

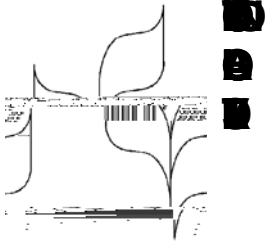


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REPORTS OF THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE

Report of the fourth meeting of the Subsidiary Body
on Scientific, Technical and Technological Advice**

AGENDA ITEM 1: OPENING OF THE MEETING

1. The fourth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice, established by Article 25 of the Convention on Biological Diversity, was held in Montreal from 21 to 25 June 1999 at the headquarters of the International Civil Aviation Organization (ICAO).

2. The meeting was opened at 10 a.m. on Monday, 21 June, by Mr. H. A. Zakri (Malaysia), Chairman of the Subsidiary Body on Scientific, Technical and Technological Advice. Welcoming participants, Mr. Zakri said that for the Subsidiary Body to be more effective in bridging the gap between researchers and policy-making, the level of scientific and technical input into the process should be increased. What was required was a more deliberate approach, and, in that context, there seemed to be an increasing interest among Parties and other actors in exploring the feasibility of a mechanism similar to the Intergovernmental Panel on Climate Change to draw more systematically upon existing scientific knowledge, assessments and organizations. The need for more structure in modalities of cooperation needed to be borne in mind when considering the programme of work and the terms of reference for the ad hoc technical expert groups. It was now critical to start developing specific advice of use to the various thematic programmes. That would require not only changing the approach to the work, but also giving very careful attention to the recommendations that would be made to the Conference of the Parties, which would need to be specific, focused and targeted, and options would have to be clearly presented.

* UNEP/CBD/COP/5/1.

** Also issued as a document of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/SBSTTA/4/14).

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3. He pointed out that the terms of reference for the ad hoc technical groups would be an important and critical test of the ability of the Subsidiary Body to be precise and focused in its work. The Conference of the Parties had issued strategic guidance in the form of the programme of work for the Convention as contained in decision IV/16, and it was now up to the Subsidiary Body to translate it into concrete actions.

4. With regard to the thematic focus of the meeting, he said that drylands were

plans, the integration of such biological diversity strategies and action plans into other sectors was much more complicated. The Subsidiary Body needed to design mechanisms to enable the identification of those areas where there was insufficient knowledge and the ways in which such gaps could be filled.

8. One innovative feature of the current meeting was the initiative, supported by the Bureau, to invite renowned experts to address the Subsidiary Body on matters related to the issues under consideration. The presentations, which would not be prescriptive, could become a standard feature of meetings of the Subsidiary Body.

9. He concluded his presentation by highlighting two key issues. The current meeting was to be followed by an inter-sessional meeting on the operations of the Convention, which would also address questions of access to genetic resources and benefit-sharing and its conclusions would later be considered by the Conference of the Parties. In addition, at its extraordinary meeting, held in Cartagena in February 1999, the Conference of the Parties had requested its President and the Bureau of the fourth meeting of the Conference of the Parties, in close consultation with the Acting Executive Secretary, to decide on the date and venue of the resumed session to finalize the Cartagena Protocol on Biosafety. Discussions on preparations for the resumed session had continued since that time, and the President of the extraordinary meeting and the President of the fourth meeting of the Conference of the Parties would be in Montreal in the coming week.

10. In closing, Mr. Zedan expressed his gratitude to those Governments that had
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AGENDA ITEM 2: ORGANIZATIONAL MATTERS

A. Attendance

13. The meeting was attended by representatives of the following Contracting Parties and countries: Albania, Algeria, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Bahamas, Bangladesh, Belarus, Belgium, Belize, Bhutan, Bolivia, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Canada, Chile, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Czech Republic, Democratic Republic of Congo, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, European Community, Finland, France, Gambia, Georgia, Germany, Greece, Guinea, Guyana, Haiti, Holy See, Honduras, Hungary, Iceland, India, Indonesia, Italy, Jamaica, Japan, Jordan, Kenya, Kiribati, Latvia, Lesotho, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mexico, Micronesia (Federated States of), Mongolia, Morocco, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Panama, Peru, Philippines, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Rwanda, Saint Lucia, Saudi Arabia, Seychelles, Singapore, Slovakia, South Africa, Spain, Sri Lanka, Suriname, Swaziland, Sweden, Switzerland, Syrian

Peoples of the Tropical Forests (IAITPTF), International Biodiversity Observation

Mr. David Brackett (Canada)

C. Adoption of the agenda

19. The Subsidiary Body adopted the following agenda for its fourth meeting, on the basis of the provisional agenda that had been circulated as document UNEP/CBD/SBSTTA/4/1/Rev.1:

1. Opening of the meeting.
2. Organizational matters:
 - 2.1. Election of officers;
 - 2.2. Adoption of the agenda;
 - 2.3. Organization of work.
3. Reports:
 - 3.1. Cooperation with other bodies;
 - 3.2.

5. Draft provisional agenda for the fifth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice.
6. Dates and venue of the fifth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice.
7. Other matters.
8. Adoption of the report.
9. Closure of the meeting.

D. Organization of work

20. As provided for in its modus operandi, the Subsidiary Body decided to establish two open-ended sessional working groups for its fourth meeting. Working Group 1 was allocated agenda items 4.3, 4.4 and 4.5, and Working Group 2 was allocated items 4.6, 4.7 and 4.8. It was decided that the remaining items would be taken up directly in plenary.

21. The Subsidiary Body agreed that the following would serve as officers of the working groups:

Working Group 1

Chair: Mr. Martin Uppenbrink (Germany)

Rapporteur: Ms. Elaine Fisher (Jamaica)

Working Group 2

Chair: Mr. Zipangani M. Vokhiwa (Malawi)

Rapporteur: Mr. Terita Savae Latu (Tonga)

22. The Subsidiary Body also approved the organization of work for the meeting as set out in annex II to the annotated provisional agenda (UNEP/CBD/SBSTTA/4/1/Add.1).

AGENDA ITEM 3: REPORTS

3.1. Cooperation with other bodies

and

3.2. Progress in the work programme on thematic areas

23. At the 1st plenary session of the meeting, on 21 June 1999, the Subsidiary Body took up the agenda items 3.1 and 3.2 concurrently. In its deliberations on cooperation with other bodies, the Subsidiary Body had before it the report by the Executive Secretary on the subject (UNEP/CBD/SBSTTA/4/2). Introducing the item, the representative of the Secretariat pointed to the report of the Executive Secretary which, he said, covered the period from September 1997 to 31 December 1998.

24. In its deliberations on progress in the work programmes of thematic areas, the Subsidiary Body had before it a report on the subject, submitted by the Executive

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Secretary (UNEP/CBD/SBSTTA/4/3 and Corr.1). Introducing the item, the representative of the Secretariat said that the report of the Executive Secretary covered progress made in the period since the fourth meeting of the Conference of the Parties in the work under the thematic areas of inland water, marine and coastal, agricultural and forest biological diversity. It also described progress in the areas common to the thematic programmes, namely the roster of experts and the linkages with the clearing-house mechanism, and set out options for possible recommendations by the Subsidiary Body.

25. During the discussion of sub-items 3.1 and 3.2, statements were made by the following Contracting Parties and countries: Argentina, Brazil, Cameroon, Canada, Germany, Indonesia, Japan, Malawi, New Zealand, Netherlands, Norway, Portugal, Republic of Korea, Suriname, Switzerland, Tonga, United Kingdom of Great Britain and Northern Ireland, United States of America. Statements were also made by the representatives of the Secretariat of the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar); the Food and Agriculture Organization of the United Nations (FAO); the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa; the Scientific Council of the Convention on the Conservation of Migratory Species of Wild Animals (CMS); and the International Plant Genetic Resources Institute (IPGRI).

26. The representative of the Convention on Wetlands briefly focused on the seventh meeting of the Conference of the Parties to the Convention on Wetlands which, he said, had provided substantial outputs of relevance to the work of the Convention on Biological Diversity, guidelines relating to several issues, including the integration of wetlands into river-basin management, the review of laws and institutions and a comprehensive toolbox for managing and monitoring the condition of wetlands. He urged participants to take note of the impending availability of that comprehensive and integrated "toolbox" and make it a feature of their deliberations. Finally, he announced that, at the Conference of the Parties, it had been decided to extend an invitation to the Chair of the Subsidiary Body to become a permanent observer to the Scientific and Technical Review Panel, which was a smaller-scale counterpart of the Subsidiary Body.

27. He recalled the partnership agreement by which the Subsidiary Body had asked the Secretariat of the Convention on Wetlands to be the lead partner for advancing matters relating to inland water ecosystems. That agreement had led to the endorsement of a joint work programme at the fourth meeting of the Conference of the Parties. An informal progress report on the implementation of that joint work programme, and containing a number of recommendations taken at the seventh meeting of the Conference of the Parties to the Convention on Wetlands, had been distributed to participants by way of information.

28. The representative of the FAO noted that, at its current meeting, the Subsidiary Body was examining a variety of topics of relevance to food and agriculture and expressed the will of FAO to continue cooperating in the objective of the Convention on Biological Diversity and in the implementation of its programmes of work. He recalled that decision II/15 of the Conference of the Parties to the Convention recognized agricultural biodiversity's special nature, distinctive features and problems needing distinctive solutions. FAO and its Commission on Genetic Resources for Food and Agriculture represented intergovernmental forums where complex agricultural biodiversity-related policy was discussed and relevant international agreements negotiated and adopted by member countries. The International Plant Protection Convention, Codex Alimentarius and the International Undertaking on Plant Genetic Resources

(currently under revision) provided relevant examples. FAO would be pleased if its expertise and capacities already developed in those agricultural-biodiversity-related areas at international, regional and national levels could be further capitalized upon to ensure synergy and coordination with the Convention on Biological Diversity.

29. The representative of the United Nations Convention to Combat Desertification mentioned the factors that had contributed to a reduction of biological diversity and the fact that developing countries were the most affected in such situations. The Secretariat of the Convention to Combat Desertification had reached a memorandum of understanding with the Secretariat of the Convention on Biological Diversity and was now working on a common framework to strengthen the synergies between the two Conventions. There were strong similarities in the chapters on scientific and technical cooperation of the two conventions, calling for a pooling of synergies based on existing links between them. There were enormous areas of potential cooperation between the Convention to Combat Desertification and the Convention on Biological Diversity but, because of certain constraints, developing countries were unable to make the most of those advantages.

30. The representative of the Scientific Council of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) described the links that were being established between the work of CMS and that of the Subsidiary Body in an effort to maintain the synergies and collaboration between the scientific bodies of both conventions. Such collaboration was essential, notably with respect to the transboundary initiatives taken to conserve migratory species and their habitats. She recalled the memorandum of understanding signed between the secretariats of the two conventions in 1997 and welcomed the news that UNEP had decided to help strengthen the synergies between the subsidiary bodies of the various environmental conventions.

31. The representative of the International Plant Genetic Resources Institute (IPGRI), speaking on behalf of all the members of the Consultative Group on International Agricultural Research (CGIAR), drew attention to paragraph 86 of the report of the Secretariat on progress in the work on thematic areas (UNEP/CBD/SBSTTA/4/3), highlighting the good collaboration with FAO in the field of new technologies, and the closer links between CGIAR and the Convention on Biological Diversity. CGIAR stood ready to assist the Subsidiary Body in the formation of the liaison group of experts referred to in paragraph 78 of the above report.

32. In the ensuing discussion on items 3.1 and 3.2, all representatives who took the floor expressed their satisfaction at the high quality of the report on cooperation with other bodies prepared by the Secretariat (UNEP/CBD/SBSTTA/4/2).

33. Many representatives pointed to the importance of cooperation with other relevant bodies as a fundamental element of the operation of the Subsidiary Body in making effective use of available scientific knowledge and expertise, and stressed that the focus should now lie in maintaining and extending such cooperation. One representative stressed that more effective interaction with the scientific community was needed. A number of representatives considered it important to ensure that such cooperation should go beyond participation in workshops and the signing of memoranda of understanding, and should be practical in nature, providing a clear and transparent idea of which body would be carrying out what action, and when.

34. A number of representatives supported the use of the Intergovernmental Panel on Climate Change (IPCC) as a model for a scientific body to provide technical and scientific information for the Subsidiary Body.

35. Several representatives considered it particularly important for the Secretariat to establish and/or strengthen cooperation with the IUCN Commission on Education and Communication; the World Trade Organization; the United Nations Framework Convention on Climate Change, particularly in connection with its Kyoto Protocol and the programmes dealing with the effects of carbon sequestration; the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa; the Intergovernmental Forum on Forests; and the Commission on Sustainable Development.

36. One representative said that consideration should be given to the establishment of a mechanism to ensure that the advice given by the Subsidiary Body was in harmony with the advice of the respective scientific bodies of the Ramsar Convention on Wetlands, and of the conventions on desertification and on climate change.

37. Another representative believed that the Subsidiary Body should consider enhancing the use of joint work programmes, using as a model the excellent joint work plan between the Convention and the Convention on Wetlands.

38. Some representatives expressed concern at the lack of progress made in the development of indicators of biological diversity and several voiced support for the Secretariat's action, as set out in paragraphs 12 and 13 of its report on cooperation. Others cautioned that such action should not be carried out in isolation nor duplicate the work of other forums. Several representatives believed that, in its work to develop indicators, the Subsidiary Body should make use of the experience and practices of other processes and mechanisms, such as FAO, the Organisation for Economic Cooperation and Development, and the Commission on Sustainable Development, and, through the Secretariat, consult countries to see where they required assistance to develop indicators. Another said that the Secretariat and the Subsidiary Body should help to develop indicators to measure how biological-diversity concerns were being taken into consideration in the work of the World Trade Organization. There was a need to see how the sectors were contributing to the goals of the Convention.

39. With regard to the identification, monitoring and assessment of biological diversity, several representatives supported the close cooperation between the Secretariat and DIVERSITAS and its Secretariat. One considered the inclusion of a strong outreach component in the proposed activities under the International Biodiversity Observation Year (IBOY) to be particularly important.

40. Concerning the ecosystem approach, one representative expressed satisfaction at the fact that the approach was becoming more substantive, and drew attention to the conference scheduled to be convened in Trondheim, Norway, in September 1999, which would deal with issues of the ecosystem approach and sustainable use biological diversity.

41. With regard to the thematic programmes of work, one representative, noting the important cooperation in the field of agricultural biological diversity between DIVERSITAS, UNEP, FAO and the United Nations Educational, Scientific and Cultural Organization, said that the Subsidiary Body should also contribute to work on plant genetic resources. He was concerned at the apparent slow pace of such work and said that it had to be completed by November 2000.

42. One representative considered that, under decision IV/10 of the Conference of the Parties, concerning measures for the implementation of the Convention, high priority should be accorded to public education and awareness, since despite all efforts, degradation of biological diversity and ecosystems was continuing. Expressing her satisfaction at the development of cooperation between the Secretariat and UNESCO, she stressed that two groups of stakeholders needed to be the subject of special attention: the private sector, which exploited biological resources, and the communities whose livelihood was dependent on such resources.

43. Several representatives welcomed the establishment of the ad hoc technical expert groups on specific priority issues, and said that they should play a major role in relieving the Subsidiary Body of its heavy burden of work in examining the issues entrusted to it by the Parties. One stressed that such groups needed to be constituted in a transparent way, with explicit terms of reference and adequate peer review. Another representative said that his country was willing to

representative pointed to the pilot project set up by a number of countries to measure the implementation of the Convention in countries.

50. One representative supported the Secretariat's suggestion, referred to in paragraph 83 of its report on cooperation, to the effect that the Chair should participate in the work of the Steering Committee of DIVERSITAS and in the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF).

51. Another representative emphasized the relevance of identifying those meetings that could be invited to present results to the Subsidiary Body, as noted in paragraph 85 of the report on cooperation.

52. All representatives who took the floor expressed appreciation for the Secretariat's report on progress in the implementation of programmes of work on thematic areas (UNEP/CBD/SBSTTA/4/3). One representative said that a good deal had been accomplished and the report reflected the active part played by the Secretariat in undertaking, facilitating and coordinating action. Another considered that achievements under the work programmes were hard to measure and there was a need for clearer mandates and routines. One representative requested the Secretariat to distribute to Parties the outputs of the formal and informal workshops related to the Convention on Biological Diversity.

53. One representative considered it important that future reports should enable the Subsidiary Body to monitor progress and performance of the work against the agreed objectives, time-scale and resources set out in the agreed work programmes. They should reflect not only the successes, but also identify the areas of shortfalls or slippage, as well as details of implemented or proposed remedial action.

54. One representative noted that, in general, despite the calls for more information from Parties, the Secretariat had received only very few case studies and he encouraged it to make full use of all available sources of data, including the national reports. Another representative believed that the clearing-house mechanism should be better used in the thematic programmes of the Convention.

55. Concerning biological diversity of inland waters, several representatives praised the good cooperation with the Convention on Wetlands and one of them pointed out that, if the Subsidiary Body were to accept the invitation to participate as an observer in the Scientific and Technical Review Panel of the Convention on Wetlands, there would be no need for it to constitute its own ad hoc technical working group on inland waters.

56. One representative drew attention to a lack of progress by the Subsidiary Body in implementing decision IV/4, paragraph 11, of the fourth meeting of the Conference of the Parties, by which Parties asked the Secretariat and the Subsidiary Body to give particular attention to early progress in the development of rapid assessment methodologies, especially in the small island States. He asked the Secretariat to put more emphasis on supporting and establishing cooperation with such States in the South-west Pacific region.

57. With regard to marine and coastal biological diversity, several representatives, pleased at the broad support given to the work programme, said that others should continue to be invited to contribute to the programme, with clear arrangements about who was doing what and when, and full use of the roster of experts. One representative called for more efforts with regard to coral reef

destruction, such as that caused by trawling and dynamite fishing, rather than only the focus on the effects of bleaching. One other representative sought clarification on whether the UNFCCC task force had responded to the invitation to carry out work on the issue of coral bleaching.

58. On the subject of agricultural biological diversity, several representatives supported the delay of the work programme until after the fifth meeting of the Subsidiary Body. Although several representatives highlighted the important cooperation with FAO, one representative believed there was a need to clarify who was doing what within the work programme. Another was of the opinion that, in connection with this sector, Parties should be invited to take note of the results of the workshops concerned, rather than be guided by them.

59. One representative, noting the attention being paid to new technology within the seed sector, expressed strong opposition to the development of so-called suicide gene technology.

60. Several representatives looked forward to additional inputs into the issue of agricultural biological diversity prior to the fifth meeting of the Subsidiary Body. One of them drew attention to the upcoming FAO/Netherlands Conference on the Multifunctional Character of Agriculture and Land, scheduled for 13 to 17 September 1999, which would consider the sectoral theme of integrated planning and management of land resources, into which biological diversity would be integrated. He noted that the work programme must reflect the functions of agricultural biological diversity, since that was linked to the sustainable production of food and other agricultural products.

61. Several representatives referred to the the Workshop on Sustaining Agricultural Biodiversity and Agro-ecosystems Functions, held in Rome in December 1998, and to the Workshop on the Conservation and Sustainable Use of Pollinators in Agriculture, held in Sao Paulo, Brazil, in October 1998, as useful inputs, and one considered that follow-up should be undertaken.

62. With regard to the implementation of the work programme for forest biological diversity, a number of representatives expressed concern at the slow progress made, and urged the Secretariat to continue efforts to overcome that state of affairs. One considered that urgent action was needed, perhaps through the establishment of a technical expert group. Another was concerned at the inclusion of this sector on the agenda of the fifth meeting of the Conference of the Parties, given the lack of progress made.

63. One representative considered that there should be an examination of the thematic areas covered in the past period, looking at the reasons behind their success or failure, viewing the advice given by the Subsidiary Body to the Parties and analysing how to provide the right type of advice to them.

64. At the 4th plenary session of the meeting, on 25 June 1999, the Subsidiary Body took up a draft recommendation submitted by the Chair under agenda item 3.1. The draft recommendation, as orally amended, was adopted as recommendation IV/1 A. The text of the recommendation as adopted is contained in annex I to the present report.

65. At the same session, the Subsidiary Body took up a draft recommendation submitted by the Chair under agenda item 3.2. The draft recommendation, as orally amended, was adopted as recommendation IV/1 B. The text of the recommendation as adopted is contained in annex I to the present report.

AGENDA ITEM 4: PRIORITY ISSUES

4.1. Programme of work of the Subsidiary Body on Scientific, Technical and Technological Advice

66. The Subsidiary Body took up agenda item 4.1 at the 2nd plenary session of the meeting, on 21 June 1999. In considering the item, the Subsidiary Body had before it a note by the Executive Secretary entitled "Proposal on the draft programme of work of the Subsidiary Body on Scientific, Technical and Technological Advice: a longer-term programme of work for the period from the fourth to the seventh meeting of the Conference of the Parties" (UNEP/CBD/SBSTTA/4/4).

67. Introducing the item, the Secretariat recalled that, in its decision IV/16, the Conference of the Parties had requested the Subsidiary Body to prepare a proposal for its programme of work based on the priorities set out in annex II to that decision, with a view to streamlining and focusing the agendas of its meetings. The proposal prepared by the Executive Secretary took into account the items to be given in-depth consideration by the Conference of the Parties in the period up to its seventh meeting. A summary of the programme areas to be considered by the Subsidiary Body over that period was annexed to the note.

68. During the discussion of the item, statements were made by the following Contracting Parties and countries: Argentina, Brazil, Burkina Faso, Cameroon, Canada, China, Colombia, Democratic Republic of the Congo, Ecuador, European Community, Finland, Germany, India, Jordan, Kenya, Netherlands, New Zealand, Peru, Republic of Korea, South Africa, Suriname, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland. A representative of the Global Environment Network also made a statement.

69. In the discussion, a number of representatives expressed support for the note by the Executive Secretary as a starting point for the preparation of a proposal for a longer-term programme of work of the Subsidiary Body. Some of those representatives pointed to the need to develop a strategic plan with targets and time-frames. Another representative noted that such a strategic plan would help promote transparency in the work of the Body.

70. Most representatives were in agreement in their general support of the proposed programme, and it was noted that, although the document dealt with issues in a superficial way, actual practices would be carried out at the country level and thus tailored to national strategies. According to one representative, if the Subsidiary Body concentrated more on issues of a scientific nature, leaving policy-related issues to other working bodies, then it would be able to successfully manage its very heavy work programme and effectively address some of the specific priority areas that dealt increasingly with conservation technology.

71. Many representatives stressed that the agenda of the Subsidiary Body should be focused and sufficiently limited to allow in-depth discussion of the issues and the preparation of targeted recommendations to the Conference of the Parties, as well as to ensure that small delegations could cover all the items. A number of representatives said that it was important to consider whether individual topics could be addressed through other mechanisms. In that connection, a number of representatives cited access and benefit-sharing and the Article 8(j) guidelines as themes that could be removed from the agenda of the Subsidiary Body, as they were being considered in special groups set up under the Convention. One of those representatives, however, emphasized that the removal of the implementation of the Article 8(j) guidelines as a specific topic on the agenda in no way diminished the

importance of integrating the knowledge of indigenous peoples in the discussion of all items under consideration by the Subsidiary Body. Some representatives spoke out in favour of including those items, stressing the lack of measures pertaining to access and benefit-sharing in developing countries and highlighting the need for scientific and technological advice regarding socio-economic information related to the issue. Others pointed out that the Subsidiary Body should limit its attention to purely scientific aspects of these areas. One representative stressed that the focus should be placed on those issues for which actual decisions and working mandates from the Conference of the Parties existed, while another emphasized the use of the clearing-house mechanism as a way to contribute to scientific work within the proposed thematic areas.

72. One representative stressed the need to improve notification to the Parties of material sent to the Secretariat, of workshops held outside the framework of the Convention, and of the selection of experts to be involved in expert groups, liaison groups and peer-review. On the latter point, another representative cautioned that the confidentiality of the experts chosen to undertake peer-reviews was an important element in ensuring their independence, and their names should be disclosed only with their consent.

73. Many representatives stressed the importance of avoiding duplication, with several mentioning the importance of using all available mechanisms to address issues and of achieving wider collaboration with other conventions and scientific institutions. Several representatives stressed the need for a clear delineation of responsibilities among the various organizations and bodies involved.

74. One representative mentioned that the process of coordination must include education and public awareness. Another representative said that the structure approved at the first meeting of the Conference of the Parties, whereby the subject matter was divided into thematic and cross-cutting areas, would be viable only if there was interaction with the two other objectives of the Convention; it was also necessary to pay more attention to the interactions between humans and biological diversity.

75. Some representatives noted that the underlying vision of the Convention on Biological Diversity was sustainable development and that fact should be recognized by the Subsidiary Body. In that connection, one representative suggested that sustainable use should not be limited to tourism, but that all possible options for sustainable use should be explored. The same representative also suggested that the theme of sustainable use be added to the agenda of the seventh meeting of the Conference of the Parties and that the theme of in situ conservation of ecosystems be included more explicitly on the agendas of the next four meetings of the Subsidiary Body.

76. One representative underscored the need for linkages between the climate and biodiversity conventions, advising that cooperation be undertaken on the issues of land use, forestry, vulnerable ecosystems, carbon sinks, indicators, research and monitoring, and potential areas of conflict. This view was repeated by a number of others, who declared that the Subsidiary Body needed to clearly articulate how best to coordinate with other bodies through regular consultations planned in both the short and long term. The suggestion that the Subsidiary Body bring in social scientists and economists was also made.

77. Several representatives referred to the question of alien invasive species, one of them proposing that principles should be developed to set out the key elements of a prevention and response programme applicable to all nations, which could be

adapted to meet specific needs. Prevention and eradication were espoused as measures to control invasion. Several others raised the issue of how such a programme would manage to be so broad in scope while dealing with specific identification of species (alien and other) that would constitute a threat in all countries. One representative echoed this statement with a request for more factual information related to alien species.

78. One representative called attention to paragraphs 53 (b) and (c) of the note by the Executive Secretary and proposed that they should be reworded as it was not in the Subsidiary Body's mandate to assess the effects of measures undertaken or to conduct impact assessments, as opposed to assessing the effects of types of measures taken and providing guidelines and advice on methods, criteria and indicators for impact assessments. Another representat

priority of the proposed thematic issues for the groups and their terms of reference and recommend thereon to the fifth meeting of the Conference of the Parties.

84. During the discussion of the item, statements were made by the following Contracting Parties and countries: Argentina, Australia, Bolivia, Brazil, Canada, China, Colombia, Congo, Costa Rica, Côte d'Ivoire, Ecuador, European Community, Finland, Germany, Greece, India, Indonesia, Japan, Jordan, Kenya, Malawi, Netherlands, New Zealand, Norway, Peru, Portugal, Republic of Korea, Suriname, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, Zimbabwe. The representative of the Convention on Wetlands also made a statement.

85. A number of representatives welcomed the note of the Executive Secretary as a good basis for further discussion on the subject. Some representatives, however, pointed to a number of inconsistencies in the note which they felt should be rectified. Some representatives also proposed specific amendments to the terms of reference for the expert groups. One representative said that it was important to clarify the difference between a "technical expert group" and a "liaison group".

86. Many representatives believed that, if expert groups were to be formed, they should be small in composition and should have a clearly defined and time-limited mandate. A number of representatives cautioned against the proliferation of such groups, stating that they should be limited in number to no more than two or three at a time.

87. There were differing views on the thematic issues to be addressed by the groups. Many representatives, however, agreed that a decision on the matter should wait until the Subsidiary Body had completed its discussion of the issues themselves. One representative suggested that, instead of trying to make an extremely difficult choice for one or two ecosystems, such expert group should be provided with a mandate focusing on issues relevant to more than one work programme; for example, one group could focus on ecosystem issues, including the enhancement of the indicator issue and the implementation of the ecosystem approach, while another could focus on species and genetic issues, including taxonomy.

88. Particular stress was made on the need to avoid duplication with other bodies and, in that connection, a number of representatives pointed to the work already underway within the framework of the Convention on Wetlands, for inland waters, and the Global Invasive Species Programme, for alien species. One representative, however, said that there was not a complete overlap between the work conducted under the Convention on Wetlands and the inland waters programme of the Convention on Biological Diversity; he agreed that some work could be conducted through the Ramsar mechanism, but attention needed to be paid to the issues that were not covered by it. On a point of clarification, a representative of the Convention on Wetlands said that the mandate of that Convention mirrored the inland waters work programme adopted by the Conference of the Parties to the Convention on Biological Diversity. The joint work programme was to be revised at the end of 1999, and that process would offer the Subsidiary Body the opportunity to provide input through the Scientific and Technical Review Panel. The outcome of the process could be put before the Subsidiary Body at its fifth meeting to see if the Scientific and Technical Review Panel was in a position to meet expectations with regard to the inland water ecosystems work programme.

89. With regard to the selection process for experts in the groups, a number of representatives stressed the need to ensure that the membership of the groups was balanced in terms of geographic origin, linguistic background and areas of expertise, including traditional and indigenous knowledge. Several

representatives suggested that need to make use of the existing roster of experts, which should be revised and updated accordingly, with the Subsidiary Body providing guidance on the range of skills required. A number of representatives agreed with the Secretariat's suggestion that modern means of communication should be used among members in order to ensure full participation in the work of the groups.

90. One representative expressed concern about the use of the term "alien species" in the terms of reference, which implied that all such species were necessarily harmful, and suggested that the term should be replaced by the words "invasive species".

91. One representative suggested that one of the technical expert groups should have the mandate of considering ways to promote the development and transfer of in situ and ex situ biological diversity conservation and technology.

92. At the 3rd plenary session of the meeting, on 25 June 1999, the Chair explained that the Conference of the Parties, by its decision IV/5, had decided that ad hoc technical expert groups would be established for marine and coastal protected areas and for mariculture. The experts were to be drawn from the roster of experts maintained by the Executive Secretary. The Executive Secretary had, since the fourth meeting of the Conference of the Parties, requested Parties to propose names of experts for inclusion in the roster. The response had been disappointing and a satisfactory roster had, consequently, not been established. The existing roster of ad hoc technical experts needed to be updated, and the Executive Secretary impressed upon the Parties the need to address the issue and to propose names for inclusion. The Bureau of the Subsidiary Body on Scientific, Technical and Technological Advice had therefore decided that the issue would be addressed at its fifth meeting.

4.3. Global Taxonomy Initiative: advice on its further advancement

93. Working Group 1 took up agenda item 4.3 at its 3rd meeting on 23 June 1999. The Group had before it the note prepared by the Executive Secretary on further advancement of the Global Taxonomy Initiative (UNEP/CBD/SBSTTA/4/6 and Corr.1), as well as the following background information papers submitted by DIVERSITAS: "The Global Taxonomy Initiative - shortening the distance between discovery and delivery. Report of a meeting held at the Linnean Society, London, UK, on 10 and 11 September 1998" (UNEP/CBD/SBSTTA/4/Inf.1); "The Global Taxonomy Initiative: Recommendations from DIVERSITAS Element 3, including an assessment of present knowledge of key species groups. Report of a DIVERSITAS/Systematics Agenda 2000 meeting held at the International Council of Scientific Unions (ICSU), Paris, France on 20 and 21 February 1999" (UNEP/CBD/SBSTTA/4/Inf.6); and "The Global Taxonomy Initiative: Using systematic inventories to meet country and regional needs. Report of the DIVERSITAS/Systematics Agenda 2000 meeting held at the American Museum of Natural History, New York, USA from 17 to 19 September 1998" (UNEP/CBD/SBSTTA/4/Inf.7).

94. As input to the discussion on the item, the Working Group heard a keynote address by a distinguished expert in the field, Dr. Peter Bridgewater, formerly an active member of the Australian delegation to most previous meetings of the Subsidiary Body and the Conference of the Parties, speaking in his capacity as a representative of DIVERSITAS. Following the presentation, for which the Working Group expressed broad appreciation, questions were asked by the representatives of Argentina, Belgium, Bolivia, Brazil, Canada, Guinea and Mexico.

95. Introducing the debate on the item, the representative of the Secretariat drew attention to the note prepared by the Executive Secretary, which had been prepared in response to the proposals contained in the annex to decision IV/1 D of the Conference of the Parties. In the note, the Executive Secretary had endeavoured to identify the types of final products, tools or instruments to be expected from those proposals and to provide options for the Subsidiary Body in formulating advice to bring about their timely development for the further advancement of the Global Taxonomy Initiative.

96. During the discussion on the item, statements were made by the representatives of the following Contracting Parties and countries: Argentina, Australia, Belgium, Brazil, Burkina Faso, Cameroon, Canada, Colombia, Democratic Republic of the Congo, Ethiopia, European Community, Finland, France, Gambia, Germany, India, Indonesia, Mali, Netherlands, New Zealand, Norway, Oman, Peru, Republic of Korea, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, United States. A statement was also made by the Commonwealth Secretariat.

97. At its 5th meeting, on 24 June 1999, the Working Group considered a draft recommendation on the item, submitted by the Chair. After an exchange of views, the Group agreed to set up an informal contact group, to be coordinated by Ms. Linda Hedlund (Sweden), to examine the draft recommendation and to report back on the results of its work.

98.

diversity of dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems, and contained proposed recommendations for the Conference of the Parties, including a recommendation on a specific work programme on drylands, mediterranean, and semi-arid, grassland and savannah ecosystems.

103. During the discussion of the item, statements were made by representatives of the following Contracting Parties and countries: Algeria, Antigua and Barbuda, Argentina, Australia, Brazil, Burkina Faso, Cameroon, Canada, Chile, China, Costa Rica, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, European Community, Germany, Greece, Guinea, Holy See, India, Indonesia, Japan, Kenya, Mali, Mauritania, Mexico, Namibia, Netherlands, New Zealand, Niger, Norway, Peru, Portugal, South Africa, Sweden, Switzerland, Turkey, United Kingdom of Great Britain and Northern Ireland, Zimbabwe. Interventions were also made by a representative speaking on behalf of the Southern African Sustainable Use Specialist Group of IUCN and also on behalf of the African Resources Trust; by the World Wide Fund for Nature - West Africa, also on behalf of the World Resources Institute and the Green Earth Organization of Ghana; and by the Arab Center for the Study of Arid Zones and Drylands (ACSAD).

104. At its 4th meeting, on 23 June 1999, the Group considered a draft recommendation submitted by the Chair on the agenda item. Following an exchange of views on the draft recommendation, involving many representatives, it was agreed that the Chair would submit a revised version to the Working Group.

105. At its 5th meeting on 24 June 1999, the Group considered a revised version of the draft recommendation submitted by the Chair on the agenda item. Following an exchange of views on the draft recommendation involving many representatives, the Working Group approved the draft recommendation, as orally amended, for transmission to plenary (UNEP/CBD/SBSTTA/4/L.3).

106. At the 3rd plenary session of the meeting, on 25 June 1999, the Subsidiary Body took up draft recommendation UNEP/CBD/SBSTTA/4/L.3 and adopted it as recommendation IV/3. The text of the recommendation as adopted is contained in annex I to the present report.

- 4.5. Development of guiding principles for the prevention of impacts of alien species, by identifying priority areas of work on isolated ecosystems and by evaluating and giving recommendations for

122. In the course of the discussion on the draft recommendation, the representative of the United States of America said that, although the United States agreed that the technologies concerned should be rigorously assessed by Governments, it should be clarified that the recommendation did not suggest that countries could avoid their obligations under other international agreements, including those of the World Trade Organization. It was the understanding of her delegation that the preambular clause on a moratorium simply recognized that countries could take regulatory measures to protect health and the environment in case a risk of harm is present. In addition, the United States noted that the recommendation did not sufficiently reflect the potential benefits of those technologies.

123. In adopting the recommendation, the Working Group agreed that the report of the meeting should reflect the view of the delegation of New Zealand that a distinction should be drawn between field testing in containment, which was an important stage in risk assessment and would not pose a risk to the environment, and field-testing without containment, or field release. For that reason, New Zealand had reservations about the seventh preambular paragraph and subparagraph (e), since the term "field-testing" could be interpreted to include testing in containment outside the laboratory. As currently worded, the recommendation might prevent a country from completing the necessary level of risk assessment to make an informed decision on the technology.

124. The representative of Australia said that his delegation recognized that the use of genetic use restriction technologies raised a number of issues related to agricultural production and food security as well as other socio-economic and human-health issues. Australia believed that it was important that any recommendations from the Subsidiary Body should address only those issues that were within its mandate as set out in Article 25 of the Convention. Australia wished to place on record its reservation that the recommendation appeared to extend beyond the mandate of the Subsidiary Body, in particular by referring to socio-economic issues more generally, rather than placing them within the context of the conservation and sustainable uses of biological diversity and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

4.7. Incorporation of biological diversity considerations into environmental impact assessment

125. Working Group 2 took up agenda item 4.7 at its 3rd meeting, on 23 June 1999. The Group had before it a note by the Executive Secretary presenting a synthesis of reports and case-studies relating to environmental impact assessment (UNEP/CBD/SBSTTA/4/10).

126. Introducing the item, the Secretariat recalled that, in paragraph 3 of decision IV/10 C, the Conference of the Parties had instructed the Subsidiary Body to identify further actions that would promote implementation of the impact assessment procedures requested by Article 14 of the Convention, including consideration of whether there was a need for additional work to develop guidelines on the incorporation of biological-diversity considerations into environmental impact assessment, and to report to the Conference of the Parties. In the same decision, the Executive Secretary had been requested to prepare a synthesis report based on submissions from Parties, Governments, national and international organizations, and indigenous and local communities embodying traditional lifestyles. The note by the Executive Secretary submitted under the item had been

of biological resources, including tourism. At the current meeting, a focus was given to tourism as one example of sustainable use. At its fifth meeting, the Subsidiary Body would broaden the scope of its consideration of sustainable use

as orally amended, as recommendation IV/7. The text of the recommendation as adopted is contained in the annex I to the present report.

141. During the discussion of the draft recommendation in plenary, the representative of Norway said that his delegation could accept the recommendation on the understanding that the issue of sustainable use, including tourism, would be dealt with at the fifth meeting of the Subsidiary Body, on the basis of a much broader and balanced paper from the Secretariat, dealing with sustainable use in a much more comprehensive way and that it would be possible to revisit and revalue the current recommendations, including the annex, wherever it was necessary to do so, on the basis of the discussions at the fifth meeting of the Subsidiary Body and the recommendations arising therefrom.

AGENDA ITEM 5: DRAFT PROVISIONAL AGENDA OF THE FIFTH MEETING OF SBSTTA

142. At the 6th plenary session of the meeting, on 25 June 1999, the Subsidiary Body considered the above item of the agenda. In introducing the note prepared by the Executive Secretary on the subject (UNEP/CBD/SBSTTA/4/12), the representative of the Secretariat noted that it incorporated the advice provided by the Bureau of the Subsidiary Body and took into account relevant decisions adopted by the

AGENDA ITEM 7: OTHER MATTERS

150. There were no other matters.

AGENDA ITEM 8: ADOPTION OF THE REPORT

151. The present report was adopted by the Subsidiary Body at the 3rd plenary session of the meeting, on 25 June 1999, on the basis of the draft report that had been circulated as document UNEP/CBD/SBSTTA/4/L.1 and Add.1 and 2.

AGENDA ITEM 9: CLOSURE OF THE MEETING

152. Following the customary exchange of courtesies, the Chair declared the fourth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice closed at 5.30 p.m. on Friday, 25 June 1999.

Annex I

RECOMMENDATIONS ADOPTED BY THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE AT ITS FOURTH MEETING

IV/1. Programme of work

A. Progress in the work programmes on thematic areas

The Subsidiary Body on Scientific, Technical and Technological Advice,

1. Notes with appreciation the progress made in implementing the programmes of work on marine and coastal biological diversity, agricultural biological diversity and the biological diversity of inland water ecosystems, as described in the note by the Executive Secretary (UNEP/CBD/SBSTTA/4/3);

1. Notes that limited progress has been made on the implementation of the programme of work on forest biological diversity, as contained in decision IV/7 of the Conference of the Parties, on forest biological diversity;

2. Notes that limited progress has been made in the development and implementation of indicators, as called for in decisions III/10 and IV/1 A of the Conference of the Parties;

3. Urges the Executive Secretary to promote the implementation of the programme of work on forest biological diversity in accordance with decision IV/7, and report to the Subsidiary Body on Scientific, Technical and Technological Advice at its fifth meeting on progress made, as well as actions required for its future development;

4. Notes with appreciation the contribution of the Food and Agriculture Organization of the United Nations to the thematic work programmes and welcomes the results of the Workshop on Sustaining Agricultural Biodiversity and Agro-Ecosystem Functions, held in Rome from 2 to 4 December 1998, and of the Workshop on the Conservation and Sustainable Use of Pollinators in Agriculture, with an Emphasis on Bees, held in Sao Paulo, Brazil, in October 1998;

5. Agrees that physical degradation and destruction of coral reefs also pose a significant threat to the biological diversity of these ecosystems and therefore recommends that the Conference of the Parties expand its request to the Subsidiary Body on Scientific, Technical and Technological Advice, as contained in paragraph 1 of its decision IV/5, so as to include the effects of such activities in addition to the analysis of coral bleaching and urges the Executive Secretary to make rapid progress on the issue of coral bleaching;

6. Recommends that education and public awareness, referred to in Article 13 of the Convention on Biological Diversity, be included in the discussions on the work programmes on thematic areas;

8. Recommends to the Executive Secretary that, in preparing reports of progress in programmes of work for the Subsidiary Body on Scientific, Technical and Technological Advice at its fifth meeting, special emphasis be given to identify limitations and propose measures to improve their implementation.

B. Cooperation with other bodies

7. Invites the Executive Secretary to enhance communication with Parties by introducing a notification system for the Convention on Biological Diversity with respect to documents received, selection of experts for technical panels and liaison groups and the peer-review processes initiated by the Executive Secretary, and to make such information available through the clearing-house mechanism save to the extent that an expert objects to the release of information concerning him/her;

8. Recommends increased cooperation on scientific, technical and technological advice between the Convention on Biological Diversity and other relevant international conventions/agreements important for achieving the objectives of the Convention on Biological Diversity and, to that aim, also recommends that the Conference of the Parties consider the development of the modalities for more direct types of cooperation between the Subsidiary Body on Scientific, Technical and Technological Advice and parallel bodies under these conventions/agreements;

9. Invites the Executive Secretary to enhance cooperation with scientific, technical and technological organizations and to consider modalities to promote such cooperation.

C. Proposal on draft programme of work for the Subsidiary Body on Scientific, Technical and Technological Advice

The Subsidiary Body on Scientific, Technical and Technological Advice,

Recalling decision IV/16 adopted by the Conference of the Parties to the Convention on Biological Diversity at its fourth meeting,

Having considered its programme of work based on the priorities set out in annex II to decision IV/16, with a view to streamlining and focusing the agendas of its future meetings,

1. Proposes to the Conference of the Parties that it adopt the longer-term programme of work of the Subsidiary Body on Scientific, Technical and Technological Advice, as contained in the annex to the present recommendation, and recommends the preparation of a strategic plan to guide its implementation;

2. Recommends that a consideration of the interests of indigenous and local communities embodying traditional lifestyles be included in the consideration by the Subsidiary Body on Scientific, Technical and Technological Advice of each of the topics described in the programme of work contained in the annex to the present decision;

3. Decides to apply the programme provisionally for the period between its present meeting and the fifth meeting of the Conference of the Parties;

4. Notes that the inter-sessional meeting on the operations of the Convention, to be held in Montreal from 25 to 30 June 1999, will consider important institutional issues with respect to the execution of this programme of work and therefore decides to reconsider the programme at its fifth meeting, if necessary;

5. Invites the Executive Secretary to further develop a uniform methodology for the use of rosters of experts, and agrees to consider proposals in this regard at its fifth meeting;

6. Acknowledges with appreciation the case-studies submitted in response to previous decisions of the Conference of the Parties, and considers that most of these case-studies contain important information for many aspects of the work of the bodies of the Convention;

7. Invites the Executive Secretary to develop a common framework for case-studies, taking into account the information contained in the national reports submitted by Parties pursuant to Article 26 of the Convention on Biological Diversity;

8. Recommends to the Conference of the Parties that the Executive Secretary make available all case-studies, through, inter alia, the clearing-house mechanism, so that the Convention bodies can draw upon the information contained therein as appropriate;

9. Recommends to the Conference of the Parties to request the respective mechanisms under the Convention that are dealing with access to genetic resources and benefit-sharing, as well as Article 8(j) to advise the Conference of the Parties on what scientific, technical and technological aspects are important for the Subsidiary Body on Scientific, Technical and Technological Advice to deal with;

10. Recognizes the need to better consider micro-organisms and genetic diversity in the different elements of longer-term programme of work of the Subsidiary Body on Scientific, Technical and Technological Advice;

11. Recognizes the need to enhance inter-sessional and collaborative initiatives to allow the Subsidiary Body on Scientific, Technical and Technological Advice to better implement the programme of work proposed in the annex to the present recommendation;

12. Recognizes the need to start considering the development of assessments of the status and trends of biological diversity, as called for in Article 25, paragraph 2 (a), of the Convention on Biological Diversity.

Annex

PROGRAMME AREAS TO BE CONSIDERED BY THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL

SBSTTA MEETING	THEMATIC AREA*	MAIN CROSS-CUTTING ISSUES	OTHER ISSUES
	Mediterranean, arid, semi-arid, grassland and savannah ecosystems	sectoral activities for adoption of biodiversity-friendly practices and technologies	

activities and

agricultural
biodiversity
agricultural

SBSTTA MEETING	THEMATIC AREA*	MAIN CROSS-CUTTING ISSUES	OTHER ISSUES
			diversity
Seventh (2001)	[Main] Biological diversity of forest ecosystems	Guidelines to minimize or mitigate negative impacts of invasive species Programme of work on forest biological diversity, including traditional forest-related knowledge and benefit-sharing	Identification and monitoring, including indicators Linkages between <u>in situ</u> and <u>ex situ</u> conservation
Sixth meeting of the Conference of the Parties (May 2002)			
Eighth (2002)	[Main] Biological diversity of mountain ecosystems Review of workplan on inland water biological diversity	Protected areas Transfer of technology and technology cooperation	Cooperation Sustainable use and role of the private sector and incentive measures, with a focus on thematic areas considered in the session
			<u>In situ</u> conservation: best practices and technologies, including linkages with <u>ex situ</u> conservation
Ninth (early 2003)	[Main] Programme of work on mountain ecosystems Review of workplan on inland water biological diversity	Guidelines for technology transfer and cooperation Public education and awareness	Cooperation Ecosystem approach for mountain areas and inland water ecosystems Identification and monitoring
Seventh meeting of the Conference of the Parties (May 2004)			

IV/2. Further advancement of a Global Taxonomy Initiative

The Subsidiary Body on Scientific, Technical and Technological Advice,

Recalling decision III/10 of the Conference of the Parties, supporting a Global Taxonomy Initiative to overcome the taxonomic impediment which had been highlighted in recommendation II/2 of the Subsidiary Body on Scientific, Technical and Technological Advice,

Recalling also decision IV/1 D, in which the Conference of the Parties further reiterated its endorsement of a Global Taxonomy Initiative and provided suggestions for action contained in an annex to that decision,

Recalling also paragraph 2 of decision IV/13 of the Conference of the Parties, which provides advice to the Global Environment Facility regarding the provision of financial resources in support of that decision,

Noting that, in paragraph 3 of decision IV/1 D, the Conference of the Parties requested the Subsidiary Body on Scientific, Technical and Technological Advice to examine the suggestions for action to develop and implement a Global Taxonomy Initiative contained in the annex to decision IV/1 D, and provide advice to the Conference of the Parties on the further advancement of a Global Taxonomy Initiative,

Having examined the note by the Executive Secretary (UNEP/CBD/SBSTTA/4/6) and related documents submitted by DIVERSITAS (UNEP/CBD/SBSTTA/4/Inf.1; UNEP/CBD/SBSTTA/4/Inf.6 and UNEP/CBD/SBSTTA/4/Inf.7),

Recognizing the need for a cohesive global strategy for capacity-building in taxonomy, which requires action at national, subregional, regional and global levels,

Noting the invitation extended by the Conference of the Parties to the United Nations Environment Programme to assist in the global implementation of a Global Taxonomy Initiative, on the basis of the offer made by the Executive Director of the United Nations Environment Programme in his address to the Conference of the Parties,

to identify priorities, opportunities and constraints, building on the experiences of existing relevant initiatives. Initial priorities should include: capacity-building (in particular training), the development of taxonomy-related products, and dissemination of and access to taxonomy information and collections;

(c) That funding institutions, including the Global Environment Facility, recognize the cross-cutting nature of taxonomy which underpins the ecosystem approach and the thematic approach taken by the Convention, and facilitate partnerships between developing and developed countries;

3. Requests the Executive Secretary to identify options for a coordination structure for a Global Taxonomy Initiative and options for global, regional, subregional and national baseline initiatives in support of the implementation of the established programmes of work of the Convention on Biological Diversity, and to report thereon to the Subsidiary Body on Scientific, Technical and Technological Advice at its fifth meeting;

4. Undertakes to integrate the development and implementation of a Global Taxonomy Initiative in the ongoing thematic and cross-cutting work programmes of the Subsidiary Body on Scientific, Technical and Technological Advice and to advise periodically the Conference of the Parties on further measures required to advance capacity-building for taxonomy.

IV/3. Assessment of the status and trends and options for conservation and sustainable use of terrestrial biological diversity: dryland, Mediterranean, arid, semi-arid, grassland, and savannah ecosystems

The Subsidiary Body on Scientific, Technical and Technological Advice,

Noting that, at its fourth meeting, the Conference of the Parties adopted decision IV/16, which in annex II on its programme of work, considers "dryland, Mediterranean, arid, semi-arid, grassland, and savannah ecosystems" as matters requiring in-depth consideration at its fifth meeting,

Welcoming the note by the Executive Secretary (UNonservation and

Recalling that the knowledge and practices of indigenous and local communities could play an important role in the conservation and sustainable management of the biological diversity of dryland, Mediterranean, arid, semi-arid, grassland, and savannah ecosystems,

Recognizing that several aspects of these ecosystems are covered neither by the current thematic work programmes of the Convention on Biological Diversity nor by other conventions or processes,

1. Recommends that the Conference of the Parties:

(a) Consider adopting a programme of work on biological diversity of dryland, Mediterranean, arid, semi-arid, grassland, and savannah ecosystems; and

(b) Consider providing guidance to the financial mechanism regarding the financing of such a programme of work;

2. Requests, therefore, the Executive Secretary:

(a) To prepare a draft programme of work on biological diversity of dryland, Mediterranean, arid, semi-arid, grassland, and savannah ecosystems, in consultation with the Secretariat of the Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, bearing in mind the need to avoid duplication of work with other global conventions or processes, and to present it to the Subsidiary Body on Scientific, Technical and Technological Advice at its fifth meeting. This draft programme, to be based on the ecosystem approach, should take due account of the three objectives of the Convention, and be demand-driven and flexible. It should identify synergies, gaps and overlaps within the current programmes of the Convention, in particular on agriculture, forest and inland water biological diversity and should integrate consideration of such issues as:

- (i) Fires, land-use management such as grazing and inappropriate land conversion, soil degradation, desertification, impact of agriculture, invasive species, water management, inclusive of all activities that have an impact on the ecosystems;
- (ii) In situ conservation (including protected areas and threatened species), ex situ conservation, as well as restoration or rehabilitation of ecosystems;
- (iii) Socio-economic and cultural aspects, including the needs of indigenous people and local communities, and incentives and economic valuation;
- (iv) Knowledge, innovations and practices of indigenous and local communities, in accordance with Article 8(j) and other related provisions of the Convention on Biological Diversity;
- (v) Capacity-building, particularly in developing countries, including for inventories, evaluations and monitoring;
- (vi) Identification of the most threatened components of these ecosystems (including species);

- (i) Developing a standardized terminology on alien species;
- (ii) Developing criteria for assessing risks from introductions;
- (iii) Assessing the positive and negative socio-economic implications of

Annex II

OUTLINE FOR CASE-STUDIES ON ALIEN SPECIES

To the extent possible, case-studies should be short, succinct summaries of experiences on alien species at the country and the regional levels. A case-study should focus on the prevention of the introduction, control or eradication of alien species that threaten ecosystems, habitats or species. If possible, case-studies should be provided in hard copy and an electronic version (by floppy disk or via electronic mail). Case-studies should follow, to the extent possible, the proposed structure outlined below.

Case-studies should include the following sections. A summary of the information may be provided under each heading, and a more detailed paper may be attached. If the information is not available, this should be indicated in the appropriate section.

1. Location of the case-study.
2. Identification of alien species (the scientific name of species should be indicated if possible).
3. Biology of the alien species.
4. Vector of invasion (e.g. deliberate importation, contamination of imported goods, ballast water, hull fouling, spread from adjacent area. It should be noted, if there is a difference between the initial entry into the country and later spread.) It should be specified (if known) whether entry was deliberate and legal, deliberate and illegal, accidental, or natural.
5. How and when the alien species was first detected.
6. Ecosystem invaded or threatened (specify in general terms, e.g. tropical rain forest, temperate estuary, and also give detailed description if relevant).
7. Potential or actual impacts, including on biological diversity and on stakeholder interests in that biological diversity.
8. What time period between initial entry of the alien species and the development of impacts.
9. Options considered for response to the threat or impacts, and reasons for selecting the actions taken.
10. Institutions responsible for decisions and actions.
11. Details of decision-making process, including stakeholders affected, consultation processes used, etc.

12. Actions and related measures taken. First, categorize the action as prevention, early detection, eradication, localized eradication or control, or restoration of habitats or natural communities affected by alien species. Then provide details of the particular actions or measures, including the detailed methods used. Include any research, monitoring, public education and regulatory measures. Specify the time involved, including dates.
13. Costs of action and benefits achieved. Specify whether the action was fully successful, partially successful or unsuccessful. In specifying costs, include any adverse effects of the actions taken on the conservation and sustainable use of biodiversity.
14. Any lessons learned from the operation.

IV/5. Consequences of the use of the new technology for the control of plant gene expression for the conservation and sustainable use of biological diversity

The Subsidiary Body on Scientific, Technical and Technological Advice,

Noting that, based on expert opinion, products incorporating either variety-specific genetic use restriction technologies (V-GURTs) or trait-specific genetic use restriction technologies (T-GURTs), as defined in the annex to the note by the Executive Secretary on 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 (UNEP/CBD/SBSTTA/4/9/Rev.1), are not likely to be commercialized in the near future and that at this time no example of this technology has been released in either research or investigative field trials, resulting in a lack of information,

Noting that many countries already have policy or regulatory frameworks in place, or under development, to address the use of new technologies, but that many countries do not,

Acknowledging that this situation makes necessary adequate and thorough research and studies to assess, inter alia, on a case-by-case basis, the potential implications of genetic use restriction technologies and to put in place the required procedures to anticipate and prevent or mitigate any potential negative impacts,

Recognizing that genetic use restriction technologies are a form of new technologies that will be developed and it is necessary to reflect seriously on the policies associated with their emergence and to place more weight on the environmental and global implications of the development of technologies so that those technologies meet the needs of growing rural and urban populations, while satisfying long-term sustainability needs and social and ethical requirements,

Noting the need for holistic approaches that revalidate ecological principles and practices of agricultural production, reduced chemical dependence and maintained biological diversity,

Recognizing that organisms engineered by variety-specific and trait-specific genetic use restriction technologies are living modified organisms

to address these issues, Parties should widely disseminate information on scientific assessments, including through the clearing-house mechanism, and share their expertise in this regard.

At the national level

(f) Encourage Parties and Governments to consider how to address generic concerns regarding such technologies as genetic use restriction technologies under international and national approaches to the safe and sustainable use of germplasm;

(g) Reaffirming the need of Parties and Governments for additional information, and recalling Article 8(g) of the Convention on Biological Diversity, which calls on Parties and Governments to establish or maintain procedures for regulating, managing or controlling risks associated with the use and release of living modified organisms resulting from biotechnology, invite Parties to carry out and disseminate the results through the clearing-house mechanism and submit scientific assessments on, inter alia, ecological, social and economic effects of genetic use restriction technologies taking into account such information, as available, as:

- (i) The molecular biology information available;
- (ii) The genetic constructs and inducers used;
- (iii) Effects at the molecular level, such as site-specific effects, gene-silencing, epigenesis and recombination;
- (iv) Potential positive applications of the variety-specific genetic use restriction technologies on limiting gene flow, and possible negative impacts of genetic use restriction technologies on small populations of threatened wild relatives;

and to make these assessments available through, inter alia, the clearing-house mechanism;

(h) Further encourage Parties and Governments to identify ways and means to address the potential impacts of genetic use restriction technologies on the in situ and ex situ conservation and sustainable use, including food security, of agricultural biological diversity;

(i) Urge Parties and Governments to assess whether there is a need to develop, and how to ensure the application of, effective regulations at national level which take into account, inter alia, the specific nature of variety-specific and trait-specific genetic use restriction technologies, in order to ensure the safety of human health, the environment, food security and the conservation and sustainable use of biological diversity and to make this information available through, inter alia, the clearing-house mechanism;

Secretariat

(j) Request the Executive Secretary to prepare a report, to be considered by the Subsidiary Body on Scientific, Technical and Technological Advice at a future meeting prior to the sixth meeting of the Conference of the Parties, on the status of development of genetic use restriction technologies and of relevant initiatives at international, regional and national levels on the basis of information provided by organizations, Parties and Governments;

(k) Recognizing the importance of indigenous and local communities in the conservation and sustainable use of plant genetic resources according to Article 8(j) of the Convention, and taking into account the revision of the International Undertaking on Plant Genetic Resources for Food and Agriculture, request the Executive Secretary to discuss with those organizations with relevant expertise and representatives of indigenous and local communities on the potential impacts of the application of genetic use restriction technologies on those communities and on Farmers' Rights in keeping with the revision of the aforementioned International Undertaking to keep, use, exchange and sell seed or propagating material and to prepare a report to be considered by the Conference of the Parties.

IV/6. Incorporation of biological diversity considerations into

- (iii) To consider biological diversity concerns in the development of new legislative and regulatory frameworks from the early stages of the drafting process;
- (iv) To ensure the involvement of interested and affected stakeholders in a participatory approach to all stages of the assessment process, including governmental bodies, the private sector, research and scientific institutions, indigenous and local communities and non-governmental organizations, including by the use of appropriate mechanisms, such as the setting up of committees, at the appropriate level, to this end;
- (v) To organize experts meetings, workshops, seminars, as well as training, educational and public-awareness programmes and exchange programmes, in order to promote the development of local expertise in methodologies, techniques and procedures;

(b) Encourage Parties, Governments and relevant organizations to use strategic environmental assessment in order to assess impacts not only of individual projects, but also of the cumulative and global effects, incorporating biological diversity considerations at the decision-making/environmental planning level, to include the development of alternatives, mitigation measures and consideration of the elaboration of compensation measures in environmental impact assessment;

(c) Request Parties to include in their national reports practices, systems, mechanisms and experiences on the subject;

(d) Request the Subsidiary Body on Scientific, Technical and Technological Advice to further develop guidelines on the incorporation of bio02 Tw 0 -e0 1 Tf -0pld8 ()Tj 0.

Recalling decisions IV/15 and IV/16 adopted by the Conference of the Parties to the Convention on Biological Diversity at its fourth meeting,

Welcoming the outcome of the seventh session of the Commission on Sustainable Development on tourism and sustainable development,

Recalling also that the General Assembly, in its resolution 53/200 of 15 December 1998, proclaimed the year 2002 as the International Year of Ecotourism and its resolution 53/24 of 10 November 1998 proclaimed 2002 also as the International Year of Mountains,

Considering the importance of tourism, as one example of sustainable use of the components of biological diversity and that the consideration of sustainable use of biological diversity will take place at the fifth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice,

Understanding that linkages between tourism and sustainable use of biological diversity will be examined by the Executive Secretary in order to elucidate any principles, approaches or methodologies that may apply to a wider consideration of sustainable use, in the fifth meeting of SBSTTA and that in further preparing for this meeting contact will be initiated with other groups involved in sustainable use, such as the Sustainable Use Initiative,

Recommends that the Conference of the Parties:

(a) Adopt the assessment of the interlinkages between biological diversity and tourism, as contained in the annex to the present recommendation, which includes:

- (i) The role of tourism in the sustainable use of biological resources, including the economic importance of tourism in the interrelationship between tourism and the environment and potential benefits for the conservation and sustainable use of biological diversity;
- (ii) The potential impacts on biological diversity of tourism, including economic, social and environmental impacts;

(b) Accept the invitation to participate in the international work programme on sustainable tourism development under the CSD process with regard to biological diversity, in particular, with a view to contributing to international guidelines for activities related to sustainable tourism development in vulnerable terrestrial, marine and coastal ecosystems and habitats of major importance for biological diversity and protected areas, including fragile mountain ecosystems;

(c) Decide to transmit the assessment of the interlinkages between tourism and biological diversity to the Commission on Sustainable Development, with the recommendation to the Commission on Sustainable Development to incorporate the assessment in the international work programme on sustainable tourism development;

(d) Recommend to Parties, Governments, the tourism industry and relevant international organizations to consider this assessment as a basis for their policies, programmes and activities in the field of sustainable tourism and encourage them to pay particular attention to:

- (i) The unique role of ecotourism - i.e. tourism that relies on the existence and maintenance of biological diversity and habitats - and to develop clear strategies to develop sustainable ecotourism sectors which provides viable income-generating opportunities for indigenous and local communities;
- (ii) The need to develop, with all the potential stakeholders, strategies and planning, based on an ecosystem approach and aiming at the correct balance between economic, social and environmental concerns, maximizing opportunities for the conservation and sustainable use of biological diversity and the equitable sharing of benefits, recognition of traditional knowledge, and minimizing risks to biological diversity;
- (iii) The need for long-term monitoring and assessment, including the development and use of indicators to measure impacts of tourism on biological diversity and consequently to improve strategies and plans for tourism activities;
- (iv) Bringing to the local economies tangible benefits, such as job creation and sharing of benefits arising from the sustainable use of biological diversity for tourism purposes. In this regard, small and medium-sized enterprises can play a major role;
- (v) The need to develop sustainable tourism which is essential for the conservation and management of biological diversity and to meet the expectations of all stakeholders, while encouraging responsible behaviour on the part of tourists, of people working in tourism enterprises and of the local population;
- (vi) Awareness-raising, information-sharing, education and training of tourism operators and sensitization of tourists on biological

(e) Endorse the work of the Subsidiary Body on Scientific, Technical and Technological Advice on tourism as an example of sustainable use of biological diversity by exchanging experiences, knowledge and best practices through the clearing-house mechanism and encourage Parties, Governments and relevant organizations to continue to submit to the Executive Secretary case-studies in this regard;

(f) In order to contribute further to the international work programme on sustainable tourism development under the Commission on Sustainable Development process with regard to biological diversity, in particular, to the review of its implementation, which will be carried out in 2002, request the Subsidiary Body on Scientific, Technical and Technological Advice, through the Executive Secretary, to transmit its findings to the Commission on Sustainable Development at its tenth session;

(g) Encourage Parties, Governments, the tourism industry and relevant organizations to undertake activities that would be supportive of the preparations for both the International Year of Ecotourism and the International Year of Mountains, as well as activities of the International Coral Reef Initiative.

Annex

ASSESSMENT OF THE INTERLINKAGES BETWEEN TOURISM AND BIOLOGICAL DIVERSITY

I. THE ROLE OF TOURISM IN THE SUSTAINABLE USE OF BIOLOGICAL RESOURCES

1. The sustainable use of the components of biological diversity is one of the three objectives of the Convention on Biological Diversity. For the purposes of the Convention, "sustainable use" means "the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations" (Article 2). This definition of sustainable use is consistent with the concept of sustainable development as elaborated in the Rio Declaration on Environment and Development and Agenda 21, whereby "sustainable development" meets the needs and aspirations of the current generations without compromising the ability to meet those of future generations. Sustainable development cannot be achieved (generations without and aspir [(of the pg4 2 (Sus

development of ecotourism and to prevent threats to biological diversity on which it is intrinsically dependent.

A. Economic importance of tourism

3. Tourism is one of the world's fastest growing industries and the major source of foreign exchange earnings for many developing countries. The receipts from international tourism grew at an average annual rate of 9 per cent for the ten-year period from 1988 to 1997, reaching \$443 billion in 1997. Tourist arrivals worldwide increased by 5 per cent per annum on average during the same period. 1/ According to WTO, tourism receipts accounted for a little over 8 per cent of total world exports of goods and almost 35 per cent of the total world exports of services in 1997. The breakdown of the travel account balance shows that the industrialized countries as a whole are the net importers of such services, while the developing countries as a whole have been increasing their surplus. The surplus for the latter group of countries widened steadily from \$4.6 billion in 1980 to \$65.9 billion in 1996, offsetting more than two thirds of their current account deficit in 1996. The travel surplus has widened steadily in all developing regions in the past decade. Economies in transition recorded a deficit of \$3.5 billion in 1995, which swung back to a surplus of \$1.5 billion in 1996.

4. From the production point of view, tourism contributes around 1.5 per cent of world gross national product (GNP). 2/ Tourism is also a major source of employment, the hotel accommodation sector alone employing around 11.3 million people worldwide. 3/ Furthermore, tourism based on the natural environment is a vital and growing segment of the tourism industry, accounting for \$260 billion in 1995. 4/ In a number of developing countries, tourism has already overtaken cash-crop agriculture or mineral extraction as their major source of national income.

operators, local environmental conditions may be viewed as a type of common property resource. It will not be in the interests of any individual operator to invest more than his or her competitors in maintaining the general environmental standards in the resort. Similarly, operators are very likely to "export" their adverse environmental impacts, such as refuse, waste water and sewage, to parts of the surrounding area unlikely to be visited by tourists. This reaches its most extreme form in so-called "enclave" tourism, where tourists may remain for their entire stay in an artificially maintained environment isolated from its surroundings.

7. Second, international tourism operates in an increasingly global market in which investors and tourists have an ever-widening choice of destinations. Indeed the search for new and novel areas and experiences is one of the major engines driving the tourism life-cycle. Moreover, much of the tourism industry is controlled by financial interests located away from tourist destinations. When environmental conditions begin to deteriorate in a given location, operators are likely to shift to alternative locations rather than to invest in improving those conditions.

8. Finally, the international tourism market is fiercely competitive, much of it operating on low profit margins. Operators are therefore often extremely reluctant to absorb any additional costs associated with improving environmental conditions, and instead will often find it economically expedient to shift their area of operation rather than face such costs.

C. Potential benefits of tourism for the conservation of biological diversity and the sustainable use of its components

9. Despite the potential negative impacts, and given the fact that tourism generates a large proportion of income and that a growing percentage of tourism is nature-based, tourism does present a significant potential for realizing benefits in terms of the conservation of biological diversity and the sustainable use of its components. This section addresses the potential benefits of tourism. Among the benefits are direct revenues generated by fees and taxes incurred and voluntary payments for the use of biological resources. These revenues can be used for the maintenance of natural areas and the contribution of tourism to economic development, including linkage effects to other related sectors and job-creation.

10. Revenue creation for the maintenance of natural areas. The most direct means of exploiting tourism for the sustainable use of biological resources is through the harnessing of some proportion of tourism revenues for that end. This may be achieved either through a generalized environmental tax on tourists or particular tourism activities or by charging fees for access to biological resources, the revenue from which can then be used for their maintenance. The latter procedure

Conservation Area project also points out the difficulty in managing increased tourism activities in the fragile mountain ecosystems.

21. Impacts on the marine and coastal environment. Tourism activities may have major impacts on the marine and coastal environment, the resources they host and the diversity of those resources. Most often, those impacts are due to inappropriate planning, irresponsible behaviour by tourists and operators and/or lack of education and awareness of the impacts by, for example, tourist resorts along the coastal zones. But sometimes decisions for tourism development are based only on the potential economic benefit, in spite of the known potential damage to the environment, as in the case of various coral reef resorts. Coastal erosion

leading to eutrophication, oxygen deficit and algal blooms has already been pointed out.

25. Environmental impact of travel. Travel to and from international tourist destinations causes significant environmental impacts through pollution and production of "greenhouse" gases. A high proportion of international tourist travel is by air. Such travel is believed to be the most environmentally costly per passenger-kilometre, although the true costs are difficult to assess accurately, as are the impacts on biological resources and their diversity.

B. Socio-economic and cultural impacts of tourism

26. Influx of people and related social degradation. Increased tourism activities can cause an influx of people seeking employment or entrepreneurial opportunities, but who may not be able to find suitable employment. This may cause social degradation, such as local prostitution, drug abuse and so forth. ^{12/} In addition, due to the unstable nature of international tourism, communities that come to rely heavily on tourism in economic terms are vulnerable to the changes in the flow of tourist arrivals and may face sudden loss of income and jobs in times of downturn.

27. Impacts on local communities. When tourism development occurs, economic benefits are usually unequally distributed amongst members of local communities.

29. Impacts on cultural values. Tourism has a highly complex impact on cultural values. Tourism activities may lead to inter-generational conflicts through changing aspirations of younger members of communities who may have more contact with, and are more likely to be affected by, the behaviour of tourists. Furthermore, they may affect gender relationships through, for example, offering different employment opportunities to men and women. Traditional practices and events may also be influenced by the tourist preferences. This may lead to erosion of traditional practices, including cultural erosion and disruption of traditional lifestyles. Additionally, tourism development can lead to the loss of access by indigenous and local communities to their land and resources as well as sacred sites, which are integral to the maintenance of traditional knowledge systems and traditional lifestyles.

Annex II

PROVISIONAL AGENDA OF THE FIFTH MEETING OF THE SUBSIDIARY BODY ON
SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE

1.

4.2.3 Sustainable use of the components of biological diversity:
identification of sectoral activities that could adopt
biodiversity-friendly practices and technologies;

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