annex 1 of SBSTTA Recommendation X/5 (which was originally derived by the AHTEG meeting).

<sup>ii/</sup> Unless there is a note to the contrary, the focal areas and headline indicators are taken directly from COP decision VII/30, Annex I.

<sup>iii/</sup> Based on COP Decision VII/30 as modified by SBSTTA recommendation X/5.

<sup>iv/</sup> Based directly on Annex 1 of SBSTTA Recommendation X/5 (which was originally derived by the AHTEG meeting), although not necessarily in the same order.

<sup>v/</sup> Based on the SBSTTA documents and decision, this is discussed in more detail in the various information documents on indicators, and in the AHTEG report. Annex II to the AHTEG report is particularly relevant for consideration of potential remote sensing datasets,

<sup>vi/</sup> Based on current and short-term future availability of trend information, the following major ecosystem types are recommended for immediate indicator implementation: (i) forests (including different forest types, notably mangroves), (ii) peatlands (probably for certain geographic areas only by 2010), (iii) coral reefs, (iv) croplands, (v) grasslands/savannahs, (vi) polar/ice. Efforts should also be made to apply the indicator to the following ecosystem types, for which suitable global datasets need to be gathered, to ensure coverage of all thematic areas recognized by the Convention: (i) inland wetlands, (ii) tidal flats/estuaries, (iii) seagrass beds, (iv) dry and sub-humid lands, and (v) urban.

<sup>vii/</sup> Note that while the NASA-NGO Conservation Working Group can offer technical advice on indicators, it cannot provide actual data. Meanwhile, as part of the group's workplan, Conservation International/CABS is encouraging the scientific remote sensing community to provide desired trend data.

<sup>viii/</sup> New indicator recommended by SBSTTA at its tenth meeting.

<sup>ix/</sup> SBSTTA recommends a rewording of the title of this indicator from that contained in decision VII/30 (Numbers and cost of alien invasions).

<sup>x/</sup> The indicator from decision VII/30 (Health and well-being of people living in biodiversity-based-resource dependent communities) was reworded to clarify the focus on local dependency.

## SUMMARY OF ACTIONS TO BE CARRIED OUT ON EACH INDICATOR DURING THE PDF PHASE

Focal area	Headline Indicator	Potential Measures	Activities	Key players
Status and trends of the components of biodiversity	Trends in extent of selected biomes, ecosystems, and habitats		3.1	
		Forests, and forest types (e.g. mangroves)	3.2	
		(Natural) grasslands	3.3	
		Coral reefs	3.4	
		Seagrasses	3.5	
		Tidal flats/estuaries	3.6	
		Peatlands	3.7	
		Inland wetlands	3.8	
		Dry and sub-humid lands	3.9	
		Croplands	3.10	
		Polar/ice	3.11	
		Urban	3.12	
	Trends in abundance and distribution of selected species		3.13	
		Living Planet Index (LPI)	3.14	
		Various species assemblage-trends indices	3.15	
	Coverage of protected areas		3.16	
		Coverage according to World Database on Protected areas.	3.17	
		Management effectiveness	3.18	
		Overlays with areas of key importance to biodiversity	3.19	

## Annex 5

Focal area	Headline Indicator	Potential Measures	Activities	Key players	
		Inclusion of community and private protected areas	3.20		
		Ecological networks and corridors	3.21		
	<i>Change in status of threatened species</i>	Red List Index (RLI)	3.22		
	<i>Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socioeconomic importance</i>				3.23
			<i>Ex situ</i> crop collections		3.24
			Livestock genetic resources		3.25
			Fish genetic resources		3.26
			Tree genetic resources		3.27
	Varieties on-farm	3.28			
Sustainable use	<i>Area of forest, agricultural and aquaculture ecosystems under sustainable management</i>	Existing data sets for measuring sustainability of agriculture, aquaculture and forestry, including FAO reports, Certification, and Ecological corridors and community-based management areas, and wildlife sustainable management schemes	3.29		
	Proportion of products derived from sustainable sources		3.30		
	Ecological footprint and related concepts	Ecological footprint	3.31		
Other measures of the area of land and sea needed to support production of goods and deliver services		3.32			

Focal area	Headline Indicator	Potential Measures	Activities	Key players	
Threats to biodiversity	<b>Nitrogen deposition</b>		3.33		
	<i>Trends in invasive alien species</i>	Numbers and cost of alien invasive species	3.34		
Ecosystem integrity and ecosystem goods and services		Other measures to be identified and developed			
	<b>Marine Trophic Index</b>		3.35		
	<b>Water quality of freshwater ecosystems</b>	Indicator of biological oxygen demand (BOD), nitrates and sediments/ turbidity	3.36		
		Trophic integrity of other ecosystems	3.37		
	<i>Connectivity / fragmentation of ecosystems</i>	Patch size distribution of terrestrial habitats (forests and possibly other habitat types)	3.38		
		Fragmentation of river systems	3.39		
		Incidence of human-induced ecosystem failure	<i>[See notes in AHTEG paper on possible measures]</i>	3.40	
		Health and well-being of communities who depend directly on local ecosystem goods and services		3.41	
		Biodiversity for food and medicine		3.42	

## Annex 5

Focal area	Headline Indicator	Potential Measures	Activities	Key players
Status of traditional knowledge, innovations and practices	<b>Status and trends of linguistic diversity and numbers of speakers of indigenous languages</b>		3.43	
	Other indicator of the status of indigenous and traditional knowledge		3.44	
Status of access and benefits sharing	Indicator of access and benefit-sharing		3.45	
Status of resource transfers	<b>Official development assistance provided in support of the Convention</b>	Official development assistance as marked	3.46	
	Indicator of technology transfer		3.47	