

**CONVENTION ON  
BIOLOGICAL  
DIVERSITY**

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**SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND  
TECHNOLOGICAL ADVICE**

Sixth meeting

Montreal, 12-16 March 2001

Item 5.1 of the provisional agenda\*

**SCIENTIFIC ASSESSMENTS*****Development of methodologies and identification of pilot studies***

*Note by the Executive Secretary*

*Executive summary*

In response to decision V/20 of the Conference of the Parties, on the operations of the Convention, the present note draws from the report of the Oslo brainstorming meeting on scientific assessment (UNEP/CBD/SBSTTA/6/9/Add.1 (previously issued as UNEP/CBD/COP/5/INF/1)), held in November 1999, to propose methods and procedures for scientific assessments within the framework of the Convention on Biological Diversity. The note then identifies options for potential pilot scientific assessment projects addressing ecosystems, specific biomes and habitats, and threats posed to biodiversity; and assessment methods.

*Suggested recommendations*

The Subsidiary Body on Scientific, Technical and Technological Advice may wish to:

- (a) Initiate a number of small-scale pilot scientific assessment projects from among those listed below to be undertaken in preparation for the sixth meeting of the Conference of the Parties, in accordance with paragraph 29 (b) of decision V/20, in order to: (i) advance assessments on some priority issues that have been already identified, and (ii) test a range of methods and modalities for assessments:
- (i) A pilot assessment using an ad hoc technical expert group and the roster of experts under the Convention, for example, on special issues related to forest biological diversity;
  - (ii) A rapid assessment on an urgent issue, for example, the integration of biological diversity considerations in the implementation of the United Nations Framework Convention on Climate Change and its Kyoto Protocol, drawing upon expertise in the

\* UNEP/CBD/SBSTTA/6/1.

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Intergovernmental Panel on Climate Change (IPCC), as well as the roster of experts under the Convention on Biological Diversity;

- (iii) A pilot project on the development of rapid assessment methods for the biodiversity of inland waters ecosystems;
- (iv) A pilot assessment project on the impacts of invasive alien species, building upon the desk study on status and trends prepared for the sixth meeting of SBSTTA;
- (b) Decide to consider the Millennium Ecosystem Assessment as one of the pilot scientific assessment projects referred to in decision V/20, paragraph 29;
- (c) Invite the Millennium Ecosystem Assessment, the Global International Waters Assessment and Forest Resources Assessment, respectively, to integrate the following topics in their work:
  - (i) The interrelationship between climate change and biodiversity;
  - (ii) Development of an improved picture of inland water biological diversity, its uses and threats; and status and trends of marine and coastal biological diversity;
  - (iii) Further aspects of forest biodiversity as identified by SBSTTA on the basis of the work of the ad hoc technical expert group on forest biological diversity;
  - (d) Request the Executive Secretary to make the necessary arrangements, taking into account available resources, to initiate selected pilot assessment projects, drawing on the project briefs provided in annex III to the present note;
  - (e) Decide to consider, at future meetings, the results of these pilot assessments.

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## I. INTRODUCTION

1. In paragraph 25 of its decision V/20, the Conference of the Parties recognized that there is a need to improve the quality of the scientific, technical and technological advice provided to it, and to undertake sound scientific and technical assessments, including in-depth assessments of the state of knowledge on issues critical for the implementation of the Convention on Biological Diversity.

2. In paragraphs 27–29 of the same decision, the Conference of the Parties noted the report of the brainstorming meeting on scientific assessment (UNEP/CBD/COP/5/INF/1\*) and referred it to SBSTTA for consideration and, where appropriate, use in its work. The Oslo brainstorming meeting identified the need to address the following main issues to develop the scientific-assessment process under the Convention on Biological Diversity:

- (a) Needs and scope of assessments;
- (b) Assessments within the framework and operations of the Convention on Biological Diversity;
- (c) Linkages with relevant existing and planned assessments;
- (d) Joint assessments;
- (e) Involvement of the scientific community;
- (f) Assessment process and mechanisms;
- (g) Financing.

3. In paragraph 29 of decision V/20, the Conference of the Parties also requested the Subsidiary Body on Scientific, Technical and Technological Advice:

(a) To identify and, where needed, further develop, procedures and methods to undertake or participate in scientific assessments, or make use of existing ones, taking into account considerations of participation, effectiveness and costs;

(b) To undertake a limited number of pilot scientific assessment projects, in preparation for the sixth meeting of the Conference of the Parties, and to invite, among others, the Millennium Ecosystem Assessment to work closely together with the Subsidiary Body in this area; and to facilitate and support the implementation of these projects; and, at an appropriate stage, to carry out an evaluation of them;

(c) To develop further its methodologies for scientific assessment, and to provide advice to Parties on scientific assessment design and implementation; and

(d) To identify and regularly update, within the context of its programme of work, assessment priorities and information needs.

4. The present note has been prepared to assist SBSTTA in responding to the above mentioned requests of the Conference of the Parties. Sections II and III describe the scientific assessment needs of

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\* This report is available to SBSTTA at the current meeting as an addendum to the present document (UNEP/CBD/SBSTTA/6/9/Add.1).

the Convention, ongoing assessments in which the Convention can participate or which may contribute to fulfilling its assessment needs, and the procedures and methods used or needed for scientific assessments. Section IV proposes pilot projects on scientific assessments for consideration by SBSTTA.

## **II. PROCEDURES AND METHODS TO UNDERTAKE OR PARTICIPATE IN SCIENTIFIC ASSESSMENTS**

5. Assessments need a broad-based authorization by the Conference of the Parties to receive world-wide political and scientific credibility. Based on the outputs from the assessment process agreed upon by the Conference of the Parties and SBSTTA, SBSTTA would need to develop the specific procedures and methods for undertaking any scientific assessment initiative. The Oslo brainstorming meeting on scientific assessment underlined the importance of an authorizing environment in order to secure ownership of the assessment procedure and the consideration and potential acceptance of the assessment findings within the Convention process.

6. The outputs of any assessment process would provide SBSTTA with sets of scientifically reliable information on status and trends; factors determining status and trends, including threats, and measures taken to conserve and sustainably use biological diversity and its components. The results of scientific assessments would improve the quality of the scientific advice provided by SBSTTA, with respect to individual and societal interaction with biological diversity, and provide the scientific foundation for policy decisions.

7. Experience indicates that assessments commissioned by the Conference of the Parties or carried out on its behalf should exhibit the following characteristics:

- (a) Be fully international, thus needing to be intergovernmentally sanctioned;
- (b) Engage a wide spectrum of societal interest;
- (c) Be transparent;
- (d) Be based on scientific principles;
- (e) Be based on existing knowledge and authoritatively unearth knowledge gaps;
- (f) Be focused;
- (g) Be cost-effective;
- (h) Be management- or policy-oriented;
- (i) Be delivered in a timely manner;
- (j) Contribute to capacity-building, development and enhancement of institutions and promote scientific cooperation;
- (k) Be conducted within a set of agreed procedures, rules, and frameworks; and
- (l) Avoid duplication.

8. To the greatest extent possible, the assessment mechanism should mobilize existing structures within the Convention and/or resources provided by Parties. While the roster of experts should be used to the extent possible in the assessment process, in some cases additional expertise may be required. The

ad hoc technical expert groups established by the Conference of the Parties would be an important structure within the assessment process. The clearing-house mechanism should be used to promote technical and scientific cooperation, identify experts who can participate in the assessments, and facilitate the exchange of relevant information and dissemination of results.

9. In order to secure governmental commitment to an assessment process, a formal mechanism for conducting, guiding, and accepting of the assessment findings should be identified, including the designation of a body to serve as an assessment panel under the Convention. A draft outline for an assessment process for the Convention was developed at the brainstorming meeting in Oslo and is reproduced in annex I below.

10. According to the *modus operandi* established by decision V/20, SBSTTA may establish ad hoc technical expert groups, which may be designated as the assessment panel. Alternatively, SBSTTA might identify another body to serve as the assessment panel. The results of the assessment can be reported back to SBSTTA, and SBSTTA itself might approve in detail a summary of the results.

11. General methods for assessing biodiversity and types of measures taken to conserve and sustainably use biodiversity are provided in annex II below.

### **III. SCIENTIFIC ASSESSMENTS WITHIN THE CONVENTION ON BIOLOGICAL DIVERSITY, AND RELEVANT OTHER ASSESSMENT PROCESSES**

12. Article 25 of the Convention on Biological Diversity gives SBSTTA two specific assessment responsibilities, namely: (i) scientific and technical assessments of the status of biological diversity, and (ii) scientific and technical assessments of the effects and types of measures taken in accordance with the provisions of the Convention. In addition, the Conference of the Parties, in its decision III/10, endorsed the general advice of SBSTTA on some aspects of scientific assessment and indicators of biological diversity. Although important, the present note will not further address the assessment of effects and types of measures as they fall outside the scope of scientific assessments.

13. The Conference of the Parties has emphasized the need for assessments in all the programmes of work on the thematic areas (see the table on pages 8-9 below) as the basis for formulating target actions for the conservation and sustainable use of biodiversity.

14. Assessments carried out to date have been generally ad hoc and small scale. Nevertheless, this limited experience provides some useful insights to the value of various assessment methodologies:

(a) Desk-studies have been routinely undertaken by the Secretariat for in preparing pre-session papers. These very limited assessments include, for example, the that on the status and trends of biodiversity in dry and sub-humid lands (UNEP/CBD/SBSTTA/4/7);

(b) The assessment prepared by SBSTTA of the interlinkages between tourism and biological diversity, which was developed from such an desk-study is an example of a successful small-scale exercise (see decision V/25, annex);

(c) The report of the Expert Consultation on Coral Bleaching, held in Manila in October 1999 (see decision V/3, annex), was a very successful model that formed basis of important decisions of the Conference of the Parties;

(d) The assessment of the consequences of the use of the new technology for the control of plant-gene expression for the conservation and sustainable use of biological diversity carried out in line

with decision IV/6 by a team of consultants, with peer-review of experts from the roster and international organizations, was also well received by SBSTTA and the Conference of the Parties;

(e) The report on the state of the world's plant genetic resources for food and agriculture was prepared outside the framework of the Convention, through the preparatory process for the FAO International Technical Conference on the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture, held Leipzig 1996. In decision II/16, the COP welcomed this process as innovative and exemplary. As requested, the Chair of the ITC reported back to the Conference of the Parties, which welcomed the report in decision III/11. The report formed the scientific basis for the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources for Food and Agriculture, which was endorsed by the Conference of the Parties in its decision III/11.

15. Planned assessments within existing thematic programmes of work include the following:

(a) The programme of work on biological diversity of inland water ecosystems (decision IV/4) requires an assessment of the status and trends of the biological diversity of inland water ecosystems and identification of options for conservation and sustainable use (programme element A). It also calls for a review of methodologies for assessment of biological diversity as pertaining to inland water ecosystems (programme element C), in particular methods and guidelines for rapid assessments. In addition, a conceptual framework for wetland risk assessment has been developed within the joint programme of work with the Convention on Wetlands;

(b) Implementation of the Jakarta Mandate on marine and coastal biodiversity (decision IV/5) requires several assessment exercises, such as monitoring and assessment of marine and coastal ecosystems and their living resources (operational objective 1.3), assessing and monitoring components of biological diversity, sustainable use of such components, and ecosystem effects (operational objective 2.1), and the assessment of the consequences of mariculture for marine and coastal biological diversity (programme element 4). At its fifth meeting, the Conference of the Parties decided to modify the programme of work to include elements of monitoring and assessment of coral reefs, in particular related to coral bleaching;

(c) The programme of work on agricultural biodiversity (decision V/5) identifies the need to provide a comprehensive analysis of status and trends of the world's agricultural biodiversity and of their underlying causes (including a focus on the goods and services agricultural biodiversity provides), as well of local knowledge of its management. While processes for country-driven assessments are in place for the crop and farm-animal genetic resources components, as well as for the resources that provide the basis for agriculture (soil, water), and for land cover and use, climatic and agro-ecological zones, the need for additional assessments is identified in the programme of work, for example, for microbial genetic resources, for the ecosystem services provided by agricultural biodiversity such as nutrient cycling, pest and disease regulation and pollination, and for social and economic aspects related to agricultural biodiversity, as well as for genetic use restriction technologies;

(d) With respect to forest biological diversity, the Conference of the Parties, in decision IV/7 paragraph 12, requests SBSTTA to provide advice on the status and trends of forest biological diversity and the identification of options for the conservation and sustainable use of biological diversity. In addition, the work programme on forest biological diversity as contained in the annex to that decision, includes several identified activities related to assessment such as a call for case studies on the ecosystem approach, a comprehensive analysis of the ways in which human activities influence forest biological diversity, and methodology to advance the elaboration of criteria and indicators for forest biological diversity. In decision V/7, the Conference of the Parties has also identified several other priority issues that may need specific assessments such as impact of human-induced uncontrolled forest fires, harvesting of non-timber forest resources, and climate change on forest biological diversity. Moreover, the

Conference of the Parties has decided to establish an ad hoc technical expert group to review available information on the status and trends of, and major threats to, forest biological diversity;

(e) Additionally, in its decisions V/4, paragraph 11, and V/3, paragraphs 4–5, the Conference of the Parties requested SBSTTA to consider the impact of climate change on forest biological diversity and marine and coastal biological diversity, respectively. Therefore, the linkages between climate change and the implications on biodiversity could be considered by SBSTTA as a pilot assessment project on urgent issues. An expert group could be drawn from experts on the Convention's roster as well as those involved in the Intergovernmental Panel on Climate Change (IPCC). Such work could draw upon the third IPCC assessment report and include information on the potential impacts of climate change on biodiversity in all ecosystems and the IPCC *Special Report on Land Use, Land Use Change and Forestry*, which assesses the state of knowledge regarding land use management and the carbon cycle;

(f) The programme of work on dry and sub-humid lands (decision V/23) provides for a full set of assessment activities, including the identification of specific areas of particular value and areas under major threat, building knowledge on processes that affect dry and sub-humid lands, especially their structure and functioning, and identification of benefits derived from biological diversity. A joint programme of work has been agreed upon with the Convention to Combat Desertification.

16. In considering cross-cutting issues, the Conference of the Parties has also recommended a number of assessment work or tasks relating to the tools needed for assessment activities:

(a) Indicators of biological diversity under consideration within the framework of the Convention (decisions IV/1 and V/7) would be an important tool to assess specific aspects of biological diversity and to develop monitoring programmes;

(b) Regarding invasive alien species, the Conference of the Parties at its fifth meeting decided to develop criteria for assessing risks from introduction of alien species as well as developing processes for assessing the socio-economic implications of invasive alien species, particularly the implications for indigenous and local communities (decision V/8);

(c) At its fifth meeting, the Conference of the Parties also decided to undertake an assessment of best practices and lessons learned from the sustainable use of biological diversity under the thematic areas of the Convention, drawing on case-studies and the experience of Parties, Governments, relevant organizations, the private sector and indigenous and local communities (decision V/24).

#### **INDICATIVE LIST OF PROPOSED ASSESSMENT INITIATIVES IN THEMATIC AND CROSS-CUTTING AREAS**

<b>Programme area</b>	<b>Assessment area or tools</b>	<b>Justification</b>
Biological diversity of inland water ecosystems	Rapid assessment methods for status and trends	Programme of work (POW), programme element A
	Review of methodologies for assessment	POW, programme element C
	The impact of dams	COP decision V/2
	Global International Waters Assessment	COP decision V/2
	World Water Assessment Programme	Emerging issue
Marine and coastal biological diversity	Guidelines for ecosystem evaluation and assessment	POW, programme element 1, operational objective 1.3

<b>Programme area</b>	<b>Assessment area or tools</b>	<b>Justification</b>
	Ecosystem approach for assessment and monitoring of components of biological diversity, sustainable use, and ecosystem effects	POW, programme element 2, operational objective 2.1
	Marine and coastal protected areas	POW, programme element 3, operational objective 3.2
	Assess the consequences of mariculture	POW, programme element 4
	Coral bleaching and physical destruction of coral reefs	COP decision V/3
	Global International Waters Assessment	COP decision V/3
Agriculture biodiversity	Status and trends of the world's agricultural resources	POW, programme element 1
	Pollinators	COP decision V/5
	Actual and potential impacts of existing and new agricultural technologies	POW, programme element 1
	Genetic use restriction technologies	COP decision V/5
	State of the world's animal genetic resources	
Forest biodiversity	Status and trends of forest biodiversity and major threats	COP decision V/4
	The impact of induced uncontrolled forest fires	COP decision V/4
	Harvesting of non-timber forest resources	COP decision V/4
	Status and trends of biological diversity in undisturbed forests	Emerging issue
Indicators of biological diversity	Indicators that may be used for regional and global overviews on the state and trends of biodiversity	COP decisions IV/1 and V/7
Invasive alien species	Criteria for assessing risks from introduction of alien species;	COP decision V/8
	Processes for assessing the socio-economic implications of invasive alien species, particularly the implications for indigenous and local communities	COP decision V/8
Sustainable use	Assessment of best practices and lessons learned from the use of biological diversity	COP decision V/24
Others	Effects and types of measures taken in accordance with the Convention	Article 25, paragraph 2
	Biodiversity considerations in the Kyoto Protocol	COP decisions V/3 and V/4
	Assessment of biodiversity in mining areas	Emerging issue
	Millennium Ecosystem Assessment	COP decisions V/20 and V/21

17. Additionally, a number of relevant ongoing or planned assessments have been identified in the note by the Executive Secretary on ongoing assessment processes (UNEP/CBD/SBSTTA/6/3). Participation in these initiatives may provide a cost-effective way of fulfilling some of the assessment needs of the Convention.

18. On the other hand, while such, ongoing, external, assessments may present a valuable, cost-effective but time-limited opportunity for joint activities to fulfil some of the assessment needs of the Convention, the utilization of their findings may face obstacles related to the ownership and authorizing

environment for the process. The lack of formal endorsement of an ongoing activity as a fully intergovernmental process may complicate the acceptance of the findings by Governments. Also, the possibilities for Convention bodies to influence these assessment projects are limited by the fact that their implementation are bound by work plans already approved by a wide range of stakeholders and multiple donors. Assessment projects already being partially funded by the Global Environment Facility (GEF) and other donors may also reduce the possibilities for funding from these sources of new assessment activities in closely related fields.

19. For example, the Millennium Ecosystem Assessment is an initiative that will be of significant relevance to the Convention as it will focus on the capacity of ecosystems to provide goods and services, in particular current ecosystem extent, trends, pressures, conditions and value, as well as ecosystem scenarios, trade-offs, and response options. The project has gained considerable political support and funding to date, and the launching is scheduled for mid-2001. SBSTTA may wish to undertake a pilot assessment project jointly with the Millennium Assessment. The Convention is already represented at the Executive Committee for the Assessment, and collaboration between the Convention and the Millennium Assessment was considered by the Conference of the Parties as a mechanism to conduct a potential pilot assessment project (decision V/21, paragraph 10; decision V/20, paragraph 29 (b)).

20. The Global International Waters Assessment (GIWA) is currently under implementation and includes an assessment of conditions and trends of biodiversity in international waters, including transboundary freshwater ecosystems. GIWA presents an opportunity for contributing to the assessment needs of the Convention, and contacts have been established between the Convention and GIWA for joint work on biodiversity issues in marine and coastal areas.

21. The Forest Resource Assessment 2000 is expected to be concluded in 2001. This assessment provides important information on status and trends of forests and their biological diversity. SBSTTA may wish to strengthen cooperation with the Food and Agriculture Organization of the United Nations (FAO) regarding any follow up and related assessment work relevant to forest biological diversity.

22. Preparation of the report on the state of the world's animal genetic resources for food and agriculture through the FAO Commission on Genetic Resources for Food and Agriculture is recognized as a contribution to the Convention's programme of work on agricultural biodiversity. SBSTTA may wish to request that it receives reports from FAO on this process.

#### **IV. PILOT SCIENTIFIC ASSESSMENT PROJECTS**

23. In paragraph 29 (b) of decision V/20, the Conference of the Parties requested SBSTTA to undertake a limited number of pilot scientific assessment projects, in preparation for the sixth meeting of the Conference of the Parties, and to invite, among others, the Millennium Ecosystem Assessment to work closely together with the Subsidiary Body in this area; and to facilitate and support the implementation of these projects; and evaluate them at an appropriate stage.

24. Within the framework of the Convention, pilot assessment projects can be undertaken for the following purposes:

(a) To develop and test assessment methods and procedures. This process might take advantage of ongoing initiatives and participate with a view to emphasizing an aspect that is particularly important to the Convention;

(b) To initiate assessment work on urgent and emerging issues.

25. With regard to the above, the following projects could be considered as pilot scientific assessment projects:

- (a) A pilot assessment using an ad hoc technical expert group and the roster of experts, for example, on special issues related to forest biological diversity;
- (b) A rapid assessment on an urgent issue, for example, for example, the integration of biological diversity considerations in the implementation of the UNFCCC and the Kyoto Protocol, drawing upon expertise in the IPCC as well as the roster of experts under the Convention;
- (c) A pilot project on the development of rapid assessment methods for the biodiversity of inland waters ecosystems
- (d) A pilot assessment project on the impacts of invasive alien species, building upon the desk-study on status and trends prepared for the sixth meeting of SBSTTA.

26. SBSTTA could consider to implement some of the identified pilot assessment projects within the context of, or making use of large scale assessment, for example the Millennium Ecosystem Assessment, the Global International Waters Assessment and the Forest Resources Assessment. These large-scale assessment projects could provide valuable information, in particular in the areas of:

- (a) The interrelationship between climate change and biodiversity;
- (b) Developing an improving the picture of inland water biological diversity, its uses and threats;
- (c) Status and trends of marine and coastal biological diversity;
- (d) Further aspects of forest biodiversity as identified by SBSTTA on the basis of the ad hoc technical expert group on forest biological diversity.

27. Apart from the proposed pilot projects, SBSTTA may wish to consider if there is a need to undertake or participate in assessments on emerging issues. These could include:

- (a) Participation in the World Water Assessment Programme;
- (b) Assessment of coral-reef bleaching and physical destruction of coral reefs (with the International Coral Reef Initiative and its partners);
- (c) Status and trends of biological diversity in undisturbed forests (with the Forest Resources Assessment);
- (d) Assessment of biodiversity in mining areas (with the International Council on Metals and the Environment).

28. A number of project briefs have been developed to assist SBSTTA to consider potential scientific pilot assessment projects. SBSTTA may wish to consider the project briefs and identify a limited number of pilot projects to be undertaken in accordance with the decision V/20 of the Conference of the Parties. The project briefs are attached in annex III below.

*Annex I*

**DRAFT OUTLINE FOR AN ASSESSMENT PROCESS UNDER THE CONVENTION  
ON BIOLOGICAL DIVERSITY (BASED ON THE REPORT OF THE OSLO  
BRAINSTORMING MEETING ON SCIENTIFIC ASSESSMENT  
(UNEP/CBD/SBSTTA/6/9/Add.1))**

<b>COP</b>	- Approves assessment mechanism for the Convention
⇓	
<b>SBSTTA</b>	- Defines scope for the assessment process, then decides whether the assessment is wholly Convention-driven or can be achieved by other means (e.g. joint assessments, co-sponsoring, etc.) - Develop and approves the terms of reference - If Convention-driven, select the Scientific Assessment Panel (SAP)* Options: SBSTTA/Working Group/ Ad hoc technical group of experts - If joint assessments, SBSTTA decides mode and level of involvement
⇓	
<b>SAP*</b>	- Select chairs - Approves table of contents - Appoints lead authors
⇓	
<b>Chair and Lead authors</b>	- Invite contributing authors - Prepare zero draft - Manage peer review process
⇓	
<b>CHM</b>	- Facilitate a network for promotion of scientific and technical cooperation, information exchange and peer review process
⇓	
<b>Chair and Lead Authors</b>	- Incorporate comments - Prepare revised draft
⇓	
<b>Review authors</b>	- Check draft and comments
⇓	
<b>SAP* and Chairs</b>	- Accept assessment - Prepare executive summary - Manage peer-review of executive summary, including experts and governments
⇓	
<b>Review authors</b>	- Check draft and comments
⇓	
<b>SBSTTA</b>	- Executive summary ** (Option 1 - for consideration and action, Option 2 - for approval) - Develop recommendations
⇓	
<b>COP</b>	- Decision

\* For joint assessments, the SAP in collaboration with other partners

\*\* See paragraph 34 of the report of the brainstorming meeting.

*Annex II*

**GENERAL METHODS FOR ASSESSING BIODIVERSITY AND TYPES OF MEASURES  
TAKEN TO CONSERVE AND SUSTAINABLY USE BIODIVERSITY**

- (1) Scientific assessments are needed to provide data on status and trends at different levels or scales for example at the ecosystem, species and genetic levels; and at the global, regional, national, landscape, habitat or biome level.
- (2) Methodologies used in assessment exercises depend on a number of factors, including the level at which the assessment is being carried out. At the global, regional or national levels, at the biome and in some cases, ecosystem or habitat scale, technologies such as remote sensing which is used in a number of global observing systems are operating and providing data of relevance to the Convention on Biological Diversity. However, in many cases remote-sensing data do not provide specific information on the quality or health of ecosystems/habitats or on the status and trends of species and genetic diversity. Ground-truthing and/or correlation between the monitoring data and its significance to local biodiversity and the goods and services provided by ecosystems are required. Long-term data series on ecosystems have also been collected through monitoring programmes, for example FAO on forests, Ramsar on Wetlands, and other international and national agencies. However, as these data mostly have been collected for specific purposes and not for monitor biodiversity loss or ecosystem goods and services their direct relevance for assessing biodiversity must be evaluated.
- (3) Assessment technologies, monitoring programmes, and data sets at species level have been developed for well-known species e.g. mammals, birds, plants, but is much less developed or completely lacking for other organisms such as aquatic organisms and micro organisms which play an important role in eco-system functioning.
- (4) Monitoring of genetic diversity has mainly been developed regarding agricultural biodiversity. The genetic variability of wild species is much less known.
- (5) A number of measures have been taken to improve the environmental considerations in decision-making. However, environmental destruction and biodiversity loss are closely linked to development activities and the use of natural resources. The effect of any measures to prevent biodiversity loss is therefore depending on political will, socio-economic factors and the efficiency of legal measures to protect the environment. National environmental strategies and biodiversity action plans, strategic environmental assessments, environmental impact assessments and public awareness are examples of such measures. Assessment of the effect of measures taken is therefore of great importance and provision for this is included in Article 25 of the Convention.

*Annex III*

**PROJECT BRIEFS FOR JOINT ASSESSMENT AND PILOT ASSESSMENT PROJECTS**

***Project brief 1***

*Tentative project name:* Collaboration with the Millennium Ecosystem Assessment

*Justification of project:* Decisions V/18 and V/20 of the Conference of the Parties

*Duration:* Four years

*Potential executing bodies and institutional setup*

Joint assessment between Parties, the Convention Secretariat and the Millennium Ecosystem Assessment. Convention participation in the Millennium Assessment could consist of being part of the entire project, but also by making use of the Assessment's mechanism and process to carry out specific assessment projects on for example: (a) rapid assessment of biodiversity of inland water ecosystems; (b) forest biological diversity; and (c) implication of climate change on biodiversity.

*Expected outputs:*

The pilot project would deliver three kinds of outputs, namely (a) assessment reports, findings and conclusions; (b) a Convention mechanism to participate and accept findings of joint assessment projects; (c) capacity-building and involvement of Parties in large-scale assessment exercises; and (d) assessment report on specific pilot assessments which the Millennium Assessment may undertake at the request of the Convention bodies.

*Project summary*

The objective of the pilot project would be to support Parties to the Convention to participate in and contribute to the global assessment and approximately ten catalytic assessments undertaken at regional, national, and local levels. The pilot project would, in particular, test how the findings from joint assessments can be used by Parties and develop a mechanism for how these findings can be used in the Convention process and accepted by relevant Convention bodies. It would also strengthen the linkages between existing programmes of work under the Convention and the Millennium Assessment.

Activities would include support for Parties to provide guidance and communicate information needs to the Millennium Assessment, to encourage and support Parties to actively participate in the delivery of the assessment, participation in the Executive Committee of the Assessment and relevant working and expert groups, the establishment of a process for review and acceptance of assessment findings by relevant Convention bodies. The Millennium Assessment could also be used to deliver specific focused assessments identified by SBSTTA.

The outputs would consist of an established mechanism for the Parties to the Convention to provide input to and receive information from the Millennium Assessment during its implementation, as well as the findings and conclusions from the assessment exercise.

### ***Project brief 2***

*Tentative project name:* Collaboration with GIWA on the assessment of the biodiversity of inland waters and marine and coastal areas

*Justification of project:* Decisions IV/4, IV/5 (including its annex – programme of work on marine and coastal biological diversity), and V/2 of the Conference of the Parties.

*Duration:* Three years

#### *Potential executing bodies and institutional set-up*

Joint assessment between interested Parties, the Convention on Biological Diversity, the Global International Waters Assessment (GIWA) and other relevant bodies within the framework of the Jakarta Mandate, the programme of work on biological diversity of inland water ecosystems and the programme of work on indicators for biological diversity.

#### *Expected outputs*

The project would assure that all collaborators use and compile relevant biodiversity data in the assessment process and that the findings will be useful for the Convention process.

#### *Project summary*

The objective of the pilot project would be to assist Parties to develop and test methodologies and indicators for biological diversity to be used in global assessment processes; to strengthen the linkages between the thematic programmes of work on biological diversity of inland waters and marine and coastal biological diversity; to contribute to the GIWA methodological protocol; and to contribute to the GIWA assessment process.

The activities would include identification and further development of indicators used by Parties on biological diversity to be used in the GIWA methodological protocol and in the CBD process; to review and contribute to the monitoring and data gathering by GIWA, to assist the GIWA in reviewing outputs (including the causal change analysis) relevant to biological diversity of inland waters and marine and coastal areas.

The expected outputs would be increased capability of Parties to use monitoring programmes and indicators, a set of indicators and data on biological diversity included in the methodological protocol; Convention input and review of relevant sections in all GIWA products. The indicator set used could significantly contribute to the programmes of work under the Convention.

### ***Project brief 3***

*Tentative project name:* Collaboration with the Forest Resources Assessment (FRA) on assessment of forest biological diversity

*Justification of project:* Decision V/4 of the Conference of the Parties

*Duration:* Five years

*Potential executing bodies and institutional set-up:*

Joint assessment between interested Parties, the Convention (in particular the ad hoc technical working group on forest biological diversity), and the Forest Resources Assessment.

*Expected outputs*

The project would ensure that relevant data on forest biological diversity are compiled and used in the assessment process and that the findings will be useful for the Convention process.

*Project summary*

The objective of the pilot project would be to assist Parties to develop and test methodologies and indicators for forest biological diversity to be used in global assessment processes; to strengthen the linkages between the thematic programmes of work on forest biological diversity, the work of the ad hoc technical expert group on forest biological diversity; to contribute to the work of FRA.

The activities would include identification and further development of indicators used by Parties on forest biological diversity which could be used in the FRA and in the Convention process; to review and contribute to the monitoring and data-gathering by FRA, to assist FRA in reviewing outputs relevant to forest biological diversity.

The expected outputs would be increased capability of Parties to use monitoring programmes and indicators, a set of indicators and data on forest biological diversity included in the work of FRA, Convention input and review of relevant FRA products.

#### ***Project brief 4***

*Tentative project name:* CBD pilot assessment projects on special issues related to forest biological diversity, such as:

- (a) The impact of induced uncontrolled forest fires;
- (b) Harvesting of non-timber forest resources;
- (c) Status and trends of biological diversity in undisturbed forests.

*Justification of project:* Decisions IV/7 (including its annex – work programme for forest biological diversity under the Convention on Biological Diversity) and V/4 of the Conference of the Parties.

*Duration:* 1-2 years

*Potential executing bodies and institutional set-up*

Assessment exercise under the guidance of the ad hoc technical expert group on forest biological diversity established by the Conference of the Parties at its fifth meeting, which is already undertaking an assessment of status and trends of forest biological diversity, in collaboration with Parties and relevant bodies (FRA, the International Tropical Timber Organization, and the Center for International Forestry Research).

*Expected outputs*

The project would provide the following outputs: (a) assessment reports on specific issues selected related to forest biological diversity; and (b) establishing and testing one assessment mechanism (e.g. using the ad hoc technical expert group) for the Convention.

*Project summary*

The objective of the pilot project is to address the specific issues relevant to forest biodiversity identified in decision V/5 based on the assessment of status and trends carried out by the ad hoc technical group of experts on forest biodiversity.

Activities would include the delivery of the assessment of forest biological diversity regarding the specific issues selected (the impact of human-induced uncontrolled forest fires; impact of harvesting of non-timber forest resources; status and trends of biological diversity in undisturbed forests).

Expected outputs include final assessment reports on the special issues of the impact of induced uncontrolled forest fires, on harvesting of non-timber forest resources, status and trends of undisturbed forests.

### ***Project brief 5***

*Project name:* A CBD assessment project on the integration of biodiversity considerations into the implementation of the UNFCCC and its Kyoto Protocol

*Justification of project:* Decision V/4 of the Conference of the Parties

*Duration:* Initially one year. SBSTTA may wish to expanded to include comprehensive assessment of impacts of climate change on biological diversity

*Potential executing bodies and institutional set-up:*

A group of experts established for this purpose, drawing upon the rosters of experts for the Convention and IPCC.

*Expected outputs*

Scientific guidance on the integration of biological diversity considerations into the implementation of the UNFCCC and its Kyoto Protocol.\*

*Project summary*

Through the pilot project an expert group would be constituted drawn from scientists involved in the IPCC and the Convention roster to undertake the assessment. They would focus initially on the preparation of scientific advice on the integration of biological diversity considerations into implementation of the UNFCCC and its Kyoto Protocol by drawing upon existing information, including that compiled by IPCC in the third assessment report.

Activities would consist of compilation of existing information and case studies, identification of gaps in knowledge, and the production of an assessment report. At a later stage, SBSTTA may wish to expand the scope to include a comprehensive assessment on the impact of climate change on forest biological diversity and marine and coastal biological diversity as identified in decisions V/3 and V/4.

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\* See also the note by the Executive Secretary on biological diversity and climate change, including cooperation with the United Nations Framework Convention on Climate Change (UNEP/CBD/SBSTTA/6/11).

### ***Project brief 6***

*Project name:* CBD pilot project on the development of rapid assessment methods for the biodiversity of inland waters ecosystems.

*Justification of project:* Decisions IV/4 and V/2 of the Conference of the Parties.

*Duration:* Two years

*Potential executing bodies and institutional set-up*

Thematic assessment within the Programme of work on Biological Diversity of Inland Water Ecosystems, in collaboration with the Ramsar Convention, Parties and relevant organizations.

*Expected outputs*

Report on status and trends of inland waters biological diversity and methodology for rapid assessment of inland waters biological diversity.

*Project summary*

The objective of the pilot project would be based on existing information, to develop an improved picture of status and trends of inland water biological diversity, its uses and threats; and to develop methods on rapid assessment as planned in the programme of work on the biological diversity of inland waters ecosystems.

Activities would consist of compilation of information and case-studies, review of existing manuals and guidelines, criteria and indicators, and production of best practices and regional guidelines on biodiversity in relation to inland water ecosystems.

The expected outputs would be a compilation of relevant information on status and trends of inland water, a set of regional guidelines on methods for rapid assessments, and a set of best practices.

***Project brief 7***

*Project name:* CBD pilot project on the assessment of the impact of invasive alien species

*Justification of project:* Decision V/8 of the Conference of the Parties

*Duration:* Two years

*Potential executing bodies and institutional set-up:*

Risk and impact assessment in collaboration with Parties and relevant organizations.

*Expected outputs*

Report on best practices and regional guidelines and methodology for assessing risks, and ecological and socio-economic impact of invasive alien species.

*Project summary*

The objective of the pilot project would be based on existing information, including the desk study on status and trends of invasive alien species, the development of criteria for assessing risks from introduction of alien species, and the development of processes for assessing the ecological and socio-economic impacts of invasive alien species, particularly the impacts for indigenous and local communities.

Activities would consist of compiling information and case-studies, reviewing existing manuals and guidelines, criteria, and production of best practices and regional guidelines and methodology for assessing risks, and ecological and socio-economic impacts of invasive alien species.

The expected outputs would be a report on best practices and regional guidelines and methodology for assessing risks and socio-economic impacts of invasive alien species.

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